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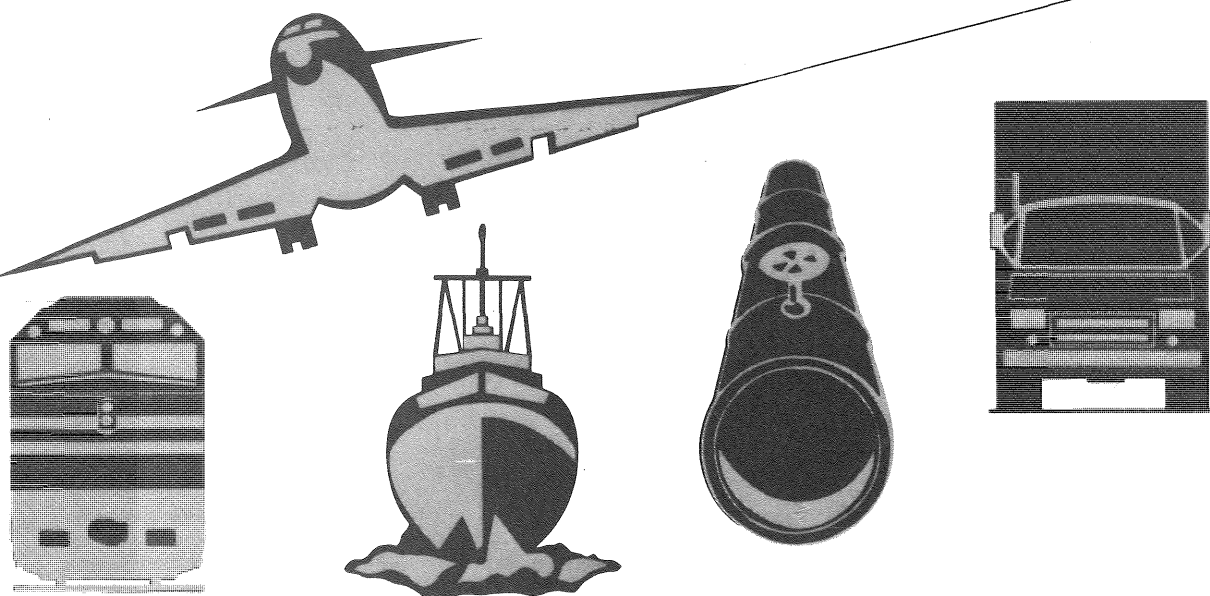
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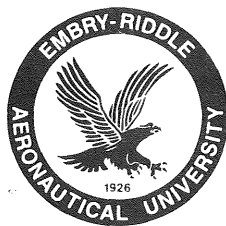
# NATIONAL TRANSPORTATION SAFETY BOARD



## AIRCRAFT ACCIDENT REPORTS

BRIEF FORMAT  
U.S. CIVIL AND FOREIGN AVIATION  
ISSUE NUMBER 1 OF 1989 ACCIDENTS





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				14. Sponsoring Agency Code	
15. Supplementary Notes					
16. Abstract <p>This publication contains selected aircraft accident reports in Brief Format occurring in U.S. civil and foreign aviation operations during Calendar Year 1989. Approximately 200 General Aviation and Air Carrier accidents contained in this publication represent a random selection. This publication is issued irregularly, approximately fifteen times each year. The Brief Format represents the facts, conditions, circumstances and probable cause(s) for each accident.</p> <p align="center">File Numbers: 1 through 9 10 through 52 54 through 98 100 through 200</p>					
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## 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 approximately fifteen (15) 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.

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## DEFINITIONS

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

### Aircraft Accidents

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.

### Substantial 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:

## Gear Collapsed

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.

#### Business

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.

#### Corporate/Executive Operations

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.

## 2. AIR CARRIER

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.

### Powerplant - Loss of Power

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 or supplement the probable cause(s). Additional 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 1

CALENDAR YEAR 1989

## File Order Listing - Issue No. 1, 1989

File Number	Aircraft Regist.	Date	Location	Make	Aircraft Model	Injury Index	Page
-----	-----	----	-----	----	-----	-----	-----
1	5134T	010289	CANTWELL, AK	CHAMPION	7GCBC	NONE	2
2	5074R	011289	BELL MOUNTAIN, AK	HUGHES	500-D	NONE	10
3	7329U	010389	RUSSIAN MISSION, AK	CESSNA	207A	NONE	4
4	67667	011089	KETCHIKAN, AK	DEHAVILLAND	DHC-2	NONE	8
5	6420E	011089	JUNEAU, AK	CESSNA	185F	NONE	6
6	901ZZ	011589	ASHLAND, VA	CESSNA	172N	NONE	352
7	6414K	011689	BIG LAKE, AK	CESSNA	150	NONE	16
8	3799R	010889	CHADRON, NE	CESSNA	172	MINOR	268
9	43527	011589	PORT LIONS, AK	PIPER	PA-32-300	NONE	14
11	4355Z	020889	BOULDER, CO	PIPER	PA-18-150	NONE	122
12	7049	020689	ILIAMNA, AK	PIPER	PA-18	NONE	24
13	4280Z	012189	GIRDWOOD, AK	PIPER	PA-18	NONE	18
14	1243A	022289	SULATNA RIVER, AK	PIPER	PA-18	NONE	32
15	5312Q	021989	CHUGIAK, AK	CESSNA	152	NONE	30
16	78627	022389	IGIUGIG, AK	PIPER	PA-11	NONE	34
17	89038	020689	GRAND FORKS, ND	CESSNA	152	NONE	262
18	9459D	020689	MAYVILLE, ND	CESSNA	172RG	NONE	264
19	52095	013089	ELK CITY, ID	CESSNA	180J	NONE	198
20	49104	012589	PUYALLUP, WA	CESSNA	152	NONE	362
21	3254Y	013089	N. BONNEVILLE, WA	CESSNA	182	NONE	364
22	95286	021589	BEAVER MARSH, OR	PIPER	PA28-140	NONE	316
23	8726K	011589	SOUTH ST. PAUL, MN	STINSON	108-1	NONE	234
24	70122	030989	ALEXANDER LAKE, AK	CESSNA	185E	NONE	44
25	4433N	031689	FAIRBANKS, AK	AERONCA	15AC	NONE	46
26	4257T	030989	KASIGLUK, AK	PIPER	PA-32	NONE	42



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27	35038	021589	SKWENTNA, AK	PIPER	J-5	NONE	28
28	6675H	020289	RICHARDS, TX	PIPER	J-3C-65	MINOR	332
29	732FN	011689	SEKIU, WA	CESSNA	206	MINOR	356
30	7343E	011489	CARSON CITY, NV	CESSNA	210	NONE	292
31	9024C	020589	WRANGELL, AK	CESSNA	180	NONE	22
32	97764	022589	ALBANY, OR	STINSON	108-1	NONE	318
33	22997	011489	CLARION, IA	CESSNA	150	NONE	180
34	9824X	030789	SHELL LAKE, AK	CESSNA	185	NONE	40
35	4737P	012789	DURANGO, CO	CESSNA	P210N	NONE	120
36	8774B	011989	WILLIAMSBURG, OH	CESSNA	172	MINOR	308
37	1497Q	012289	CAMBRIDGE, OH	CESSNA	150	NONE	310
38	89867	010989	AUDUBON, IA	CESSNA	140	NONE	178
39	4843G	012989	AINSWORTH, NE	CESSNA	172	NONE	270
40	61064	021189	WAYLAND, MO	CESSNA	150	NONE	246
41	9755	021089	DAWSON, GA	GRUMMAN	G-164A	NONE	174
42	4717D	022589	SPARTA, IL	CESSNA	182A	NONE	206
43	48688	012989	MINDEN, NV	AERONCA	O-58B	FATAL	294
44	3576W	031289	SEABECK, WA	PIPER	PA-32	NONE	368
45	9104R	011989	ARLINGTON, WA	CESSNA	180A	NONE	358
46	8792H	032589	ROSALIA, WA	GRUMMAN/SCHW	G-164A	NONE	372
47	945FE	010589	ASPEN, CO	CESSNA	208B	SERIOUS	114
48	11SE	021189	WALKER, LA	PITTS	S2B	SERIOUS	222
49	66385	010189	AUSTIN, TX	CESSNA	150	NONE	328
50	5999M	030389	SAN ANTONIO, TX	CESSNA	421B	NONE	338
51	9023D	031489	HENRYETTA, OK	PIPER	PA-22-160	NONE	312

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52	2096S	031189	SANDWICH, IL	CESSNA	TR182 II	NONE	208
54	47431	012789	GOODLAND, KS	PIPER	PA-28-181	NONE	218
55	25909	022389	KANSAS CITY, MO	CESSNA	152	NONE	248
56	9044L	030589	PINE CREEK, WI	AERONCA	7KCAB	NONE	384
57	3016A	040289	FREEDOM, WI	CESSNA	170B	NONE	390
58	8359L	022589	FORT WASHINGTON, MD	CESSNA	172I	SERIOUS	226
59	2582F	012289	PORT TOWNSEND, WA	CHAMPION	7ECA	NONE	360
60	73771	020989	NOME, AK	CESSNA	207	SERIOUS	26
61	9685B	032589	SKWENTNA, AK	CESSNA	180-A	NONE	48
62	9850X	041189	TRINITY LAKE, AK	CESSNA	185	NONE	52
63	4713U	022489	HONOLULU, HI	BOEING	747-122	FATAL	176
64	5119C	030389	DES MOINES, IA	CESSNA	310	NONE	192
65	8782L	011689	BOGALUSA, LA	PIPER	PA-25-235	MINOR	220
66	24658	011789	GREENFIELD, IA	BEECH	C-23	NONE	182
67	611CZ	022589	HUDSON, IA	COMPOSITE AI	COZY	NONE	184
68	4314R	022589	FT. MADISON, IA	CESSNA	182RG	NONE	188
69	6418D	022889	GRAND RAPIDS, MN	CESSNA	172	NONE	238
70	3627D	030189	HARRISBURG, AR	GRUMMAN	G-164B	NONE	60
71	5329B	030189	CROOKSTON, MN	CESSNA	152	NONE	240
72	6610Q	030289	GRIFFITHVILLE, AR	GRUMMAN	G-164B	NONE	62
73	25884	040989	IRWINDALE, CA	CESSNA	152	NONE	110
75	69383	021989	CORONA, CA	CESSNA	402B	FATAL	98
76	757KR	010789	STRATFORD, CT	CESSNA	152	NONE	130
77	41692	031689	LAKEWOOD, NJ	BELLANCA	7GCBC	NONE	278
78	2361K	011389	ALBANY, NY	PIPER	PA-38-112	NONE	300

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79	90918	042289	ANCHORAGE, AK	PIPER	PA-18	NONE	56
80	7652A	042489	FAIRBANKS, AK	CESSNA	180	NONE	58
81	7085	040389	KOTZEBUE, AK	PIPER	PA-18	MINOR	50
82	11250	011589	KETCHIKAN, AK	DEHAVILLAND	DHC-3	FATAL	12
83	7407T	030389	BASTROP, TX	CESSNA	172	NONE	340
84	9992Z	030389	ANCHORAGE, AK	CESSNA	U-206G	NONE	36
85	1292F	030689	PUNTILLA LAKE, AK	CESSNA	A-185-F	MINOR	38
86	1749U	012389	KALSKAG, AK	CESSNA	207	NONE	20
87	6479L	041789	KENAI, AK	CESSNA	152	NONE	54
88	6894H	021889	QUINCY, IL	CESSNA	172M	NONE	204
89	1672T	010989	PLEASANTON, CA	CESSNA	414	FATAL	82
90	16733	040589	PARK CITY, UT	BELL	206B-III	NONE	350
91	8079S	031089	MONROE CITY, MO	CESSNA	150	NONE	250
92	527Y	041889	KINDRED, ND	GRUMMAN	G-164	NONE	266
93	98934	030389	CEDAR RAPIDS, IA	CESSNA	310	NONE	190
94	6602Q	031089	WYNNE, AR	GRUMMAN	G-164A	NONE	64
95	69806	030289	NORFOLK, NE	CESSNA	310Q	NONE	272
96	5371D	030589	CRESCO, IA	CESSNA	172	NONE	194
97	4639W	012989	RENO, NV	GULFSTREAM C	112TCA	NONE	296
98	24508	050489	LACEY, WA	PIPER	PA-38-112	NONE	380
100	5620X	020889	COTTONWOOD, ID	AERO COMMAND	S2R	NONE	200
101	1790E	032289	CATOOSA, OK	AERONCA	7AC	MINOR	314
102	4836Q	032489	LAKE ARTHUR, LA	CESSNA	A185F	NONE	224
103	54US	021789	SPOKANE, WA	MITSUBISHI	MU-2B-35J	NONE	366
104	4439E	050189	GERLACH, NV	PIPER	PA-38-112	NONE	298

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105	5289Y	011489	FLORENCE, SC	CESSNA	T210N	NONE	326
106	4340S	041789	GRANGEVILLE, ID	AIR TRACTOR	AT-301	MINOR	202
107	5315D	030589	SUPERIOR, WI	CESSNA	172N	NONE	386
108	7551Z	031889	ANACORTES, WA	CESSNA	TU206	NONE	370
109	504JT	040689	INDEPENDENCE, OR	THIESSEN	RV-4	NONE	320
110	2918W	020189	STRATHMORE, CA	BELL	47G-3B2	SERIOUS	94
111	26PL	040289	HANFORD, CA	LOWE	QUICKIE Q-	MINOR	108
112	6713Q	031889	WESTLEY, CA	GRUMMAN	G-164B	SERIOUS	106
113	91363	022689	EL PASO, TX	ICA BRASOR	IS-28B2	SERIOUS	334
114	277MB	030889	LEGGETT, CA	STEARNS	BD-4	FATAL	104
115	9039E	010589	CALEXICO, CA	MAULE	M-5-210C	NONE	80
116	9675Z	022289	AGUILA, AZ	WARWICK	THORP T-18	SERIOUS	78
117	51K	020489	TRACY, CA	WAR REPLICAS	P-51	FATAL	96
118	3331R	011489	VALPARAISO, IN	PIPER	PA-28-180	NONE	214
119	3045M	031289	WEST CHICAGO, IL	PIPER	PA-34-200T	NONE	210
120	9504T	040289	ALLEGAN, MI	PIPER	PA-38-112	NONE	230
121	81444	010789	BUNNELL, FL	PIPER	PA-28-161	NONE	136
122	9378N	011089	ROSE HILL, MS	PIPER	PA-28R-200	SERIOUS	254
123	26RS	031289	ROY, UT	CESSNA	T210L	MINOR	348
124	590GC	010689	GREENWOOD, MS	CESSNA	210L	NONE	252
125	2439B	011289	TERRA CEIA, FL	PIPER	PA-38-112	NONE	138
126	4409D	042089	STANWOOD, WA	DONNER/PARTO	AVID FLYER	NONE	376
127	6866Q	041989	ARLINGTON, WA	BEECH	A55	NONE	374
128	6064R	050489	LYNDEN, WA	CESSNA	172	NONE	378
129	4072G	042989	MILTON-FREEWTR, OR	BELL/SOLOY	47G3B2	MINOR	322

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130	74473	011389	SEBRING, FL	BELLANCA	14-13-2	NONE	140
131	66688	032289	CORUNNA, MI	CESSNA	150M	FATAL	228
132	9439B	012189	LARIMORE, ND	CESSNA	172RG	NONE	260
133	6Y	010989	WILMINGTON, OH	SWEARINGEN	SX-300	FATAL	306
134	3697Q	020489	CLEARWATER, FL	BEECH	A23-24	SERIOUS	156
135	99Y	020389	KEY WEST, FL	WACO	YMF	MINOR	154
136	926SA	021089	FERNANDINA BCH, FL	PIPER	PA-38-112	NONE	162
137	339RH	031789	CHESAPEAKE, VA	HALSTEAD	SANDPIPER	NONE	354
138	95975	021389	CROOKSTON, MN	CESSNA	152	NONE	236
139	7662X	022589	UNIONVILLE, IA	CESSNA	172B	NONE	186
140	44ME	012289	TUCSON, AZ	LEHMAN/JERRE	VANS RV-4	FATAL	76
141	4763T	011789	FORT MYERS, FL	PIPER	PA-32-300	MINOR	142
142	457SA	011689	CAROLINA, PR	BRITTEN-NORM	BN-2A	NONE	324
143	312BH	010589	QUEMADO, NM	BUMGARTNER/H	STEEN SKYB	NONE	284
144	96319	010489	LONGMONT, CO	CESSNA	172	NONE	112
145	4440L	010289	CHEYENNE, WY	CESSNA	172	NONE	392
146	9739L	010289	SANTA FE, NM	BEECH	19	NONE	282
147	30PC	041089	PENSACOLA, FL	BEECH	200	FATAL	172
148	9874	031189	STUTTGART, AR	GRUMMAN	G-164A	MINOR	66
149	7245	041389	OSCEOLA, AR	GRUMMAN	G-164A	MINOR	70
150	16733	010889	PARK CITY, UT	BELL	206B III	NONE	346
151	89803	011989	JACKSONVILLE, FL	CESSNA	152	NONE	144
151	32816	011989	JACKSONVILLE, FL	PIPER	PA-28-151	NONE	146
152	8547H	030189	RIVERDALE, CA	GRUMMAN	G-164A	SERIOUS	102
153	736BX	010589	MARGATE, FL	CESSNA	R172K	MINOR	134

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154	82290	010689	CRAIG, CO	PIPER	PA-31T	NONE	116
155	9578V	032789	WEST BEND, WI	CESSNA	172M	NONE	388
156	1672M	040589	LOS LUNAS, NM	CESSNA	182P	MINOR	290
157	35053	032489	FORT DODGE, IA	CESSNA	177	NONE	196
158	3070M	012389	LAS CRUCES, NM	PIPER	PA-34-200T	NONE	288
159	4028D	021189	BALDWIN, WI	CESSNA	182A	NONE	382
160	6347H	011789	PAGE, AZ	CESSNA	T207A	NONE	74
161	4445W	041289	INDIANAPOLIS, IN	BEECH	A60	NONE	216
162	1721W	011889	BROOMFIELD, CO	BEECH	V35B	MINOR	118
163	2652N	011889	FARMINGTON, NM	CESSNA	140	NONE	286
164	83596	011989	MEDICINE LAKE, MT	PIPER	PA-18-150	NONE	256
165	69117	020989	GILL, CO	CESSNA	152	NONE	124
166	7127J	021489	TELLURIDE, CO	BALLOON WORK	AX8-24	NONE	126
167	735VE	031389	BROOMFIELD, CO	CESSNA	TU206G	MINOR	128
168	4273Z	032589	GREAT FALLS, MT	PIPER	PA-18-150	NONE	258
169	5398R	011789	OAKLAND, CA	CESSNA	TR182	NONE	84
170	1058D	011889	SONOMA, CA	CESSNA	190	NONE	88
171	6913D	011789	SANTA ANA, CA	PIPER	PA-32R-301	NONE	86
172	22988	012189	NAPA, CA	CESSNA	150H	NONE	90
173	2860W	012689	DAYTONA BEACH, FL	BEECH	A36	NONE	148
174	4506D	012789	PANACEA, FL	BEECH	G-35	MINOR	150
175	8163F	013089	SAN MARTIN, CA	PIPER	PA-28-161	MINOR	92
176	9961	012289	SANTA FE, TX	PITTS	S1A	SERIOUS	330
177	83864	040589	CHEYENNE, WY	PIPER	PA-34-220T	NONE	394
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**AIRCRAFT ACCIDENT REPORTS**  
**BRIEF FORMAT**  
**U.S. CIVIL AND FOREIGN AVIATION**  
**ISSUE NUMBER 1 OF 1989 ACCIDENTS**

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 1      1/02/89      CANTWELL, AK      A/C Reg. No. N5134T      Time (Lcl) - 1512 AST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage SUBSTANTIAL		Injuries			
Type of Operation	-PERSONAL	Fire	Crew	Fatal	Serious	Minor	None
Flight Conducted Under	-14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During	-LANDING			0	0	0	1

-----Aircraft Information-----

Make/Model	- CHAMPION 7GCBC	Eng Make/Model	- LYCOMING O-320-B2B	ELT Installed/Activated	- YES/YES
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 1650	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 2	Rated Power	- 160 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary	Airport Proximity
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point	ON AIRSTRIP
Method	- N/A	ANCHORAGE, AK	
Completeness	- N/A	Destination	Airport Data
Basic Weather	- VMC	CANTWELL, AK	CANTWELL
Wind Dir/Speed	- CALM		Runway Ident
Visibility	- 15.0 SM	ATC/Airspace	- 04
Lowest Sky/Clouds	- 4000 FT SCATTERED	Type of Flight Plan	- 2100-UNK/NR
Lowest Ceiling	- NONE	Type of Clearance	- SNOW
Obstructions to Vision	- NONE	Type Apch/Lndg	- SNOW - DRY
Precipitation	- NONE		
Condition of Light	- DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 36	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
STUDENT	Current - N/A	Total	- 49
	Months Since - N/A	Make/Model	- 16
	Aircraft Type - N/A	Instrument	- 0
		Last 24 Hrs	- 2
		Last 30 Days	- 3
		Last 90 Days	- 12

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PILOT AND HIS PASSENGER WERE ATTEMPTING TO LAND ON A SNOW COVERED RUNWAY AT CANTWELL, AK. THE WHEEL EQUIPPED AIRPLANE ENCOUNTERED DEEP SNOW DURING THE LANDING ROLL, CAUSING THE LEFT MAIN LANDING GEAR TO COLLAPSE. THE STUDENT PILOT HAD A TOTAL OF 49.2 HOURS OF FLIGHT EXPERIENCE, AND WAS PROHIBITED FROM CARRYING PASSENGERS.

Brief of Accident (Continued)

File No. - 1 1/02/89 CANTWELL,AK A/C Reg. No. N5134T Time (Lcl) - 1512 AST

---

Occurrence #1 MAIN GEAR COLLAPSED  
Phase of Operation LANDING - ROLL

Finding(s)

1. TERRAIN CONDITION - SNOW COVERED
  2. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
  3. LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S SELECTION OF UNSUITABLE TERRAIN FOR LANDING. CONTRIBUTING FACTORS WERE THE PILOT'S LACK OF TOTAL  
EXPERIENCE, AND THE SNOW COVERED RUNWAY.

Brief of Accident

File No. - 3 1/03/89 RUSSIAN MISSION, AK A/C Reg. No. N7329U Time (Lcl) - 1540 AST

-----Basic Information-----

Type Operating Certificate	COMMUTER	Aircraft Damage		Fatal	Injuries		
Name of Carrier	-RYAN AIR	SUBSTANTIAL			Serious	Minor	None
Type of Operation	-SCHEDULED, DOMESTIC, PASSENGER	Fire	Crew	0	0	0	1
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	1
Accident Occurred During	-LANDING						

-----Aircraft Information-----

Make/Model	- CESSNA 207A	Eng Make/Model	- CONTINENTAL IO-520	ELT Installed/Activated	- YES-UNK/NR
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 3800	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 7	Rated Power	- 300 HP		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	KALSKAG, AK	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	RUSSIAN MISSION, AK	
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - N/A
Visibility - 3.000 SM	Type of Flight Plan - COMPANY (VFR)	Runway Lth/Wid - N/A
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - 700 FT OVERCAST	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - N/A
Obstructions to Vision- UNK/NR	FORCED LANDING	
Precipitation - SNOW		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 33	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
ATP	Current - YES	Total - 4650
SE LAND, ME LAND, SE SEA	Months Since - 3	Make/Model - 2205
	Aircraft Type - PA-11	Instrument - 207
		Multi-Eng - 770
		Last 24 Hrs - 3
		Last 30 Days - 71
		Last 90 Days - 240

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE COMMERCIAL AIR TAXI PILOT AND HIS PASSENGER WERE UNINJURED FOLLOWING A FORCED LANDING. THE PILOT SAID THAT HE HAD FLOWN OVER HIS INTENDED LANDING SITE AT RUSSIAN MISSION, AK., TO INSPECT THE RUNWAY. ON THE DOWNWIND LEG, THE ENGINE OF CESSNA 207 LOST MOST OF ITS POWER. HE WAS UNABLE TO RESTORE SUFFICIENT POWER TO REMAIN AIRBORNE AND ELECTED TO LAND ON THE NEARBY, FROZEN, YUKON RIVER. HE SAID THAT HE MISJUDGED HIS ALTITUDE DURING THE LANDING APPROACH DUE TO THE FEATURELESS, ALL WHITE SURFACE OF THE RIVER, AND STRUCK THE SURFACE WHILE STILL IN A SLIGHT RIGHT TURN. INSPECTION OF THE CRASH SITE TWO DAYS AFTER THE ACCIDENT REVEALED NUMEROUS ICE CRYSTALS IN THE LEFT FUEL TANK SUMP. NO OTHER OBVIOUS ABNORMALITIES WERE NOTED. IT IS UNKNOWN IF THE ICE CRYSTALS FOUND IN THE FUEL TANK WERE CONTRIBUTORY TO THE ACCIDENT DUE TO THE LENGTH OF TIME BETWEEN THE SAMPLE AND THE ACCIDENT.

Brief of Accident (Continued)

File No. - 3

1/03/89

RUSSIAN MISSION, AK

A/C Reg. No. N7329U

Time (Lc1) - 1540 AST

Occurrence #1 LOSS OF ENGINE POWER(PARTIAL) - NON-MECHANICAL  
Phase of Operation APPROACH - VFR PATTERN - DOWNWIND

Finding(s)

1. POWERPLANT - FAILURE, PARTIAL
2. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND

Occurrence #2 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 DRAGGED WING, ROTOR, POD, OR FLOAT  
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

3. MANEUVER - IMPROPER - PILOT IN COMMAND

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PARTIAL ENGINE POWER LOSS DUE TO UNDETERMINED REASONS. CONTRIBUTING TO THE ACCIDENT WAS THE PILOT'S IMPROPER  
INFLIGHT PLANNING BY FLYING AT A TRAFFIC PATTERN ALTITUDE INSUFFICIENT TO INSURE A SAFE EMERGENCY LANDING EITHER ON  
OR OFF THE AIRPORT AND HIS MISJUDGEMENT OF CLEARANCE ABOVE THE FROZEN RIVER.

Brief of Accident

File No. - 5      1/10/89      JUNEAU, AK      A/C Reg. No. N6420E      Time (Lc1) - 1530 AST

-----Basic Information-----

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage					
Name of Carrier	-CHANNEL FLYING, INC.	SUBSTANTIAL					
Type of Operation	-SCHEDULED, DOMESTIC, PASSENGER	Fire	Crew	Fatal	0	0	0
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	1
Accident Occurred During	-LANDING						

-----Aircraft Information-----

Make/Model	- CESSNA 185F	Eng Make/Model	- CONTINENTAL IO-520-D	ELT Installed/Activated	- YES/YES
Landing Gear	- AMPHIBIAN	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 3320	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 4	Rated Power	- 300 HP		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - IN PERSON	KAKE, AK	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	SNETTISHAM
Wind Dir/Speed- 135/020 KTS	ATC/Airspace	Runway Ident - 36
Visibility - 2.000 SM	Type of Flight Plan - VFR	Runway Lth/Wid - 2500/ 100
Lowest Sky/Clouds - UNK/NR	Type of Clearance - VFR	Runway Surface - GRAVEL
Lowest Ceiling - 1500 FT OVERCAST	Type Apch/Lndg - STRAIGHT-IN	Runway Status - SNOW - DRY
Obstructions to Vision- NONE	FULL STOP	
Precipitation - SNOW		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 38	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, CFI	Current - YES	Total - 4400
SE LAND, SE SEA	Months Since - 6	Make/Model - 300
	Aircraft Type - UNK/NR	Instrument - 60
		Multi-Eng - UNK/NR
		Last 24 Hrs - 4
		Last 30 Days - 35
		Last 90 Days - 85
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

FAR 135 FLT WAS DIVERTED TO REMOTE STRIP TO PICK UP ADDITIONAL PASSENGERS. THE DISPATCHER WAS NOT AWARE THAT THE RUNWAY WAS COVERED BY 4 FT OF SNOW UNTIL THE ACFT WAS BEYOND RADIO RANGE. THE PLT ASSUMED THAT THE RWY HAD BEEN PLOWED AS IT WAS IN PREVIOUS WINTERS. THE BOX CANYON CONDITION OF THE SURROUNDING TERRAIN PRECLUDED THE PLT FROM OVER FLYING THE RWY TO CHECK ITS CONDITION. ON APPROACH THE RWY APPEARED TO BE A NORMAL SNOW PACKED SURFACE. THE PLT LANDED THE AMPHIB FLOAT ACFT WITH THE LANDING GEAR DOWN AND THE AIRPLANE NOSED OVER DURING THE LANDING.

Brief of Accident (Continued)

File No. - 5 1/10/89 JUNEAU, AK

A/C Reg. No. N6420E

Time (Lcl) - 1530 AST

Occurrence #1 NOSE OVER  
Phase of Operation LANDING

Finding(s)

1. TERRAIN CONDITION - SNOW COVERED
2. IN-FLIGHT PLANNING/DECISION - INFORMATION INSUFFICIENT -
3. UNSUITABLE TERRAIN - SELECTED - DISPATCHER
4. WEATHER CONDITION - SNOW
5. FLT WITH INADQT ENROUTE/DESTN FACILITIES - DISPATCHED - DISPATCHER
6. TERRAIN CONDITION - BOX CANYON

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE MISJUDGEMENT OF THE RUNWAY CONDITIONS ON THE PART OF THE PILOT PRIOR TO LANDING. CONTRIBUTING TO THE ACCIDENT WERE DEEP SNOW ON THE RUNWAY, BOX CANYON CONFIGURATION OF THE AREA PRECLUDING RUNWAY OVERFLIGHT, MARGINAL WEATHER/LIGHT CONDITIONS FOR ASSESSING THE RUNWAY STATUS AND FAILURE ON THE PART OF COMPANY DISPATCH PERSONNEL TO ACQUIRE AND PROVIDE THE PILOT WITH THE RUNWAY CONDITIONS BEFORE DIVERTING THE FLIGHT TO THE LOCATION OF THE MISHAP.

Brief of Accident

File No. - 4 1/10/89 KETCHIKAN, AK

A/C Reg. No. N67667

Time (Lcl) - 1500 AST

-----Basic Information-----

Type Operating Certificate-ON-DEMAND AIR TAXI

Aircraft Damage  
SUBSTANTIAL

Injuries				
Fatal	Serious	Minor	None	
0	0	0	1	
0	0	0	1	

Type of Operation -POSITIONING

Flight Conducted Under -14 CFR 91

Accident Occurred During -LANDING

Fire

Crew

Pass

NONE

0

0

0

1

-----Aircraft Information-----

Make/Model - DEHAVILLAND DHC-2

Landing Gear - AMPHIBIAN

Max Gross Wt - 5090

No. of Seats - 8

Eng Make/Model - P&W R-985-AN14B

Number Engines - 1

Engine Type - RECIPROCATING-CARBURETOR

Rated Power - 450 HP

ELT Installed/Activated - YES/NO

Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING

Method - N/A

Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 130/004 KTS

Visibility - 10.0 SM

Lowest Sky/Clouds - 1000 FT SCATTERED

Lowest Ceiling - 2500 FT BROKEN

Obstructions to Vision- NONE

Precipitation - NONE

Condition of Light - DAYLIGHT

Itinerary

Last Departure Point

KETCHIKAN, AK

Destination

KETCHIKAN, AK

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A

Runway Lth/Wid - N/A

Runway Surface - WATER

Runway Status - WATER-CALM

ATC/Airspace

Type of Flight Plan - NONE

Type of Clearance - NONE

Type Apch/Lndg - STRAIGHT-IN

FULL STOP

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL

SE LAND, SE SEA

Age - 27

Biennial Flight Review

Current - YES

Months Since - 6

Aircraft Type - C-172

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total - 350

Make/Model- 33

Instrument- 55

Multi-Eng - UNK/NR

Last 24 Hrs - UNK/NR

Last 30 Days- 7

Last 90 Days- 27

Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT WAS ATTEMPTING TO LAND ON CALM WATER AFTER A 3 MINUTE POSITIONING FLIGHT. DURING THE TOUCH DOWN, THE LEFT FLOAT DUG INTO THE WATER WHICH RESULTED IN A SWERVE AND WATER CONTACT WITH THE RIGHT WING.



Brief of Accident (Continued)

File No. -

4

1/10/89

KETCHIKAN, AK

A/C Reg. No. N67667

Time (Lcl) - 1500 AST

-----  
Occurrence #1        DRAGGED WING, ROTOR, POD, OR FLOAT  
Phase of Operation    LANDING

Finding(s)

1. FLARE - IMPROPER - PILOT IN COMMAND

-----  
----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER FLARE ATTITUDE AT TOUCHDOWN, CAUSING THE LEFT FLOAT TO DIG INTO THE WATER.

Brief of Accident

File No. - 2 1/12/89 BELL MOUNTAIN, AK A/C Reg. No. N5074R Time (Lcl) - 1115 AST

-----Basic Information-----

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage		Injuries	
Name of Carrier	-SOLOY, L.C.	SUBSTANTIAL		Fatal	0
Type of Operation	-NON SCHED, DOMESTIC, PASSENGER	Fire	Crew	Serious	0
Flight Conducted Under	-14 CFR 135	NONE	Pass	Minor	0
Accident Occurred During	-LANDING			None	1

-----Aircraft Information-----

Make/Model	- HUGHES 500-D	Eng Make/Model	- ALLISON 250-C20B	ELT Installed/Activated	- YES/YES
Landing Gear	- SKID	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 3000	Engine Type	- TURBOSHAFT		
No. of Seats	- 4	Rated Power	- 420 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary		Airport Proximity	
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point		OFF AIRPORT/STRIP	
Method	- N/A	WASILLA, AK			
Completeness	- N/A	Destination		Airport Data	
Basic Weather	- VMC	LOCAL		Runway Ident	- N/A
Wind Dir/Speed	- 270/005 KTS	ATC/Airspace		Runway Lth/Wid	- N/A
Visibility	- 30.0 SM	Type of Flight Plan	- COMPANY (VFR)	Runway Surface	- N/A
Lowest Sky/Clouds	- 2000 FT SCATTERED	Type of Clearance	- NONE	Runway Status	- N/A
Lowest Ceiling	- NONE	Type Apch/Lndg	- NONE		
Obstructions to Vision	- BLOWING SNOW				
Precipitation	- NONE				
Condition of Light	- DAYLIGHT				

-----Personnel Information-----

Pilot-In-Command	Age - 30	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
ATP, CFI	Current - YES	Total	- 4400
SE LAND	Months Since - 2	Make/Model	- 1400
HELICOPTER	Aircraft Type - H-500D	Instrument	- 100
		Multi-Eng	- 0
		Last 24 Hrs	- 2
		Last 30 Days	- 25
		Last 90 Days	- 150
		Rotorcraft	- 4000

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT ENCOUNTERED A COMPLETE WHITEOUT CONDITION DURING THE APPROACH AND HOVER ON A MOUNTAIN. THE PILOT STATED THAT AFTER TOUCHDOWN THE HELICOPTER ROLLED OVER ON ITS RIGHT SIDE.

Brief of Accident (Continued)

File No. - 2 1/12/89 BELL MOUNTAIN, AK A/C Reg. No. N5074R Time (Lcl) - 1115 AST

---

Occurrence #1 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation HOVER

Finding(s)

1. WEATHER CONDITION - WHITEOUT
  2. CLEARANCE - MISJUDGED - PILOT IN COMMAND
  3. VISUAL/AURAL PERCEPTION - PILOT IN COMMAND
- 

Occurrence #2 ROLL OVER  
Phase of Operation LANDING - FLARE/TOUCHDOWN

---

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S MISJUDGMENT OF HIS CLEARANCE ABOVE THE TERRAIN DUE TO DISTORTED VISUAL PERCEPTION. CONTRIBUTING TO THE  
ACCIDENT WAS THE WHITEOUT CONDITION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 82      1/15/89      KETCHIKAN, AK      A/C Reg. No. N11250      Time (Lcl) - 0810 AST

-----Basic Information-----

Type Operating Certificate-COMMUTER	Aircraft Damage		Injuries		
Name of Carrier - TEMSCO HELICOPTERS, INC.	DESTROYED		Fatal	Serious	Minor
Type of Operation -NON SCHED, DOMESTIC, PASSENGER	Fire	Crew	1	0	0
Flight Conducted Under -14 CFR 135	ON GROUND	Pass	1	0	0
Accident Occurred During -DESCENT					None

-----Aircraft Information-----

Make/Model - DEHAVILLAND DHC-3	Eng Make/Model - P&W R-1340-59	ELT Installed/Activated - YES/NO
Landing Gear - FLOAT	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 7967	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 11	Rated Power - 600 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - COMPANY	Last Departure Point	OFF AIRPORT/STRIP
Method - IN PERSON	KETCHIKAN, AK	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - IMC	KLA WOCK, AK	Runway Ident - N/A
Wind Dir/Speed- 340/007 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 75.0 SM	Type of Flight Plan - COMPANY (VFR)	Runway Surface - N/A
Lowest Sky/Clouds - 1800 FT SCATTERED	Type of Clearance - VFR	Runway Status - N/A
Lowest Ceiling - 3200 FT BROKEN	Type Apch/Lndg - NONE	
Obstructions to Vision- FOG		
Precipitation - SNOW SHOWER		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 22	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT	
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL	Current - YES	Total - 1470	Last 24 Hrs - 1
SE LAND, SE SEA	Months Since - 9	Make/Model- 150	Last 30 Days- 25
	Aircraft Type - DHC-2	Instrument- UNK/NR	Last 90 Days- 140
		Multi-Eng - 40	Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

AFTER DEPARTING THE FLOATPLANE BASE ON A COMPANY VFR FLIGHT PLAN, THE SCHEDULED COMMUTER FLIGHT PROCEEDED NORTHWEST ALONG A SALT WATER STRAIT AT A LOW ALTITUDE ABOVE WATER. TWO MILES NW OF THE ARPT THE ACFT ENTERED A SNOW SQUALL AND THE PILOT ATTEMPTED A STEEP TURN TO REVERSE COURSE. DURING THE TURN THE AIRCRAFT IMPACTED AND SANK IN 167 FT DEEP WATER. SEARCH AND RESCUE EFFORTS WERE SUSPENDED AFTER 4 DAYS.

Brief of Accident (Continued)

File No. - 82

1/15/89

KETCHIKAN, AK

A/C Reg. No. N11250

Time (Lc1) - 0810 AST

Occurrence #1 IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation CRUISE

Finding(s)

1. WEATHER CONDITION - SNOW
2. VFR FLIGHT INTO IMC - INADVERTENT - PILOT IN COMMAND
3. WEATHER EVALUATION - POOR - PILOT IN COMMAND

Occurrence #2 LOSS OF CONTROL - IN FLIGHT  
Phase of Operation MANEUVERING - TURN TO REVERSE DIRECTION

Finding(s)

4. MANEUVER - EXCESSIVE - PILOT IN COMMAND
5. STALL - INADVERTENT -

Occurrence #3 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation DESCENT - UNCONTROLLED

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S INADVERTANT FLIGHT INTO IFR CONDITIONS AND THE STALL WHICH OCCURRED DURING THE TURN TO REVERSE COURSE.  
CONTRIBUTING TO THE ACCIDENT WERE THE SNOW CONDITIONS ENCOUNTERED.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 9      1/15/89      PORT LIONS, AK      A/C Reg. No. N43527      Time (Lcl) - 1548 AST

-----Basic Information-----

Type Operating Certificate	COMMUTER	Aircraft Damage					
Name of Carrier	-PENINSULA AIRWAYS, INC.	SUBSTANTIAL					
Type of Operation	-NON SCHED, DOMESTIC, PAX/CARGO	Fire	Crew	0	0	0	1
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	3
Accident Occurred During	-LANDING						

-----Aircraft Information-----

Make/Model	- PIPER PA-32-300	Eng Make/Model	- LYCOMING IO-540-K1A5	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 3400	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 7	Rated Power	- 300 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary		Airport Proximity	
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point		ON AIRPORT	
Method	- N/A	KODIAK, AK			
Completeness	- N/A	Destination		Airport Data	
Basic Weather	- VMC	SAME AS ACC/INC		PORT LIONS	
Wind Dir/Speed	- 300/012 KTS			Runway Ident	- 24
Visibility	- 15.0 SM	ATC/Airspace		Runway Lth/Wid	- 2600/ 100
Lowest Sky/Clouds	- 3400 FT SCATTERED	Type of Flight Plan	- COMPANY (VFR)	Runway Surface	- GRAVEL
Lowest Ceiling	- NONE	Type of Clearance	- NONE	Runway Status	- DRY
Obstructions to Vision	- NONE	Type Apch/Lndg	- TRAFFIC PATTERN		
Precipitation	- NONE		FULL STOP		
Condition of Light	- DAYLIGHT				

-----Personnel Information-----

Pilot-In-Command	Age - 32	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
ATP	Current - YES	Total - 6457	Last 24 Hrs - 3
SE LAND, ME LAND	Months Since - 6	Make/Model - 498	Last 30 Days - 63
	Aircraft Type - BN2A	Instrument - 123	Last 90 Days - 161
		Multi-Eng - 1239	

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE AIR-TAXI PILOT REPORTED THAT WHEN HE WAS ABOUT 15 FEET OVER THE RUNWAY THRESHOLD, THE AIRPLANE BEGAN SINKING RAPIDLY. HE ADDED POWER AND AFT ELEVATOR CONTROL, BUT THE AIRPLANE STILL LANDED HARD, CAUSING THE AFT END OF THE FUSELAGE TO STRIKE THE RUNWAY.

Brief of Accident (Continued)

File No. - 9

1/15/89

PORT LIONS, AK

A/C Reg. No. N43527

Time (Lcl) - 1548 AST

-----  
Occurrence #1        HARD LANDING  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

1. WEATHER CONDITION - DOWNDRAFT
2. COMPENSATION FOR WIND CONDITIONS - DELAYED - PILOT IN COMMAND
3. STALL/MUSH - NOT CORRECTED - PILOT IN COMMAND

-----  
-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOTS INADEQUATE COMPENSATION FOR WIND CONDITIONS WHICH RESULTED IN A STALL/MUSH AND SUBSEQUENT HARD LANDING.  
THE DOWNDRAFT WHICH THE AIRCRAFT ENCOUNTERED WAS A FACTOR IN THE ACCIDENT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 7 1/16/89 BIG LAKE, AK A/C Reg. No. N6414K Time (Lcl) - 1415 AST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation -PERSONAL  
Flight Conducted Under -14 CFR 91  
Accident Occurred During -DESCENT

Aircraft Damage  
SUBSTANTIAL  
Fire  
NONE

	Fatal	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	0

-----Aircraft Information-----

Make/Model - CESSNA 150  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 1600  
No. of Seats - 2

Eng Make/Model - CONTINENTAL O-200-A  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 100 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- CALM  
Visibility - 10.0 SM  
Lowest Sky/Clouds - 4000 FT SCATTERED  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
ANCHORAGE, AK  
Destination  
LOCAL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - STRAIGHT-IN  
SIMULATED FORCED LANDING

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
STUDENT

Age - 28  
Biennial Flight Review  
Current - N/A  
Months Since - N/A  
Aircraft Type - N/A

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 96  
Make/Model- 51  
Instrument- 0  
Last 24 Hrs - UNK/NR  
Last 30 Days- 2  
Last 90 Days- 11

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PILOT WAS SIMULATING A FORCED LANDING TO A FROZEN LAKE WHEN A LOSS OF POWER WAS EXPERIENCED. THE ACFT CRASHED INTO A WOODED AREA DURING THE APCH. THE OUTSIDE AIR TEMPERATURE WAS 15 DEG BELOW ZERO. THE STUDENT PLT STATED THAT THE ENGINE SHOULD HAVE BEEN KEPT AT A HIGHER RPM DURING THE SIMULATED FORCED LANDING TO PREVENT CARB ICE.



Brief of Accident (Continued)

File No. - 7

1/16/89

BIG LAKE, AK

A/C Reg. No. N6414K

Time (Lcl) - 1415 AST

Occurrence #1      LOSS OF ENGINE POWER  
Phase of Operation      MANEUVERING

Finding(s)

1. WEATHER CONDITION - TEMPERATURE EXTREMES
2. UNDETERMINED

Occurrence #2      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

3. OBJECT - TREE(S)

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE STUDENT PILOT'S FAILURE TO FOLLOW PROCEDURES DURING THE SIMULATED FORCED LANDING. CONTRIBUTING TO THE ACCIDENT  
WERE THE EXTREME TEMPERATURES.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 13      1/21/89      GIRDWOOD, AK      A/C Reg. No. N4280Z      Time (Lcl) - 1600 AST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - TAXI

Aircraft Damage  
SUBSTANTIAL  
Fire - NONE

		Injuries			
		Fatal	Serious	Minor	None
Crew		0	0	0	1
Pass		0	0	0	1

-----Aircraft Information-----

Make/Model - PIPER PA-18  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 1750  
No. of Seats - 2

Eng Make/Model - LYCOMING O-320  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 150 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed - 030/006 KTS  
Visibility - 60.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - NONE  
Obstructions to Vision - NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
GIRDWOOD, AK  
Destination  
LOCAL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - NONE

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

ATP  
SE LAND, ME LAND, SE SEA, ME SEA  
GLIDER

Age - 45

Biennial Flight Review

Current - YES  
Months Since - 7  
Aircraft Type - B-377

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total	- 21000	Last 24 Hrs	- 3
Make/Model	- 300	Last 30 Days	- 20
Instrument	- 3100	Last 90 Days	- 30
Multi-Eng	- 16000	Rotorcraft	- 30

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE AIRLINE TRANSPORT PILOT LANDED UP-SLOPE ON A GLACIER AND WAS TURNING TO TAKEOFF DOWN-SLOPE WHEN TAILWIND AND 10-20 DEGREE SLOPE CAUSED THE AIRCRAFT TO TURN THROUGH THE DESIRED TAKEOFF HEADING, AND TO SLIDE SIDEWAYS. THE RIGHT SKI DUG INTO THE SNOW, CAUSING THE RIGHT MAIN LANDING GEAR TO COLLAPSE, AND THE RIGHT WING TO CONTACT THE FROZEN SURFACE. THE CRASH SITE ELEVATION WAS ABOUT 4,400 FEET MSL.

Brief of Accident (Continued)

File No. - 13

1/21/89

GIRDWOOD, AK

A/C Reg. No. N4280Z

Time (Lcl) - 1600 AST

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      TAXI - TO TAKEOFF

Finding(s)

1. TERRAIN CONDITION - DOWNHILL
2. TERRAIN CONDITION - ICY
3.     UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
4.     OVER CONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND
5.     OVER CONFIDENCE IN AIRCRAFT'S ABILITY - PILOT IN COMMAND

Occurrence #2      GEAR COLLAPSED  
Phase of Operation      TAXI - TO TAKEOFF

Occurrence #3      DRAGGED WING, ROTOR, POD, OR FLOAT  
Phase of Operation      TAXI - TO TAKEOFF

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO MAINTAIN CONTROL OF THE AIRPLANE WHILE ATTEMPTING TO TAKEOFF FROM A SLOPED TERRAIN THAT WAS  
TOO STEEP FOR A SAFE OPERATION. CONTRIBUTING TO THE ACCIDENT WAS THE DOWNHILL, ICY TERRAIN CONDITIONS AND THE PILOT'S  
OVERCONFIDENCE IN BOTH HIS AND THE AIRPLANE'S ABILITY..

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 86      1/23/89      KALSKAG,AK      A/C Reg. No. N1749U      Time (Lcl) - 1900 AST

-----Basic Information-----

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage					
Name of Carrier	-BUSH AIR, INC.	SUBSTANTIAL					
Type of Operation	-NON SCHED,DOMESTIC,PASSENGER	Fire	Crew	Fatal	0	0	0
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	1
Accident Occurred During	-LANDING						3

-----Aircraft Information-----

Make/Model	- CESSNA 207	Eng Make/Model	- CONTINENTAL IO-520	ELT Installed/Activated	- YES/NO
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 3800	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 7	Rated Power	- 300 HP		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing	- NO RECORD OF BRIEFING	ON AIRPORT
Method	- N/A	
Completeness	- N/A	
Basic Weather	- VMC	Airport Data
Wind Dir/Speed	- 140/003 KTS	KALSKAG
Visibility	- 20.0 SM	Runway Ident
Lowest Sky/Clouds	- CLEAR	- UNK/NR
Lowest Ceiling	- NONE	Runway Lth/Wid
Obstructions to Vision	- NONE	- 3200/ 50
Precipitation	- NONE	Runway Surface
Condition of Light	- NIGHT(DARK)	- GRAVEL
		Runway Status
		- DRY
		SNOW - DRY

-----Personnel Information-----

Pilot-In-Command	Age - 47	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL,ATP	Current - YES	Total - 12490	Last 24 Hrs - 5
SE LAND,ME LAND,SE SEA,ME SEA	Months Since - 10	Make/Model- 4450	Last 30 Days- 29
HELICOPTER	Aircraft Type - C-207	Instrument- 505	Last 90 Days- 29
		Multi-Eng - 1100	Rotorcraft - 120

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT LOST DIRECTIONAL CONTROL OF THE AIRPLANE WHICH COLLIDED WITH A SNOWBERM AFTER LANDING WITH INOPERATIVE LANDING AND TAXI LIGHTS ON A DARK NIGHT. THE AIRPLANE TOUCHED DOWN ABOUT 20 FEET LEFT OF THE CENTER OF THE RUNWAY, WITH THE LEFT MAIN WHEEL 2-3 FEET FROM A 2-3 FOOT DEEP SNOWBERM ALONG THE LEFT SIDE OF THE RUNWAY.

Brief of Accident (Continued)

File No. - 86

1/23/89

KALSKAG,AK

A/C Reg. No. N1749U

Time (Lc1) - 1900 AST

Occurrence #1 LOSS OF CONTROL - ON GROUND  
Phase of Operation LANDING - ROLL

Finding(s)

1. LANDING LIGHT - INOPERATIVE
2. PROPER ALIGNMENT - NOT ATTAINED - PILOT IN COMMAND
3. TERRAIN CONDITION - BERM
4. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
5. OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - IMPROPER - PILOT IN COMMAND
6. LIGHT CONDITION - DARK NIGHT

Occurrence #2 ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation LANDING - ROLL

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT FAILED TO PROPERLY ALIGN THE AIRPLANE ON THE RUNWAY FOR LANDING, THEN FAILED TO MAINTAIN DIRECTIONAL CONTROL  
AFTER LANDING. CONTRIBUTING TO THE ACCIDENT WAS THE PILOTS OPERATION OF THE AIRPLANE WITH AN INOPERATIVE LANDING LIGHT  
AND THE DARK NIGHT CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 31      2/05/89      WRANGELL, AK      A/C Reg. No. N9024C      Time (Lcl) - 1430 AST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries Serious	Minor	None
Type of Operation - PERSONAL	Fire	Crew 0	0	0	1
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	0	1
Accident Occurred During -TAKEOFF					

-----Aircraft Information-----

Make/Model - CESSNA 180	Eng Make/Model - CONTINENTAL O-470-J	ELT Installed/Activated - YES/NO
Landing Gear - SKI	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2550	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 225 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 090/020 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 46	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 350
SE LAND, SE SEA	Months Since - 15	Last 24 Hrs - UNK/NR
	Aircraft Type - UNK/NR	Make/Model- 330
		Instrument- UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT ATTEMPTED A TAKEOFF FROM A ROUGH AND UNEVEN FROZEN RIVER IN THE SKI EQUIPPED ACFT. THE TAKEOFF WAS MADE INTO WINDS OF 20 KTS GUSTING TO 35 KTS. AS THE ACFT REACHED A SPEED OF APRX 35 KTS, A GUST OF WIND, COMBINED WITH THE ACFT BOUNCING ON THE ROUGH TERRAIN, TIPPED THE ACFT, CAUSING THE WING TO DRAG AND THE ACFT TO CARTWHEEL.

Brief of Accident (Continued)

File No. - 31

2/05/89

WRANGELL, AK

A/C Reg. No. N9024C

Time (Lc1) - 1430 AST

Occurrence #1 DRAGGED WING, ROTOR, POD, OR FLOAT  
Phase of Operation TAKEOFF - GROUND RUN

Finding(s)

1. WEATHER CONDITION - GUSTS
2. TERRAIN CONDITION - ROUGH/UNEVEN
3. AIRCRAFT HANDLING - INADEQUATE - PILOT IN COMMAND
4. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PLT'S FAILURE TO PROPERLY COMPENSATE FOR THE WIND DURING TAKEOFF ON UNSUITABLE TERRAIN. CONTRIBUTING TO THE  
ACCIDENT WERE THE TERRAIN CONDITIONS AND GUSTING WINDS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 12      2/06/89      ILIAMNA, AK      A/C Reg. No. N7049      Time (Lcl) - 1620 AST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation -PUBLIC USE  
Flight Conducted Under -14 CFR 91  
Accident Occurred During -MANEUVERING

Aircraft Damage  
SUBSTANTIAL  
Fire  
NONE

	Fatal	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	0

-----Aircraft Information-----

Make/Model - PIPER PA-18  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 1750  
No. of Seats - 2

Eng Make/Model - LYCOMING O-320  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 150 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- 170/020 KTS  
Visibility - 90.0 SM  
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  
LOCAL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - NONE

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
PRIVATE  
SE LAND, SE SEA

Age - 40  
Biennial Flight Review  
Current - YES  
Months Since - 5  
Aircraft Type - PA-18

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 1597  
Make/Model- 1250  
Instrument- UNK/NR  
Multi-Eng - UNK/NR  
Last 24 Hrs - 1  
Last 30 Days- 15  
Last 90 Days- 57  
Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT STATED THAT THE WIND WAS APPROXIMATELY 10 TO 15 MPH. THE STATE TROOPER'S AIRPLANE WAS MANEUVERING AT LOW LEVEL WHEN THE AIRPLANE'S LEFT WING SUDDENLY DROPPED TO THE LEFT. THE AIRPLANE CRASHED ON THE FROZEN TUNDRA.



Brief of Accident (Continued)

File No. - 12

2/06/89

ILIAMNA, AK

A/C Reg. No. N7049

Time (Lcl) - 1620 AST

Occurrence #1      LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      MANEUVERING

Finding(s)

1. WEATHER CONDITION - HIGH WIND
2. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
3. WEATHER CONDITION - GUSTS
4. COMPENSATION FOR WIND CONDITIONS - NOT ATTAINED - PILOT IN COMMAND

Occurrence #2      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      MANEUVERING

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO COMPENSATE FOR THE GUSTY WIND CONDITIONS AND TO MAINTAIN CONTROL OF THE AIRPLANE. CONTRIBUTING  
TO THE ACCIDENT WAS THE GUSTY WINDS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 60      2/09/89      NOME, AK

A/C Reg. No. N73771

Time (Lcl) - 1425 AST

-----Basic Information-----

Type Operating Certificate-ON-DEMAND AIR TAXI

Aircraft Damage  
SUBSTANTIAL

		Injuries			
		Fatal	Serious	Minor	None
Crew	0	1	0	0	0
Pass	0	0	0	0	0

Type of Operation - BUSINESS  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - DESCENT

Fire  
NONE

-----Aircraft Information-----

Make/Model - CESSNA 207  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 3800  
No. of Seats - 8

Eng Make/Model - CONTINENTAL IO-520-F  
Number Engines - 1  
Engine Type - RECIP-FUEL INJECTED  
Rated Power - 300 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- 135/010 KTS  
Visibility - 3.000 SM  
Lowest Sky/Clouds - UNK/NR SCATTERED  
Lowest Ceiling - UNK/NR  
Obstructions to Vision- BLOWING SNOW  
Precipitation - SNOW  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
COUNCIL, AK  
Destination  
NOME, AK

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

ATC/Airspace

Type of Flight Plan - COMPANY (VFR)  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
COMMERCIAL, ATP, CFI  
SE LAND, ME LAND

Age - 48  
Biennial Flight Review  
Current - YES  
Months Since - 5  
Aircraft Type - C-185

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)	
Total - 19000	Last 24 Hrs - 1
Make/Model- 2000	Last 30 Days- UNK/NR
Instrument- UNK/NR	Last 90 Days- 83
Multi-Eng - UNK/NR	Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE AIRPLANE TRANSPORT PILOT REPORTED THAT WHILE IN CRUISE FLIGHT HE EXPERIENCED A PARTIAL LOSS OF ENGINE POWER TWICE WITHIN A PERIOD OF ABOUT THREE MINUTES. HE WAS ABLE TO REGAIN ENGINE POWER BOTH TIMES, BUT THE SECOND TIME THE AIRPLANE IMPACTED ON A SNOW-COVERED MOUNTAIN SIDE BEFORE THE DESCENT COULD BE STOPPED. A TEAR DOWN AND ANALYSIS OF THE ENGINE FUEL PUMP REVEALED AN EIGHTH INCH LONG THREAD-LIKE METAL SLIVER LODGED UNDER THE LOW PRESSURE CHECK VALVE PLUNGER.

Brief of Accident (Continued)

File No. - 60

2/09/89

NOME, AK

A/C Reg. No. N73771

Time (Lc1) - 1425 AST

-----  
Occurrence #1      LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation      CRUISE - NORMAL

Finding(s)

1. FUEL SYSTEM,PUMP - CONTAMINATION  
-----

Occurrence #2      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

2. TERRAIN CONDITION - MOUNTAINOUS/HILLY  
-----

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PARTIAL LOSS OF POWER RESULTING FROM FUEL INTERRUPTION DUE TO A BLOCKAGE IN THE ENGINE FUEL PUMP LOW PRESSURE  
CHECK VALVE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 27      2/15/89      SKWENTNA,AK      A/C Reg. No. N35038      Time (Lcl) - 1415 AST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL					
Type of Operation -BUSINESS	Fire	Crew	Fatal	Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -LANDING			0	0	0	0

-----Aircraft Information-----

Make/Model - PIPER J-5	Eng Make/Model - CONTINENTAL C-85-8	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1450	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 85 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	CHUGIAK,AK	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	JOHNSON CREEK,AK	
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - N/A
Visibility - 150.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - VALLEY/TERRAIN FOLLOWING	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 39	Medical Certificate - UNK/NR
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 252
SE LAND	Months Since - 21	Last 24 Hrs - 0
	Aircraft Type - J-5	Make/Model- 123
		Instrument- 5
		Last 30 Days- 0
		Last 90 Days- 4

Instrument Rating(s) - NONE

-----Narrative-----

THE 252 HOUR PRIVATE PILOT WAS ATTEMPTING TO LAND HIS SKI EQUIPPED PIPER J-5 AIRPLANE ON A FROZEN LAKE WHEN THE LEFT MAIN GEAR COLLAPSED, CAUSING SUBSTANTIAL DAMAGE TO THE LEFT WING LIFT STRUTS. HE SAID THAT THE LEFT MAIN GEAR ENCOUNTERED A SNOW BERM THAT WAS LARGER THAN ANTICIPATED AND THAT THE GEAR WAS OVERLOADED BY THE IMPACT. THE PILOT RECOMMENDS A CLOSER INSPECTION OF GROUND CONDITIONS PRIOR TO LANDING, AND NOT LANDING WHEN SNOW DRIFTS ARE VISIBLE FROM 100' AGL.

Brief of Accident (Continued)

File No. - 27

2/15/89

SKWENTNA, AK

A/C Reg. No. N35038

Time (Lc1) - 1415 AST

Occurrence #1      MAIN GEAR COLLAPSED  
Phase of Operation      LANDING - ROLL

Finding(s)

1. TERRAIN CONDITION - ROUGH/UNEVEN
2. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
3. LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S SELECTION OF UNSUITABLE TERRAIN. A CONTRIBUTING FACTOR IS THE PILOT'S LACK OF EXPERIENCE IN OFF AIRPORT  
LANDINGS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 15      2/19/89      CHUGIAK, AK      A/C Reg. No. N5312Q      Time (Lcl) - 1430 AST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL					
Type of Operation - PERSONAL	Fire	Crew	Fatal	0	0	0
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -TAKEOFF						

-----Aircraft Information-----

Make/Model - CESSNA 152	Eng Make/Model - LYCOMING O-235-L2C	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1670	Engine Type - RECIPROCATING-CARBURETOR	
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	ON AIRSTRIP
Method - N/A	ELMENDORF AFB, AK	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	BIRCHWOOD
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - 01
Visibility - 50.0 SM	Type of Flight Plan - VFR	Runway Lth/Wid - 4000/ 100
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - TOUCH AND GO	Runway Status - ICE COVERED
Obstructions to Vision- NONE		SNOW - CRUSTED
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 28	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 78
SE LAND	Months Since - 6	Make/Model- 78
	Aircraft Type - C-152	Instrument- 4
		Last 24 Hrs - 0
		Last 30 Days- 0
		Last 90 Days- 3

Instrument Rating(s) - NONE

-----Narrative-----

THE 78 HOUR PRIVATE PILOT WAS ATTEMPTING A TOUCH AND GO LANDING. AFTER A SUCCESSFUL TOUCH DOWN, HE ADDED POWER TO TAKE OFF. AS THE POWER INCREASED, THE AIRPLANE VEERED QUICKLY TO THE LEFT ON THE ICY RUNWAY. HE REDUCED POWER, BUT WAS UNABLE TO REGAIN COMPLETE DIRECTIONAL CONTROL, AND COLLIDED WITH TWO SNOW BERMS AS HE WENT OFF THE LEFT SIDE OF THE RUNWAY. THE NOSE GEAR COLLAPSED WHEN THE AIRPLANE STRUCK THE SECOND BERM. THE PILOT STATED THAT HE HAD LAST FLOWN ON JANUARY 8, 1989, AND HAD APRX 11 HOURS OF FLIGHT TIME SINCE HE RECEIVED HIS AIRMAN'S CERTIFICATED ON AUGUST 31, 1988.

Brief of Accident (Continued)

File No. - 15

2/19/89

CHUGIAK, AK

A/C Reg. No. N5312Q

Time (Lc1) - 1430 AST

-----  
Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

1. TERRAIN CONDITION - ICY
  2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
  3. LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
- 

Occurrence #2      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      TAKEOFF - GROUND RUN

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Occurrence #3      NOSE GEAR COLLAPSED  
Phase of Operation      TAKEOFF - GROUND RUN

-----

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL DURING A TOUCH AND GO LANDING. A CONTRIBUTING FACTOR IS  
THE PILOT'S LACK OF TOTAL FLIGHT EXPERIENCE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 14      2/22/89      SULATNA RIVER, AK      A/C Reg. No. N1243A      Time (Lcl) - 1430 AST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage				
	SUBSTANTIAL				
Type of Operation -PERSONAL	Fire	Crew	Fatal	Injuries	
Flight Conducted Under -14 CFR 91	NONE	Pass	0	Serious	Minor
Accident Occurred During -MANEUVERING			0	0	0
					None
					1
					1

-----Aircraft Information-----

Make/Model - PIPER PA-18	Eng Make/Model - LYCOMING O-320-A2B	ELT Installed/Activated - YES/YES
Landing Gear - SKI	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1730	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 150 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - N/A
Visibility - 80.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 53	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 10000
SE LAND, SE SEA	Months Since - 12	Last 24 Hrs - 4
	Aircraft Type - PA-18	Make/Model- 4000
		Last 30 Days- 30
		Instrument- 100
		Last 90 Days- 30

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT LOST DIRECTIONAL CONTROL OF THE AIRPLANE AT A LOW ALTITUDE. THE AIRPLANE STALLED AND CRASHED INTO A WOODED AREA NEXT TO A FROZEN RIVER.



Brief of Accident (Continued)

File No. - 14

2/22/89

SULATNA RIVER, AK

A/C Reg. No. N1243A

Time (Lcl) - 1430 AST

-----  
Occurrence #1        LOSS OF CONTROL - IN FLIGHT  
Phase of Operation    MANEUVERING

Finding(s)

1. STALL/MUSH - NOT IDENTIFIED - PILOT IN COMMAND
  2. AIRCRAFT HANDLING - NOT MAINTAINED - PILOT IN COMMAND
- 

Occurrence #2        IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation    MANEUVERING

Finding(s)

3. OBJECT - TREE(S)
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO MAINTAIN CONTROL OF THE AIRPLANE WHICH RESULTED IN A STALL.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 16      2/23/89      IGIUGIG,AK      A/C Reg. No. N78627      Time (Lcl) - 1720 AST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	0	1
0	0	0	0

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - TAKEOFF

Fire Crew  
NONE Pass

-----Aircraft Information-----

Make/Model - PIPER PA-11  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 1220  
No. of Seats - 2

Eng Make/Model - CONTINENTAL C-90-B  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 90 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - IMC  
Wind Dir/Speed- CALM  
Visibility - 2.000 SM  
Lowest Sky/Clouds - 500 FT  
Lowest Ceiling - 500 FT OVERCAST  
Obstructions to Vision- FOG  
Precipitation - SNOW  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
SAME AS ACC/INC  
Destination  
SAME AS ACC/INC

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - NONE

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
PRIVATE  
SE LAND

Age - 27  
Biennial Flight Review  
Current - YES  
Months Since - 8  
Aircraft Type - PA-11

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 563  
Make/Model- 46  
Instrument- 80  
Last 24 Hrs - 4  
Last 30 Days- 4  
Last 90 Days- 4

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT STATED THAT THE WEATHER WAS DETERIORATING DURING THE FLIGHT AND HE ELECTED TO LAND ON A FROZEN LAKE. THE PILOT THEN ELECTED TO GO-AROUND. DURING THE GO-AROUND, THE AIRPLANE STRUCK A TREE AT THE DEPARTURE END OF THE RUNWAY.

Brief of Accident (Continued)

File No. - 16

2/23/89

IGIUGIG,AK

A/C Reg. No. N78627

Time (Lcl) - 1720 AST

Occurrence #1 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation TAKEOFF - INITIAL CLIMB

Finding(s)

1. TERRAIN CONDITION - TREE(S)
2. AIRCRAFT HANDLING - NOT MAINTAINED - PILOT IN COMMAND
3. PERFORMANCE DATA - NOT UNDERSTOOD - PILOT IN COMMAND

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO MAINTAIN CONTROL OF THE AIRPLANE AND HIS FAILURE TO UNDERSTAND THE PERFORMANCE PARAMETERS  
OF HIS AIRPLANE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 84      3/03/89      ANCHORAGE, AK      A/C Reg. No. N9992Z      Time (Lcl) - 0955 AST

-----Basic Information-----

Type Operating Certificate	COMMUTER	Aircraft Damage						
Name of Carrier	-TRAIL LAKE FLYING SER.	SUBSTANTIAL		Fatal	Serious	Minor	None	
Type of Operation	-NON SCHED, DOMESTIC, CARGO	Fire	Crew	0	0	0	1	
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	0	
Accident Occurred During	-TAXI							

-----Aircraft Information-----

Make/Model	- CESSNA U-206G	Eng Make/Model	- CONTINENTAL IO-520-F	ELT Installed/Activated	- YES/NO
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 3600	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 4	Rated Power	- 300 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary		Airport Proximity	
Wx Briefing	- FSS	Last Departure Point		ON AIRPORT	
Method	- TELEPHONE	SEWARD, AK			
Completeness	- PARTIAL, LMTD BY PILOT	Destination		Airport Data	
Basic Weather	- VMC	SAME AS ACC/INC		ANCHORAGE	
Wind Dir/Speed	- 360/028 KTS	ATC/Airspace		Runway Ident	- 32
Visibility	- 40.0 SM	Type of Flight Plan	- VFR	Runway Lth/Wid	- 10496/ 150
Lowest Sky/Clouds	- 12000 FT SCATTERED	Type of Clearance	- VFR	Runway Surface	- ASPHALT
Lowest Ceiling	- NONE	Type Apch/Lndg	- STRAIGHT-IN	Runway Status	- DRY
Obstructions to Vision	- NONE				
Precipitation	- NONE				
Condition of Light	- DAYLIGHT				

-----Personnel Information-----

Pilot-In-Command	Age - 46	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL, ATP, CFI	Current - YES	Total - 27000	Last 24 Hrs - 1
SE LAND, ME LAND, SE SEA	Months Since - 5	Make/Model - 1500	Last 30 Days - 65
	Aircraft Type - C-207	Instrument - UNK/NR	Last 90 Days - 130
		Multi-Eng - 13000	Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING THE POST-LANDING TAXI, A STRONG LEFT CROSSWIND LIFTED THE LEFT WING CAUSING THE AIRPLANE TO MAKE AN UNCONTROLLED 270 DEGREE RIGHT TURN, DURING WHICH THE RIGHT WING TIP AND PROPELLER STRUCK THE GROUND. THE WINDS WERE REPORTED TO BE 28 KTS GUSTING TO 44 KTS.

Brief of Accident (Continued)

File No. - 84

3/03/89

ANCHORAGE, AK

A/C Reg. No. N9992Z

Time (Lc1) - 0955 AST

Occurrence #1 LOSS OF CONTROL - ON GROUND  
Phase of Operation TAXI - FROM LANDING

Finding(s)

1. WEATHER CONDITION - CROSSWIND
2. WEATHER CONDITION - GUSTS
3. HAZARDOUS WEATHER ADVISORY - DISREGARDED - PILOT IN COMMAND
4. HAZARDOUS WEATHER ADVISORY - DISREGARDED - COMPANY/OPERATOR MGMT
5. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2 DRAGGED WING, ROTOR, POD, OR FLOAT  
Phase of Operation TAXI - FROM LANDING

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S AND COMPANY'S DISREGARD OF HAZARDOUS WEATHER CONDITIONS AND THE PILOT'S FAILURE TO MAINTAIN CONTROL OF THE AIRPLANE. CONTRIBUTING TO THE ACCIDENT WERE THE GUSTY CROSSWIND CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 85      3/06/89      PUNTILLA LAKE, AK      A/C Reg. No. N1292F      Time (Lcl) - 1130 AST

-----Basic Information-----

Type Operating Certificate	ON-DEMAND AIR TAXI	Aircraft Damage						
Name of Carrier	-JIM & JULIE OKONEK	SUBSTANTIAL						
Type of Operation	-NON SCHED, DOMESTIC, PAX/CARGO	Fire	Crew	Fatal	0	Serious	0	Injuries
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	Minor	0	None
Accident Occurred During	-MANEUVERING						1	1

-----Aircraft Information-----

Make/Model	- CESSNA A-185-F	Eng Make/Model	- CONTINENTAL IO-520-D	ELT Installed/Activated	- YES/YES
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 3350	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 4	Rated Power	- 300 HP		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	ROHN RIVER, AK	Runway Ident - N/A
Wind Dir/Speed - 340/010 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 25.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 10000 FT THIN BKN	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
Obstructions to Vision - NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 57	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, ATP, CFI	Current - YES	Total - 11500
SE LAND, ME LAND, SE SEA	Months Since - 10	Make/Model - 1000
	Aircraft Type - C-206	Instrument - 1342
		Multi-Eng - 4423
		Last 24 Hrs - 4
		Last 30 Days - 23
		Last 90 Days - 23
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

IMMEDIATELY AFTER TAKEOFF, THE PILOT BECAME UNSURE OF CLEARING THE MOUNTAINOUS TERRAIN. A 180 DEG TURN WAS INITIATED DURING WHICH THE PILOT ENCOUNTERED A STRONG DOWNDRAFT. PASSENGERS AND WITNESSES STATED THAT THE AIRPLANE MAINTAINED AN UNUSUAL NOSE-HIGH ATTITUDE AND LOW AIRSPEED FROM LIFT-OFF TO JUST BEFORE IMPACT. THE PILOT HAD TAKEN OFF FROM A ROUGH AREA ON THE FROZEN LAKE, DIFFERENT FROM THE USUAL TAKEOFF AREA.

Brief of Accident (Continued)

File No. - 85

3/06/89

PUNTILLA LAKE, AK

A/C Reg. No. N1292F

Time (Lc1) - 1130 AST

Occurrence #1 ALTITUDE DEVIATION, UNCONTROLLED  
Phase of Operation TAKEOFF - INITIAL CLIMB

Finding(s)

1. TERRAIN CONDITION - MOUNTAINOUS/HILLY
2. AIRSPEED(VLOF) - REDUCED - PILOT IN COMMAND
3. WEATHER CONDITION - DOWNDRAFT
4. MANEUVER - IMPROPER - PILOT IN COMMAND
5. PREFLIGHT PLANNING/PREPARATION - POOR - PILOT IN COMMAND

Occurrence #2 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation MANEUVERING - TURN TO REVERSE DIRECTION

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO OBTAIN AN ADEQUATE AIRSPEED, THE TURN TO REVERSE COURSE MANEUVER PERFORMED AT THE REDUCED AIRSPEED AND POOR PREFLIGHT PLANNING. CONTRIBUTING TO THE ACCIDENT WERE THE MOUNTAINOUS TERRAIN AND THE DOWNDRAFT CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 34      3/07/89      SHELL LAKE, AK      A/C Reg. No. N9824X      Time (Lcl) - 1130 AST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage	Injuries			
		SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation	-PERSONAL	Fire	Crew	0	0	0
Flight Conducted Under	-14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During	-LANDING					

-----Aircraft Information-----

Make/Model	- CESSNA 185	Eng Make/Model	- CONTINENTAL IO-470-F	ELT Installed/Activated	- YES/NO
Landing Gear	- SKI/WHEEL	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 3200	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 4	Rated Power	- 260 HP		

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - NO RECORD OF BRIEFING</p> <p>Method - N/A</p> <p>Completeness - N/A</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- LIGHT AND VARIABLE</p> <p>Visibility - 10.0 SM</p> <p>Lowest Sky/Clouds - CLEAR</p> <p>Lowest Ceiling - NONE</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point</p> <p>BIG LAKE, AK</p> <p>Destination</p> <p>SAME AS ACC/INC</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - NONE</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - FULL STOP</p>	<p>Airport Proximity</p> <p>OFF AIRPORT/STRIP</p> <p>Airport Data</p> <p>Runway Ident - N/A</p> <p>Runway Lth/Wid - N/A</p> <p>Runway Surface - N/A</p> <p>Runway Status - N/A</p>
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-----Personnel Information-----

Pilot-In-Command	Age - 45	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - NO	Total - 711
SE LAND, SE SEA	Months Since - 39	Make/Model- 211
	Aircraft Type - C-185	Instrument- 3
		Last 24 Hrs - 2
		Last 30 Days- 6
		Last 90 Days- 12

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT WAS ATTEMPTING TO LAND ON A FROZEN LAKE WHEN HIS RIGHT SKI HIT A SNOW DRIFT AND BECAME DETACHED. THE AIRPLANE'S RIGHT GEAR CONTACTED THE ICE CAUSING THE AIRPLANE TO NOSE OVER ON ITS BACK.



Brief of Accident (Continued)

File No. - 34

3/07/89

SHELL LAKE, AK

A/C Reg. No. N9824X

Time (Lcl) - 1130 AST

Occurrence #1 ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation LANDING - ROLL

Finding(s)

1. TERRAIN CONDITION - ROUGH/UNEVEN
2. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
3. TERRAIN CONDITION - SNOWBANK
4. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
5. LANDING GEAR, MAIN GEAR - OVERLOAD
6. LANDING GEAR, MAIN GEAR - SEPARATION

Occurrence #2 NOSE OVER  
Phase of Operation LANDING - ROLL

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S IMPROPER INFLIGHT DECISION IN SELECTING UNSUITABLE TERRAIN ON WHICH TO LAND. CONTRIBUTING TO THE ACCIDENT  
WAS THE ROUGH/UNEVEN TERRAIN AND THE SNOWBANK.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 26      3/09/89      KASIGLUK,AK      A/C Reg. No. N4257T      Time (Lc1) - 1530 AST

-----Basic Information-----

Type Operating Certificate	COMMUTER	Aircraft Damage					
Name of Carrier	-TIM CRACE	SUBSTANTIAL					
Type of Operation	-SCHEDULED,DOMESTIC,PASSENGER	Fire	Crew	Fatal	0	Serious	0
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	Minor	0
Accident Occurred During	-TAXI					None	1
							2

-----Aircraft Information-----

Make/Model	- PIPER PA-32	Eng Make/Model	- LYCOMING IO-540-K1A5	ELT Installed/Activated	- YES/NO
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 3400	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 6	Rated Power	- 300 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary	Airport Proximity
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point	ON AIRSTRIP
Method	- N/A	BETHEL,AK	
Completeness	- N/A	Destination	Airport Data
Basic Weather	- VMC	SAME AS ACC/INC	KASIGLUK
Wind Dir/Speed	- 160/009 KTS		Runway Ident
Visibility	- 30.0 SM	ATC/Airspace	- 17
Lowest Sky/Clouds	- 1500 FT SCATTERED	Type of Flight Plan	- 2400/ 75
Lowest Ceiling	- 7000 FT BROKEN	Type of Clearance	- SNOW
Obstructions to Vision	- NONE	Type Apch/Lndg	- ICE COVERED
Precipitation	- NONE		
Condition of Light	- DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 27	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL,CFI	Current - YES	Total	- 1229
SE LAND,ME LAND	Months Since - 3	Make/Model	- 304
	Aircraft Type - PA-32	Instrument	- 106
		Multi-Eng	- 28
		Last 24 Hrs	- 3
		Last 30 Days	- 105
		Last 90 Days	- 246

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT HAD JUST LANDED AND WAS BACK TAXIING WHEN THE AIRPLANE STRUCK A SNOWBANK NEXT TO THE RUNWAY.

Brief of Accident (Continued)

File No. - 26

3/09/89

KASIGLUK,AK

A/C Reg. No. N4257T

Time (Lcl) - 1530 AST

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Occurrence #1        ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation    TAXI - FROM LANDING

Finding(s)

1. TERRAIN CONDITION - SNOWBANK
  2. AIRCRAFT HANDLING - IMPROPER - PILOT IN COMMAND
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S INADEQUATE VISUAL LOOKOUT WHICH RESULTED IN THE COLLISION WITH A SNOWBANK.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 24      3/09/89      ALEXANDER LAKE, AK      A/C Reg. No. N70122      Time (Lcl) - 1845 AST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries Serious	Minor	None
Type of Operation -PERSONAL	Fire	Crew 0	0	0	1
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	0	1
Accident Occurred During -LANDING					

-----Aircraft Information-----

Make/Model - CESSNA 185E	Eng Make/Model - CONTINENTAL IO-520-F	ELT Installed/Activated - YES/YES
Landing Gear - SKI/WHEEL	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3350	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 300 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	STONEY RIVER, AK	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - N/A
Visibility - 40.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 42	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 2000
SE LAND	Months Since - 20	Last 24 Hrs - 4
	Aircraft Type - C-185	Make/Model- 455
		Instrument- 2
		Last 30 Days- 15
		Last 90 Days- 20
		Multi-Eng - 1

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT INTENDED TO LAND ON THE FROZEN LAKE BEFORE PROCEEDING BACK TO HIS HOME BASE. AS HE APPROACHED THE AREA OF THE FROZEN LAKE THE AIRPLANE RAN OUT OF FUEL. THE PILOT ATTEMPTED AN EMERGENCY LANDING ON THE FROZEN LAKE; AFTER ROLLOUT THE AIRPLANE STRUCK A SNOWBANK.

Brief of Accident (Continued)

File No. - 24

3/09/89

ALEXANDER LAKE, AK

A/C Reg. No. N70122

Time (Lc1) - 1845 AST

Occurrence #1 LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation CRUISE

Finding(s)

1. FLUID, FUEL - EXHAUSTION
2. FUEL SUPPLY - EXCEEDED - PILOT IN COMMAND
3. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND

Occurrence #2 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation LANDING - ROLL

Finding(s)

4. TERRAIN CONDITION - SNOWBANK
5. TERRAIN CONDITION - ROUGH/UNEVEN

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S IMPROPER IN-FLIGHT PLANNING, DECISIONS WHICH RESULTED IN EXCEEDING THE AMOUNT OF FUEL AVAILABLE WHICH  
RESULTED IN FUEL EXHAUSTION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 25 3/16/89 FAIRBANKS, AK

A/C Reg. No. N4433N

Time (Lcl) - 1300 AST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	0	2
0	0	0	0

Type of Operation -INSTRUCTIONAL

Flight Conducted Under -14 CFR 91

Accident Occurred During -LANDING

Fire  
NONE

Crew  
Pass

-----Aircraft Information-----

Make/Model - AERONCA 15AC  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 2070  
No. of Seats - 2

Eng Make/Model - CONTINENTAL O-300  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 145 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing - FSS  
Method - TELEPHONE  
Completeness - FULL  
Basic Weather - VMC  
Wind Dir/Speed- 020/003 KTS  
Visibility - 60.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
HEALY, AK  
Destination  
FAIRBANKS, AK

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

ATC/Airspace

Type of Flight Plan - VFR  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
COMMERCIAL, CFI  
SE LAND, ME LAND

Age - 28  
Biennial Flight Review  
Current - YES  
Months Since - 14  
Aircraft Type - PA-22

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 560  
Last 24 Hrs - 2  
Make/Model- 15  
Last 30 Days- 5  
Instrument- 80  
Last 90 Days- 10  
Multi-Eng - 25

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE FLIGHT INSTRUCTOR STATED THAT DURING CRUISE FLIGHT THE ENGINE BEGAN TO RUN ROUGH AND SUBSEQUENTLY QUIT. EMERG PROCEDURES WERE FOLLOWED AND THE ENG REGAINED POWER. THE THROTTLE WAS REDUCED TO 2000 RPM IN ORDER TO ALLOW FOR EXTRA TIME TO FIGURE OUT WHAT FAILED. WITH THE THROTTLE REDUCED, THE ENGINE QUITE ONCE AGAIN. THE CFI APPLIED CARB HEAT AND THE STUDENT SUBSEQUENTLY REMOVED CARB HEAT. THIS HAPPENED SEVERAL TIMES WITH SUBSEQUENT LOSSES AND GAINS IN POWER. THE POWER EVENTUALLY COULD NOT BE REGAINED AND A FORCED LANDING WAS MADE ON A FROZEN SWAMP AREA WHICH WAS COVERED BY 2 1/2 FEET OF SNOW. THE ACFT NOSED OVER DURING THE LANDING.

Brief of Accident (Continued)

File No. - 25

3/16/89

FAIRBANKS, AK

A/C Reg. No. N4433N

Time (Lc1) - 1300 AST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      CRUISE

Finding(s)

1. CARBURETOR HEAT - IMPROPER USE OF - DUAL STUDENT
2. FUEL SYSTEM, CARBURETOR - ICE
3. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
4. WEATHER CONDITION - CARBURETOR ICING CONDITIONS

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING - ROLL

Finding(s)

5. TERRAIN CONDITION - ROUGH/UNEVEN

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE STUDENT PILOT'S INPROPER USE OF CARBURETOR HEAT AND THE INSTRUCTORS FAILURE TO PROPERLY SUPERVISE THE STUDENT  
ACTIONS WITHIN THE AIRPLANE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 61      3/25/89      SKWENTNA, AK      A/C Reg. No. N9685B      Time (Lcl) - 1300 AST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

		Injuries			
		Fatal	Serious	Minor	None
Fire	Crew	0	0	0	1
NONE	Pass	0	0	0	1

Type of Operation -PERSONAL  
Flight Conducted Under -14 CFR 91  
Accident Occurred During -TAKEOFF

-----Aircraft Information-----

Make/Model - CESSNA 180-A  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 2650  
No. of Seats - 4

Eng Make/Model - CONTINENTAL O-470-L  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 230 HP

ELT Installed/Activated - YES-UNK/NR  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - FSS  
Method - TELEPHONE  
Completeness - WEATHER NOT PERTINENT  
Basic Weather - VMC  
Wind Dir/Speed- CALM  
Visibility - 60.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - UNK/NR BROKEN  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
ANCHORAGE, AK  
Destination  
HEWETT LAKE, AK

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - SNOW  
Runway Status - SNOW - WET

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - NONE

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
PRIVATE  
SE LAND, SE SEA

Age - 51  
Biennial Flight Review  
Current - YES  
Months Since - 22  
Aircraft Type - C-180A

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 1108  
Make/Model- 507  
Instrument- 7  
Last 24 Hrs - 1  
Last 30 Days- 5  
Last 90 Days- 14

Instrument Rating(s) - NONE

-----Narrative-----

THE PRIVATE PILOT WAS ATTEMPTING TO LAND HIS SKI EQUIPPED AIRPLANE AT AN OFF-AIRPORT LANDING SITE IN DEEP WET SNOW. DURING THE LANDING ROLL, THE AIRPLANE BEGAN TO SINK INTO THE SNOW. HE ELECTED TO TAKE OFF AND RETURN FOR ANOTHER LANDING IN THE TRACKS HE HAD JUST MADE. A FEW SECONDS PRIOR TO REACHING LIFT-OFF SPEED, THE RIGHT MAIN SKI HIT A COMPACTED SNOW MACHINE TRACK, CAUSING THE PILOT TO LOSE DIRECTIONAL CONTROL. THE PILOT WAS UNABLE TO REGAIN CONTROL AND THE AIRPLANE ULTIMATELY NOSED OVER ONTO ITS BACK, SUSTAINING SUBSTANTIAL DAMAGE. THE PILOT BELIEVES THAT THE ACCIDENT COULD HAVE BEEN AVOIDED HAD HE REDUCED POWER AND TURNED AROUND IN HIS LANDING TRACKS PRIOR TO ATTEMPTING THE TAKEOFF.



Brief of Accident (Continued)

File No. - 61

3/25/89

SKWENTNA,AK

A/C Reg. No. N9685B

Time (Lcl) - 1300 AST

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

1. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND

Occurrence #2      NOSE OVER  
Phase of Operation      TAKEOFF - GROUND RUN

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL OF THE AIRPLANE DURING THE TAKEOFF RUN. A CONTRIBUTING  
FACTOR TO THE ACCIDENT IS THE PILOT'S SELECTION OF AN UNSUITABLE LANDING/TAKEOFF SITE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 81      4/03/89      KOTZEBUE, AK      A/C Reg. No. N7085      Time (Lcl) - 1915 ADT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL		Fatal	0	0	0
Type of Operation -PUBLIC USE	Fire	Crew	0	0	1	0
Flight Conducted Under -PUBLIC USE	NONE	Pass	0	0	0	0
Accident Occurred During -MANEUVERING						

-----Aircraft Information-----

Make/Model - PIPER PA-18	Eng Make/Model - LYCOMING O-320	ELT Installed/Activated - YES/YES
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1750	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 150 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SELAWIK, AK	
Completeness - N/A	Destination	Airport Data
Basic Weather - IMC	KOTZEBUE, AK	Runway Ident - N/A
Wind Dir/Speed- 120/028 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 5.0 SM	Type of Flight Plan - VFR	Runway Surface - N/A
Lowest Sky/Clouds - 2200 FT PART OBS	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - 2200 FT OVERCAST	Type Apch/Lndg - NONE	
Obstructions to Vision-		
Precipitation - SNOW		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 34	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 1163
SE LAND, SE SEA	Months Since - 1	Make/Model- 880
	Aircraft Type - C-185	Instrument- 21
		Last 24 Hrs - 4
		Last 30 Days- 17
		Last 90 Days- 36

Instrument Rating(s) - NONE

-----Narrative-----

THE PRIVATE PILOT, A STATE FISH AND WILDLIFE PROTECTION OFFICER, CONTINUED VFR INTO IFR CONDITIONS THEN LOST CONTROL AND CRASHED THE AIRPLANE WHILE TRYING TO EXECUTE A 180 DEGREE TURN BACK TO VFR CONDITION. THE CRASH WAS ABOUT TWO HOURS BEFORE SUNSET AND 14 NM FROM HIS HOME BASE FROM WHICH THE PILOT HAD DEPARTED OVER 8 HOURS EARLIER. HIS PVT PILOTS CERTIFICATE HAD A LIMITATION PROHIBITING NIGHT FLIGHT. THE AIRPLANE WAS NOT EQUIPPED, & THE PILOT WAS NOT RATED FOR, INSTRUMENT FLIGHT. ALTHOUGH AVAILABLE AT THE POINT OF DEPARTURE AND ENROUTE, NO WX BRIEFING WAS OBTAINED EITHER PRIOR TO OR DURING THE FLIGHT.

Brief of Accident (Continued)

File No. - 81

4/03/89

KOTZEBUE, AK

A/C Reg. No. N7085

Time (Lcl) - 1915 ADT

Occurrence #1 IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation CRUISE - NORMAL

Finding(s)

1. WEATHER CONDITION - SNOW
2. VFR FLIGHT INTO IMC - INTENTIONAL - PILOT IN COMMAND
3. WEATHER CONDITION - WHITEOUT
4. WEATHER EVALUATION - NOT OBTAINED - PILOT IN COMMAND
5. PREFLIGHT BRIEFING SERVICE - NOT OBTAINED - PILOT IN COMMAND
6. IN FLIGHT WEATHER ADVISORIES - NOT OBTAINED - PILOT IN COMMAND

Occurrence #2 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation MANEUVERING - TURN TO REVERSE DIRECTION

Finding(s)

7. PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT CONTINUED FLIGHT INTO IFR CONDITIONS AND FAILED TO MAINTAIN THE ALTITUDE. CONTRIBUTING TO THE ACCIDENT  
WAS THE PILOT'S FAILURE TO OBTAIN A WEATHER BRIEFING AND THE DETERIORATED WEATHER CONDITIONS WHICH WERE ENCOUNTERED.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 62      4/11/89      TRINITY LAKE, AK      A/C Reg. No. N9850X      Time (Lcl) - 1730 ADT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL		Injuries		
Type of Operation      -PERSONAL	Fire	Crew	Fatal	Serious	Minor
Flight Conducted Under      -14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During      -LANDING			0	0	0
					None
					1
					1

-----Aircraft Information-----

Make/Model      - CESSNA 185	Eng Make/Model - CONTINENTAL IO-520	ELT Installed/Activated - YES/NO
Landing Gear      - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt      - 3350	Engine Type      - RECIP-FUEL INJECTED	
No. of Seats      - 4	Rated Power      - 300 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing      - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method      - TELEPHONE	ANCHORAGE, AK	
Completeness      - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather      - VMC	SAME AS ACC/INC	
Wind Dir/Speed- 360/005 KTS	ATC/Airspace	Runway Ident      - N/A
Visibility      - 60.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid      - N/A
Lowest Sky/Clouds      - CLEAR	Type of Clearance      - NONE	Runway Surface      - N/A
Lowest Ceiling      - NONE	Type Apch/Lndg      - VALLEY/TERRAIN FOLLOWING	Runway Status      - N/A
Obstructions to Vision- NONE		
Precipitation      - NONE		
Condition of Light      - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 47	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current      - YES	Total      - 942
SE LAND, SE SEA	Months Since      - 23	Make/Model- 703
	Aircraft Type - C-185	Instrument- 41
		Last 24 Hrs - 1
		Last 30 Days- 7
		Last 90 Days- 12

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT WAS ATTEMPTING A LATE AFTERNOON LANDING AT AN OFF AIRPORT LANDING SITE ON A SNOW COVERED LAKE. SHORTLY AFTER TOUCH DOWN, THE RIGHT MAIN LANDING GEAR SKI BECAME DETACHED FROM THE GEAR LEG. THE GEAR LEG WENT THROUGH THE SNOW AND INTO THE ICE BELOW, COLLAPSING THE RIGHT MAIN GEAR IN THE PROCESS. THE PILOT REPORTED THAT THE SNOW CONDITIONS WERE EXTREMELY WET, AND THAT DURING THE LANDING ROLL THE RIGHT MAIN SKI BECAME MIRED IN THE HEAVY SNOW, ULTIMATELY CAUSING THE SKI ATTACHMENT BOLTS TO FAIL AND ALLOWING THE GEAR LEG TO STRIKE THE ICE.

Brief of Accident (Continued)

File No. - 62

4/11/89

TRINITY LAKE, AK

A/C Reg. No. N9850X

Time (Lcl) - 1730 ADT

Occurrence #1 MAIN GEAR COLLAPSED  
Phase of Operation LANDING - ROLL

Finding(s)

1. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND

Occurrence #2 NOSE DOWN  
Phase of Operation LANDING - ROLL

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S SELECTION OF UNSUITABLE TERRAIN ON WHICH TO LAND.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 87      4/17/89      KENAI, AK      A/C Reg. No. N6479L      Time (Lcl) - 1159 ADT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage		Injuries				
		SUBSTANTIAL			Fatal	Serious	Minor	None
Type of Operation	-PERSONAL	Fire		Crew	0	0	0	1
Flight Conducted Under	-14 CFR 91	NONE		Pass	0	0	0	0
Accident Occurred During	-LANDING							

-----Aircraft Information-----

Make/Model	- CESSNA 152	Eng Make/Model	- LYCOMING O-235	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 1670	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 2	Rated Power	- 108 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary	Airport Proximity	
Wx Briefing	- FSS	Last Departure Point	OFF AIRPORT/STRIP	
Method	- TELEPHONE	ANCHORAGE, AK		
Completeness	- WEATHER NOT PERTINENT	Destination	Airport Data	
Basic Weather	- VMC	SAME AS ACC/INC		
Wind Dir/Speed	- 090/010 KTS		Runway Ident	- N/A
Visibility	- 30.0 SM	ATC/Airspace	Runway Lth/Wid	- N/A
Lowest Sky/Clouds	- 4000 FT SCATTERED	Type of Flight Plan	Runway Surface	- N/A
Lowest Ceiling	- 5500 FT OVERCAST	Type of Clearance	Runway Status	- N/A
Obstructions to Vision	- NONE	Type Apch/Lndg		
Precipitation	- NONE			
Condition of Light	- DAYLIGHT			

-----Personnel Information-----

Pilot-In-Command	Age - 24	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
PRIVATE	Current - YES	Total - 178	Last 24 Hrs - 2
SE LAND, ME LAND	Months Since - 5	Make/Model - 151	Last 30 Days - 28
	Aircraft Type - PA-34	Instrument - 41	Last 90 Days - 63
		Multi-Eng - 23	

Instrument Rating(s) - NONE

-----Narrative-----

AT APPROXIMATELY 1000 M.S.L. THE ENGINE QUIT. THE PILOT ATTEMPTED AN EMERGENCY LANDING ON THE BEACH. AFTER TOUCHDOWN THE AIRPLANE NOSED OVER ON ITS BACK. EXAMINATION OF THE AIRPLANE FUEL SYSTEM REVEALED COMPLETE FUEL EXHAUSTION.

Brief of Accident (Continued)

File No. - 87

4/17/89

KENAI, AK

A/C Reg. No. N6479L

Time (Lcl) - 1159 ADT

-----  
Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      DESCENT - NORMAL

Finding(s)

1. FLUID, FUEL - EXHAUSTION
  2. PREFLIGHT PLANNING/PREPARATION - IMPROPER - PILOT IN COMMAND
- 

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

-----

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

-----

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER PREFLIGHT PLANNING AND PREPARATION BY THE PILOT WHICH RESULTED IN FUEL EXHAUSTION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 79      4/22/89      ANCHORAGE, AK      A/C Reg. No. N90918      Time (Lcl) - 1330 ADT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL				
Type of Operation -PERSONAL	Fire	Crew	Fatal	Injuries Serious	Minor
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During -LANDING			0	0	0
					None
					1
					1

-----Aircraft Information-----

Make/Model - PIPER PA-18	Eng Make/Model - LYCOMING O-360	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1750	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 180 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
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	ELMENDORF
Wind Dir/Speed- 060/006 KTS	ATC/Airspace	Runway Ident - 05
Visibility - UNK/NR	Type of Flight Plan - NONE	Runway Lth/Wid - 10000/ 200
Lowest Sky/Clouds - 4000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 7000 FT OVERCAST	Type Apch/Lndg - FULL STOP	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 53	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 5200
SE LAND, ME LAND, SE SEA	Months Since - 4	Make/Model- 150
	Aircraft Type - C-172	Instrument- UNK/NR
		Multi-Eng - 2500
		Last 24 Hrs - 1
		Last 30 Days- 14
		Last 90 Days- 30
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

ON LANDING THE PILOT LOST DIRECTIONAL CONTROL OF THE AIRPLANE WHICH SUBSEQUENTLY GROUND LOOPED.



Brief of Accident (Continued)

File No. - 79

4/22/89

ANCHORAGE, AK

A/C Reg. No. N90918

Time (Lcl) - 1330 ADT

-----  
Occurrence #1            LOSS OF CONTROL - ON GROUND

Phase of Operation      LANDING - ROLL

1. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND  
-----

Occurrence #2            DRAGGED WING, ROTOR, POD, OR FLOAT

Phase of Operation      LANDING - ROLL  
-----

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL OF THE AIRPLANE DURING THE LANDING ROLL.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 80      4/24/89      FAIRBANKS, AK      A/C Reg. No. N7652A      Time (Lcl) - 1513 ADT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage	Injuries				
		SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation	-PERSONAL	Fire	Crew	0	0	0	1
Flight Conducted Under	-14 CFR 91	NONE	Pass	0	0	0	0
Accident Occurred During	-LANDING						

-----Aircraft Information-----

Make/Model	- CESSNA 180	Eng Make/Model	- CONTINENTAL O-470K	ELT Installed/Activated	- YES/NO
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 2550	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 4	Rated Power	- 230 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary	Airport Proximity
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point	ON AIRSTRIP
Method	- N/A	SAME AS ACC/INC	
Completeness	- N/A	Destination	Airport Data
Basic Weather	- VMC	SAME AS ACC/INC	FAIRBANKS
Wind Dir/Speed	- 070/007 KTS	ATC/Airspace	Runway Ident
Visibility	- 60.0 SM	Type of Flight Plan	- 01
Lowest Sky/Clouds	- 5000 FT SCATTERED	- NONE	Runway Lth/Wid
Lowest Ceiling	- 20000 FT OVERCAST	- NONE	- 3200/ 60
Obstructions to Vision	- NONE	Type of Clearance	Runway Surface
Precipitation	- NONE	Type Apch/Lndg	- ASPHALT
Condition of Light	- DAYLIGHT	FULL STOP	Runway Status
			- DRY

-----Personnel Information-----

Pilot-In-Command	Age - 36	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
PRIVATE	Current - YES	Total - 674	Last 24 Hrs - 1
SE LAND	Months Since - 11	Make/Model - 526	Last 30 Days - 15
	Aircraft Type - C-180	Instrument - UNK/NR	Last 90 Days - 26
		Multi-Eng - UNK/NR	Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PRIVATE PILOT WAS ATTEMPTING TO LAND HIS CESSNA 180 AIRPLANE IN A RIGHT QUARTERING HEAD WIND OF APPROXIMATELY 07 KNOTS. THE RIGHT WING LIFTED ABRUPTLY DURING THE LANDING ROLL AND THE PILOT WAS UNABLE TO TAKE CORRECTIVE ACTION QUICKLY ENOUGH TO MAINTAIN DIRECTIONAL CONTROL. THE AIRPLANE GROUND-LOOPE TO THE RIGHT AND NOSED OVER.

Brief of Accident (Continued)

File No. - 80

4/24/89

FAIRBANKS, AK

A/C Reg. No. N7652A

Time (Lc1) - 1513 ADT

-----  
Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      LANDING - ROLL

Finding(s)

1. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
- 

Occurrence #2      NOSE OVER  
Phase of Operation      LANDING - ROLL

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL OF THE AIRPLANE DURING THE LANDING ROLL.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 70      3/01/89      HARRISBURG,AR      A/C Reg. No. N3627D      Time (Lcl) - 0840 CST

-----Basic Information-----

Type Operating Certificate	AGRICULTURAL AIRCRAFT	Aircraft Damage						
		SUBSTANTIAL						
Type of Operation	-AERIAL APPLICATION	Fire	Crew	Fatal	0	0	0	1
Flight Conducted Under	-14 CFR 137	NONE	Pass	0	0	0	0	0
Accident Occurred During	-LANDING							

-----Aircraft Information-----

Make/Model	- GRUMMAN G-164B	Eng Make/Model	- P&W R-1340-AN1	ELT Installed/Activated	- NO	-N/A
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- UNK/NR	
Max Gross Wt	- 5200	Engine Type	- RECIPROCATING-CARBURETOR			
No. of Seats	- 1	Rated Power	- 600 HP			

-----Environment/Operations Information-----

Weather Data		Itinerary		Airport Proximity	
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point		ON AIRSTRIP	
Method	- N/A	HARRISBURG,AR			
Completeness	- N/A	Destination		Airport Data	
Basic Weather	- VMC	LOCAL		Runway Ident	- UNK/NR
Wind Dir/Speed	- 050/010 KTS	ATC/Airspace		Runway Lth/Wid	- UNK/NR
Visibility	- 12.0 SM	Type of Flight Plan	- NONE	Runway Surface	- GRASS/TURF
Lowest Sky/Clouds	- 10000 FT SCATTERED	Type of Clearance	- NONE	Runway Status	- DRY
Lowest Ceiling	- 25000 FT BROKEN	Type Apch/Lndg	- FULL STOP		
Obstructions to Vision	- NONE				
Precipitation	- NONE				
Condition of Light	- DAYLIGHT				

-----Personnel Information-----

Pilot-In-Command	Age - 59	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL	Current - YES	Total - 18124	Last 24 Hrs - 1
SE LAND	Months Since - 12	Make/Model- 8604	Last 30 Days- UNK/NR
	Aircraft Type - C-150	Instrument- UNK/NR	Last 90 Days- UNK/NR
		Multi-Eng - UNK/NR	Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT SAID THAT HE WAS RETURNING TO A PRIVATE LDG STRIP AFTER COMPLETING AN AERIAL APPLICATION OPERATION. DURING THE LANDING ROLL, THE LEFT BRAKE LINE FAILED CAUSING THE ACFT TO VEEER OFF THE RUNWAY AND OVERTURN.

Brief of Accident (Continued)

File No. - 70

3/01/89

HARRISBURG, AR

A/C Reg. No. N3627D

Time (Lcl) - 0840 CST

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation LANDING - ROLL

Finding(s)

1. LANDING GEAR, NORMAL BRAKE SYSTEM - INOPERATIVE
2. HYDRAULIC SYSTEM, LINE - FAILURE, TOTAL
3. BRAKES(NORMAL) - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #2 LOSS OF CONTROL - ON GROUND  
Phase of Operation LANDING - ROLL

Occurrence #3 NOSE OVER  
Phase of Operation LANDING - ROLL

Finding(s)

4. TERRAIN CONDITION - OPEN FIELD

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE HYDRAULIC LINE WHICH RENDERED THE BRAKE SYSTEM INOPERATIVE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 72      3/02/89      GRIFFITHVILLE, AR      A/C Reg. No. N6610Q      Time (Lcl) - 1530 CST

-----Basic Information-----

Type Operating Certificate-AGRICULTURAL AIRCRAFT	Aircraft Damage SUBSTANTIAL					
Type of Operation -INSTRUCTIONAL	Fire	Crew	Fatal	Injuries Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -LANDING			0	0	0	0

-----Aircraft Information-----

Make/Model - GRUMMAN G-164B	Eng Make/Model - P&W R-985-AN1	ELT Installed/Activated - NO -N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 4500	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 1	Rated Power - 450 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity ON AIRSTRIP
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point GRIFFITHVILLE, AR	
Method - N/A	Destination	Airport Data
Completeness - N/A	SAME AS ACC/INC	Runway Ident - 36
Basic Weather - VMC	ATC/Airspace	Runway Lth/Wid - 2800/ 100
Wind Dir/Speed- 130/005 KTS	Type of Flight Plan - NONE	Runway Surface - GRASS/TURF
Visibility - 7.0 SM	Type of Clearance - NONE	Runway Status - SOFT
Lowest Sky/Clouds - UNK/NR	Type Apch/Lndg - STOP AND GO	
Lowest Ceiling - 1700 FT OVERCAST		
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 38	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 290
SE LAND	Months Since - 1	Make/Model- 26
	Aircraft Type - C-150	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 2
		Last 30 Days- 29
		Last 90 Days- 112
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT SAID THAT WHILE PRACTICING TO'S AND LDGS ON A GRASS STRIP, HE ENCOUNTERED A SOFT SPOT AND WAS UNABLE TO KEEP THE AIRCRAFT FROM NOSING OVER. THE NEWLY CERTIFICATED PILOT WAS PRACTICING FOR POSSIBLE EMPLOYMENT WITH AN AERIAL APPLICATION OPERATION AND WAS NOT INVOLVED IN AN AERIAL APPLICATION OPERATION.

Brief of Accident (Continued)

File No. - 72

3/02/89

GRIFFITHVILLE, AR

A/C Reg. No. N6610Q

Time (Lc1) - 1530 CST

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Occurrence #1 NOSE OVER

Phase of Operation LANDING - ROLL

Finding(s)

1. TERRAIN CONDITION - SOFT

2. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND

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----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE PILOT TO ASSURE SUITABLE TERRAIN WAS BEING USED FOR THE LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 94 3/10/89 WYNNE,AR

A/C Reg. No. N6602Q

Time (Lcl) - 0800 CST

-----Basic Information-----

Type Operating Certificate-AGRICULTURAL AIRCRAFT

Type of Operation -AERIAL APPLICATION  
Flight Conducted Under -14 CFR 137  
Accident Occurred During -STANDING

Aircraft Damage

DESTROYED

Fire

ON GROUND

Crew

Pass

Fatal

0

0

Injuries

Serious

0

0

Minor

0

0

None

1

0

-----Aircraft Information-----

Make/Model - GRUMMAN G-164A  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 4500  
No. of Seats - 1

Eng Make/Model - P&W R-1340-AN1

Number Engines - 1

Engine Type - RECIPROCATING-CARBURETOR

Rated Power - 600 HP

ELT Installed/Activated - NO -N/A

Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING

Method - N/A

Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 360/005 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

WYNNE,AR

Destination

LOCAL

ATC/Airspace

Type of Flight Plan - NONE

Type of Clearance - NONE

Type Apch/Lndg - NONE

Airport Proximity

ON AIRSTRIP

Airport Data

Runway Ident - 26

Runway Lth/Wid - 2000/ 60

Runway Surface - GRASS/TURF

Runway Status - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL

SE LAND

Age - 46

Biennial Flight Review

Current - YES

Months Since - 19

Aircraft Type - 7AC

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total - 5500

Make/Model- 4500

Instrument- 14

Multi-Eng - UNK/NR

Last 24 Hrs - 0

Last 30 Days- 5

Last 90 Days- 10

Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT SAID THAT WHILE ATTEMPTING TO START THE ENGINE IN PREPARATION FOR AN AERIAL APPLICATION OPERATION, THE ENGINE BACKFIRED AND CAUGHT FIRE. BEFORE THE FIRE COULD BE EXTINGUISHED THE AIRCRAFT WAS DESTROYED BY FLAMES. THE LOCAL FIRE DEPT WAS CALLED AND RESPONDED. AS THE FIRE WAS ENGULFING THE FUEL TANK, THE ACFT WAS PULLED AWAY FROM OTHER EQUIPMENT AND HANGAR TO PREVENT ADDITIONAL DAMAGE.



Brief of Accident (Continued)

File No. - 94

3/10/89

WYNNE, AR

A/C Reg. No. N6602Q

Time (Lcl) - 0800 CST

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Occurrence #1 FIRE

Phase of Operation STANDING - STARTING ENGINE(S)

Finding(s)

1. ENGINE ASSEMBLY - FIRE

2. UNDETERMINED

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-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
AN ENGINE FIRE DURING ENGINE START FOR UNDETERMINED REASONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 148      3/11/89      STUTTGART, AR      A/C Reg. No. N9874      Time (Lcl) - 1530 CST

-----Basic Information-----

Type Operating Certificate-AGRICULTURAL AIRCRAFT	Aircraft Damage SUBSTANTIAL		Injuries			
Type of Operation - AERIAL APPLICATION	Fire	Crew	Fatal	Serious	Minor	None
Flight Conducted Under -14 CFR 137	NONE	Pass	0	0	1	0
Accident Occurred During -MANEUVERING			0	0	0	0

-----Aircraft Information-----

Make/Model - GRUMMAN G-164A	Eng Make/Model - P&W R-1340-AN1	ELT Installed/Activated - NO -N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 4500	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 1	Rated Power - 600 HP	

-----Environment/Operations Information-----

<b>Weather Data</b> Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC Wind Dir/Speed- 220/010 KTS Visibility - 10.0 SM Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - DAYLIGHT	<b>Itinerary</b> Last Departure Point STUTTGART, AR Destination LOCAL  <b>ATC/Airspace</b> Type of Flight Plan - NONE Type of Clearance - NONE Type Apch/Lndg - FORCED LANDING	<b>Airport Proximity</b> OFF AIRPORT/STRIP  <b>Airport Data</b> STUTTGART Runway Ident - N/A Runway Lth/Wid - N/A Runway Surface - N/A Runway Status - N/A
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-----Personnel Information-----

Pilot-In-Command Certificate(s)/Rating(s) COMMERCIAL SE LAND	Age - 27 Biennial Flight Review Current - YES Months Since - 1 Aircraft Type - C-172RG	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT Flight Time (Hours) Total - 306 Make/Model- 35 Instrument- 11 Last 24 Hrs - 9 Last 30 Days- 35 Last 90 Days- 35
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Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT REPORTED THAT AS HE WAS LINING UP TO MAKE HIS FIRST SWATH RUN, THE ENGINE LOST POWER. ALSO, HE STATED THAT AS THE AIRCRAFT WAS LOSING ALTITUDE AND POWER, IT GOT TO ABOUT TELEPHONE POLE HEIGHT, THEN IT STALLED AND COLLIDED WITH THE TERRAIN AT A STEEP ANGLE. A POST ACCIDENT EXAM OF THE ENGINE REVEALED THE SUPERCHARGER SHAFT HAD SHEARED, WHICH RESULTED IN THE LOSS POWER. REPORTEDLY, THE AIRCRAFT WAS FULLY LOADED WITH FUEL AND DRY FERTILIZER, WHEN IT CRASHED.

Brief of Accident (Continued)

File No. - 148

3/11/89

STUTT GART, AR

A/C Reg. No. N9874

Time (Lc1) - 1530 CST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation      MANEUVERING - AERIAL APPLICATION

Finding(s)

1. ENGINE ASSEMBLY, BLOWER/IMPELLER - SHEARED

Occurrence #2      FORCED LANDING  
Phase of Operation      MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Finding(s)

2. LOAD JETTISON - NOT PERFORMED - PILOT IN COMMAND

Occurrence #3      LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      MANEUVERING

Finding(s)

3. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
4. STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #4      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      MANEUVERING

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE ENGINE BLOWER ASSEMBLY DRIVE SHAFT, WHILE MANEUVERING AT LOW ALTITUDE, AND FAILURE OF THE  
PILOT TO MAINTAIN ADEQUATE AIRSPEED, WHICH RESULTED IN A STALL BEFORE HE COULD LAND.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 183      3/13/89      FISHER,AR

A/C Reg. No. N7701V

Time (Lcl) - 1745 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	0	1
0	0	0	0

Type of Operation -AERIAL APPLICATION

Flight Conducted Under -14 CFR 91

Accident Occurred During -MANEUVERING

Fire      Crew      0  
Pass      0

-----Aircraft Information-----

Make/Model - CALLAIR A9-B  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 3600  
No. of Seats - 1

Eng Make/Model - LYCOMING IO-540-B1C5  
Number Engines - 1  
Engine Type - RECIP-FUEL INJECTED  
Rated Power - 290 HP

ELT Installed/Activated - NO -N/A  
Stall Warning System - 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  
FISHER,AR  
Destination  
LOCAL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Wind Dir/Speed- 210/007 KTS  
Visibility - 4.000 SM  
Lowest Sky/Clouds - 25000 FT THIN BKN  
Lowest Ceiling - NONE  
Obstructions to Vision- HAZE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE  
SE LAND

Age - 18  
Biennial Flight Review  
Current - YES  
Months Since - 1  
Aircraft Type - C-152

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total	- 226	Last 24 Hrs -	5
Make/Model-	50	Last 30 Days-	45
Instrument-	1	Last 90 Days-	50
Multi-Eng -	0	Rotorcraft -	0

Instrument Rating(s) - NONE

-----Narrative-----

WHILE PERFORMING AN AERIAL APPLICATION LOW PASS OVER HIS FAMILY'S FARM FEILD, THE NEWLY CERTIFICATED PVT PILOT LOST ENGINE POWER AND MADE AN EMERGENCY LDG. POST ACCIDENT INVESTIGATION REVEALED THE RIGHT ENGINE MAGNETO HAD FAILED CAUSING THE ENGINE FAILURE. THE PILOT WAS NOT QUALIFIED FOR 14 CFR 137 OPS.

Brief of Accident (Continued)

File No. - 183

3/13/89

FISHER,AR

A/C Reg. No. N7701V

Time (Lcl) - 1745 CST

Occurrence #1 LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation MANEUVERING - AERIAL APPLICATION

Finding(s)

1. IGNITION SYSTEM,MAGNETO - FAILURE,TOTAL

Occurrence #2 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation LANDING

Finding(s)

2. TERRAIN CONDITION - NONE SUITABLE

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE ENGINE MAGNETO RESULTING IN ENGINE FAILURE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 149      4/13/89      OSCEOLA, AR      A/C Reg. No. N7245      Time (Lcl) - 0640 CDT

-----Basic Information-----

Type Operating Certificate-AGRICULTURAL AIRCRAFT	Aircraft Damage	Injuries			
	SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation - AERIAL APPLICATION	Fire	Crew 0	0	1	0
Flight Conducted Under -14 CFR 137	NONE	Pass 0	0	0	0
Accident Occurred During -MANEUVERING					

-----Aircraft Information-----

Make/Model - GRUMMAN G-164A	Eng Make/Model - P&W R-985-AN1	ELT Installed/Activated - NO -N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 4500	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 1	Rated Power - 450 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	OSCEOLA, AR	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 040/005 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 25000 FT SCATTERED	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 22	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 600
SE LAND	Months Since - 11	Make/Model- 240
	Aircraft Type - BE-24R	Instrument- 10
		Multi-Eng - 0
		Last 24 Hrs - 7
		Last 30 Days- 80
		Last 90 Days- 150
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT SAID THAT WHILE PERFORMING AN AERIAL APPLICATION OPERATION, HE ATTEMPTED TO FLY UNDER SOME POWER LINES. AS THE ACFT WAS GOING UNDER THE WIRES, THE MAIN GEAR CONTACTED FRESHLY PLOWED SOIL, THEN THE ACFT NOSED OVER. THE PLT SAID HE THOUGHT THAT HAVING A DIRTY WINDSHIELD WHILE FLYING DIRECTLY INTO THE RISING SUN & THE LOCATION OF THE POWER LINES CONTRIBUTED TO THE ACCIDENT.

Brief of Accident (Continued)

File No. - 149

4/13/89

OSCEOLA, AR

A/C Reg. No. N7245

Time (Lc1) - 0640 CDT

-----  
Occurrence #1        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    MANEUVERING - AERIAL APPLICATION

Finding(s)

1. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
  2. WINDOW, FLIGHT COMPARTMENT WINDOW/WINDSHIELD - DIRTY (FOGGY)
  3. LIGHT CONDITION - SUNGLARE
  4. OBJECT - WIRE, TRANSMISSION
  5. CLEARANCE - MISJUDGED - PILOT IN COMMAND
- 

Occurrence #2        NOSE OVER  
Phase of Operation    OTHER

Finding(s)

6. TERRAIN CONDITION - SOFT
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER PLANNING/DECISION BY THE PILOT, AND HIS MISJUDGEMENT OF CLEARANCE BETWEEN THE AIRPLANE, WIRES,  
AND THE GROUND DURING THE AERIAL APPLICATION MANEUVER. FACTORS RELATING TO THE ACCIDENT WERE: THE DIRTY  
WINDSHIELD, SUNGLARE, TRANSMISSION LINE (WIRES), AND SOFT TERRAIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 189      1/15/89      TUCSON,AZ

A/C Reg. No. N61LM

Time (Lcl) - 1104 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
DESTROYED

Injuries			
Fatal	Serious	Minor	None
Crew 1	0	0	0
Pass 0	0	0	0

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - MANEUVERING

Fire  
NONE

-----Aircraft Information-----

Make/Model - MURPHEY VANCRAFT 532  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 550  
No. of Seats - 1

Eng Make/Model - ROTAX 532LC  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 64 HP

ELT Installed/Activated - NO -N/A  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- 006/004 KTS  
Visibility - 50.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
TUCSON,AZ  
Destination  
LOCAL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - NONE

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE  
SE LAND  
GYROPLANE

Age - 56

Biennial Flight Review

Current - YES  
Months Since - 15  
Aircraft Type - UNK/NR

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total - 3200	Last 24 Hrs - UNK/NR
Make/Model- 89	Last 30 Days- UNK/NR
Instrument- UNK/NR	Last 90 Days- 5
Multi-Eng - UNK/NR	Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DURING A PLEASURE FLIGHT, THE GYROCOPTER COLLIDED WITH TRANSMISSION WIRES. IT SUBSEQUENTLY COLLIDED WITH THE TERRAIN. THE WEATHER AT THE TIME OF THE ACCIDENT WAS CLEAR AND VISIBILITY WAS 50 MILES. NO EVIDENCE OF MECHANICAL FAILURES OR MALFUNCTIONS WAS FOUND. A WITNESS REPORTED THAT THE ENGINE SOUNDED "FINE" AND THAT HE OBSERVED THE GYROCOPTER TO DESCEND JUST BEFORE IMPACT, AS IF THE PILOT WAS ATTEMPTING TO AVOID CONTACT WITH THE WIRES. ANOTHER WITNESS SAID IT APPEARED THAT THE GYROCOPTER WAS IN LEVEL FLIGHT WHEN IT STRUCK WIRES.



Brief of Accident (Continued)

File No. - 189

1/15/89

TUCSON,AZ

A/C Reg. No. N61LM

Time (Lcl) - 1104 MST

Occurrence #1 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation MANEUVERING

Finding(s)

1. OBJECT - WIRE,TRANSMISSION
2. PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
3. VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND

Occurrence #2 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation DESCENT - UNCONTROLLED

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE LOOKOUT BY THE PILOT DURING UNWARRANTED LOW FLIGHT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 160 1/17/89 PAGE,AZ

A/C Reg. No. N6347H

Time (Lcl) - 0900 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation -NON SCHED,DOMESTIC,CARGO  
Flight Conducted Under -14 CFR 135  
Accident Occurred During -MANEUVERING

Aircraft Damage

SUBSTANTIAL

Fire  
NONE

Fatal

Crew 0  
Pass 0

Injuries

Serious Minor

0 0  
0 0

None

1  
0

-----Aircraft Information-----

Make/Model - CESSNA T207A  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 3800  
No. of Seats - 2

Eng Make/Model - CONTINENTAL TS10-520-M  
Number Engines - 1  
Engine Type - RECIP-FUEL INJECTED  
Rated Power - 310 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - FSS  
Method - TELEPHONE  
Completeness - UNK/NR

Basic Weather - VMC

Wind Dir/Speed- 011 KTS

Visibility - 20.0 SM

Lowest Sky/Clouds - N/A

Lowest Ceiling - 600 FT OVERCAST

Obstructions to Vision- HAZE

Precipitation - NONE

Condition of Light - DAYLIGHT

Itinerary

Last Departure Point

TUBA CITY,AZ

Destination

PAGE,AZ

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A

Runway Lth/Wid - N/A

Runway Surface - N/A

Runway Status - N/A

ATC/Airspace

Type of Flight Plan - COMPANY (VFR)

Type of Clearance - VFR

Type Apch/Lndg - NONE

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL,CFI

SE LAND,ME LAND

Age - 22

Biennial Flight Review

Current - YES

Months Since - 3

Aircraft Type - PA-31

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total - 1782 Last 24 Hrs - 2

Make/Model- 226 Last 30 Days- 73

Instrument- 105 Last 90 Days- 266

Multi-Eng - 814

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING A CARGO FLIGHT, THE PILOT WAS FLYING THE AIRPLANE AT ABOUT 500 FT AGL UNDER AN OVERCAST LAYER. A FLOCK OF BIRDS FLEW INTO THE AIRPLANE'S FLIGHT PATH AND THE PILOT TOOK EVASIVE ACTION TO AVOID A COLLISION. AS HE ATTEMPTED TO RESUME NORMAL FLIGHT, THE AIRPLANE WAS IN CLOSE PROXIMITY TO THE TERRAIN. SUBSEQUENTLY, THE VERTICAL STABILIZER COLLIDED WITH A TRANSMISSION WIRE THAT WAS STRETCHED ACROSS A SHALLOW CANYON. THE AIRPLANE YAWED VIOLENTLY, BUT THE PILOT WAS ABLE TO MAINTAIN CONTROL AND LAND AT A NEARBY AIRPORT.

Brief of Accident (Continued)

File No. - 160

1/17/89

PAGE,AZ

A/C Reg. No. N6347H

Time (Lcl) - 0900 MST

---

Occurrence #1            IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation       MANEUVERING

Finding(s)

1. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
  2. OBJECT - BIRD(S)
  3. MANEUVER - EXCESSIVE - PILOT IN COMMAND
  4. OBJECT - WIRE,TRANSMISSION
  5. VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER IN-FLIGHT PLANNING/DECISION BY THE PILOT AND HIS INADEQUATE VISUAL LOOKOUT (FAILURE TO SEE-AND-AVOID  
THE OBSTRUCTION). FACTORS RELATED TO THE ACCIDENT WERE: THE BIRDS, THE PILOT'S EXCESSIVE MANEUVER, AND THE  
TRANSMISSION LINE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 140      1/22/89      TUCSON, AZ      A/C Reg. No. N44ME      Time (Lcl) - 1230 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal		Injuries Serious		Minor		None	
Type of Operation -PERSONAL	Fire	Crew	1	0	0	0	0	0	0
Flight Conducted Under -14 CFR 91	NONE	Pass	1	0	0	0	0	0	0
Accident Occurred During -TAKEOFF									

-----Aircraft Information-----

Make/Model - LEHMAN/JERRELL VANS RV-4	Eng Make/Model - LYCOMING O-320-D3G	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1500	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 160 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	LACHOLLA AIRPARK
Wind Dir/Speed- 002/004 KTS	ATC/Airspace	Runway Ident - 19
Visibility - 50.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3400/ 36
Lowest Sky/Clouds - 12000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 37	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 300
SE LAND	Months Since - UNK/NR	Last 24 Hrs - UNK/NR
	Aircraft Type - UNK/NR	Make/Model- UNK/NR
		Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DURING A LOCAL FLIGHT JUST AFTER TAKEOFF, THE AIRPLANE WAS OBSERVED TO FLY THE LENGTH OF THE RUNWAY AT APPROXIMATELY 5-7 FEET AGL. AT THE END OF THE RUNWAY, THE AIRPLANE WENT INTO A STEEP CLIMB TO 200-300 FEET AGL THEN ROLLED TO THE LEFT. THE NOSE PITCHED DOWN AND THE AIRPLANE DESCENDED IN A SPIN UNTIL COLLISION WITH THE TERRAIN. NO EVIDENCE OF MECHANICAL FAILURES OR MALFUNCTIONS OF THE AIRPLANE WAS FOUND. THE ACFT HAD A TOTAL FLT TIME OF 119 HOURS. THE AIRPLANE HAD BEEN CERTIFIED ON 8/20/88. THE PILOT WAS ALSO THE OWNER OF THE AIRCRAFT.

Brief of Accident (Continued)

File No. - 140

1/22/89

TUCSON,AZ

A/C Reg. No. N44ME

Time (Lc1) - 1230 MST

-----  
Occurrence #1        LOSS OF CONTROL - IN FLIGHT  
Phase of Operation    TAKEOFF - INITIAL CLIMB

Finding(s)

1. JUDGEMENT - POOR - PILOT IN COMMAND
  2. MANEUVER - IMPROPER - PILOT IN COMMAND
  3. STALL/SPIN - INADVERTENT - PILOT IN COMMAND
- 

Occurrence #2        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    DESCENT - UNCONTROLLED

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
POOR JUDGEMENT BY THE PILOT IN ATTEMPTING AND THEN IMPROPERLY PERFORMING AN AEROBATIC MANEUVER AFTER TAKEOFF,  
RESULTING IN A STALL/SPIN TO THE GROUND.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 116      2/22/89      AGUILA,AZ      A/C Reg. No. N9675Z      Time (Lcl) - 1600 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - LANDING

Aircraft Damage  
SUBSTANTIAL

Fire  
NONE

Crew  
Pass

Fatal  
0  
0

Injuries

Fatal	Serious	Minor	None
0	0	1	0
0	1	0	0

-----Aircraft Information-----

Make/Model - WARWICK THORP T-18  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 1800  
No. of Seats - 2

Eng Make/Model - LYCOMING O-360-A1A  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 180 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- CALM  
Visibility - 60.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
AGUILA,AZ  
Destination  
LOCAL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - TRAFFIC PATTERN  
FULL STOP

Airport Proximity  
ON AIRPORT

Airport Data

EAGLE POINT  
Runway Ident - UNK/NR  
Runway Lth/Wid - 3800/ 60  
Runway Surface - ASPHALT  
Runway Status - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
COMMERCIAL,CFI  
SE LAND,ME LAND

Age - 58  
Biennial Flight Review  
Current - YES  
Months Since - 9  
Aircraft Type - C-150

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)	
Total - 4900	Last 24 Hrs - 2
Make/Model- 2500	Last 30 Days- UNK/NR
Instrument- UNK/NR	Last 90 Days- 30
Multi-Eng - 20	Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE LANDING, THE AIRPLANE TRAVELED OVER A RISE IN THE RWY & VEERED TO THE RIGHT. THE PLT ATTEMPTED TO CORRECT WITH LEFT RUDDER, BUT THE ACFT CONTINUED OFF THE RWY. SUBSEQUENTLY, IT HIT A DITCH & NOSED OVER. NO PREIMPACT MECHANICAL PROBLEMS WERE FOUND.

Brief of Accident (Continued)

File No. - 116

2/22/89

AGUILA,AZ

A/C Reg. No. N9675Z

Time (Lc1) - 1600 MST

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      LANDING - ROLL

Finding(s)

1. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - ROUGH/UNEVEN
2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
3. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Occurrence #2      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING

Finding(s)

4. TERRAIN CONDITION - DITCH

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT TO MAINTAIN DIRECTIONAL CONTROL, WHICH RESULTED IN THE AIRCRAFT VEERING OFF THE RUNWAY.  
FACTORS RELATED TO THE ACCIDENT WERE: UNEVEN RUNWAY & THE DITCH.

Brief of Accident

File No. - 115      1/05/89      CALEXICO,CA      A/C Reg. No. N9039E      Time (Lcl) - 1615 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries Serious	Minor	None
Type of Operation -PERSONAL	Fire	Crew 0	0	0	1
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	0	3
Accident Occurred During -LANDING					

-----Aircraft Information-----

Make/Model - MAULE M-5-210C	Eng Make/Model - CONTINENTAL IO-360	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2300	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 210 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity ON AIRPORT
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point MEXICALI,MX	
Method - N/A	Destination	Airport Data CALEXICO
Completeness - N/A	SAME AS ACC/INC	Runway Ident - UNK/NR
Basic Weather - VMC	ATC/Airspace	Runway Lth/Wid - 4330/ 75
Wind Dir/Speed- CALM	Type of Flight Plan - VFR	Runway Surface - ASPHALT
Visibility - 15.0 SM	Type of Clearance - NONE	Runway Status - DRY
Lowest Sky/Clouds - 2500 FT SCATTERED	Type Apch/Lndg - TRAFFIC PATTERN	
Lowest Ceiling - 5000 FT BROKEN		
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 49	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 1119
SE LAND,ME LAND	Months Since - 1	Last 24 Hrs - 5
	Aircraft Type - M-5	Make/Model- 26
		Last 30 Days- 25
		Instrument- 124
		Last 90 Days- 32
		Multi-Eng - 538

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD THAT DURING THE LANDING ROLL, THE ACFT SUDDENLY VEERED LEFT. HE WAS UNABLE TO MAINTAIN CONTROL OF THE ACFT. SUBSEQUENTLY, IT EXITED THE RUNWAY & COLLIDED WITH THE TERRAIN. AN EXAM OF THE LEFT MAIN WHEEL & BRAKE REVEALED THE TORQUE PLATE PIN WAS RUSTED, WHICH RESTRICTED WHEEL MOVEMENT. REPORTEDLY, THE ACFT HAD VEERED ON OTHER RECENT FLT'S, BUT NO DISCREPANCY HAD BEEN FOUND.



Brief of Accident (Continued)

File No. - 115

1/05/89

CALEXICO,CA

A/C Reg. No. N9039E

Time (Lcl) - 1615 PST

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      LANDING - ROLL

Finding(s)

1. MAINTENANCE - INADEQUATE - OTHER MAINTENANCE PSNL
2. OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - PERFORMED - PILOT IN COMMAND
3. LANDING GEAR,NORMAL BRAKE SYSTEM - BINDING(MECHANICAL)
4. DIRECTIONAL CONTROL - NOT POSSIBLE -
5. GROUND LOOP/SWERVE - UNCONTROLLED -

Occurrence #2      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING

Finding(s)

6. TERRAIN CONDITION - ROUGH/UNEVEN

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
A BINDING BRAKE SYSTEM TORQUE PLATE. FACTORS RELATED TO THE ACCIDENT WERE: INADEQUATE MAINTENANCE BY OTHER  
MAINTENANCE PERSONNEL, AND OPERATION OF THE AIRPLANE WITH A KNOWN EFFICIENCY BY THE PILOT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 89 1/09/89 PLEASANTON, CA

A/C Reg. No. N1672T

Time (Lcl) - 1124 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation -PERSONAL  
Flight Conducted Under -14 CFR 91  
Accident Occurred During -APPROACH

Aircraft Damage  
DESTROYED  
Fire  
ON GROUND

	Fatal	Serious	Minor	None
Crew	1	0	0	0
Pass	0	0	0	0

-----Aircraft Information-----

Make/Model - CESSNA 414  
Landing Gear - TRICYCLE-RETRACTABLE  
Max Gross Wt - 6500  
No. of Seats - 8

Eng Make/Model - CONTINENTAL TS10-520-N  
Number Engines - 2  
Engine Type - RECIP-FUEL INJECTED  
Rated Power - 310 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - FSS  
Method - UNK/NR  
Completeness - FULL  
Basic Weather - IMC  
Wind Dir/Speed- 010/004 KTS  
Visibility - UNK/NR  
Lowest Sky/Clouds - UNK/NR  
Lowest Ceiling - OBSCURED  
Obstructions to Vision- FOG  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
SANTA ANA, CA  
Destination  
OAKLAND, CA

ATC/Airspace

Type of Flight Plan - IFR  
Type of Clearance - IFR  
Type Apch/Lndg - ILS-COMPLETE

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

OAKLAND INT'L  
Runway Ident - 27R  
Runway Lth/Wid - 5453/ 150  
Runway Surface - ASPHALT  
Runway Status - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
PRIVATE  
SE LAND, ME LAND

Age - 43

Biennial Flight Review

Current - YES  
Months Since - 11  
Aircraft Type - PA-23

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total	- 471	Last 24 Hrs	- 2
Make/Model-	149	Last 30 Days-	2
Instrument-	98	Last 90 Days-	26
Multi-Eng	- 155		

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DRG ARRIVAL, THE PLT WAS CLRD FOR AN ILS RWY 27R APCH TO THE METRO OAKLAND INTL ARPT. AS SHE BEGAN THE APCH, THE ATC CTLR NOTED THE ACFT HAD DSCNDD THRU 2900 FT MSL. HE PROVIDED A LOW ALT ALERT TO THE PLT & WARNED HER THE ACFT SHOULD BE AT 3300 FT. THE PLT ACKNOWLEDGED BY SAYING "THANK YOU." THE ATC CTLR SUGGESTED THE PLT CLIMB TO 3300 FT IMMEDIATELY, THEN HE CANCELED THE CLNC & TOLD THE PLT TO CLIMB IMMEDIATELY TO 3300 FT. SUBSEQUENTLY, THE ACFT CRASHED APRX 15 MI EAST OF THE ARPT. IMPACT OCCURRED WITH A 1500 FT RIDGE AT ABOUT THE 1000 FT LEVEL. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE ACFT WAS FOUND.

Brief of Accident (Continued)

File No. - 89

1/09/89

PLEASANTON, CA

A/C Reg. No. N1672T

Time (Lcl) - 1124 PST

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Occurrence #1 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation / APPROACH - IAF TO FAF/OUTER MARKER (IFR)

Finding(s)

1. IFR PROCEDURE - IMPROPER - PILOT IN COMMAND
  2. WEATHER CONDITION - LOW CEILING
  3. WEATHER CONDITION - FOG
  4. TERRAIN CONDITION - MOUNTAINOUS/HILLY
  5. MINIMUM DESCENT ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT TO PROPERLY FOLLOW THE IFR (INSTRUMENT FLIGHT RULES) PROCEDURES BY NOT MAINTAINING  
THE MINIMUM DESCENT ALTITUDE FOR THAT SEGMENT OF THE APPROACH. THE WEATHER CONDITIONS AND MOUNTAINOUS  
TERRAIN WERE CONSIDERED TO BE RELATED FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 169      1/17/89      OAKLAND, CA      A/C Reg. No. N5398R      Time (Lcl) - 0112 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

	Fatal	Serious	Minor	None
Injuries				
Crew	0	0	0	1
Pass	0	0	0	1

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - LANDING

-----Aircraft Information-----

Make/Model - CESSNA TR182  
Landing Gear - TRICYCLE-RETRACTABLE  
Max Gross Wt - 3100  
No. of Seats - 4

Eng Make/Model - LYCOMING O-540  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 235 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - FSS  
Method - TELEPHONE  
Completeness - UNK/NR  
Basic Weather - IMC  
Wind Dir/Speed- 070/006 KTS  
Visibility - 2.000 SM  
Lowest Sky/Clouds - 600 FT PART OBS  
Lowest Ceiling - NONE  
Obstructions to Vision- HAZE  
Precipitation - NONE  
Condition of Light - NIGHT(DARK)

Itinerary

Last Departure Point  
RENO, NV  
Destination  
OAKLAND, CA

Airport Proximity  
ON AIRPORT

Airport Data

OAKLAND  
Runway Ident - 27R  
Runway Lth/Wid - 5453/ 150  
Runway Surface - ASPHALT  
Runway Status - DRY

ATC/Airspace

Type of Flight Plan - VFR  
Type of Clearance - VFR  
Type Apch/Lndg - TRAFFIC PATTERN

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
COMMERCIAL  
SE LAND, ME LAND

Age - 30  
Biennial Flight Review  
Current - YES  
Months Since - 9  
Aircraft Type - C-TR182

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 1225  
Last 24 Hrs - 4  
Make/Model- 1100  
Last 30 Days- 10  
Instrument- 96  
Last 90 Days- 35  
Multi-Eng - 26

Instrument Rating(s) - AIRPLANE

-----Narrative-----

PRIOR TO LANDING, THE PLT EXTENDED THE LANDING GEAR AND NOTED THAT THE GEAR DOWN AND LOCKED INDICATOR WAS NOT ILLUMINATED. THE PLT MANUALLY EXTENDED THE GEAR, HOWEVER, THE INDICATION WAS THE GEAR WAS NOT DOWN AND LOCKED. THE PLT VISUAL NOTED THAT THE MAIN GEAR WAS EXTENDED BUT WAS UNSURE IF THE NOSE WAS EXTENDED. THE PLT FLEW BY THE TOWER AND THE CONTROLLER NOTED THAT IT APPEARED THAT THE NOSE WAS IN THE DOWN POSITION. THE PLT LANDED THE AIRPLANE, MAIN WHEELS FIRST, AND HELD THE NOSE OFF AS LONG AS POSSIBLE. WHEN THE NOSE WHEEL TOUCHED DOWN, THE AIRPLANE VEERED TO THE RT. THE PLT APPLIED BRAKES AND BACK PRESSURE ON THE YOKE. THE NOSE WHEEL COLLAPSED AS THE AIRPLANE EXITED THE RWY AND NOSED OVER. THERE WAS NO EVIDENCE OF MECHANICAL FAILURES OR MALFUNCTIONS HAVING CAUSED THE GEAR COLLAPSE. THE PLT RPTD THAT THE AIRPLANE HAD EXPERIENCED A PREVIOUS HARD LANDING.

Brief of Accident (Continued)

File No. - 169

1/17/89

OAKLAND, CA

A/C Reg. No. N5398R

Time (Lcl) - 0112 PST

Occurrence #1 NOSE GEAR COLLAPSED  
Phase of Operation LANDING - ROLL

Finding(s)

1. LANDING GEAR, NOSE GEAR ASSEMBLY - PREVIOUS DAMAGE
2. MAINTENANCE, INSPECTION OF AIRCRAFT - INADEQUATE - OTHER MAINTENANCE PSNL

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PREVIOUS DAMAGE DUE TO PREVIOUS HARD LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 171      1/17/89      SANTA ANA, CA      A/C Reg. No. N6913D      Time (Lcl) - 2345 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL					
Type of Operation - PERSONAL	Fire	Crew	Fatal	Injuries		
Flight Conducted Under - 14 CFR 91	NONE	Pass	0	Serious	Minor	None
Accident Occurred During - TAKEOFF			0	0	0	1
			0	0	0	1

-----Aircraft Information-----

Make/Model - PIPER PA-32R-301T	Eng Make/Model - LYCOMING TIO-540-S1AD	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt. - 3617	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 300 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
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	VAN NUYS, CA	JOHN WAYNE
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - 19R
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 5700/ 150
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - NIGHT(DARK)		

-----Personnel Information-----

Pilot-In-Command	Age - 55	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 1130
SE LAND	Months Since - 7	Last 24 Hrs - 2
	Aircraft Type - PA-32R	Make/Model- 673
		Last 30 Days- 18
		Instrument- UNK/NR
		Last 90 Days- 58
		Rotorcraft - UNK/NR
		Multi-Eng - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DURING THE TAKEOFF ROLL, THE AIRLANE COLLIDED WITH A GENERATOR THAT WAS POSITIONED ON THE RUNWAY TO ILLUMINATE AN X INDICATING THAT THE RUNWAY WAS CLOSED. THE PILOT DID NOT REALIZE THAT THE RUNWAY WAS CLOSED EVEN AFTER LISTENING TO AN ATIS MESSAGE STATING THAT THE RUNWAY WAS CLOSED. A NOTAM WAS IN EFFECT REPORTING THE SAME. THE PILOT SAID HE HEARD WHAT HE EXPECTED TO HEAR WHEN HE "LISTENED" TO THE ATIS.

Brief of Accident (Continued)

File No. - 171

1/17/89

SANTA ANA, CA

A/C Reg. No. N6913D

Time (Lc1) - 2345 PST

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Occurrence #1      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

1. LIGHT CONDITION - DARK NIGHT
  2. PREFLIGHT PLANNING/PREPARATION - POOR - PILOT IN COMMAND
  3. HABIT INTERFERENCE - PILOT IN COMMAND
  4. OBJECT - AIRPORT FACILITY
  5. WRONG RUNWAY - SELECTED - PILOT IN COMMAND
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
POOR PREFLIGHT PLANNING AND PREPARATION BY SELECTING THE WRONG RUNWAY DESPITE NOTAM AND ATIS INFORMATION INDICATING  
THE RUNWAY WAS CLOSED.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 170      1/18/89      SONOMA, CA

A/C Reg. No. N1058D

Time (Lcl) - 1315 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation            -PERSONAL  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During    -LANDING

Aircraft Damage

SUBSTANTIAL

Fire

NONE

Crew

Pass

Fatal

0

0

Injuries

Serious

0

0

Minor

0

0

None

1

1

-----Aircraft Information-----

Make/Model    - CESSNA 190  
Landing Gear   - TAILWHEEL-ALL FIXED  
Max Gross Wt   - 3150  
No. of Seats    - 5

Eng Make/Model - JACOBS R755-B2  
Number Engines - 1  
Engine Type    - RECIPROCATING-CARBURETOR  
Rated Power    - 275 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing        - NO RECORD OF BRIEFING  
Method            - N/A  
Completeness      - N/A  
Basic Weather      - VMC  
Wind Dir/Speed-    CALM  
Visibility          - 30.0    SM  
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  
LOCAL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance   - NONE  
Type Apch/Lndg      - TOUCH AND GO

Airport Proximity  
ON AIRPORT

Airport Data

SONOMA VALLEY  
Runway Ident       - 16  
Runway Lth/Wid    - 2200/    65  
Runway Surface    - ASPHALT  
Runway Status      - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

ATP,CFI

SE LAND,ME LAND

Age - 39

Biennial Flight Review

Current - YES

Months Since - 6

Aircraft Type - SD3-60

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total - 2730

Make/Model- 110

Instrument- 174

Multi-Eng - 580

Last 24 Hrs - UNK/NR

Last 30 Days- 4

Last 90 Days- 63

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE PRACTICING TOUCH AND GO LANDINGS, DURING THE LANDING ROLL, THE AIRPLANE BEGAN VEERING TO THE LEFT. THE PILOT WAS UNABLE TO MAINTAIN DIRECTIONAL CONTROL. THE AIRPLANE EXITED THE RUNWAY AND NOSED OVER. INSPECTION OF THE LEFT MAIN GEAR BRAKE MECHANISM, REVEALED THAT A CLIP BROKE FREE AND JAMMED BETWEEN THE DISC HOUSING AND THE WHEEL HUB.



Brief of Accident (Continued)

File No. - 170

1/18/89

SONOMA, CA

A/C Reg. No. N1058D

Time (Lcl) - 1315 PST

---

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      LANDING - ROLL

Finding(s)

1. DIRECTIONAL CONTROL - NOT POSSIBLE -
  2. LANDING GEAR, NORMAL BRAKE SYSTEM - JAMMED
- 

Occurrence #2      NOSE OVER  
Phase of Operation      LANDING - ROLL

Finding(s)

3. TERRAIN CONDITION - DITCH
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
A JAMMED BRAKE MECHANISM RESULTING IN THE PILOT'S INABILITY TO MAINTAIN DIRECTIONAL CONTROL.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 172      1/21/89      NAPA, CA

A/C Reg. No. N22988

Time (Lcl) - 1315 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

		Injuries			
		Fatal	Serious	Minor	None
Crew	0	0	0	0	2
Pass	0	0	0	0	0

Type of Operation - INSTRUCTIONAL

Flight Conducted Under - 14 CFR 91

Accident Occurred During - LANDING

-----Aircraft Information-----

Make/Model - CESSNA 150H

Landing Gear - TRICYCLE-FIXED

Max Gross Wt - 1600

No. of Seats - 2

Eng Make/Model - CONTINENTAL O-200A

Number Engines - 1

Engine Type - RECIPROCATING-CARBURETOR

Rated Power - 100 HP

ELT Installed/Activated - YES/YES

Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING

Method - N/A

Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 080/008 KTS

Visibility - 5.0 SM

Lowest Sky/Clouds - 20000 FT SCATTERED

Lowest Ceiling - NONE

Obstructions to Vision- NONE

Precipitation - NONE

Condition of Light - DAYLIGHT

Itinerary

Last Departure Point

SAME AS ACC/INC

Destination

LOCAL

Airport Proximity

ON AIRPORT

Airport Data

NAPA CO.

Runway Ident - 18L

Runway Lth/Wid - 2500/ 75

Runway Surface - ASPHALT

Runway Status - DRY

ATC/Airspace

Type of Flight Plan - NONE

Type of Clearance - VFR

Type Apch/Lndg - TOUCH AND GO

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL,CFI

SE LAND,ME LAND

Age - 39

Biennial Flight Review

Current - YES

Months Since - 10

Aircraft Type - UNK/NR

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total - 2372

Make/Model- UNK/NR

Instrument- UNK/NR

Multi-Eng - UNK/NR

Last 24 Hrs - 0

Last 30 Days- UNK/NR

Last 90 Days- 50

Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING AN INSTRUCTIONAL FLIGHT, THE STUDENT'S APPROACH RESULTED IN A TOUCHDOWN 300 FEET BEYOND THE THRESHOLD. THE INSTRUCTOR TOLD STUDENT TO GO-AROUND. FLAP RETRACTION AND POWER APPLICATION WERE DELAYED. WITH 350 FEET LEFT ON THE RUNWAY, THE INSTRUCTOR TOOK OVER AND ABORTED THE TAKEOFF. THE INSTRUCTOR TRIED TO EXIT THE RUNWAY VIA A TAXIWAY, HOWEVER THE AIRPLANE RAN INTO A DITCH. STUDENT HAD 34 HRS FLIGHT EXPERIENCE.

Brief of Accident (Continued)

File No. - 172

1/21/89

NAPA, CA

A/C Reg. No. N22988

Time (Lc1) - 1315 PST

-----  
Occurrence #1       LOSS OF CONTROL - ON GROUND  
Phase of Operation    LANDING - ROLL

Finding(s)

1. GO-AROUND - DELAYED - DUAL STUDENT
  2. REMEDIAL ACTION - DELAYED - PILOT IN COMMAND(CFI)
  3. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND(CFI)
- 

Occurrence #2       ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation    LANDING - ROLL

Finding(s)

4. TERRAIN CONDITION - DITCH
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE CFI'S DELAY IN ABORTING THE TAKEOFF, LEADING TO A LOSS OF DIRECTIONAL CONTROL.

Brief of Accident

File No. - 175      1/30/89      SAN MARTIN, CA      A/C Reg. No. N8163F      Time (Lcl) - 1545 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation -PERSONAL  
Flight Conducted Under -14 CFR 91  
Accident Occurred During -TAKEOFF

Aircraft Damage  
SUBSTANTIAL  
Fire  
NONE

		Injuries			
		Fatal	Serious	Minor	None
Crew		0	0	1	0
Pass		0	0	3	0

-----Aircraft Information-----

Make/Model - PIPER PA-28-161  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 2325  
No. of Seats - 4

Eng Make/Model - LYCOMING O-320-D3G  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 160 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - FSS  
Method - TELEPHONE  
Completeness - UNK/NR  
Basic Weather - VMC  
Wind Dir/Speed- 350/002 KTS  
Visibility - 10.0 SM  
Lowest Sky/Clouds - 20000 FT THIN BKN  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
SAN MARTIN, CA  
Destination  
OCEANO, CA

ATC/Airspace

Type of Flight Plan - VFR  
Type of Clearance - VFR  
Type Apch/Lndg - FORCED LANDING

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

SOUTH COUNTY  
Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
PRIVATE  
SE LAND

Age - 36  
Biennial Flight Review  
Current - YES  
Months Since - 1  
Aircraft Type - PA-28

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 112  
Make/Model- 89  
Instrument- 3  
Last 24 Hrs - 2  
Last 30 Days- 26  
Last 90 Days- 39  
Rotorcraft - 4

Instrument Rating(s) - NONE

-----Narrative-----

SHORTLY AFTER TAKEOFF, THE ENGINE LOST PARTIAL POWER. THE PILOT ATTEMPTED TO RELAND AT THE AIRPORT, HOWEVER, THE ENGINE LOST POWER COMPLETELY AND AN EMERGENCY LANDING WAS MADE IN A FIELD. INSPECTION OF THE ENGINE REVEALED THAT A SPARK PLUG WAS LOOSE. THE REMAINING PLUGS WERE SEVERELY LEAD AND CARBON FOULED. THE ENGINE WAS SUCCESSFULLY TEST RUN AFTER THE ACCIDENT.

Brief of Accident (Continued)

File No. - 175

1/30/89

SAN MARTIN, CA

A/C Reg. No. N8163F

Time (Lc1) - 1545 PST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      TAKEOFF - INITIAL CLIMB

Finding(s)

1. IGNITION SYSTEM, SPARK PLUG - FOULED
2. MAINTENANCE, INSPECTION OF AIRCRAFT - INADEQUATE - OTHER MAINTENANCE PSNL
3. IGNITION SYSTEM, SPARK PLUG - LOOSE

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - ROLL

Finding(s)

4. TERRAIN CONDITION - SOFT

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
ENGINE FAILURE DUE TO A LOOSE SPARK PLUG WITH THE REMAINING PLUGS FOULED WITH CARBON DEPOSITS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 110      2/01/89      STRATHMORE, CA      A/C Reg. No. N2918W      Time (Lcl) - 0941 PST

-----Basic Information-----

Type Operating Certificate-AGRICULTURAL AIRCRAFT	Aircraft Damage DESTROYED		Injuries		
Type of Operation - AERIAL APPLICATION	Fire	Crew	Fatal	Serious	Minor
Flight Conducted Under -14 CFR 137	NONE	Pass	0	1	0
Accident Occurred During -HOVER		Other	0	0	1
			0	0	0

-----Aircraft Information-----

Make/Model - BELL 47G-3B2	Eng Make/Model - LYCOMING TVO-435-B1A	ELT Installed/Activated - NO -N/A
Landing Gear - SKID	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 3100	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 280 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- VARIABLE/003 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 5.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 58	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 16000
SE LAND	Months Since - 12	Make/Model- 9000
HELICOPTER	Aircraft Type - UNK/NR	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 4
		Last 30 Days- 10
		Last 90 Days- UNK/NR
		Rotorcraft - 12000

Instrument Rating(s) - NONE

-----Narrative-----

DURING A HOVERING MANEUVER, AFTER THE HELICOPTER HAD JUST LIFTED OFF WITH AN EXTERNAL LOAD, A GUST OF WIND WAS ENCOUNTERED. SUBSEQUENTLY, THE EXTERNAL LOAD SWUNG & SNAGGED ON THE SERVICE TRUCK. THE HELICOPTER WAS THEN PULLED DOWN & IT COLLIDED WITH THE TRUCK. NO PREIMPACT MECHANICAL FAILURE OR MALFUNCTION WAS REPORTED. THE PLT SUFFERED BROKEN RIBS & A MINOR HEAD INJURY; A GROUND LOADING ASSISTANT RECEIVED MINOR INJURIES.

Brief of Accident (Continued)

File No. - 110

2/01/89

STRATHMORE,CA

A/C Reg. No. N2918W

Time (Lcl) - 0941 PST

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Occurrence #1      IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      HOVER

Finding(s)

1. WEATHER CONDITION - UNFAVORABLE WIND
  2. WEATHER CONDITION - GUSTS
  3. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
  4. OBJECT - VEHICLE
  5. CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER COMPENSATION FOR WIND CONDITIONS BY THE PILOT, AND HIS FAILURE TO MAINTAIN CLEARANCE FROM THE  
SERVICE TRUCK. FACTORS RELATING TO THE ACCIDENT WERE: THE UNFAVORABLE (VARIABLE) AND GUSTY WIND CONDITIONS  
AND CLOSE PROXIMITY OF THE SERVICE VEHICLE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 117      2/04/89      TRACY, CA      A/C Reg. No. N51K      Time (Lcl) - 1545 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage	Injuries			
Type of Operation	-FLT TEST	DESTROYED	Fatal	1	0	0
Flight Conducted Under	-14 CFR 91	Fire	Crew	0	0	0
Accident Occurred During	-APPROACH	NONE	Pass	0	0	0

-----Aircraft Information-----

Make/Model	- WAR REPLICAS P-51	Eng Make/Model	- HONDA 1829CC	ELT Installed/Activated	- NO -N/A
Landing Gear	- TAILWHEEL-RETRACTABLE MAINS	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 2000	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 1	Rated Power	- 104 HP		

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - NO RECORD OF BRIEFING</p> <p>Method - N/A</p> <p>Completeness - N/A</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- CALM</p> <p>Visibility - UNK/NR</p> <p>Lowest Sky/Clouds - CLEAR</p> <p>Lowest Ceiling - NONE</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point</p> <p>TRACY, CA</p> <p>Destination</p> <p>LOCAL</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - NONE</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - TRAFFIC PATTERN</p>	<p>Airport Proximity</p> <p>OFF AIRPORT/STRIP</p> <p>Airport Data</p> <p>TRACY</p> <p>Runway Ident - 29</p> <p>Runway Lth/Wid - 3680/ 100</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - DRY</p>
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-----Personnel Information-----

Pilot-In-Command	Age - 43	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 622
SE LAND	Months Since - UNK/NR	Make/Model- 9
	Aircraft Type - UNK/NR	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DURING A LOCAL TEST FLIGHT, THE PILOT LOST CONTROL OF THE HALF-SCALE P-51 AIRPLANE WHILE TURNING FROM DOWNWIND TO BASE. THE AIRPLANE COLLIDED WITH THE TERRAIN SHORT OF THE RUNWAY. INSPECTION OF THE AIRPLANE REVEALED THAT THE AILERON CONTROL BELLCRANK WAS NOT INSTALLED IN ACCORDANCE WITH RECORDS HELD BY THE PILOT/MANUFACTURER. WITNESSES REPORTED SEEING BOTH AILERONS AND THE WINGS FLUTTERING BEFORE THE CRASH. EVIDENCE INDICATED AILERON OVERTRAVEL. THE COCKPIT CONTROL STICK WAS NOT EQUIPPED WITH CONTROL TRAVEL STOPS.



Brief of Accident (Continued)

File No. - 117

2/04/89

TRACY, CA

A/C Reg. No. N51K

Time (Lcl) - 1545 PST

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Occurrence #1        LOSS OF CONTROL -- IN FLIGHT  
Phase of Operation    APPROACH - VFR PATTERN - BASE TURN

Finding(s)

1. FLIGHT CONTROL,AILERON ATTACHMENT - IMPROPER
  2. MAINTENANCE,MODIFICATION - NOT CORRECTED - PILOT IN COMMAND
  3. FLIGHT CONTROL,AILERON - FLUTTER
  4. LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
- 

Occurrence #2        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    DESCENT - UNCONTROLLED

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE IMPROPER INSTALLATION OF THE AILERON CONTROLS OF THIS HOMEBUILT ACFT BY THE PILOT/MANUFACTURER WHICH LED TO THE  
INFLIGHT LOSS OF CONTROL OF THE AIRPLANE. CONTRIBUTING TO THE ACCIDENT WAS THE PILOT'S INEXPERIENCE IN THE AIRPLANE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 75      2/19/89      CORONA, CA      A/C Reg. No. N69383      Time (Lcl) - 1210 PST

-----Basic Information-----

Type Operating Certificate	ON-DEMAND AIR TAXI	Aircraft Damage						
Name of Carrier	-LAS VEGAS FLYERS, INC.	DESTROYED						
Type of Operation	-NON SCHED, DOMESTIC, PASSENGER	Fire						
Flight Conducted Under	-14 CFR 135	NONE	Crew	1	Fatal	0	Serious	0
Accident Occurred During	-DESCENT		Pass	9		0	Minor	0
								None
								0
								0

-----Aircraft Information-----

Make/Model	- CESSNA 402B	Eng Make/Model	- CONTINENTAL TS10-520-E5B	ELT Installed/Activated	- YES/NO
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 2	Stall Warning System	- YES
Max Gross Wt	- 6300	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 10	Rated Power	- 300 HP		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	LAS VEGAS, NV	
Completeness - FULL	Destination	Airport Data
Basic Weather - IMC	SANTA ANA, CA	
Wind Dir/Speed - UNK/NR	ATC/Airspace	Runway Ident - N/A
Visibility - UNK/NR	Type of Flight Plan - VFR	Runway Lth/Wid - N/A
Lowest Sky/Clouds - N/A	Type of Clearance - VFR	Runway Surface - N/A
Lowest Ceiling - OBSCURED	Type Apch/Lndg - NONE	Runway Status - N/A
Obstructions to Vision - UNK/NR		
Precipitation - UNK/NR		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 34	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, ATP, CFI	Current - YES	Total - 4000
SE LAND, ME LAND	Months Since - 4	Make/Model - 572
	Aircraft Type - C-402	Instrument - 108
		Multi-Eng - 1998
		Last 24 Hrs - 1
		Last 30 Days - 25
		Last 90 Days - 41

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT WAS OPERATING AN ON-DEMAND AIR TAXI PASSENGER FLT TO SANTA ANA, CA. THE ACFT OCCURRED DRG DESCENT, WHEN THE ACFT COLLIDED WITH A MTN AT 2060 FT MSL. THE PLT HAD RCVD A PREFLT WX BRIEFING IN WHICH HE WAS ADVISED OF LOW CEILINGS AND REDUCED VIS IN THE LOS ANGELES BASIN, SURROUNDING MTNS OBSCURED BY CLOUDS, AND THAT VFR FLT TO SANTA ANA WAS NOT RECOMMENDED. HE DEPARTED VFR. WHILE EN ROUTE, THE PLT WAS ADVISED THAT SANTA ANA WAS REPORTING 1400 FT OVCST WITH 5 MILES VIS. A VIDEOTAPE RECORDED BY A PASSENGER SHOWED MTN PEAKS PROTRUDING THROUGH A SOLID CLOUD LAYER AND SHOWED THE ACFT DESCENDING INTO THE CLOUDS. WITNESSES DESCRIBED A LOW CLOUD CEILING NR THE CRASH SITE AND CLOUD TOPS AT 5000 FT. EXAMINATION OF THE WRECKAGE REVEALED EVIDENCE OF POWERED FLT AND NO EVIDENCE OF PREIMPACT CONTROL OR ENGINE MALFUNCTION. RECORDS INDICATED THAT THE PLT HAD ENCOUNTERED IMC ON ONLY 1 FLT IN THE PREVIOUS 9 MOS. HE WAS DIR OF OPNS FOR THE OPERATOR.

Brief of Accident (Continued)

File No. - 75

2/19/89

CORONA, CA

A/C Reg. No. N69383

Time (Lcl) - 1210 PST

Occurrence #1 IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation DESCENT - NORMAL

Finding(s)

1. PREFLIGHT PLANNING/PREPARATION - IMPROPER - PILOT IN COMMAND
2. WEATHER FORECAST - DISREGARDED - PILOT IN COMMAND
3. IN FLIGHT WEATHER ADVISORIES - DISREGARDED - PILOT IN COMMAND
4. WEATHER CONDITION - LOW CEILING
5. VFR FLIGHT INTO IMC - INTENTIONAL - PILOT IN COMMAND

Occurrence #2 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation DESCENT - NORMAL

Finding(s)

6. TERRAIN CONDITION - MOUNTAINOUS/HILLY

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO PROPERLY PREFLIGHT AND PLAN FOR FLIGHT AND HIS INTENTIONAL FLIGHT INTO IMC CONDITIONS.  
FACTORS CONTRIBUTING TO THE ACCIDENT WERE THE LOW CEILING CONDITIONS IN CONJUNCTION WITH THE MOUNTAINOUS TERRAIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 188      2/22/89      COMPTON, CA      A/C Reg. No. N6972C      Time (Lcl) - 1645 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage		Injuries			
		SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation	-PERSONAL	Fire	Crew	0	0	1	0
Flight Conducted Under	-14 CFR 91	ON GROUND	Pass	0	0	0	0
Accident Occurred During	-TAKEOFF						

-----Aircraft Information-----

Make/Model	- NORTH AMERICAN AT-6	Eng Make/Model	- P&W R-1340-AN-1	ELT Installed/Activated	- YES/YES
Landing Gear	- TAILWHEEL-RETRACTABLE MAINS	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 5300	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 2	Rated Power	- 600 HP		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing	Last Departure Point	OFF AIRPORT/STRIP
Method	COMPTON, CA	
Completeness	Destination	Airport Data
Basic Weather	LOCAL	COMPTON
Wind Dir/Speed	ATC/Airspace	Runway Ident
Visibility	Type of Flight Plan	- 25
Lowest Sky/Clouds	- NONE	Runway Lth/Wid
Lowest Ceiling	- NONE	- 3600/ 60
Obstructions to Vision	Type of Clearance	Runway Surface
Precipitation	- NONE	- ASPHALT
Condition of Light	Type Apch/Lndg	Runway Status
	- FORCED LANDING	- DRY

-----Personnel Information-----

Pilot-In-Command	Age - 58	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL	Current	Total	- 7926
SE LAND	Months Since	Make/Model	- 652
	Aircraft Type	Instrument	- 2338
		Multi-Eng	- 1102
		Last 24 Hrs	- UNK/NR
		Last 30 Days	- 2
		Last 90 Days	- 4
		Rotorcraft	- 1

Instrument Rating(s) - NONE

-----Narrative-----

AT THE BEGINNING OF A LOCAL PLEASURE FLIGHT, JUST AFTER TAKEOFF, THE ENGINE EXPERIENCED A LOSS OF POWER. WIRES WERE STRUCK DURING A FORCED LANDING ON A RESIDENTIAL STREET. INSPECTION OF THE ENGINE REVEALED THAT THE NUMBER FIVE CYLINDER WAS CRACKED IN TWO PARTS. A METALLURGICAL EXAMINATION REVEALED THAT THREE SEPARATE FATIGUE CRACKS EXISTED PRIOR TO THE FINAL BREAK. COMBUSTION BY-PRODUCTS WERE NOTED IN THE CRACKS AND ON THE OUTSIDE OF THE CYLINDER IN THE AREA OF THE CRACKS.

Brief of Accident (Continued)

File No. - 188

2/22/89

COMPTON, CA

A/C Reg. No. N6972C

Time (Lcl) - 1645 PST.

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation      TAKEOFF - INITIAL CLIMB

Finding(s)

1. ENGINE ASSEMBLY, CYLINDER - FATIGUE

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

2. OBJECT - WIRE, TRANSMISSION

Occurrence #4      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING - ROLL

Finding(s)

3. OBJECT - POLE

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FATIGUE CRACKS THAT EXISTED IN AN ENGINE CYLINDER.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 152      3/01/89      RIVERDALE, CA

A/C Reg. No. N8547H

Time (Lcl) - 1251 PST

-----Basic Information-----

Type Operating Certificate-AGRICULTURAL AIRCRAFT

Aircraft Damage  
DESTROYED

Injuries			
Fatal	Serious	Minor	None
0	1	0	0
0	0	0	0

Type of Operation - AERIAL APPLICATION

Fire  
ON GROUND

Crew  
Pass

Flight Conducted Under -14 CFR 137

Accident Occurred During -MANEUVERING

-----Aircraft Information-----

Make/Model - GRUMMAN G-164A  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 4500  
No. of Seats - 1

Eng Make/Model - P&W R-985-14B  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 450 HP

ELT Installed/Activated - NO -N/A  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- LIGHT AND VARIABLE  
Visibility - 20.0 SM  
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  
LOCAL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - NONE

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
COMMERCIAL  
SE LAND

Age - 59  
Biennial Flight Review  
Current - YES  
Months Since - 1  
Aircraft Type - BE-35

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 23200  
Make/Model- 7000  
Instrument- 113  
Last 24 Hrs - 1  
Last 30 Days- 2  
Last 90 Days- 24

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING AN AERIAL APPLICATION FLIGHT, THE PILOT HAD JUST COMPLETED A SWATH RUN OVER A FIELD, WHEN THE AIRPLANE COLLIDED WITH POWER LINES. HE SAID THAT AFTER MAKING THE SWATH RUN, HE LOOKED BACK OVER HIS SHOULDER TO OBSERVE THE FLAGGERS. WHEN HE LOOKED FORWARD AGAIN, THE AIRPLANE WAS ABOUT TO STRIKE THE WIRES.

Brief of Accident (Continued)

File No. - 152

3/01/89

RIVERDALE, CA

A/C Reg. No. N8547H

Time (Lcl) - 1251 PST

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Occurrence #1            IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation       MANEUVERING - AERIAL APPLICATION

Finding(s)

1. OBJECT - WIRE, TRANSMISSION
  2. VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND
  3. DIVERTED ATTENTION - PILOT IN COMMAND
- 

Occurrence #2            IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation       DESCENT - UNCONTROLLED

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----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE VISUAL LOOKOUT BY THE PILOT, WHEN HE DIVERTED HIS ATTENTION. THE POWER LINE WAS A RELATED FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 114      3/08/89      LEGGETT,CA      A/C Reg. No. N277MB      Time (Lcl) - 1530 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage DESTROYED		Injuries		
Type of Operation -PERSONAL	Fire	Crew	Fatal	Serious	Minor
Flight Conducted Under -14 CFR 91	NONE	Pass	1	0	0
Accident Occurred During -CRUISE			1	0	0

-----Aircraft Information-----

Make/Model - STEARNS BD-4	Eng Make/Model - LYCOMING O-360	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1237	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 180 HP	

-----Environment/Operations Information-----

<b>Weather Data</b> Wx Briefing - NWS Method - IN PERSON Completeness - FULL Basic Weather - IMC Wind Dir/Speed- LIGHT AND VARIABLE Visibility - UNK/NR Lowest Sky/Clouds - UNK/NR Lowest Ceiling - OVERCAST Obstructions to Vision- FOG Precipitation - DRIZZLE Condition of Light - DAYLIGHT	<b>Itinerary</b> Last Departure Point SANTA MARIA,CA Destination CORVALLIS,OR  <b>ATC/Airspace</b> Type of Flight Plan - VFR Type of Clearance - VFR Type Apch/Lndg - NONE	<b>Airport Proximity</b> OFF AIRPORT/STRIP  <b>Airport Data</b> Runway Ident - N/A Runway Lth/Wid - N/A Runway Surface - N/A Runway Status - N/A
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-----Personnel Information-----

Pilot-In-Command Certificate(s)/Rating(s) COMMERCIAL,FLT ENG SE LAND,ME LAND	Age - 59 Biennial Flight Review Current - YES Months Since - 16 Aircraft Type - AA-5B	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT Flight Time (Hours) Total - 596 Make/Model- 106 Instrument- 55 Multi-Eng - 106 Last 24 Hrs - 4 Last 30 Days- 10 Last 90 Days- 10
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Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING A X-COUNTRY FLT, THE AIRPLANE COLLIDED WITH TALL TREES AT THE TOP OF A CLIFF, NEXT TO THE PACIFIC SHORELINE. THE CRASH SITE WAS LOCATED ABOUT 1000 FT ABOVE THE SHORE. AFTER IMPACTING THE TREES, WRECKAGE WAS STREWN OVER ABOUT A 3000 YARD AREA OF RELATIVELY LEVEL TERRAIN. THERE WAS EVIDENCE THE ACFT WAS FLYING OVER WATER & ANGLING TOWARD THE SHORELINE, JUST PRIOR TO INITIAL IMPACT. APRX 50 TO 60 MI NORTH AT UKIAH, THERE WAS A REPORTED CEILING AT 2000 FT WITH LIGHT DRIZZLE & FOG. WX AT THE ACDNT SITE WAS NOT VERIFIED. NO EVIDENCE OF A PREIMPACT MECHANICAL PROBLEM WAS FOUND DURING THE INVESTIGATION.



Brief of Accident (Continued)

File No. - 114

3/08/89

LEGGETT, CA

A/C Reg. No. N277MB

Time (Lcl) - 1530 PST

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Occurrence #1            IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation      CRUISE - NORMAL

Finding(s)

1. TERRAIN CONDITION - HIGH TERRAIN
  2. WEATHER CONDITION - LOW CEILING
  3. WEATHER CONDITION - FOG
  4. WEATHER CONDITION - DRIZZLE
  5. VFR FLIGHT INTO IMC - CONTINUED - PILOT IN COMMAND
- 

Occurrence #2            IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      CRUISE

Finding(s)

6. OBJECT - TREE(S)
  7. PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
- 

Occurrence #3            IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      DESCENT - UNCONTROLLED

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-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S CONTINUATION OF VFR FLIGHT INTO INSTRUMENT METEOROLOGICAL CONDITIONS (IMC), AND HIS FAILURE  
MAINTAIN PROPER ALTITUDE. FACTORS RELATED TO THE ACCIDENT WERE THE ADVERSE WEATHER CONDITIONS, HIGH  
TERRAIN, AND TREES.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 112      3/18/89      WESTLEY, CA      A/C Reg. No. N6713Q      Time (Lcl) - 0900 PST

-----Basic Information-----

Type Operating Certificate-AGRICULTURAL AIRCRAFT	Aircraft Damage	Injuries			
	SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation - AERIAL APPLICATION	Fire	0	1	0	0
Flight Conducted Under - 14 CFR 137	NONE	0	0	0	0
Accident Occurred During - MANEUVERING					

-----Aircraft Information-----

Make/Model - GRUMMAN G-164B	Eng Make/Model - P&W R-985	ELT Installed/Activated - NO	-N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES	
Max Gross Wt - 6075	Engine Type - RECIPROCATING-CARBURETOR		
No. of Seats - 1	Rated Power - 450 HP		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	WESTLEY, CA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 210/008 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 5.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - N/A	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - 4000 FT OVERCAST	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- NONE		
Precipitation - RAIN		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 37	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 5079
ME LAND	Months Since - 7	Last 24 Hrs - 2
	Aircraft Type - BE-58	Make/Model- 1500
		Instrument- 411
		Multi-Eng - 1424
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - 61

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD THAT DURING AN AERIAL APPLICATION FLT, THE ENG LOST PARTIAL POWER. AS HE MANEUVERED TO AVOID OBSTACLES, THE ACFT MUSHED INTO A CULTIVATED FIELD & NOSED OVER. AN INSPECTION OF THE ENG & ACFT REVEALED NO REASON FOR THE LOSS OF POWER.

Brief of Accident (Continued)

File No. - 112

3/18/89

WESTLEY,CA

A/C Reg. No. N6713Q

Time (Lc1) - 0900 PST

Occurrence #1      LOSS OF ENGINE POWER  
Phase of Operation      MANEUVERING - AERIAL APPLICATION

Finding(s)  
1. UNDETERMINED

Occurrence #2      FORCED LANDING  
Phase of Operation      MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Finding(s)  
2. TERRAIN CONDITION - HIGH OBSTRUCTION(S)  
3. MANEUVER - PERFORMED - PILOT IN COMMAND  
4. AIRSPEED - INADEQUATE -  
5. STALL/MUSH

Occurrence #4      NOSE OVER  
Phase of Operation      OTHER

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
A LOSS OF ENGINE POWER FOR UNDETERMINED REASONS. A FACTOR RELATED TO THE ACCIDENT WAS THE PROXIMITY OF OBSTRUCTIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 111      4/02/89      HANFORD, CA      A/C Reg. No. N26PL      Time (Lcl) - 0900 PDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL						
Type of Operation -PERSONAL	Fire	Crew	Fatal	Injuries Serious	Minor	None	
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	1	0	
Accident Occurred During -APPROACH			0	0	1	0	

-----Aircraft Information-----

Make/Model - LOWE QUICKIE Q-200	Eng Make/Model - CONTINENTAL D-200-A	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 720	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 100 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	SALINAS, CA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	HANFORD
Wind Dir/Speed- 350/005 KTS	ATC/Airspace	Runway Ident - 32
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3965/ 75
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 71	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 1500
SE LAND	Months Since - 23	Make/Model- 50
	Aircraft Type - T-CRAFT	Instrument- UNK/NR
		Multi-Eng - 800
		Last 24 Hrs - 5
		Last 30 Days- 10
		Last 90 Days- 20
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

WHILE ON FINAL APPROACH TO LAND, THE AIRPLANE COLLIDED WITH THE AIRPORT BOUNDARY FENCE. IT CAME TO REST INSIDE THE FENCE, JUST SHORT OF THE RUNWAY. NO PREIMPACT MECHANICAL MALFUNCTION OR FAILURE OF THE AIRPLANE WAS REPORTED.

Brief of Accident (Continued)

File No. - 111

4/02/89

HANFORD, CA

A/C Reg. No. N26PL

Time (Lcl) - 0900 PDT

Occurrence #1      UNDERSHOOT

Phase of Operation      APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. DISTANCE - MISJUDGED - PILOT IN COMMAND

2. ALTITUDE - MISJUDGED - PILOT IN COMMAND

Occurrence #2      IN FLIGHT COLLISION WITH OBJECT

Phase of Operation      APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

3. OBJECT - FENCE

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation      OTHER

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT MISJUDGED HIS ALTITUDE & DISTANCE TO THE RUNWAY, WHILE ON FINAL APPROACH, WHICH RESULTED IN  
AN UNDERSHOOT OF THE RUNWAY. A FACTOR RELATED TO THE ACCIDENT WAS THE FENCE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 73      4/09/89      IRWINDALE, CA      A/C Reg. No. N25884      Time (Lcl) - 1702 PDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation - INSTRUCTIONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - LANDING

Aircraft Damage  
SUBSTANTIAL

Fire  
NONE

		Injuries			
		Fatal	Serious	Minor	None
Crew		0	0	0	2
Pass		0	0	0	0

-----Aircraft Information-----

Make/Model - CESSNA 152  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 1650  
No. of Seats - 2

Eng Make/Model - LYCOMING O-235-L2C  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 110 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A

Basic Weather - VMC  
Wind Dir/Speed- 180/008 KTS  
Visibility - 8.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - NONE  
Obstructions to Vision- HAZE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
EL MONTE, CA  
Destination  
LOCAL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
COMMERCIAL, CFI  
SE LAND

Age - 22  
Biennial Flight Review  
Current - YES  
Months Since - 1  
Aircraft Type - PA-28

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)

Total	- 292	Last 24 Hrs -	2
Make/Model-	118	Last 30 Days-	26
Instrument-	66	Last 90 Days-	37
Multi-Eng -	3		

Instrument Rating(s) - AIRPLANE

-----Narrative-----

A CESSNA 152 COLLIDED WITH A FENCE DURING A FORCED LANDING. AT 4,000 FT MSL, THE CFI SWITCHED THE FUEL SHUT OFF VALVE TO THE OFF POSITION TO SIMULATE AN ENG FAILURE. THE STUDENT PILOT SWITCHED THE FUEL SHUT OFF VALVE TO THE ON POSITION. THE ENG DID NOT REGAIN RPM. THE CFI THEN "DOUBLE CHECKED" TO SEE THAT THE STUDENT SWITCHED THE FUEL SHUT OFF VALVE TO THE "ON" POSITION. THE ENG BEGAN TO FIRE AND THEN QUIT. THE CFI THEN CHECKED THE FUEL SHUT OFF VALVE AGAIN ALONG WITH THE MIXTURE CTRL, MAGNETOS, AND ENG PRIMER. AT 2000 FT MSL THE PROPELLER STOPPED TURNING. THE CFI ENGAGED THE STARTER IN AN ATTEMPT TO RESTART THE ENG. THE CFI OVERSHOT THE INTENDED LANDING AREA AND SELECTED ANOTHER ROAD AND LANDED SHORT OF IT. THE ACFT STRUCK A FENCE AND NOSED OVER. THE ACFT WAS EXAMINED AND THE CARBURETOR FUEL BOWL WAS FOUND EMPTY OF FUEL. AC 61-21 STATES, IN PART, "THE CFI SHOULD GIVE SIMULATED FORCED LANDINGS BY RETARDING THE THROTTLE."

Brief of Accident (Continued)

File No. - 73

4/09/89

IRWINDALE, CA

A/C Reg. No. N25884

Time (Lcl) - 1702 PDT

Occurrence #1 LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation MANEUVERING

Finding(s)

1. FLUID, FUEL - STARVATION
2. EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND(CFI)
3. PROCEDURES/DIRECTIVES - IMPROPER - PILOT IN COMMAND(CFI)
4. LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND(CFI)

Occurrence #2 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

Finding(s)

5. STARTING PROCEDURE - ATTEMPTED - PILOT IN COMMAND(CFI)

Occurrence #3 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

6. OBJECT - FENCE

Occurrence #4 NOSE OVER  
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

7. TERRAIN CONDITION - HIGH VEGETATION
8. TERRAIN CONDITION - ROUGH/UNEVEN

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER PROCEDURE USED BY THE CERTIFIED FLIGHT INSTRUCTOR IN SIMULATING AN ENGINE FAILURE. CONTRIBUTING TO THIS  
ACCIDENT WAS THE LACK OF TOTAL FLIGHT INSTRUCTION EXPERIENCE OF THE FLIGHT INSTRUCTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 144      1/04/89      LONGMONT, CO      A/C Reg. No. N96319      Time (Lcl) - 1000 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL		Injuries		
Type of Operation - PERSONAL	Fire	Crew	Fatal	Serious	Minor
Flight Conducted Under - 14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During - LANDING			0	0	0
					1
					0

-----Aircraft Information-----

Make/Model - CESSNA 172	Eng Make/Model - LYCOMING O-320-D2J	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2300	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 160 HP	

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - NO RECORD OF BRIEFING</p> <p>Method - N/A</p> <p>Completeness - N/A</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- CALM</p> <p>Visibility - 20.0 SM</p> <p>Lowest Sky/Clouds - CLEAR</p> <p>Lowest Ceiling - NONE</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point DENVER, CO</p> <p>Destination SAME AS ACC/INC.</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - NONE</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - TRAFFIC PATTERN FULL STOP</p>	<p>Airport Proximity ON AIRPORT</p> <p>Airport Data</p> <p>LONGMONT</p> <p>Runway Ident - 29</p> <p>Runway Lth/Wid - 4200/ 60</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - DRY</p>
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-----Personnel Information-----

<p>Pilot-In-Command</p> <p>Certificate(s)/Rating(s) STUDENT</p>	<p>Age - 49</p> <p>Biennial Flight Review</p> <p>Current - N/A</p> <p>Months Since - N/A</p> <p>Aircraft Type - N/A</p>	<p>Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <p>Total - 22</p> <p>Make/Model- 22</p> <p>Instrument- 2</p> <p>Last 24 Hrs - 1</p> <p>Last 30 Days- UNK/NR</p> <p>Last 90 Days- UNK/NR</p>
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Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PLT LANDED ON RWY 29 (4200 X 60 FT) IN CALM WIND CONDITIONS. HE STATED THAT DURING THE LANDING, THE ACFT VEERED TO THE LEFT, ENCOUNTERED A SNOWDRIFT & SUBSEQUENTLY NOSED OVER. ALSO, HE RPRTD THAT ABOUT 6 TO 8 FT OF THE RUNWAY WAS STILL COVERED WITH SNOW AT THE EDGES. HE BELIEVED THAT PLOWING THE FULL WIDTH OF THE RUNWAY MAY HAVE HELPED PREVENT THE ACCIDENT.



Brief of Accident (Continued)

File No. - 144

1/04/89

LONGMONT, CO

A/C Reg. No. N96319

Time (Lc1) - 1000 MST

-----  
Occurrence #1        ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation    LANDING - ROLL

Finding(s)

1. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - SNOW COVERED
  2.    PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND
  3.        LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
  4. TERRAIN CONDITION - SNOWBANK
- 

Occurrence #2        NOSE OVER  
Phase of Operation    LANDING - ROLL

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE STUDENT PILOT TO MAINTAIN PROPER RUNWAY ALIGNMENT DURING THE LANDING ROLL. FACTORS RELATED TO  
THE ACCIDENT WERE: SNOW ON THE EDGES OF THE RUNWAY, THE STUDENT'S LACK OF TOTAL EXPERIENCE, AND THE SNOWBANK.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 47      1/05/89      ASPEN, CO      A/C Reg. No. N945FE      Time (Lcl) - 0739 MST

-----Basic Information-----

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage					
Name of Carrier	-P. M. AIR, INC.	DESTROYED		Fatal	Serious	Minor	None
Type of Operation	-NON SCHED, DOMESTIC, CARGO	Fire	Crew	0	1	0	0
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	1	0
Accident Occurred During	-APPROACH						

-----Aircraft Information-----

Make/Model	- CESSNA 208B	Eng Make/Model	- P&W PT6A-114	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 8750	Engine Type	- TURBOPROP		
No. of Seats	- 2	Rated Power	- 600 HP		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity	
Wx Briefing	- FSS	OFF AIRPORT/STRIP	
Method	- ACFT RADIO		
Completeness	- PARTIAL, LMTD BY PILOT	Airport Data	
Basic Weather	- IMC	ASPEN-PITKIN COUNTY	
Wind Dir/Speed	- CALM	Runway Ident	- 15
Visibility	- 3.000 SM	Runway Lth/Wid	- 7003/ 100
Lowest Sky/Clouds	- N/A	Runway Surface	- ASPHALT
Lowest Ceiling	- 900 FT OBSCURED	Runway Status	- SNOW - COMPACTED
Obstructions to Vision	- NONE		
Precipitation	- SNOW		
Condition of Light	- DAWN		

-----Personnel Information-----

Pilot-In-Command	Age - 33	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL	Current - YES	Total	- 5347
SE LAND, ME LAND	Months Since - 6	Make/Model	- 322
	Aircraft Type - C-208B	Instrument	- 200
		Multi-Eng	- 3700

Instrument Rating(s) - AIRPLANE

-----Narrative-----

PLT SAID HE ENCOUNTERED SEVERE TO EXTREME TURBULENCE UPON REACHING MISSED APCH POINT AND FELT ACFT MIGHT STALL IF HE BEGAN IMMEDIATE RIGHT TURN AS CALLED FOR IN MISSED APCH PROCEDURE. PLT SAID HE MADE LEFT TURN AT 15 DME (MISSED APCH POINT IS AT 11.5 DME) BECAUSE THERE WAS HIGHER TERRAIN TO RIGHT. ACFT COLLIDED WITH TREES ON MOUNTAIN 3 MI EAST OF ARPT. WX ANALYSIS INDICATED POTENTIAL FOR LIGHT TO MODERATE TURBULENCE BUT NOT SEVERE TO EXTREME TURBULENCE. PLTS LANDING AND DEPARTING ARPT PRIOR TO AND AFTER ACCIDENT REPORTED LIGHT TO MODERATE CHOP. RADAR SHOWED ACFT SPEED AT 183.1 KTS BETWEEN IAF AND FAF. BETWEEN FAF AND MISSED APCH POINT, ACFT SPEED WAS 95.7 KTS. PLT SAID HE REFERRED TO CURRENT COMMERCIAL INSTRUMENT APCH CHART WHILE EXECUTING APCH. ONLY OBSOLETE GOVERNMENT INSTRUMENT APCH BOOK WAS FOUND IN ACFT. RADIOS WERE NOT TUNED TO MISSED APCH NAVAIDS. PLT-RATED PAX SAID PLT PANICKED AFTER ENCOUNTERING TURBULENCE.

Brief of Accident (Continued)

File No. - 47

1/05/89

ASPEN, CO

A/C Reg. No. N945FE

Time (Lcl) - 0739 MST

Occurrence #1 IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation APPROACH - MISSED APPROACH (IFR)

Finding(s)

1. WEATHER CONDITION - TURBULENCE IN CLOUDS
2. WEATHER CONDITION - LOW CEILING
3. WEATHER CONDITION - OBSCURATION
4. WEATHER CONDITION - SNOW

Occurrence #2 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation APPROACH - MISSED APPROACH (IFR)

Finding(s)

5. IFR PROCEDURE - IMPROPER - PILOT IN COMMAND
6. TERRAIN CONDITION - MOUNTAINOUS/HILLY
7. OBJECT - TREE(S)

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT'S IMPROPER IFR PROCEDURE. CONTRIBUTING FACTORS INCLUDED MODERATE TURBULENCE, LOW CEILINGS, OBSCURATION AND SNOW.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 154      1/06/89      CRAIG,CO      A/C Reg. No. N82290      Time (Lcl) - 1307 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL		Injuries			
Type of Operation -EXECUTIVE/CORPORATE	Fire	Crew	Fatal	Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -TAKEOFF			0	0	0	5

-----Aircraft Information-----

Make/Model - PIPER PA-31T	Eng Make/Model - P&W PT6A-28	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 9000	Engine Type - TURBOPROP	
No. of Seats - 7	Rated Power - 620 HP	

-----Environment/Operations Information-----

<b>Weather Data</b> Wx Briefing - FSS Method - TELEPHONE Completeness - FULL Basic Weather - IMC Wind Dir/Speed- 330/005 KTS Visibility - .500 SM Lowest Sky/Clouds - N/A Lowest Ceiling - 400 FT OBSCURED Obstructions to Vision- FOG Precipitation - SNOW Condition of Light - DAYLIGHT	<b>Itinerary</b> Last Departure Point SAME AS ACC/INC Destination ENGLEWOOD,CO  <b>ATC/Airspace</b> Type of Flight Plan - IFR Type of Clearance - IFR Type Apch/Lndg - NONE	<b>Airport Proximity</b> ON AIRPORT  <b>Airport Data</b> CRAIG-MOFFAT Runway Ident - 25 Runway Lth/Wid - 5600/ 100 Runway Surface - ASPHALT Runway Status - SNOW - WET
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-----Personnel Information-----

Pilot-In-Command Certificate(s)/Rating(s) ATP,CFI SE LAND,ME LAND	Age - 47 Biennial Flight Review Current - YES Months Since - 17 Aircraft Type - BE-300	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT Flight Time (Hours) Total - 9555 Make/Model- 2300 Instrument- 862 Multi-Eng - 5872 Last 24 Hrs - 1 Last 30 Days- 32 Last 90 Days- 78
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Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT REQUESTED THE SNOW COVERED RWY BE REFLOWED BEFORE HE TOOK OFF. HE RPRTD THAT AFTERWARD, HE SAW NO SNOW RIDGES OR EVIDENCE OF UNEVEN PLOWING & CONCLUDED THE "RUNWAY DEMARCATION WAS ADEQUATE FOR TAKEOFF." HE SAID THAT DRG TAKEOFF, AT ABOUT 80 KTS, HE FELT THE LEFT GEAR DRAG AND THE AIRPLANE BEGAN TO SWERVE LEFT. HE CORRECTED WITH RUDDER & THE AIRPLANE SWERVED TO THE RIGHT EDGE OF THE RWY. SUBSEQUENTLY, THE PLT LOST CONTROL OF THE AIRPLANE & IT CONTINUED INTO A SNOWBANK & WAS DAMAGED. RPRTDLY, THE ACFT SWERVED AFTER ENCOUNTERING A "SNOWRIDGE" LEFT BY THE SNOWPLOW. NO PRE-ACDNT PART FAILURE OR MALFUNCTION WAS RPRTD.

Brief of Accident (Continued)

File No. - 154

1/06/89

CRAIG, CO

A/C Reg. No. N82290

Time (Lc1) - 1307 MST

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

1. WEATHER CONDITION - SNOW
2. WEATHER CONDITION - FOG
3. WEATHER CONDITION - OBSCURATION
4. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - SNOW COVERED
5. AIRPORT SNOW REMOVAL - INADEQUATE - AIRPORT PERSONNEL
6. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - ROUGH/UNEVEN
7. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
8. VISUAL/AURAL PERCEPTION - PILOT IN COMMAND
9. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
10. GROUND LOOP/SWERVE - UNCONTROLLED -

Occurrence #2      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

11. TERRAIN CONDITION - SNOWBANK

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
UNSUITABLE TERRAIN (RUNWAY CONDITION) SELECTED BY THE PILOT. FACTORS RELATED TO THE ACCIDENT WERE:  
THE ADVERSE WEATHER CONDITIONS, INADEQUATE REMOVAL OF SNOW FROM THE RUNWAY BY AIRPORT PERSONNEL, UNEVEN  
SNOW COVERED RUNWAY, LACK OF VISUAL PERCEPTION BY THE PILOT, AND SNOWBANKS BESIDE THE RUNWAY.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 162      1/18/89      BROOMFIELD, CO      A/C Reg. No. N1721W      Time (Lcl) - 1130 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -SALES DEMO  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -LANDING

Aircraft Damage  
SUBSTANTIAL  
Fire      NONE

		Injuries			
		Fatal	Serious	Minor	None
Crew		0	0	0	1
Pass		0	0	1	1

-----Aircraft Information-----

Make/Model      - BEECH V35B  
Landing Gear      - TRICYCLE-RETRACTABLE  
Max Gross Wt      - 3400  
No. of Seats      - 5

Eng Make/Model      - CONTINENTAL IO-520-BA  
Number Engines      - 1  
Engine Type      - RECIP-FUEL INJECTED  
Rated Power      - 285 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - NO RECORD OF BRIEFING  
Method      - N/A  
Completeness      - N/A  
Basic Weather      - VMC  
Wind Dir/Speed- 190/006 KTS  
Visibility      - 60.0 SM  
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  
LOCAL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance      - NONE  
Type Apch/Lndg      - TRAFFIC PATTERN  
FORCED LANDING

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

JEFFCO  
Runway Ident      - 29R  
Runway Lth/Wid      - 7498/ 100  
Runway Surface      - ASPHALT  
Runway Status      - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
COMMERCIAL,CFI  
SE LAND

Age - 39

Biennial Flight Review

Current      - YES  
Months Since      - 19  
Aircraft Type      - C-210

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total	- 2241	Last 24 Hrs	- UNK/NR
Make/Model-	26	Last 30 Days-	1
Instrument-	101	Last 90 Days-	5

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE CFI RATED PLT WAS PERFORMING A SALES-DEMONSTRATION FLIGHT WITH TWO PAX. THE LEFT SEAT PAX WAS FLYING. THE CONTROL TOWER HAD CLEARED THE FLIGHT TO LAND ON RWY 29R, A 7,498 X 100 FT ASPHALT RWY, WITH WINDS REPORTED AS 190 DEGREES AT 6 KNOTS. THE CFI SAID THAT JUST PRIOR TO TURNING BASE, THE ENGINE STOPPED. THE CFI TOOK THE CONTROLS AND ATTEMPTED A RESTART, TO NO AVAIL. THE CFI FIRST RETRACTED THE LANDING GEAR, TO CLEAR OBSTACLES, THEN EXTENDED THE LANDING GEAR TO ABSORB LANDING IMPACT. THE ACFT TOUCHED DOWN 600 FEET SHORT OF THE RUNWAY. THE LANDING GEAR COLLAPSED DURING ROLL OUT AND THE ACFT CAME TO REST 400 FEET FROM THE APPROACH END OF RWY 29R. POST ACNT INVESTIGATION REVEALED THAT THE FUEL SELECTOR WAS ON THE RGT FUEL TANK AND THE RGT TANK WAS EMPTY. NO FUEL WAS FOUND IN THE FUEL LINES OR FUEL PUMP. BOTH PAX SAID THE FUEL PRESS DROPPED TO ZERO WHEN THE ENG QUIT.

Brief of Accident (Continued)

File No. - 162

1/18/89

BROOMFIELD, CO

A/C Reg. No. N1721W

Time (Lc1) - 1130 MST

-----  
Occurrence #1      LOSS OF ENGINE POWER  
Phase of Operation      APPROACH - VFR PATTERN - BASE TURN

Finding(s)

1. FLUID, FUEL - STARVATION
  2. FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND
- 

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

-----

Occurrence #3      COMPLETE GEAR COLLAPSED  
Phase of Operation      LANDING - ROLL

Finding(s)

3. TERRAIN CONDITION - ROUGH/UNEVEN
  4. LANDING GEAR - OVERLOAD
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FUEL STARVATION DUE TO IMPROPER FUEL TANK SELECTION OPERATION BY THE PILOT. A FACTOR RELATED TO THE ACCIDENT WAS:  
UNPREPARED (ROUGH/UNEVEN) TERRAIN SHORT OF THE RUNWAY.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 35      1/27/89      DURANGO, CO      A/C Reg. No. N4737P      Time (Lcl) - 1800 MST

-----Basic Information-----

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage					
Name of Carrier	-KANGAROO TRANSPORTATION,	SUBSTANTIAL					
Type of Operation	-NON SCHED, DOMESTIC, CARGO	Fire	Crew	Fatal	Injuries		
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	Serious	Minor	None
Accident Occurred During	-TAKEOFF			0	0	0	1
				0	0	0	0

-----Aircraft Information-----

Make/Model	- CESSNA P210N	Eng Make/Model	- CONTINENTAL TS10-520-P	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 3400	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 6	Rated Power	- 310 HP		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - TELEPHONE	SAME AS ACC/INC	
Completeness - FULL	Destination	Airport Data
Basic Weather - IMC	ALBUQUERQUE, NM	ANIMAS
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - 19
Visibility - 2.000 SM	Type of Flight Plan - IFR	Runway Lth/Wid - 5000/ 50
Lowest Sky/Clouds - UNK/NR	Type of Clearance - IFR	Runway Surface - ASPHALT
Lowest Ceiling - 1000 FT OVERCAST	Type Apch/Lndg - NONE	Runway Status - SNOW - DRY
Obstructions to Vision- BLOWING SAND		
Precipitation - SNOW SHOWER		
Condition of Light - NIGHT(DARK)		

-----Personnel Information-----

Pilot-In-Command	Age - 27	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, ATP, CFI	Current - YES	Total - 2912
SE LAND, ME LAND	Months Since - 3	Make/Model - 400
	Aircraft Type - C-402	Instrument - 166
		Multi-Eng - 1538
		Last 24 Hrs - 3
		Last 30 Days - 57
		Last 90 Days - 134

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE ATP RATED PLT WAS STARTING A SCHEDULED PART 135, CARGO RUN, DEPARTING ON RWY 19, A 5,000 X 50 FOOT, ASPHALT RWY. THE RWY WAS COVERED BY ONE INCH OF SNOW AND A SNOW SHOWER WAS IN PROGRESS. THE PILOT SAID HE DID NOT REMOVE SNOW FROM THE ACFT PRIOR TO THE TAKEOFF ATTEMPT, BECAUSE IT DID NOT APPEAR TO NEED IT. THE AIRPORT IS NEITHER APPROVED NOR EQUIPPED FOR INSTRUMENT OPERATIONS AS REQUIRED IN THE FAA APPROVED COMPANY OPERATION SPECIFICATIONS. THE PILOT REPORTED THE VISIBILITY AS "2 TO 3 MILES," WITH CALM WINDS AND SAID HE COULD NOT ESTIMATE A CEILING THROUGH THE FALLING SNOW. THREE FAA INSPECTORS, WHO WERE 3 MILES FROM THE AIRPORT, SAID THE VISIBILITY WAS LESS THAN 2 MILES, AND THE CEILING WAS INDEFINITE, LESS THAN 1000 FEET. AN IFR FLIGHT PLAN WAS FILED. DURING LIFTOFF, THE RIGHT MAIN GEAR ENTERED DEEP SNOW ON THE RIGHT EDGE OF THE RWY. THE ACFT SETTLED BACK TO THE GROUND AND PIVOTED 270 DEG TO THE RIGHT. THE NOSE AND LEFT MAIN LANDING GEAR COLLAPSED AS THE ACFT STOPPED.



Brief of Accident (Continued)

File No. - 35

1/27/89

DURANGO, CO

A/C Reg. No. N4737P

Time (Lcl) - 1800 MST

Occurrence #1 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation TAKEOFF - INITIAL CLIMB

Finding(s)

1. TERRAIN CONDITION - SNOWBANK
2. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND
3. LIGHT CONDITION - DARK NIGHT
4. FLIGHT INTO KNOWN ADVERSE WEATHER - ATTEMPTED - PILOT IN COMMAND
5. SELF-INDUCED PRESSURE - PILOT IN COMMAND
6. WEATHER CONDITION - SNOW
7. ICE/FROST REMOVAL FROM AIRCRAFT - NOT PERFORMED - PILOT IN COMMAND
8. OVER CONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND

Occurrence #2 GEAR COLLAPSED  
Phase of Operation TAKEOFF - INITIAL CLIMB

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT TO MAINTAIN RUNWAY ALIGNMENT DURING TAKEOFF. THAT THE PILOT ATTEMPTED FLIGHT INTO KNOWN ADVERSE  
CONDITIONS FROM AN AIRPORT THAT WAS NOT APPROVED FOR IMC OPERATIONS IS CONSIDERED TO BE A CONTRIBUTING FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 11      2/08/89      BOULDER, CO      A/C Reg. No. N4355Z      Time (Lcl) - 1410 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	0	2
0	0	0	0

Type of Operation -INSTRUCTIONAL  
Flight Conducted Under -14 CFR 91  
Accident Occurred During -LANDING

Fire  
NONE

Crew  
Pass

-----Aircraft Information-----

Make/Model - PIPER PA-18-150  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 1625  
No. of Seats - 2

Eng Make/Model - LYCOMING O-320-A2B  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 150 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- CALM  
Visibility - 50.0 SM  
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  
LOCAL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - TRAFFIC PATTERN

Airport Proximity  
ON AIRPORT

Airport Data

BOULDER MUNICIPAL  
Runway Ident - UNK/NR  
Runway Lth/Wid - 4100/ 75  
Runway Surface - ASPHALT  
Runway Status - DRY

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
COMMERCIAL, ATP, CFI  
SE LAND, ME LAND  
GLIDER

Age - 34  
Biennial Flight Review  
Current - YES  
Months Since - 4  
Aircraft Type - BE-76

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 2215  
Make/Model- 165  
Instrument- 209  
Multi-Eng - 121  
Last 24 Hrs - 1  
Last 30 Days- 46  
Last 90 Days- 64  
Rotorcraft - 14

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE ATP RATED CFI WAS PERFORMING A RENTAL CHECKOUT WITH A PRIVATE PLT. THE CHECK PLT TOLD THE PLT TO MAKE A LANDING AND "IF SUFFICIENT RUNWAY REMAINED," TO MAKE ANOTHER TAKEOFF. A LANDING WAS COMPLETED ON RWY 8R, A 4,100 X 75 FT ASPHALT RWY. THE CHECK PILOT HAD BEEN FOLLOWING THROUGH ON THE CONTROLS BUT DURING THE LANDING ROLL HE RELEASED THE CONTROLS AND WAITED FOR THE PLT TO STOP. HE SAID THAT AS SOON AS HE REMOVED HIS HANDS FROM THE CONTROLS, THE STICK WENT FORWARD AND HE HEARD THE ENGINE SPEED UP. THE AIRPLANE SWERVED TO THE LEFT. THE CHECK PLT TOOK THE CONTROLS AND ATTEMPTED TO CORRECT THE SWERVE, TO NO AVAIL. THE PLANE STRUCK A SNOW DRIFT ON THE LEFT SIDE OF THE RWY AND NOSED OVER.

Brief of Accident (Continued)

File No. - 11

2/08/89

BOULDER, CO

A/C Reg. No. N4355Z

Time (Lcl) - 1410 MST

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      LANDING - ROLL

Finding(s)

1. CREW/GROUP COORDINATION - INADEQUATE - PILOT IN COMMAND(CFI)
2. TOUCH-AND-GO - INITIATED - DUAL STUDENT
3. DIRECTIONAL CONTROL - NOT MAINTAINED - DUAL STUDENT
4. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)

Occurrence #2      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - ROLL

Finding(s)

5. TERRAIN CONDITION - SNOWBANK

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING - ROLL

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE DUAL STUDENT TO MAINTAIN DIRECTIONAL CONTROL AND THE FAILURE OF THE PILOT IN COMMAND (CFI), TO PROVIDE  
ADEQUATE REMEDIAL ACTION IN A TIMELY MANNER, TO CORRECT THE SWERVE. A SECOND PROBABLE CAUSE WAS THE CFI'S FAILURE  
TO PROVIDE ADEQUATE SUPERVISION DURING THE LANDING ROLL. INADEQUATE CREW COORDINATION IS CONSIDERED A FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 165      2/09/89      GILL, CO      A/C Reg. No. N69117      Time (Lcl) - 1315 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL		Injuries		
Type of Operation -INSTRUCTIONAL	Fire	Crew	Fatal	Serious	Minor
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During -LANDING			0	0	0
			2		0

-----Aircraft Information-----

Make/Model - CESSNA 152	Eng Make/Model - LYCOMING O-235-L2C	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1670	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 110 HP	

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - NO RECORD OF BRIEFING</p> <p>Method - N/A</p> <p>Completeness - N/A</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- CALM</p> <p>Visibility - 60.0 SM</p> <p>Lowest Sky/Clouds - CLEAR</p> <p>Lowest Ceiling - NONE</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point GREELEY, CO</p> <p>Destination LOCAL</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - NONE</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - FORCED LANDING</p>	<p>Airport Proximity OFF AIRPORT/STRIP</p> <p>Airport Data</p> <p>Runway Ident - N/A</p> <p>Runway Lth/Wid - N/A</p> <p>Runway Surface - N/A</p> <p>Runway Status - N/A</p>
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-----Personnel Information-----

<p>Pilot-In-Command</p> <p>Certificate(s)/Rating(s) COMMERCIAL, ATP, CFI SE LAND, ME LAND</p>	<p>Age - 34</p> <p>Biennial Flight Review Current - YES Months Since - 8 Aircraft Type - C-177RG</p>	<p>Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <table border="0" style="width: 100%;"> <tr> <td>Total - 5181</td> <td>Last 24 Hrs - 3</td> </tr> <tr> <td>Make/Model- 1400</td> <td>Last 30 Days- 78</td> </tr> <tr> <td>Instrument- 344</td> <td>Last 90 Days- 178</td> </tr> <tr> <td>Multi-Eng - 375</td> <td></td> </tr> </table>	Total - 5181	Last 24 Hrs - 3	Make/Model- 1400	Last 30 Days- 78	Instrument- 344	Last 90 Days- 178	Multi-Eng - 375	
Total - 5181	Last 24 Hrs - 3									
Make/Model- 1400	Last 30 Days- 78									
Instrument- 344	Last 90 Days- 178									
Multi-Eng - 375										

Instrument Rating(s) - AIRPLANE

-----Narrative-----

AN ATP RATED CFI AND A DUAL STUDENT WERE PRACTICING SIMULATED FORCED LANDINGS OVER SNOW COVERED FIELDS. DURING A DESCENT, THE CFI SAID HE ATTEMPTED TO ADD FULL POWER BUT THE ENGINE WOULD NOT ACCELERATE. THE CFI LANDED THE ACFT IN A SNOW COVERED CORN FIELD AND THE NOSE GEAR HIT AN EMBANKMENT. THE ACFT BOUNCED INTO THE AIR FOR ANOTHER 100 FEET. ON THE SECOND TOUCHDOWN, THE NOSE GEAR DUG IN AND THE ACFT NOSED OVER. A POST ACCIDENT ENGINE RUN FAILED TO REVEAL ANY EVIDENCE OF A MECHANICAL FAILURE. THE ENGINE STARTED AND RAN NORMALLY.

Brief of Accident (Continued)

File No. - 165

2/09/89

GILL,CO

A/C Reg. No. N69117

Time (Lcl) - 1315 MST

-----  
Occurrence #1      LOSS OF ENGINE POWER  
Phase of Operation    DESCENT - NORMAL

Finding(s)

1. EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND(CFI)
  2. THROTTLE/POWER CONTROL - IMPROPER USE OF - PILOT IN COMMAND(CFI)
  3. WEATHER CONDITION - TEMPERATURE EXTREMES
- 

Occurrence #2      FORCED LANDING  
Phase of Operation    DESCENT - EMERGENCY

-----

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

4. TERRAIN CONDITION - ROUGH/UNEVEN
  5. TERRAIN CONDITION - SNOW COVERED
- 

Occurrence #4      NOSE OVER  
Phase of Operation    LANDING - ROLL

-----

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER USE OF THE POWERPLANT CONTROLS BY THE CFI DURING DESCENT THROUGH LOW TEMPERATURE AIR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 166      2/14/89      TELLURIDE, CO      A/C Reg. No. N7127J      Time (Lcl) - 1000 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL				
Type of Operation - PERSONAL	Fire	Crew	Fatal	Injuries Serious	Minor
Flight Conducted Under - 14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During - LANDING			0	0	0
					None
					1
					2

-----Aircraft Information-----

Make/Model - BALLOON WORKS AX8-24	Eng Make/Model - N/A	ELT Installed/Activated - NO	N/A
Landing Gear - N/A	Number Engines - N/A	Stall Warning System - NO	
Max Gross Wt - 900	Engine Type - N/A		
No. of Seats - UNK/NR	Rated Power - N/A		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	SAME AS ACC/INC	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- LIGHT AND VARIABLE	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 50.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - STRAIGHT-IN	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 45	Medical Certificate - NO MEDICAL
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 453
	Months Since - 4	Last 24 Hrs - 1
FREE BALLOON	Aircraft Type - AX-7	Make/Model- 14
		Last 30 Days- 14
		Instrument- 0
		Last 90 Days- 14

Instrument Rating(s) - NONE

-----Narrative-----

THE COMMERCIAL PLT AND TWO FRIENDS WERE FLYING HIS BALLOON IN MOUNTAINOUS TERRAIN. DURING THE APPROACH TO LAND, THE PLT OPENED THE BURNER VALVE TO FLARE. THE VALVE STUCK OPEN AND THE PLT ATTEMPTED TO SHUT OFF FUEL AT THE PROPANE BOTTLE. THAT VALVE STUCK OPEN ALSO, AND THE BALLOON STARTED TO RISE. THE PLT REDUCED THE HEAT ENTERING THE ENVELOPE BY PULLING THE BURNER OUT OF THE THROAT AND POINTING IT OVERBOARD. THIS BALLOON WAS EQUIPPED WITH AN EMERGENCY "BACK UP" BURNER SYSTEM. BY USING THE BACK UP BURNER, THE PLT MANEUVERED AND LANDED IN A WOODED AREA. THE PLT SAID THAT AFTER LANDING, HE WAS ABLE TO WORK THE STUCK VALVES UNTIL THEY CLOSED AND THE FUEL FLOW CEASED. A POST ACCIDENT INVESTIGATION REVEALED THAT CONDITIONS EXISTED CONDUCIVE TO ICE FORMING IN BOTH VALVES AND PREVENTING NORMAL OPERATION.

Brief of Accident (Continued)

File No. - 166

2/14/89

TELLURIDE, CO

A/C Reg. No. N7127J

Time (Lcl) - 1000 MST

-----  
Occurrence #1            AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation      LANDING

Finding(s)

1. BALLOON EQUIPMENT, HEATER SYSTEM - FAILURE, PARTIAL
  2. FUEL SYSTEM, FUEL SHUTOFF - FROZEN
  3. THROTTLE/POWER CONTROL - NOT POSSIBLE -
- 

Occurrence #2            LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      LANDING

-----  
Occurrence #3            HARD LANDING  
Phase of Operation      LANDING

Finding(s)

4. TERRAIN CONDITION - NONE SUITABLE
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
ICE FORMING IN THE FUEL TANK SHUT OFF VALVE, AND THE BURNER BLAST VALVE RESULTING IN A LOSS OF CONTROL DURING LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 167      3/13/89      BROOMFIELD, CO      A/C Reg. No. N735VE      Time (Lcl) - 1450 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -PERSONAL  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -TAKEOFF

Aircraft Damage  
SUBSTANTIAL  
Fire  
NONE

	Fatal	Serious	Minor	None
Crew	0	0	1	0
Pass	0	0	0	1

-----Aircraft Information-----

Make/Model      - CESSNA TU206G  
Landing Gear      - TRICYCLE-FIXED  
Max Gross Wt      - 3600  
No. of Seats      - 4

Eng Make/Model      - CONTINENTAL IO-520-F  
Number Engines      - 1  
Engine Type      - RECIP-FUEL INJECTED  
Rated Power      - 300 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - NO RECORD OF BRIEFING  
Method      - N/A  
Completeness      - N/A  
Basic Weather      - VMC

Wind Dir/Speed- 260/025 KTS  
Visibility      - 75.0      SM

Lowest Sky/Clouds      - 6000 FT SCATTERED  
Lowest Ceiling      - NONE  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point  
BROOMFIELD, CO  
Destination  
TELLURIDE, CO

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance      - NONE  
Type Apch/Lndg      - NONE

Airport Proximity  
ON AIRPORT

Airport Data

JEFFERSON COUNTY  
Runway Ident      - 29R  
Runway Lth/Wid      - 9000/ 100  
Runway Surface      - ASPHALT  
Runway Status      - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE  
SE LAND

Age - 48

Biennial Flight Review

Current      - UNK/NR  
Months Since      - UNK/NR  
Aircraft Type      - UNK/NR

Medical Certificate - EXPIRED

Flight Time (Hours)

Total	- .450	Last 24 Hrs	- 0
Make/Model-	200	Last 30 Days-	5
Instrument-	UNK/NR	Last 90 Days-	15
Multi-Eng	- 0	Rotorcraft	- 0

Instrument Rating(s) - NONE

-----Narrative-----

WHILE ON TAKEOFF ROLL IN GUSTY CROSS WIND CONDITIONS THE PLT FAILED TO MAINTAIN DIRECTIONAL CONTROL OF THE ACFT AND DEPARTED THE RIGHT SIDE OF THE RUNWAY. THE PLT FAILED TO REDUCE PWR AND THE ACFT PROCEEDED ACROSS A GRASS AREA BETWEEN THE RNWY AND TAXIWAY, BECOMING AIRBORNE WHEN THE LANDING GEAR STRUCK THE TAXIWAY LIP. THE ACFT STRUCK A CHAIN LINK FENCE AFTER BECOMING AIRBORNE AND FLIPPED INVERTED INTO A LAKE BORDERING THE ARPT. BOTH THE PLT AND PAX EXITED THE ACFT THROUGH WINDOWS AND SWAM TO SHORE.



Brief of Accident (Continued)

File No. - 167

3/13/89

BROOMFIELD, CO

A/C Reg. No. N735VE

Time (Lcl) - 1450 MST

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

1. WEATHER CONDITION - CROSSWIND
2. WEATHER CONDITION - GUSTS
3. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
4. COMPENSATION FOR WIND CONDITIONS - IMPROPER - PILOT IN COMMAND

Occurrence #2      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

5. OBJECT - FENCE

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT'S FAILURE TO PROPERLY CONTROL THE AIRCRAFT WHILE CONDUCTING A CROSSWIND TAKEOFF.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 76 1/07/89 STRATFORD,CT

A/C Reg. No. N757KR

Time (Lc1) - 0930 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	0	1
0	0	0	0

Type of Operation -PERSONAL  
Flight Conducted Under -14 CFR 91  
Accident Occurred During -LANDING

Fire  
NONE

Crew  
Pass

-----Aircraft Information-----

Make/Model - CESSNA 152  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 1670  
No. of Seats - 2

Eng Make/Model - LYCOMING O-235-L2C  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 110 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - UNK/NR  
Method - UNK/NR  
Completeness - UNK/NR  
Basic Weather - VMC  
Wind Dir/Speed- 060/012 KTS  
Visibility - 15.0 SM  
Lowest Sky/Clouds - UNK/NR  
Lowest Ceiling -  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
STRATFORD,CT  
Destination  
LOCAL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

SIKORSKY  
Runway Ident - 06  
Runway Lth/Wid - 4677/ 150  
Runway Surface - ASPHALT  
Runway Status - SNOW - DRY

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
STUDENT

Age - 35  
Biennial Flight Review  
Current - N/A  
Months Since - N/A  
Aircraft Type - N/A

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)

Total	- 14	Last 24 Hrs	- UNK/NR
Make/Model-	14	Last 30 Days-	UNK/NR
Instrument-	1	Last 90 Days-	7

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PILOT WAS PRACTICING TOUCH AND GO LANDINGS. THE AIRCRAFT ENGINE FAILED FOR UNDETERMINED REASONS AT 300 FEET SHORTLY AFTER THREE TOUCH GO AND LANDINGS. THE PILOT MADE A FORCED LANDING AND THE AIRPLANE HIT A FENCE, POLE AND SHRUBBERY. EXAMINATION OF THE ENGINE REVEALED THAT ACCELERATOR PUMP DISCHARGE TUBE WAS MISSING FROM THE CARBURETOR. THE BOTTOM SPARK PLUGS WERE SEVERELY FOULED AND THE MAGNETOS WERE NOT APPROVED FOR THE ENGINE.

Brief of Accident (Continued)

File No. - 76

1/07/89

STRATFORD,CT

A/C Reg. No. N757KR

Time (Lc1) - 0930 EST

-----  
Occurrence #1      LOSS OF ENGINE POWER  
Phase of Operation      TAKEOFF - INITIAL CLIMB

Finding(s)  
1. UNDETERMINED  
-----

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY  
-----

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)  
2. OBJECT - FENCE  
3. OBJECT - POLE  
-----

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE LOSS OF ENGINE POWER FOR UNDETERMINED REASONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 196      1/16/89      BRIDGEPORT,CT      A/C Reg. No. N6829Q      Time (Lcl) - 2032 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage	Injuries			
	SUBSTANTIAL		Fatal	Serious	Minor
Type of Operation - PERSONAL	Fire	Crew	0	0	1
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	1
Accident Occurred During -TAKEOFF					0

-----Aircraft Information-----

Make/Model - BEECH S-35	Eng Make/Model - CONTINENTAL IO-520-BA6	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3300	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 285 HP	

-----Environment/Operations Information-----

<b>Weather Data</b>	<b>Itinerary</b>	<b>Airport Proximity</b>
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	BURLINGTON,VT	
Completeness - N/A	Destination	<b>Airport Data</b>
Basic Weather - VMC	BRIDGEPORT,CT	BRIDGEPORT SIKORSKY
Wind Dir/Speed- UNK/NR	<b>ATC/Airspace</b>	Runway Ident - 29
Visibility - UNK/NR	Type of Flight Plan - IFR	Runway Lth/Wid - 4761/ 150
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - TOUCH AND GO	Runway Status - DRY
Obstructions to Vision- NONE	FORCED LANDING	
Precipitation - NONE		
Condition of Light - NIGHT(BRIGHT)		

-----Personnel Information-----

<b>Pilot-In-Command</b>	Age - 39	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
ATP,CFI	Current - YES	Total - 3200
SE LAND,ME LAND	Months Since - 6	Make/Model- UNK/NR
GLIDER	Aircraft Type - B-727	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE PRACTICING TOUCH AND GO LANDINGS AFTER AN IFR FLIGHT, THE AIRPLANE EXPERIENCED A LOSS OF POWER AND WAS SUBSTANTIALLY DAMAGED DURING AN OFF AIRPORT FORCED LANDING. THE PILOT SAID THAT HE WAS OPERATING ON THE RIGHT TANK, WHICH, WHEN EXAMINED BY THE FAA CONTAINED 1-2 GALLONS OF FUEL; THE LEFT TANK CONTAINED 30 GALS. A POST-ACCIDENT ENGINE RUN-UP DID NOT REVEAL ANY MECHANICAL DEFICIENCIES.

Brief of Accident (Continued)

File No. - 196

1/16/89

BRIDGEPORT,CT

A/C Reg. No. N6829Q

Time (Lcl) - 2032 EST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      TAKEOFF - INITIAL CLIMB

Finding(s)

1. FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND
2. FLUID,FUEL - STARVATION

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

3. TERRAIN CONDITION - DITCH

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE IMPROPER FUEL SELECTOR POSITION AND LOSS OF POWER TO THE ENGINE DUE TO FUEL EXHAUSTION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 153      1/05/89      MARGATE, FL      A/C Reg. No. N736BX      Time (Lcl) - 0240 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL		Injuries		
Type of Operation - PERSONAL	Fire	Crew	Fatal	Serious	Minor
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	1
Accident Occurred During -DESCENT			0	0	1
					None
					0

-----Aircraft Information-----

Make/Model - CESSNA R172K	Eng Make/Model - CONTINENTAL IO-360-K	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2550	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 210 HP	

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - FSS</p> <p>Method - TELEPHONE</p> <p>Completeness - UNK/NR</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- 330/006 KTS</p> <p>Visibility - 15.0 SM</p> <p>Lowest Sky/Clouds - CLEAR</p> <p>Lowest Ceiling - NONE</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - NIGHT(BRIGHT)</p>	<p>Itinerary</p> <p>Last Departure Point SAVANNAH, GA</p> <p>Destination FT LAUDERDALE, FL</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - VFR</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - ILS-LOCALIZER FORCED LANDING</p>	<p>Airport Proximity OFF AIRPORT/STRIP</p> <p>Airport Data</p> <p>FT LAUDERDALE EXECUTIVE</p> <p>Runway Ident - N/A</p> <p>Runway Lth/Wid - N/A</p> <p>Runway Surface - N/A</p> <p>Runway Status - N/A</p>
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-----Personnel Information-----

<p>Pilot-In-Command</p> <p>Certificate(s)/Rating(s)</p> <p>COMMERCIAL, CFI</p> <p>SE LAND, ME LAND</p>	<p>Age - 25</p> <p>Biennial Flight Review</p> <p>Current - YES</p> <p>Months Since - 1</p> <p>Aircraft Type - PA-44</p>	<p>Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <table border="0" style="width: 100%;"> <tr> <td>Total - 336</td> <td>Last 24 Hrs - 7</td> </tr> <tr> <td>Make/Model- 104</td> <td>Last 30 Days- 43</td> </tr> <tr> <td>Instrument- 44</td> <td>Last 90 Days- 85</td> </tr> <tr> <td>Multi-Eng - 14</td> <td></td> </tr> </table>	Total - 336	Last 24 Hrs - 7	Make/Model- 104	Last 30 Days- 43	Instrument- 44	Last 90 Days- 85	Multi-Eng - 14	
Total - 336	Last 24 Hrs - 7									
Make/Model- 104	Last 30 Days- 43									
Instrument- 44	Last 90 Days- 85									
Multi-Eng - 14										

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE BEING VECTORED TO INTERCEPT THE LOCALIZER COURSE AT AN ALTITUDE OF APRX 2200 FT, APRX 5 MILES FROM THE ARPT, THE RPM GAUGE FLUCTUATED. THE PLT APPLIED FULL THROTTLE, MIXTURE & PROPELLER CONTROLS, BUT THE ENG THEN LOST POWER. DURING A SUBSEQUENT OFF-AIRPORT FORCED LANDING AT NIGHT, THE ACFT COLLIDED WITH TREES. AN EXAM OF THE ENG REVEALED EVIDENCE OF OIL STARVATION. THE ENG DRIVEN OIL PUMP DRIVE SHAFT HAD FAILED FROM OVERLOAD AFTER FOREIGN OBJECT(S) BECAME LODGED BETWEEN THE HOUSING & THE GEARS. ALSO, THERE WAS EVIDENCE OF ENG SEIZURE AFTER THE #6 CONNECTING ROD HAD FAILED & THAT THE #5 CONNECTING ROD HAD FAILED FROM OVERLOAD.

Brief of Accident (Continued)

File No. - 153

1/05/89

MARGATE, FL

A/C Reg. No. N736BX

Time (Lcl) - 0240 EST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation      APPROACH

Finding(s)

1. LUBRICATING SYSTEM,OIL PRESSURE PUMP - FOREIGN OBJECT
2. LUBRICATING SYSTEM,OIL PRESSURE PUMP - FAILURE,TOTAL
3. FLUID,OIL - STARVATION
4. ENGINE ASSEMBLY,CONNECTING ROD - FAILURE,TOTAL
5. ENGINE ASSEMBLY - SEIZED

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      LANDING

Finding(s)

6. LIGHT CONDITION - DARK NIGHT
7. OBJECT - TREE(S)

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE ENGINE DRIVEN OIL PUMP DUE TO FOREIGN OBJECT(S), WHICH RESULTED IN OIL STARVATION AND  
SUBSEQUENT ENGINE FAILURE. FACTORS RELATED TO THE ACCIDENT WERE: DARK NIGHT AND TREES IN THE EMERGENCY  
LANDING AREA.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 121      1/07/89      BUNNELL, FL      A/C Reg. No. N81444      Time (Lcl) - 1630 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage	Injuries				
		SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation	-INSTRUCTIONAL	Fire	Crew	0	0	0	2
Flight Conducted Under	-14 CFR 91	NONE	Pass	0	0	0	0
Accident Occurred During	-LANDING						

-----Aircraft Information-----

Make/Model	- PIPER PA-28-161	Eng Make/Model	- LYCOMING O-320-D3G	ELT Installed/Activated	- YES/NO
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 2325	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 4	Rated Power	- 160 HP		

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - NO RECORD OF BRIEFING</p> <p>Method - N/A</p> <p>Completeness - N/A</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- 120/007 KTS</p> <p>Visibility - 10.0 SM</p> <p>Lowest Sky/Clouds - CLEAR</p> <p>Lowest Ceiling - NONE</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point</p> <p>DAYTONA BEACH, FL</p> <p>Destination</p> <p>LOCAL</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - NONE</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - TRAFFIC PATTERN</p>	<p>Airport Proximity</p> <p>ON AIRPORT</p> <p>Airport Data</p> <p>FLAGLER COUNTY</p> <p>Runway Ident - 11</p> <p>Runway Lth/Wid - 5000/ 200</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - DRY</p>
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-----Personnel Information-----

Pilot-In-Command	Age - 31	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 854
SE LAND,ME LAND	Months Since - 14	Make/Model- 17
	Aircraft Type - C-152	Instrument- 148
		Multi-Eng - 21
		Last 24 Hrs - 2
		Last 30 Days- 11
		Last 90 Days- 31

Instrument Rating(s) - AIRPLANE

-----Narrative-----

AS THE DUAL STUDENT WAS PRACTICING A SHORT FIELD LANDING, THE ACFT TOUCHED DOWN JUST SHORT OF THE RWY. A MOMENT LATER, BEFORE THE NOSEWHEEL WAS LOWERED, THE MAIN GEAR HIT THE LIP OF THE RWY, WHICH WAS EXPOSED. DURING IMPACT, THE RIGHT MAIN TIRE BLEW OUT, THE RIGHT STRUT FAILED & THE RIGHT WING WAS DAMAGED.



Brief of Accident (Continued)

File No. - 121

1/07/89

BUNNELL, FL

A/C Reg. No. N81444

Time (Lcl) - 1630 EST

Occurrence #1           UNDERSHOOT  
Phase of Operation      APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. ALTITUDE - MISJUDGED - DUAL STUDENT
2. DISTANCE - MISJUDGED - DUAL STUDENT
3. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)

Occurrence #2           IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING

Finding(s)

4. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION -

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
MISJUDGEMENT OF ALTITUDE AND DISTANCE TO THE RUNWAY BY THE STUDENT PILOT, AND INADEQUATE SUPERVISION  
BY THE INSTRUCTOR PILOT (CFI). THE EXPOSED (RAISED) RUNWAY LIP WAS A FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 125      1/12/89      TERRA CEIA, FL      A/C Reg. No. N2439B      Time (Lcl) - 1415 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL					
Type of Operation - INSTRUCTIONAL	Fire	Crew	Fatal	0	0	0
Flight Conducted Under - 14 CFR 91	NONE	Pass	0	0	0	0
Accident Occurred During - LANDING						

-----Aircraft Information-----

Make/Model - PIPER PA-38-112	Eng Make/Model - LYCOMING O-235-L2C	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1670	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 110 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	FORT LAUDERDALE, FL	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	SARASOTA, FL	
Wind Dir/Speed- 220/010 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 2000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - PRECAUTIONARY LANDING	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 32	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 92
	Months Since - N/A	Make/Model- 61
	Aircraft Type - N/A	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- 3
		Last 90 Days- 7
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PLT STATED THAT DURING A SOLO X-COUNTRY FLT, HE HEARD UNUSUAL SOUNDS, BUT THERE WAS NO ENG FAILURE OR MALFUNCTION. HE ELECTED TO MAKE A PRECAUTIONARY LANDING IN A SOD FIELD. AFTER LANDING WITH A TAILWIND, HE WAS UNABLE TO STOP THE ACFT BEFORE IT CONTINUED INTO A DITCH & WAS DAMAGED. COMPANY PERSONNEL WERE UNABLE TO FIND ANY PREIMPACT PROBLEMS.

Brief of Accident (Continued)

File No. - 125

1/12/89

TERRA CEIA, FL

A/C Reg. No. N2439B

Time (Lc1) - 1415 EST

Occurrence #1      OVERRUN  
Phase of Operation      LANDING - ROLL

Finding(s)

1. PRECAUTIONARY LANDING - PERFORMED - PILOT IN COMMAND
2. WEATHER CONDITION - TAILWIND
3. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND

Occurrence #2      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - ROLL

Finding(s)

4. TERRAIN CONDITION - DITCH

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE IMPROPER IN-FLIGHT PLANNING/DECISION BY THE STUDENT PILOT. FACTORS RELATED TO THE ACCIDENT WERE:  
TAILWIND CONDITIONS DURING THE LANDING AND THE PROXIMITY OF THE DITCH TO THE SELECTED LANDING AREA.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 130      1/13/89      SEBRING, FL      A/C Reg. No. N74473      Time (Lcl) - 1004 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -PERSONAL  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -LANDING

Aircraft Damage  
SUBSTANTIAL  
Fire      NONE  
Pass

	Fatal	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	0

-----Aircraft Information-----

Make/Model      - BELLANCA 14-13-2  
Landing Gear      - TAILWHEEL-RETRACTABLE MAINS  
Max Gross Wt      - 2150  
No. of Seats      - 4

Eng Make/Model      - FRANKLIN 6A-335-B1  
Number Engines      - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 180 HP

ELT Installed/Activated - UNK/NR  
Stall Warning System - UNK/NR

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - NO RECORD OF BRIEFING  
Method      - N/A  
Completeness      - N/A  
Basic Weather      - VMC

Itinerary

Last Departure Point  
LAKE PLACID, FL  
Destination  
SEBRING, FL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Wind Dir/Speed- CALM  
Visibility      - 10.0      SM  
Lowest Sky/Clouds      - 12000 FT SCATTERED  
Lowest Ceiling      - NONE  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

ATC/Airspace

Type of Flight Plan      - NONE  
Type of Clearance      - NONE  
Type Apch/Lndg      - FORCED LANDING

Runway Ident      - N/A  
Runway Lth/Wid      - N/A  
Runway Surface      - N/A  
Runway Status      - N/A

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE  
SE LAND

Age - 52

Biennial Flight Review

Current      - YES  
Months Since      - 4  
Aircraft Type      - C-172

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total	- 2420	Last 24 Hrs	- 0
Make/Model-	67	Last 30 Days-	7
Instrument-	UNK/NR	Last 90 Days-	32
Multi-Eng	- UNK/NR	Rotorcraft	- UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING FLT AT AN ALT OF APRX 1000 FT, THE ENG LOST POWER. ATTEMPTS TO RESTART THE ENG WERE UNSUCCESSFUL. SUBSEQUENTLY, THE ACFT COLLIDED WITH TREES DURING AN EMERGENCY LANDING. AN EXAM OF THE ENG REVEALED THE CAM GEAR SNAP RING (FRANKLIN PART NO: 19983) HAD FAILED & ALLOWED THE CAMSHAFT GEAR TO ROTATE TO AN OUT-OF-TIME CONDITION. SUBSEQUENTLY, THE ENG LOST POWER & THE PISTONS CONTACTED THE INTAKE & EXHAUST VALVES. THE ENG HAD A TOTAL TIME OF APRX 1205 HRS.

Brief of Accident (Continued)

File No. - 130

1/13/89

SEBRING, FL

A/C Reg. No. N74473

Time (Lcl) - 1004 EST

-----  
Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation      CRUISE - NORMAL

Finding(s)

1. ENGINE ASSEMBLY, OTHER - FAILURE, TOTAL
  2. ENGINE ASSEMBLY, TIMING GEAR - DISCONNECTED
- 

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

-----

Occurrence #3      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING - ROLL

Finding(s)

3. OBJECT - TREE(S)
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE CAM GEAR SNAP RING, WHICH ALLOWED THE CAMSHAFT GEAR TO BECOME DISCONNECTED. FACTORS RELATED  
TO THE ACCIDENT WERE TREES IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 141 1/17/89 FORT MYERS, FL

A/C Reg. No. N4763T

Time (Lcl) - 0630 EST

-----Basic Information-----

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage					
Name of Carrier	-FLIGHT EXPRESS, INC.	SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation	-NON SCHED, DOMESTIC, CARGO	Fire	Crew	0	0	1	0
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	0
Accident Occurred During	-LANDING						

-----Aircraft Information-----

Make/Model	- PIPER PA-32-300	Eng Make/Model	- LYCOMING IO-540-K1A5	ELT Installed/Activated	- YES/NO
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 3400	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 7	Rated Power	- 300 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary		Airport Proximity	
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point		OFF AIRPORT/STRIP	
Method	- N/A	SAME AS ACC/INC			
Completeness	- N/A	Destination		Airport Data	
Basic Weather	- VMC	ST PETERSBURG, FL		Runway Ident	- N/A
Wind Dir/Speed	- 010/005 KTS			Runway Lth/Wid	- N/A
Visibility	- 7.0 SM	ATC/Airspace		Runway Surface	- N/A
Lowest Sky/Clouds	- 8000 FT SCATTERED	Type of Flight Plan	- IFR	Runway Status	- N/A
Lowest Ceiling	- NONE	Type of Clearance	- IFR		
Obstructions to Vision	- NONE	Type Apch/Lndg	- FORCED LANDING		
Precipitation	- NONE				
Condition of Light	- NIGHT(DARK)				

-----Personnel Information-----

Pilot-In-Command	Age - 29	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
ATP	Current - YES	Total - 1623	Last 24 Hrs - 0
SE LAND, ME LAND	Months Since - 1	Make/Model - 24	Last 30 Days - 24
	Aircraft Type - PA-32	Instrument - 105	Last 90 Days - 52
		Multi-Eng - 830	

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT STATED THAT DURING THE INITIAL CLIMB AFTER TAKEOFF, HE HEARD A "POP" & THE ENGINE STARTED RUNNING ROUGH. HE TURNED BACK TOWARD THE AIRPORT. ABOUT 2 MIN LATER, THERE WAS A LOUD NOISE, WHICH WAS FOLLOWED BY A PROGRESSIVE LOSS OF ALL POWER. SUBSEQUENTLY, THE ACFT WAS DAMAGED DURING AN EMERGENCY LANDING AT NIGHT IN A MARSHY AREA ABOUT 1 TO 2 MI FROM THE AIRPORT. AN EXAM OF THE ENGINE REVEALED THE #5 CONNECTING ROD CAP BOLT HAD FAILED, WHICH RESULTED IN FURTHER DAMAGE OF THE ENGINE.

Brief of Accident (Continued)

File No. - 141

1/17/89

FORT MYERS, FL

A/C Reg. No. N4763T

Time (Lc1) - 0630 EST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation      CLIMB

Finding(s)

1. ENGINE ASSEMBLY,CONNECTING ROD BOLT - FAILURE,TOTAL

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

2. LIGHT CONDITION - DARK NIGHT
3. TERRAIN CONDITION - SOFT
4. TERRAIN CONDITION - WET

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE #5 CONNECTING ROD BOLT. FACTORS RELATED TO THE ACCIDENT WERE: DARK NIGHT AND THE SOFT AND WET (MARSHY)  
TERRAIN CONDITIONS IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 151      1/19/89      JACKSONVILLE, FL      A/C Reg. No. N89803      Time (Lcl) - 1600 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Injuries			
Type of Operation - INSTRUCTIONAL	Fire	Fatal	Serious	Minor	None
Flight Conducted Under - 14 CFR 91	NONE	Crew 0	0	0	1
Accident Occurred During - TAXI		Pass 0	0	0	0
		Other 0	0	0	2

-----Aircraft Information-----

Make/Model - CESSNA 152	Eng Make/Model - LYCOMING O-235-L2C	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1670	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 110 HP	

-----Environment/Operations Information-----

<b>Weather Data</b>	<b>Itinerary</b>	<b>Airport Proximity</b>
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	<b>Airport Data</b>
Basic Weather - VMC	LOCAL	HERLONG
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - UNK/NR
Visibility - 7.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - UNK/NR
Lowest Sky/Clouds - 10000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - UNK/NR
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	Runway Status - UNK/NR
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 46	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 42
	Months Since - N/A	Last 24 Hrs - 1
	Aircraft Type - N/A	Make/Model- 2
		Last 30 Days- 10
		Instrument- 0
		Last 90 Days- 21

Instrument Rating(s) - NONE

-----Narrative-----

A PIPER PA-28, N32816, WAS PARKED ON A RAMP WITH THE ENGINE OPERATING AS A CESSNA 152, N89803, WAS BEING MANEUVERED TO PARK IN THE SAME AREA AFTER THE PILOT HAD LANDED. SUBSEQUENTLY, THE CESSNA'S RIGHT WING MOVED INTO THE ARC OF THE PA-28'S ROTATING PROPELLER. THIS RESULTED IN SUBSTANTIAL DAMAGE TO THE CESSNA'S WING & MINOR DAMAGE TO THE PA-28. A CHECK OF THE CESSNA'S NOSE GEAR STEERING & BRAKES REVEALED NO EVIDENCE OF A MALFUNCTION OR FAILURE.



Brief of Accident (Continued)

File No. - 151

1/19/89

JACKSONVILLE, FL

A/C Reg. No. N89803

Time (Lcl) - 1600 EST

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Occurrence #1      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      TAXI - FROM LANDING

Finding(s)

1. OBJECT - AIRCRAFT PARKED
  2. CLEARANCE - MISJUDGED - PILOT IN COMMAND
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE CESSNA 152 PILOT MISJUDGED CLEARANCE BETWEEN HIS AIRCRAFT AND THE PARKED PIPER PA-28.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 151      1/19/89      JACKSONVILLE, FL      A/C Reg. No. N32816      Time (Lcl) - 1600 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -PERSONAL  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -STANDING

Aircraft Damage

MINOR

Fire

NONE

Fatal

0

Crew

0

Pass

0

Other

0

Injuries

Serious

0

Minor

0

None

1

1

1

-----Aircraft Information-----

Make/Model      - PIPER PA-28-151  
Landing Gear      - TRICYCLE-FIXED  
Max Gross Wt      - 2150  
No. of Seats      - 4

Eng Make/Model      - LYCOMING O-320-E3D  
Number Engines      - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 150 HP

ELT Installed/Activated - YES-UNK/NR  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - UNK/NR  
Method      - UNK/NR  
Completeness      - UNK/NR

Basic Weather      - VMC

Wind Dir/Speed- CALM

Visibility      - 7.0      SM

Lowest Sky/Clouds      - 10000 FT SCATTERED

Lowest Ceiling      - NONE

Obstructions to Vision- NONE

Precipitation      - NONE

Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point

SAME AS ACC/INC

Destination

LOCAL

ATC/Airspace

Type of Flight Plan - NONE

Type of Clearance      - NONE

Type Apch/Lndg      - NONE

Airport Proximity

ON AIRPORT

Airport Data

HERLONG

Runway Ident      - UNK/NR

Runway Lth/Wid      - UNK/NR

Runway Surface      - UNK/NR

Runway Status      - UNK/NR

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE

SE LAND

Age - 65

Biennial Flight Review

Current      - UNK/NR

Months Since      - UNK/NR

Aircraft Type      - UNK/NR

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total      - 235

Make/Model- UNK/NR

Instrument- UNK/NR

Multi-Eng      - UNK/NR

Last 24 Hrs - UNK/NR

Last 30 Days- UNK/NR

Last 90 Days- UNK/NR

Rotorcraft      - UNK/NR

Instrument Rating(s)      - NONE

-----Narrative-----

A PIPER PA-28, N32816, WAS PARKED ON A RAMP WITH THE ENGINE OPERATING AS A CESSNA 152, N89803, WAS BEING MANEUVERED TO PARK IN THE SAME AREA AFTER THE PILOT HAD LANDED. SUBSEQUENTLY, THE CESSNA'S RIGHT WING MOVED INTO THE ARC OF THE PA-28'S ROTATING PROPELLER. THIS RESULTED IN SUBSTANTIAL DAMAGE TO THE CESSNA'S WING & MINOR DAMAGE TO THE PA-28. A CHECK OF THE CESSNA'S NOSE GEAR STEERING & BRAKES REVEALED NO EVIDENCE OF A MALFUNCTION OR FAILURE.

Brief of Accident (Continued)

File No. - 151

1/19/89

JACKSONVILLE, FL

A/C Reg. No. N32816

Time (Lcl) - 1600 EST

---

Occurrence #1            ON GROUND COLLISION WITH OBJECT  
Phase of Operation       STANDING - ENGINE(S) OPERATING

Finding(s)

1. OBJECT - AIRCRAFT MOVING ON GROUND
  2. CLEARANCE - MISJUDGED - PILOT OF OTHER AIRCRAFT
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE CESSNA 152 PILOT MISJUDGED CLEARANCE BETWEEN HIS AIRCRAFT AND THE PARKED PIPER PA-28.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 173      1/26/89      DAYTONA BEACH, FL      A/C Reg. No. N2860W      Time (Lcl) - 2040 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Injuries			
Type of Operation - PERSONAL	Fire	Fatal	Serious	Minor	None
Flight Conducted Under - 14 CFR 91	NONE	Crew 0	0	0	1
Accident Occurred During - STANDING		Pass 0	0	0	2
		Other 0	0	0	1

-----Aircraft Information-----

Make/Model - BEECH A36	Eng Make/Model - CONTINENTAL IO-520-BA	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3600	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 285 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity ON AIRPORT
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point SAME AS ACC/INC	
Method - N/A	Destination DAYTONA BEACH, FL	Airport Data
Completeness - N/A		SPRUCE CREEK
Basic Weather - VMC	ATC/Airspace	Runway Ident - UNK/NR
Wind Dir/Speed- 140/003 KTS	Type of Flight Plan - NONE	Runway Lth/Wid - UNK/NR
Visibility - 10.0 SM	Type of Clearance - NONE	Runway Surface - UNK/NR
Lowest Sky/Clouds - 5500 FT SCATTERED	Type Apch/Lndg - NONE	Runway Status - UNK/NR
Lowest Ceiling - NONE		
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - NIGHT(DARK)		

-----Personnel Information-----

Pilot-In-Command	Age - 52	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, ATP	Current - YES	Total - 28000
SE LAND, ME LAND	Months Since - 3	Make/Model - 200
	Aircraft Type - DC-9	Instrument - 3500
		Multi-Eng - 26000
		Last 24 Hrs - 2
		Last 30 Days - 40
		Last 90 Days - 75

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE TAXIING TO TAKEOFF FROM THE AVTN COMMUNITY ARPT DURING A DARK NIGHT WITH THE LANDING, BEACON, STROBE, & NAVIGATION LIGHTS ON, THE PLT OBSERVED A VEHICLE APPROACHING HEAD-ON. HE STOPPED THE ACFT & WAITED FOR THE VEHICLE TO PULL OFF THE TAXIWAY BUT THE CAR CONTINUED & DROVE UNDER THE LEFT WING DAMAGING IT & THE ROOF & WINDSHIELD OF THE AUTOMOBILE. THE ACFT SPUN TO THE LEFT & CAME TO REST. THE AUTOMOBILE CONTINUED FWD THEN CAME TO REST BEHIND THE ACFT.

Brief of Accident (Continued)

File No. - 173

1/26/89

DAYTONA BEACH, FL

A/C Reg. No. N2860W

Time (Lcl) - 2040 EST

Occurrence #1      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      STANDING - ENGINE(S) OPERATING

Finding(s)

1. OBJECT - VEHICLE
2. VISUAL LOOKOUT - INADEQUATE - DRIVER OF VEHICLE
3. PROCEDURES/DIRECTIVES - NOT FOLLOWED - DRIVER OF VEHICLE

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE DRIVER OF THE AUTOMOBILE TO MAINTAIN AN ADEQUATE VISUAL LOOKOUT AND TO YIELD THE RIGHT OF WAY TO  
THE AIRCRAFT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 174      1/27/89      PANACEA, FL      A/C Reg. No. N4506D      Time (Lcl) - 0618 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -PERSONAL  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -TAKEOFF

Aircraft Damage

SUBSTANTIAL

Fire  
NONE

Crew  
Pass

Fatal  
0  
0

Injuries

Serious      Minor  
0      2  
0      2

None  
0  
0

-----Aircraft Information-----

Make/Model      - BEECH G-35  
Landing Gear      - TRICYCLE-RETRACTABLE  
Max Gross Wt      - 2775  
No. of Seats      - 4

Eng Make/Model      - CONTINENTAL E-225-8  
Number Engines      - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 225 HP

ELT Installed/Activated - YES/YES  
Stall Warning 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- CALM  
Visibility      - .250 SM  
Lowest Sky/Clouds      - PART OBS  
Lowest Ceiling      - NONE  
Obstructions to Vision- FOG  
Precipitation      - NONE  
Condition of Light      - DAWN

Itinerary

Last Departure Point  
PANACEA, FL  
Destination  
NATCHEZ, MS

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance      - NONE  
Type Apch/Lndg      - NONE

Airport Proximity  
ON AIRPORT

Airport Data

WAKULLA COUNTY  
Runway Ident      - 36  
Runway Lth/Wid      - 2900/ 175  
Runway Surface      - GRASS/TURF  
Runway Status      - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
COMMERCIAL,FLT ENG  
SE LAND

Age - 63

Biennial Flight Review

Current      - YES  
Months Since      - 7  
Aircraft Type      - C-172

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total      - 791      Last 24 Hrs - UNK/NR  
Make/Model- 408      Last 30 Days- 13  
Instrument- 43      Last 90 Days- 26

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE INSTRUMENT RATED PILOT STATED THAT HE RECEIVED A WEATHER BRIEFING. NO RECORD OF A BRIEFING WAS LOCATED. HE THEN STATED THAT HE DROVE THE SOD RUNWAY IN A CAR AND NOTED THE VISIBILITY TO BE ABOUT 1/2 MILE. DURING TAKEOFF HE STATED THAT THE AIRCRAFT ENTERED A FOG BANK AT ABOUT 10 FT AND HE LOST CONTROL OF THE AIRCRAFT AND CRASHED INTO TREES AT THE LEFT SIDE OF THE RUNWAY.

Brief of Accident (Continued)

File No. - 174

1/27/89

PANACEA, FL

A/C Reg. No. N4506D

Time (Lc1) - 0618 EST

Occurrence #1      IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation      TAKEOFF - INITIAL CLIMB

Finding(s)

1. WEATHER CONDITION - FOG
2. WEATHER SERVICE - NOT USED - PILOT IN COMMAND
3. OVER CONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND

Occurrence #2      LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      TAKEOFF - INITIAL CLIMB

Finding(s)

4. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
5. SPATIAL DISORIENTATION - PILOT IN COMMAND

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      DESCENT - UNCONTROLLED

Finding(s)

6. OBJECT - TREE(S)

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOTS LOSS OF CONTROL WHEN ENTERING THE FOG BANK DURING THE TAKEOFF, DUE TO SPATIAL DISORIENTATION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 190      1/28/89      PENSACOLA, FL      A/C Reg. No. N2638N      Time (Lcl) - 1530 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - LANDING

Aircraft Damage

SUBSTANTIAL

Fire

NONE

Fatal

0

Crew

Pass

0

Injuries

Serious

0

Minor

0

None

1

1

-----Aircraft Information-----

Make/Model - CESSNA T310R  
Landing Gear - TRICYCLE-RETRACTABLE  
Max Gross Wt - 5500  
No. of Seats - 6

Eng Make/Model - CONTINENTAL TS10-520-BB  
Number Engines - 2  
Engine Type - RECIP-FUEL INJECTED  
Rated Power - 285 HP

ELT Installed/Activated - YES/NO

Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING

Method - N/A

Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 080/006 KTS

Visibility - 7.0 SM

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

LOCAL

ATC/Airspace

Type of Flight Plan - NONE

Type of Clearance - NONE

Type Apch/Lndg - FULL STOP

Airport Proximity

ON AIRPORT

Airport Data

FERGUSON

Runway Ident - 18

Runway Lth/Wid - 2800/ 40

Runway Surface - ASPHALT

Runway Status - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL

SE LAND, ME LAND

Age - 42

Biennial Flight Review

Current - YES

Months Since - 20

Aircraft Type - M-20J

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total - 500

Make/Model- 65

Instrument- 150

Multi-Eng - 160

Last 24 Hrs - UNK/NR

Last 30 Days- 16

Last 90 Days- 16

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT REPORTED THAT AIRSPEED DIMINISHED WHILE ON FINAL APCH, RESULTING IN A LANDING SHORT OF THE RWY. DURING THE LANDING ROLL HE LOST CONTROL OF THE ACFT. IT TRAVELLED OFF THE RWY AND INTO A DITCH. THE PLT DID NOT REPORT ANY MALFUNCTION OF THE ACFT.



Brief of Accident (Continued)

File No. - 190

1/28/89

PENSACOLA, FL

A/C Reg. No. N2638N

Time (Lcl) - 1530 CST

Occurrence #1       UNDERSHOOT  
Phase of Operation   LANDING - FLARE/TOUCHDOWN

Finding(s)

1. AIRSPEED(VREF) - NOT MAINTAINED - PILOT IN COMMAND
2. DISTANCE - MISJUDGED - PILOT IN COMMAND
3. PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND

Occurrence #2       LOSS OF CONTROL - ON GROUND  
Phase of Operation   LANDING - ROLL

Finding(s)

4. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3       ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation   LANDING - ROLL

Finding(s)

5. TERRAIN CONDITION - DITCH

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT TO MAINTAIN THE PROPER AIRSPEED DURING THE APPROACH RESULTING IN LANDING SHORT OF THE RUNWAY AND  
FAILURE TO MAINTAIN DIRECTIONAL CONTROL DURING THE LANDING ROLL.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 135      2/03/89      KEY WEST, FL      A/C Reg. No. N99Y      Time (Lcl) - 1130 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage	Injuries			
		SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation	-SIGHTSEEING	Fire	Crew 0	0	1	0
Flight Conducted Under	-14 CFR 91	NONE	Pass 0	0	2	0
Accident Occurred During	-DESCENT					

-----Aircraft Information-----

Make/Model	- WACO YMF	Eng Make/Model	- JACOBS R-755-B2M	ELT Installed/Activated	- YES/NO
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 2650	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 3	Rated Power	- 275 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary	Airport Proximity
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method	- N/A	KEY WEST, FL	
Completeness	- N/A	Destination	Airport Data
Basic Weather	- VMC	LOCAL	
Wind Dir/Speed	- 130/010 KTS	ATC/Airspace	Runway Ident
Visibility	- 10.0 SM	Type of Flight Plan	- N/A
Lowest Sky/Clouds	- 2000 FT SCATTERED	Type of Clearance	- N/A
Lowest Ceiling	- NONE	Type Apch/Lndg	- N/A
Obstructions to Vision	- NONE		
Precipitation	- NONE		
Condition of Light	- DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 59	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
ATP	Current - YES	Total	- 11500
SE LAND, ME LAND	Months Since - 10	Make/Model	- 500
	Aircraft Type - BE-18	Instrument	- 1000
		Multi-Eng	- 6000
		Last 24 Hrs	- 4
		Last 30 Days	- 20
		Last 90 Days	- 60

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT STATED THEY HAD JUST PASSED OVER A SCHOOL OF DOLPHIN WHILE ON A SIGHTSEEING FLT OVER WATER AT ABOUT 100 FT. HE REVERSED COURSE TO THE LEFT IN ORDER TO RETURN TO THE FISH & WHILE IN THE TURN THE ACFT ROLLED ABRUPTLY TO THE LEFT. ACFT ROLLED INTO A VERT BANK & THE ACFT HIT THE WATER INVERTED & SANK IN ABOUT 12 FT OF WATER. THE PLT STATED THAT HE HAD OBSERVED A C-130 TYPE ACFT FLYING IN THE AREA AT APPROX 800 FT JUST BEFORE THE ACCIDENT. THE PLT STATED THAT HE & HIS WIFE RECALLED HE HAD BEEN MAKING A LOW STEEP BANK OVER THE WATER AND HE RECALLED GRAVITY FORCES PRESSING THEM DOWN INTO THE SEAT DURING THE TURN. THEY HAD COMPLETED THE 1ST STEEP TURN AND WERE IN THE 2ND BANK OF ABOUT 90 DEGS WHEN A "GUST" WAS FELT & THE NEXT THING THEY KNEW, THEY HIT THE WATER UPSIDE DOWN. NEITHER PAX RECALLED SEEING ANY OTHER ACFT IN THE AREA. ONE PAX STATED THAT HE HAD SOME PREVIOUS FLT TIME INCLUDING SOLO.

Brief of Accident (Continued)

File No. - 135

2/03/89

KEY WEST, FL

A/C Reg. No. N99Y

Time (Lc1) - 1130 EST

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Occurrence #1        LOSS OF CONTROL - IN FLIGHT  
Phase of Operation    MANEUVERING

Finding(s)

1. WAKE TURBULENCE - ENCOUNTERED - PILOT IN COMMAND
  2. ALTITUDE - INADEQUATE - PILOT IN COMMAND
  3. MANEUVER - EXCESSIVE - PILOT IN COMMAND
- 

Occurrence #2        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    DESCENT - UNCONTROLLED

-----  
----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE INABILITY OF THE PLT TO MAINTAIN CONTROL AFTER ENCOUNTERING HIS OWN WAKE TURBULENCE AT A LOW ALTITUDE DURING A STEEP  
TURNING MANEUVER.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 134      2/04/89      CLEARWATER, FL      A/C Reg. No. N3697Q      Time (Lcl) - 1130 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage				
	DESTROYED	Fatal	Injuries		
Type of Operation - INSTRUCTIONAL	Fire	0	Serious	Minor	None
Flight Conducted Under - 14 CFR 91	ON GROUND	Crew 0	2	0	0
Accident Occurred During - LANDING		Pass 0	0	0	0

-----Aircraft Information-----

Make/Model - BEECH A23-24	Eng Make/Model - LYCOMING IO-360-A1B	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2550	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 180 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	ON AIRPORT
Method - UNK/NR	CLEARWATER, FL	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	LOCAL	CLEARWATER
Wind Dir/Speed- 010/005 KTS	ATC/Airspace	Runway Ident - 33
Visibility - 7.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3000/ 75
Lowest Sky/Clouds - 1000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - GO AROUND	Runway Status - DRY
Obstructions to Vision- NONE	FORCED LANDING	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 66	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, CFI	Current - YES	Total - 12000
SE LAND, ME LAND, SE SEA, ME SEA	Months Since - 4	Last 24 Hrs - UNK/NR
	Aircraft Type - VIKING	Make/Model - 35
		Instrument - 1450
		Multi-Eng - 2000
		Last 30 Days - 20
		Last 90 Days - 50

Instrument Rating(s) - AIRPLANE

-----Narrative-----

ON FINAL APCH AFTER A TRNG FLT, AN ACFT WAS STILL ON THE RWY, SO CFI TOLD 30 HR STUDENT PLT TO GO-ARND. POWER WAS APPLIED & WITNESSES ON GRND HEARD ENG REV UP OK. ABOUT 1/2 WAY DOWN RWY AT ABOUT 200 FT, THE ENG SPUTTERED & CFI TRIED A 180 DEG TURN BACK TO RWY. ACFT HIT FENCES AND CONST MATERIAL & BURST INTO FLAMES. FUEL SEL WAS FOUND OUT OF DETENT BUT ON LT TANK WHICH HOLDS 30 GALS, 26 GALS USABLE. THE ACFT BURNS ABOUT 8 GPH & HAD FLOWN FOR A TOTAL OF ABOUT 4 HRS SINCE TOPPED OFF TO 60 GALS CAPACITY. NO FUEL FOUND IN FUEL MANIFOLD & ENG WAS TEST RUN OK AFTER ACCIDENT. LT WING TANK AREA HAD LESS FIRE DAMAGE THAN RT WING AREA WHICH CONTAINED MORE FUEL. THE STU PLT RECALLED THE FUEL SEL BEING ON THE LT TANK; THE CFI SAID HE THOUGHT IT WAS ON THE RT TANK. THE CFI STATED THAT HE HAD NO RECOLLECTION AFTER THE ENG QUIT EXCEPT BEING IN A CHOPPER ON THE WAY TO A HOSPITAL.

Brief of Accident (Continued)

File No. - 134

2/04/89

CLEARWATER, FL

A/C Reg. No. N3697Q

Time (Lcl) - 1130 EST

-----  
Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      GO-AROUND (VFR)

Finding(s)

1. FLUID, FUEL - STARVATION
  2. FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND(CFI)
  3. CHECKLIST - NOT USED - PILOT IN COMMAND(CFI)
- 

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

4. EMERGENCY PROCEDURE - IMPROPER - PILOT IN COMMAND(CFI)
  5. OBJECT - FENCE
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FUEL STARVATION DUE TO THE CFI DEPLETING THE FUEL SUPPLY FROM ONE OF TWO TANKS AND FAILING TO SELECT THE FULLEST  
TANK FOR LANDING. CONTRIBUTING TO THE ACCIDENT WAS THE CFI'S IMPROPER DECISION TO TURN BACK TO THE AIRPORT WHEN  
INSUFFICIENT ALTITUDE WAS AVAILABLE TO COMPLETE THE MANEUVER.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 194      2/08/89      GREENVILLE, FL      A/C Reg. No. N204AP      Time (Lcl) - 1125 EST

-----Basic Information-----

Type Operating Certificate-EXTERNAL LOAD	Aircraft Damage	Injuries			
	SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation - LOGGING	Fire	Crew 0	0	0	2
Flight Conducted Under -14 CFR 133	NONE	Pass 0	0	0	0
Accident Occurred During -MANEUVERING					

-----Aircraft Information-----

Make/Model - BELL TH-1L	Eng Make/Model - LYCOMING T53-L-13B	ELT Installed/Activated - YES/YES
Landing Gear - SKID	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 9500	Engine Type - TURBOSHAFT	
No. of Seats - 11	Rated Power - 1400 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	GREENVILLE, FL	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	
Wind Dir/Speed- 360/004 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 6.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	Runway Status - N/A
Obstructions to Vision- FOG		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 38	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
ATP	Current - YES	Total - 7853
	Months Since - 4	Last 24 Hrs - 4
HELICOPTER	Aircraft Type - TH-1L	Make/Model- 1200
		Last 30 Days- 31
		Last 90 Days- 32
		Rotorcraft - 7853

Instrument Rating(s) - HELICOPTER

-----Narrative-----

FLT EXPERIENCED LOSS OF TRANSMISSION DRIVE AND PERFORMED AN AUTOROTATION INTO TREES. EXAMINATION OF THE TRANSMISSION INDICATED THE SPRAG CLUTCH HAD FAILED AND THAT THE FAILED SPRAG CLUTCH WAS THE IMPROPER CLUTCH FOR THAT ENGINE AND TRANSMISSION. THE CLUTCH HAD BEEN INSTALLED AT TRANSMISSION OVERHAUL 140 HOURS BEFORE THE ACCIDENT.

Brief of Accident (Continued)

File No. - 194

2/08/89

GREENVILLE, FL

A/C Reg. No. N204AP

Time (Lc1) - 1125 EST

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation MANEUVERING

Finding(s)

1. ROTOR DRIVE SYSTEM, CLUTCH ASSEMBLY - IMPROPER
2. MAINTENANCE, INSTALLATION - IMPROPER - COMPANY MAINTENANCE PSNL
3. ROTOR DRIVE SYSTEM, CLUTCH ASSEMBLY - FAILURE, TOTAL
4. ROTOR DRIVE SYSTEM - LOSS, TOTAL

Occurrence #2 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation DESCENT - EMERGENCY

Finding(s)

5. OBJECT - TREE(S)
6. TERRAIN CONDITION - NONE SUITABLE

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INSTALLATION OF THE IMPROPER SPRAG CLUTCH ASSEMBLY BY THE OWNERS MAINTENANCE PERSONNEL RESULTING IN FAILURE OF THE SPRAG  
CLUTCH AND THE LOSS OF TRANSMISSION DRIVE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 200      2/08/89      MELBOURNE, FL      A/C Reg. No. N81859      Time (Lc1) - 1751 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage SUBSTANTIAL	Injuries			
Type of Operation	-FERRY	Fire	Fatal	Serious	Minor	None
Flight Conducted Under	-14 CFR 91	NONE	Crew 0	0	1	0
Accident Occurred During	-APPROACH		Pass 0	0	0	0

-----Aircraft Information-----

Make/Model	- CESSNA T210L	Eng Make/Model	- CONTINENTAL TS10-520-H4A	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 3800	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 6	Rated Power	- 285 HP		

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - NO RECORD OF BRIEFING</p> <p>Method - N/A</p> <p>Completeness - N/A</p> <p>Basic Weather - IMC</p> <p>Wind Dir/Speed- 030/010 KTS</p> <p>Visibility - 6.0 SM</p> <p>Lowest Sky/Clouds - N/A</p> <p>Lowest Ceiling - 800 FT BROKEN</p> <p>Obstructions to Vision- HAZE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point FORT PIERCE, FL</p> <p>Destination MELBOURNE, FL</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - NONE</p> <p>Type of Clearance - SPECIAL VFR</p> <p>Type Apch/Lndg - FORCED LANDING</p>	<p>Airport Proximity OFF AIRPORT/STRIP</p> <p>Airport Data MELBOURNE REGIONAL</p> <p>Runway Ident - 04</p> <p>Runway Lth/Wid - 3002/ 100</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - DRY</p>
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-----Personnel Information-----

<p>Pilot-In-Command</p> <p>Certificate(s)/Rating(s)</p> <p>COMMERCIAL</p> <p>SE LAND, ME LAND</p> <p>HELICOPTER</p>	<p>Age - 55</p> <p>Biennial Flight Review</p> <p>Current - YES</p> <p>Months Since - 20</p> <p>Aircraft Type - MU2</p>	<p>Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <table border="0" style="width: 100%;"> <tr> <td>Total - 15000</td> <td>Last 24 Hrs - 6</td> </tr> <tr> <td>Make/Model- 1200</td> <td>Last 30 Days- 25</td> </tr> <tr> <td>Instrument- 975</td> <td>Last 90 Days- 100</td> </tr> <tr> <td>Multi-Eng - 10000</td> <td>Rotorcraft - 1000</td> </tr> </table>	Total - 15000	Last 24 Hrs - 6	Make/Model- 1200	Last 30 Days- 25	Instrument- 975	Last 90 Days- 100	Multi-Eng - 10000	Rotorcraft - 1000
Total - 15000	Last 24 Hrs - 6									
Make/Model- 1200	Last 30 Days- 25									
Instrument- 975	Last 90 Days- 100									
Multi-Eng - 10000	Rotorcraft - 1000									

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE ACFT WAS BEING FERRIED TO MELBOURNE BY A CONTRACTOR TO THE US MARSHALS SERVICE. BEFORE DEPARTURE INSPECTION AND ENGINE RUN-UP REVEALED A 500-600 RPM MAGNETO DROP; THE LEFT TANK WAS 3/4 FULL AND THE RIGHT TANK HAD APPROX 15 GALLONS OF FUEL, ACCORDING TO GAUGES. THE PLT HAD WORK DONE THAT REDUCED THE MAG DROP TO 200-250 RPM. THE PLT REPORTED THAT WHILE ON A 3-MILE FINAL TO RWY 4 AT MELBOURNE, THE ENGINE QUIT. HE SAID HE SWITCHED THE SELECTOR TO THE OTHER TANK. THE ACFT COLLIDED WITH TREES AND THE GROUND DURING A FORCED LANDING. THE FUEL SELECTOR WAS FOUND IN THE LEFT TANK POSITION. NO FUEL SYSTEM LEAKS WERE EVIDENT. FURTHER EXAMINATION REVEALED 3 OZ OF FUEL IN THE RT TANK; THE LEFT TANK CONTAINED 25 GALLONS BUT APPEARED TO BE 3/4 FULL. THE RT FUEL GAUGE WAS ACCURATE AND THE LEFT READ LOW WHEN TESTED. THE RT MAG DROP WAS 700 RPM DRG A TEST-RUN. THE RT MAG IMPULSE SPRING WAS BROKEN, ALLOWING INTERNAL TIMING TO VARY.



Brief of Accident (Continued)

File No. - 200

2/08/89

MELBOURNE, FL

A/C Reg. No. N81859

Time (Lcl) - 1751 EST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
2. OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - PERFORMED - PILOT IN COMMAND
3. FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND
4. FLUID, FUEL - STARVATION

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

5. OBJECT - TREE(S)

Occurrence #4      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      DESCENT - UNCONTROLLED

Finding(s)

6. TERRAIN CONDITION - HIGH VEGETATION

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT TO ACCURATELY DETERMINE FUEL QUANTITY PRIOR TO DEPARTURE FOLLOWED BY HIS FAILURE TO OPERATE THE  
ENGINE ON THE FULLEST FUEL TANK RESULTING IN A FUEL TANK BEING RUN DRY RESULTING IN ENGINE FAILURE WHILE ON SHORT  
FINAL APPROACH AT HIS DESTINATION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 136      2/10/89      FERNANDINA BCH,FL      A/C Reg. No. N926SA      Time (Lcl) - 1430 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	0	1
0	0	0	0

Type of Operation -INSTRUCTIONAL

Flight Conducted Under -14 CFR 91

Accident Occurred During -LANDING

Fire  
NONE

Crew  
Pass

-----Aircraft Information-----

Make/Model - PIPER PA-38-112

Landing Gear - TRICYCLE-FIXED

Max Gross Wt - 1670

No. of Seats - 2

Eng Make/Model - LYCOMING O-235-L2C

Number Engines - 1

Engine Type - RECIPROCATING-CARBURETOR

Rated Power - 112 HP

ELT Installed/Activated - YES/NO

Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING

Method - N/A

Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 310/006 KTS

Visibility - 10.0 SM

Lowest Sky/Clouds - 25000 FT SCATTERED

Lowest Ceiling - NONE

Obstructions to Vision- NONE

Precipitation - NONE

Condition of Light - DAYLIGHT

Itinerary

Last Departure Point

JACKSONVILLE,FL

Destination

SAME AS ACC/INC

Airport Proximity

ON AIRPORT

Airport Data

FERNANDINA BEACH MUNI

Runway Ident - 04

Runway Lth/Wid - 5350/ 100

Runway Surface - ASPHALT

Runway Status - DRY

ATC/Airspace

Type of Flight Plan - NONE

Type of Clearance - NONE

Type Apch/Lndg - TOUCH AND GO

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

STUDENT

Age - 23

Biennial Flight Review

Current - N/A

Months Since - N/A

Aircraft Type - N/A

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total - 41

Make/Model- 39

Instrument- 1

Last 24 Hrs - 2

Last 30 Days- 33

Last 90 Days- 41

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT STATED THAT DURING A TOUCH-&-GO LANDING, THE ACFT STARTED TO VEER TOWARD THE LEFT SIDE OF THE RUNWAY. HE ATTEMPTED TO CORRECT THE SITUATION BY USING RIGHT RUDDER & BRAKE, BUT THE ACFT CONTINUED OFF THE RUNWAY & INTO AN AREA OF GRASS. SUBSEQUENTLY, THE NOSE & RIGHT MAIN GEAR COLLAPSED. A POSTCRASH EXAM REVEALED THE LEFT BRAKE WAS LOCKED & THE WHEEL ASSEMBLY WOULD NOT TURN.

Brief of Accident (Continued)

File No. - 136

2/10/89

FERNANDINA BCH, FL

A/C Reg. No. N926SA

Time (Lcl) - 1430 EST

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation LANDING - ROLL

Finding(s)

1. LANDING GEAR, NORMAL BRAKE SYSTEM - LOCKED

Occurrence #2 LOSS OF CONTROL - ON GROUND  
Phase of Operation LANDING - ROLL

Finding(s)

2. DIRECTIONAL CONTROL - NOT POSSIBLE -
3. GROUND LOOP/SWERVE - UNCONTROLLED -

Occurrence #3 GEAR COLLAPSED  
Phase of Operation LANDING - ROLL

Finding(s)

4. LANDING GEAR, MAIN GEAR - OVERLOAD
5. LANDING GEAR, NOSE GEAR - OVERLOAD

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
LOCKING OF THE LEFT BRAKE, WHICH RESULTED IN A GROUND SWERVE AND LOSS OF CONTROL DURING THE LANDING ROLL.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 195      2/16/89      DAYTONA BEACH, FL      A/C Reg. No. N1010U      Time (Lcl) - 1644 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL					
Type of Operation - PERSONAL	Fire	Crew	Fatal	Injuries Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -TAKEOFF			0	0	0	3

-----Aircraft Information-----

Make/Model - AERO COMMANDER 500U	Eng Make/Model - LYCOMING IO-540-E1A5	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 6000	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 8	Rated Power - 290 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity ON AIRPORT
Wx Briefing - FSS	Last Departure Point DAYTONA BEACH, FL	
Method - ACFT RADIO	Destination ORLANDO, FL	Airport Data DAYTONA BEACH
Completeness - WEATHER NOT PERTINENT	ATC/Airspace	Runway Ident - 06R
Basic Weather - VMC	Type of Flight Plan - NONE	Runway Lth/Wid - 3200/ 100
Wind Dir/Speed- 020/006 KTS	Type of Clearance - NONE	Runway Surface - ASPHALT
Visibility - 10.0 SM	Type Apch/Lndg - PRECAUTIONARY LANDING	Runway Status - DRY
Lowest Sky/Clouds - N/A		
Lowest Ceiling - 4100 FT BROKEN		
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 36	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 644
SE LAND, ME LAND	Months Since - 8	Last 24 Hrs - 2
	Aircraft Type - B-76	Make/Model- 81
		Last 30 Days- 16
		Instrument- 8
		Last 90 Days- 39
		Multi-Eng - 94

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT STATED THAT SHORTLY AFTER ROTATION AFTER HE HAD RETRACTED THE LANDING GEAR, HE NOTED THAT THE ELEVATOR UP CONTROL WAS RESTRICTED. HE THEN REDUCED POWER ON BOTH ENGINES AND EXECUTED AN INTENTIONAL GEAR UP LANDING ON THE RUNWAY. POST ACCIDENT EXAMINATION REVEALED NO MALFUNCTION OR FAILURES THAT WOULD CAUSE THE ELEVATOR TO BE JAMMED.

Brief of Accident (Continued)

File No. - 195

2/16/89

DAYTONA BEACH, FL

A/C Reg. No. N1010U

Time (Lcl) - 1644 EST

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation TAKEOFF

Finding(s)

1. FLIGHT CONTROL SURFACES/ATTACHMENTS - UNDETERMINED

Occurrence #2 GEAR NOT EXTENDED  
Phase of Operation TAKEOFF - ABORTED

Finding(s)

2. WHEELS UP LANDING - INTENTIONAL - PILOT IN COMMAND

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
CONTROL MALFUNCTION OF UNDETERMINED CAUSE THAT MADE FURTHER FLIGHT INADVISABLE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 193      2/24/89      OKLAWAHA, FL      A/C Reg. No. N863Z      Time (Lcl) - 0755 EST

-----Basic Information-----

Type Operating Certificate-AGRICULTURAL AIRCRAFT	Aircraft Damage SUBSTANTIAL					
Type of Operation      -OTHER WORK USE	Fire	Crew	Fatal	0	0	0
Flight Conducted Under      -14 CFR 91	NONE	Pass	0	0	0	0
Accident Occurred During      -LANDING						

-----Aircraft Information-----

Make/Model      - BELL 47G	Eng Make/Model      - LYCOMING VO-435-A1B	ELT Installed/Activated      - NO -N/A
Landing Gear      - SKID	Number Engines      - 1	Stall Warning System      - NO
Max Gross Wt      - 2350	Engine Type      - RECIPROCATING-CARBURETOR	
No. of Seats      - 3	Rated Power      - 200 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing      - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method      - N/A	SAME AS ACC/INC	
Completeness      - N/A	Destination	Airport Data
Basic Weather      - VMC	LOCAL	
Wind Dir/Speed- 310/010 KTS	ATC/Airspace	Runway Ident      - N/A
Visibility      - 8.0 SM	Type of Flight Plan      - NONE	Runway Lth/Wid      - N/A
Lowest Sky/Clouds      - CLEAR	Type of Clearance      - NONE	Runway Surface      - N/A
Lowest Ceiling      - NONE	Type Apch/Lndg      - STRAIGHT-IN	Runway Status      - N/A
Obstructions to Vision- NONE		
Precipitation      - NONE		
Condition of Light      - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age      - 27	Medical Certificate      - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current      - YES	Total      - 1460
SE LAND, ME LAND	Months Since      - 21	Make/Model-      3
HELICOPTER	Aircraft Type      - BELL-47	Instrument-      64
		Multi-Eng      - 10
		Last 24 Hrs      - 3
		Last 30 Days-      50
		Last 90 Days-      80
		Rotorcraft      - 50

Instrument Rating(s)      - AIRPLANE

-----Narrative-----

PILOT WAS ATTEMPTING HIS FIRST LANDING ON THE BACK OF A TRUCK WHEN HE ALLOWED THE HELICOPTER TO PITCH BACK CAUSING THE TAIL ROTOR TO STRIKE THE GROUND WHICH RESULTED IN THE HELICOPTER ROLLING AND THE MAIN ROTOR STRIKING THE GROUND.

Brief of Accident (Continued)

File No. - 193

2/24/89

OKLAWAHA, FL

A/C Reg. No. N863Z

Time (Lc1) - 0755 EST

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Occurrence #1        DRAGGED WING, ROTOR, POD, OR FLOAT  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

1. ROTORCRAFT FLIGHT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND
  2.        LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND
- 

Occurrence #2        ROLL OVER  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT'S FAILURE TO PROPERLY CONTROL THE HELICOPTER DURING AN ATTEMPTED LANDING ON THE BACK OF A TRUCK. CONTRIBUTING TO  
THE ACCIDENT WAS THE PILOT'S LACK OF EXPERIENCE IN PERFORMING SIMILAR LANDINGS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 192      3/02/89      JACKSONVILLE, FL      A/C Reg. No. N3243B      Time (Lcl) - 2127 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage DESTROYED		Injuries		
Type of Operation -BUSINESS	Fire	Crew	Fatal	Serious	Minor
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	1
Accident Occurred During -APPROACH			0	0	0
					None

-----Aircraft Information-----

Make/Model - PIPER PA-22-135	Eng Make/Model - LYCOMING O-290-D2	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1950	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 135 HP	

-----Environment/Operations Information-----

<b>Weather Data</b> Wx Briefing - FSS Method - TELEPHONE Completeness - UNK/NR Basic Weather - IMC Wind Dir/Speed- 030/006 KTS Visibility - 1.500 SM Lowest Sky/Clouds - N/A Lowest Ceiling - 300 FT OVERCAST Obstructions to Vision- FOG Precipitation - NONE Condition of Light - NIGHT(DARK)	<b>Itinerary</b> Last Departure Point ORANGEBURG, SC Destination JACKSONVILLE, FL  <b>ATC/Airspace</b> Type of Flight Plan - IFR Type of Clearance - IFR Type Apch/Lndg - ILS-COMPLETE FULL STOP	<b>Airport Proximity</b> ON AIRPORT  <b>Airport Data</b> JACKSONVILLE INT'L Runway Ident - 07 Runway Lth/Wid - 8000/ 150 Runway Surface - ASPHALT Runway Status - DRY
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-----Personnel Information-----

Pilot-In-Command Certificate(s)/Rating(s) COMMERCIAL SE LAND, ME LAND	Age - 42 Biennial Flight Review Current - NO Months Since - 26 Aircraft Type - PA-22	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT Flight Time (Hours) Total - 1094 Make/Model- 701 Instrument- 275 Multi-Eng - 11 Last 24 Hrs - 4 Last 30 Days- 24 Last 90 Days- 47
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Instrument Rating(s) - AIRPLANE

-----Narrative-----

A VOR APRCH WAS ATTEMPTED AT THE ORIG DEST BUT A MISSED APRCH WAS MADE AT MINIMUMS. PLT DIVERTED TO JAX WHERE HE WAS CLEARED FOR AN ILS RWY 7 APRCH. THE ACFT WAS NOT EQUIPPED WITH GLIDESLOPE OR MARKER BCN, BUT ATC PERSONNEL STATED PLT MADE IT APPEAR THAT HE WAS EQUIPPED FOR FULL ILS APRCH. XING ALT AT OM IS 1900 FT; FLT CROSSED OM AT 400-500 FT. AT ABOUT 4.5 MI FROM RWY, FLT CLIMBED TO 900 FT, THEN AT 3.5 MI, DESCENDED TO 600 FT. ATC ADVISED FLT OF RADAR-OBSERVED ALT EXCURSIONS DURING THE APRCH. THE PLT STATED THAT HE GOT ON THE LOCALIZER, TRACKED IT FOR AWHILE, THEN GOT OFF. HE WAS TRYING TO RECAPTURE THE LOCALIZER WHEN HE HIT THE TREES ABOUT 1 MI SHORT OF THE RWY. THE PLT'S BFR HAD EXPIRED 2 MOS PRIOR TO THE CRASH & REVIEW OF HIS LOGBOOK SHOWED NO EVIDENCE OF COMPLIANCE WITH FAR 61.57, RECENT IFR EXPERIENCE. THERE WAS NO EVIDENCE OF ANY PROBLEM WITH THE ACFT OR COMPONENTS.



Brief of Accident (Continued)

File No. - 192

3/02/89

JACKSONVILLE, FL

A/C Reg. No. N3243B

Time (Lc1) - 2127 EST

Occurrence #1 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Finding(s)

1. IFR PROCEDURE - IMPROPER - PILOT IN COMMAND
2. MINIMUM DESCENT ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
3. AIRCRAFT/EQUIPMENT INADEQUATE - PILOT IN COMMAND
4. COMM/NAV EQUIPMENT, GLIDE SLOPE RECEIVER - NOT INSTALLED
5. LACK OF RECENT INSTRUMENT TIME - PILOT IN COMMAND
6. WEATHER CONDITION - FOG
7. WEATHER CONDITION - LOW CEILING
8. LIGHT CONDITION - DARK NIGHT
9. OBJECT - TREE(S)

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
AN UNSTABILIZED INSTRUMENT APPROACH WHEREIN THE PILOT DESCENDED BELOW THE MDA. CONTRIBUTING FACTORS INCLUDED AN  
INADEQUATELY EQUIPPED ACFT AND THE PILOT'S LACK OF RECENT INSTRUMENT EXPERIENCE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 191      3/11/89      JACKSONVILLE, FL      A/C Reg. No. N4033J      Time (Lcl) - 0904 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage	Injuries			
		NONE	Fatal	Serious	Minor	None
Type of Operation	-SIGHTSEEING	Fire	Crew 0	0	0	1
Flight Conducted Under	-14 CFR 91	NONE	Pass 0	1	3	0
Accident Occurred During	-LANDING					

-----Aircraft Information-----

Make/Model - ADAMS AX-9	Eng Make/Model - N/A	ELT Installed/Activated - NO -N/A
Landing Gear - N/A	Number Engines - N/A	Stall Warning System - NO
Max Gross Wt - 1929	Engine Type - N/A	
No. of Seats - UNK/NR	Rated Power - N/A	

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - UNK/NR</p> <p>Method - UNK/NR</p> <p>Completeness - FULL</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- 020/006 KTS</p> <p>Visibility - 7.0 SM</p> <p>Lowest Sky/Clouds - CLEAR</p> <p>Lowest Ceiling - NONE</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point</p> <p style="padding-left: 20px;">SAME AS ACC/INC</p> <p>Destination</p> <p style="padding-left: 20px;">LOCAL</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - NONE</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - FULL STOP</p>	<p>Airport Proximity</p> <p style="padding-left: 20px;">OFF AIRPORT/STRIP</p> <p>Airport Data</p> <p>Runway Ident - N/A</p> <p>Runway Lth/Wid - N/A</p> <p>Runway Surface - N/A</p> <p>Runway Status - N/A</p>
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-----Personnel Information-----

Pilot-In-Command	Age - 42	Medical Certificate - NO MEDICAL
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 801      Last 24 Hrs - 1
	Months Since - 8	Make/Model- 801      Last 30 Days- 9
FREE BALLOON	Aircraft Type - AX-9	Instrument- 0      Last 90 Days- 9

Instrument Rating(s) - NONE

-----Narrative-----

THE BALLOON TIPPED OVER UPON LDG. THE PLT & 2 PAX STATED THAT SAFETY BRIEFING BEFORE & DURING FLT WAS ADEQUATE, & GIVEN AT LEAST TWICE. ON TOUCHDOWN WHEN THE GONDOLA TIPPED, OTHER PAX FELL UPON FEMALE PAX INJURING HER ARM. THE ACCIDENT WAS NOT REPORTED UNTIL ABOUT 48 HRS LATER.

Brief of Accident (Continued)

File No. - 191

3/11/89

JACKSONVILLE, FL

A/C Reg. No. N4033J

Time (Lcl) - 0904 EST

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Occurrence #1 MISCELLANEOUS/OTHER  
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

1. PROCEDURES/DIRECTIVES - NOT FOLLOWED - PASSENGER
2. WEATHER CONDITION - GUSTS

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----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF A PASSENGER TO FOLLOW PRE-BRIEFED INSTRUCTIONS DURING LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 147      4/10/89      PENSACOLA, FL

A/C Reg. No. N30PC

Time (Lcl) - 1300 CDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation            -EXECUTIVE/CORPORATE  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During    -DESCENT

Aircraft Damage  
DESTROYED  
Fire  
IN FLIGHT

	Fatal	Serious	Minor	None
Crew	2	0	0	0
Pass	1	0	0	0

-----Aircraft Information-----

Make/Model    - BEECH 200  
Landing Gear   - TRICYCLE-RETRACTABLE  
Max Gross Wt   - 12500  
No. of Seats   - 10

Eng Make/Model - P&W PT6A-41  
Number Engines - 2  
Engine Type    - TURBOPROP  
Rated Power    - 850 HP

ELT Installed/Activated - YES-UNK/NR  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing    - FSS  
Method        - TELETYPE  
Completeness   - FULL  
Basic Weather   - IMC  
Wind Dir/Speed - 340/010 KTS  
Visibility     - 2.000 SM  
Lowest Sky/Clouds - UNK/NR  
Lowest Ceiling - 700 FT BROKEN  
Obstructions to Vision- FOG  
Precipitation   - RAIN  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
PENSACOLA, FL  
Destination  
ATLANTA, GA

ATC/Airspace

Type of Flight Plan - IFR  
Type of Clearance   - IFR  
Type Apch/Lndg      - NONE

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

PENSACOLA REGIONAL  
Runway Ident    - 34  
Runway Lth/Wid   - 7002/ 150  
Runway Surface   - ASPHALT  
Runway Status    - WET

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL, ATP, CFI  
SE LAND, ME LAND

Age - 45

Biennial Flight Review

Current        - YES  
Months Since   - 1  
Aircraft Type   - BE-200

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total	- 14200	Last 24 Hrs	- 1
Make/Model	- 3000	Last 30 Days	- 24
Instrument	- 1120	Last 90 Days	- 114
Multi-Eng	- 12500		

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE AIRCRAFT WAS ROUTINELY FLOWN TO PENSACOLA TO PICKUP A GULF POWER EXECUTIVE FOR A FLIGHT TO ATLANTA. THE PAX HAD 4 BAGS, 2 PLACED IN THE AFT BAGGAGE AREA BY THE GROUND CREW, THE OTHER 2 CARRIED ONBOARD BY THE PAX. AFTER TAKEOFF THE CVR RECORDED THE PAX STATING THAT THERE WAS A FIRE. THE FIRE IN THE AFT CABIN AREA WAS CONFIRMED BY THE 1ST OFFICER. AN EMERG WAS DECLARED TO THE PNS ATCT. SUBSEQUENTLY, THE AIRCRAFT WAS SEEN DESCENDING OUT OF THE OVERCAST STREAMING DARK SMOKE BEHIND IT. THE AIRCRAFT IMPACTED AN APARTMENT COMPLEX AND A POST CRASH FIRE DESTROYED IT. NO EVIDENCE OF A LIGHTNING STRIKE, AIRCRAFT SYSTEM MALFUNCTION, OR INCENDIARY DEVICE WAS FOUND DURING THE INVESTIGATION. FORENSIC CHEMICAL TESTS SHOWED TRACES OF HYDROCHLORIC AND SULPHURIC ACID ON PAX ARTICLES BUT NONE ON THE CABIN INTERIOR. METALLURGICAL EXAM OF BROKEN FUEL LINE SHOWED OVERLOAD FAILURE AND POST HEAT DISTRESS. THE INTERIOR OF THE COCKPIT WINDOWS WERE SEVERELY SOOTED. THE FLIGHT CREW DID NOT DON AVAILABLE OXYGEN MASKS.

Brief of Accident (Continued)

File No. - 147

4/10/89

PENSACOLA, FL

A/C Reg. No. N30PC

Time (Lc1) - 1300 CDT

Occurrence #1 FIRE  
Phase of Operation CLIMB

Finding(s)

1. FUSELAGE, CABIN - FIRE
2. FUSELAGE, CABIN - SMOKE

Occurrence #2 LOSS OF CONTROL - IN FLIGHT  
Phase of Operation DESCENT - EMERGENCY

Finding(s)

3. EMERGENCY PROCEDURE - NOT FOLLOWED - PILOT IN COMMAND
4. EMERGENCY PROCEDURE - NOT FOLLOWED - COPILOT/SECOND PILOT
5. PHYSICAL IMPAIRMENT(CARBON MONOXIDE) - PILOT IN COMMAND
6. PHYSICAL IMPAIRMENT(CARBON MONOXIDE) - COPILOT/SECOND PILOT

Occurrence #3 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation DESCENT - UNCONTROLLED

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
AN IN FLIGHT CABIN FIRE OF UNDETERMINED ORIGIN AND PHYSICAL IMPAIRMENT OF THE FLIGHT CREW DUE TO SMOKE AND FIRE.  
CONTRIBUTING FACTORS WERE THE FAILURE OF THE FLIGHT CREW TO DON THE AVAILABLE OXYGEN MASKS TO REDUCE THE EFFECT OF  
THE SMOKE AND FUMES IN THE COCKPIT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 41      2/10/89      DAWSON,GA

A/C Reg. No. N9755

Time (Lcl) - 1000 EST

-----Basic Information-----

Type Operating Certificate-AGRICULTURAL AIRCRAFT

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	0	1
0	0	0	0

Type of Operation -AERIAL APPLICATION

Flight Conducted Under -14 CFR 137

Accident Occurred During -LANDING

Fire  
NONE

Crew  
Pass

-----Aircraft Information-----

Make/Model - GRUMMAN G-164A  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 4500  
No. of Seats - 1

Eng Make/Model - P&W R-985-AN1  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 450 HP

ELT Installed/Activated - NO -N/A  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- 320/008 KTS  
Visibility - 10.0 SM  
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  
SAME AS ACC/INC

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
COMMERCIAL  
SE LAND,ME LAND,SE SEA  
HELICOPTER

Age - 59  
Biennial Flight Review  
Current - YES  
Months Since - 13  
Aircraft Type - G-164-A

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)

Total	- 13867	Last 24 Hrs	- 6
Make/Model-	5000	Last 30 Days-	10
Instrument-	50	Last 90 Days-	0
Multi-Eng -	800	Rotorcraft -	500

Instrument Rating(s) - NONE

-----Narrative-----

PILOT WAS COMPLETING THE SECOND AERIAL APPLICATION RUN OVER A WHEAT FIELD WHEN THE ENGINE LOST POWER. ATTEMPTS TO REGAIN POWER WERE ONLY MOMENTARILY SUCCESSFUL AND THE PILOT WAS FORCED TO LAND IN THE WHEAT. ON ROLLOUT THE AIRCRAFT WENT INTO A PLOWED FIELD AND NOSED OVER. INSPECTION OF THE ENGINE REVEALED THE CARBURETOR FLOAT WAS LEAKING WHICH RESULTED IN AN EXCESSIVELY RICH MIXTURE.

Brief of Accident (Continued)

File No. - 41

2/10/89

DAWSON,GA

A/C Reg. No. N9755

Time (Lcl) - 1000 EST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      MANEUVERING - AERIAL APPLICATION

Finding(s)

1. FUEL SYSTEM,CARBURETOR FLOAT - LEAK

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING - ROLL

Finding(s)

2. TERRAIN CONDITION - SOFT

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
TOTAL LOSS OF ENGINE POWER DUE TO LEAKING CARBURETOR FLOAT. CONTRIBUTING TO THE ACCIDENT WAS THE SOFT TERRAIN USED  
FOR A FORCED LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 63      2/24/89      HONOLULU, HI      A/C Reg. No. N4713U      Time (Lcl) - 0209 HST

-----Basic Information-----

Type Operating Certificate	AIR CARRIER - FLAG/DOMESTIC	Aircraft Damage					
Name of Carrier	-UNITED AIRLINES, INC.	SUBSTANTIAL					
Type of Operation	-SCHEDULED, INTL, PASSENGER	Fire	Crew	Fatal	Serious	Minor	None
Flight Conducted Under	-14 CFR 121	IN FLIGHT	Pass	0	3	13	3
Accident Occurred During	-CLIMB			9	2	20	306

-----Aircraft Information-----

Make/Model	- BOEING 747-122	Eng Make/Model	- P&W JT9D-3A	ELT Installed/Activated	- UNK/NR
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 4	Stall Warning System	- YES
Max Gross Wt	- 734000	Engine Type	- TURBOFAN		
No. of Seats	- 400	Rated Power	- 43000 LBS THRUST		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - COMPANY	Last Departure Point	OFF AIRPORT/STRIP
Method - TELETYPE	HONOLULU, HI	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	AUCKLAND	
Wind Dir/Speed - UNK/NR	ATC/Airspace	Runway Ident - N/A
Visibility - UNK/NR	Type of Flight Plan - IFR	Runway Lth/Wid - N/A
Lowest Sky/Clouds - N/A	Type of Clearance - IFR	Runway Surface - N/A
Lowest Ceiling - UNK/NR	Type Apch/Lndg - FORCED LANDING	Runway Status - N/A
Obstructions to Vision - UNK/NR		
Precipitation - UNK/NR		
Condition of Light - NIGHT(DARK)		

-----Personnel Information-----

Pilot-In-Command	Age - 59	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
ATP	Current - YES	Total - 28000
SE LAND, ME LAND, SE SEA	Months Since - 2	Last 24 Hrs - 0
GLIDER	Aircraft Type - B-747	Make/Model - 1650
		Last 30 Days - 0
		Instrument - UNK/NR
		Last 90 Days - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

FTL #811 WAS A SCHEDULED PASSENGER FLIGHT FROM LOS ANGELES TO SYDNEY, AUSTRALIA, WITH STOPS IN HONOLULU (HNL), HI, AND AUCKLAND, NEW ZEALAND. THE FLT WAS UNEVENTFUL UNTIL AFTER DEPARTURE FROM HNL. WHILE CLIMBING FROM FL220 TO FL230 THE CREW HEARD A "THUMP" FOLLOWED BY AN EXPLOSION. AN EXPLOSIVE DECOMPRESSION WAS EXPERIENCED AND THE #3 AND #4 ENGS WERE SHUTDOWN BECAUSE OF FOD. THE FLT RETURNED TO HNL AND PASSENGERS WERE EVACUATED. INSPECTION REVEALED THE FORWARD LOWER LOBE CARGO DOOR DEPARTED INFLT CAUSING EXTENSIVE DAMAGE TO THE FUSELAGE AND CABIN ADJACENT TO THE DOOR. NINE PASSENGERS WERE EJECTED AND LOST AT SEA. INVESTIGATION CENTERED AROUND DESIGN AND CERTIFICATION OF THE DOOR WHICH ALLOWED IT TO BE IMPROPERLY LATCHED, AND THE OPERATION AND MAINTENANCE TO ASSURE AIRWORTHINESS OF THE DOOR AND LATCHING MECHANISM. (SEE NTSB/AAR-90/01)



Brief of Accident (Continued)

File No. - 63

2/24/89

HONOLULU, HI

A/C Reg. No. N4713U

Time (Lc1) - 0209 HST

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation CLIMB - TO CRUISE

Finding(s)

1. DOOR, CARGO - UNLATCHED
2. DOOR, CARGO - SEPARATION
3. MAINTENANCE, INSPECTION OF AIRCRAFT - IMPROPER - COMPANY MAINTENANCE PSNL
4. AIRCRAFT/EQUIPMENT, INADEQUATE DESIGN - MANUFACTURER
5. ACFT/EQUIP, INADEQUATE STANDARD/REQUIREMENT - FAA(ORGANIZATION)
6. AIR COND/HEATING/PRESSURIZATION - DECOMPRESSION

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE SUDDEN OPENING OF THE IMPROPERLY LATCHED FORWARD LOBE CARGO DOOR IN FLIGHT AND THE SUBSEQUENT EXPLOSIVE DECOMPRESSION. CONTRIBUTING TO THE ACCIDENT WAS A DEFICIENCY IN THE DESIGN OF THE CARGO DOOR LOCKING MECHANISMS, WHICH MADE THEM SUSCEPTIBLE TO INSERVICE DAMAGE, AND WHICH ALLOWED THE DOOR TO BE UNATCHED, YET TO SHOW A PROPERLY LATCHED AND LOCKED POSITION. ALSO CONTRIBUTING TO THE ACCIDENT WAS THE LACK OF PROPER MAINTENANCE AND INSPECTION OF THE CARGO DOOR BY UNITED AIRLINES, AND A LACK OF TIMELY CORRECTIVE ACTIONS BY BOEING AND THE FAA FOLLOWING A PREVIOUS DOOR OPENING INCIDENT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 38      1/09/89      AUDUBON,IA      A/C Reg. No. N89867      Time (Lcl) - 1115 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - APPROACH

Aircraft Damage  
SUBSTANTIAL

Fire  
NONE

	Fatal	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	0

-----Aircraft Information-----

Make/Model - CESSNA 140  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 1450  
No. of Seats - 2

Eng Make/Model - CONTINENTAL C-85-12  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 85 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing - FSS  
Method - TELEPHONE  
Completeness - FULL  
Basic Weather - VMC  
Wind Dir/Speed- 200/020 KTS  
Visibility - 20.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
DES MOINES,IA  
Destination  
AUDUBON,IA

ATC/Airspace

Type of Flight Plan - VFR  
Type of Clearance - NONE  
Type Apch/Lndg - FULL STOP

Airport Proximity  
ON AIRPORT

Airport Data

AUDUBON  
Runway Ident - 14  
Runway Lth/Wid - 3000/ 60  
Runway Surface - CONCRETE  
Runway Status - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
STUDENT

Age - 33  
Biennial Flight Review  
Current - N/A  
Months Since - N/A  
Aircraft Type - N/A

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)	
Total - 40	Last 24 Hrs - 1
Make/Model- 40	Last 30 Days- 8
Instrument- UNK/NR	Last 90 Days- 11
Multi-Eng - UNK/NR	Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

WHILE ON SOLO CROSS COUNTRY TRAINING FLIGHT, THE STUDENT PILOT SAID HE ATTEMPTED TO LAND THE TAILWHEEL ACFT ON RUNWAY 14 WITH A RIGHT CROSSWIND IN EXCESS OF 20 KNOTS. DURING THE LANDING FLARE, HE FELT HE WAS LOSING DIRECTIONAL CONTROL AND ELECTED TO GO-AROUND. SHORTLY AFTER THAT HE LOST DIRECTIONAL CONTROL AND DRIFTED TO THE LEFT STRIKING A TREE, THEN THE TERRAIN.

Brief of Accident (Continued)

File No. - 38

1/09/89

AUDUBON, IA

A/C Reg. No. N89867

Time (Lcl) - 1115 CST

Occurrence #1       LOSS OF CONTROL - IN FLIGHT  
Phase of Operation    LANDING

Finding(s)

1. WEATHER CONDITION - CROSSWIND
2. GO-AROUND - ATTEMPTED - PILOT IN COMMAND
3. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2       IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation    GO-AROUND (VFR)

Finding(s)

4. OBJECT - TREE(S)

Occurrence #3       IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    DESCENT - UNCONTROLLED

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE PILOT TO MAINTAIN CONTROL OF THE AIRPLANE. CONTRIBUTING TO THE ACCIDENT WERE THE CROSSWIND  
CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 33      1/14/89      CLARION, IA      A/C Reg. No. N22997      Time (Lcl) - 1200 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -PERSONAL  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -LANDING

Aircraft Damage  
SUBSTANTIAL  
Fire      NONE  
Crew      0  
Pass      0

Injuries		Fatal	Serious	Minor	None
		0	0	0	1
		0	0	0	1

-----Aircraft Information-----

Make/Model      - CESSNA 150  
Landing Gear      - TRICYCLE-FIXED  
Max Gross Wt      - 1600  
No. of Seats      - 2

Eng Make/Model - CONTINENTAL D-200-A  
Number Engines - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 100 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - NO RECORD OF BRIEFING  
Method      - N/A  
Completeness      - N/A  
Basic Weather      - VMC

Wind Dir/Speed- 200/021 KTS  
Visibility      - 10.0 SM  
Lowest Sky/Clouds      - 20000 FT SCATTERED  
Lowest Ceiling      - NONE  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point  
BLAINE, MN  
Destination  
WEBSTER CITY, IA

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance      - NONE  
Type Apch/Lndg      - FORCED LANDING

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident      - N/A  
Runway Lth/Wid      - N/A  
Runway Surface      - N/A  
Runway Status      - N/A

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
PRIVATE  
SE LAND

Age - 27  
Biennial Flight Review  
Current      - YES  
Months Since      - 10  
Aircraft Type      - C-150

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total      - 126      Last 24 Hrs - 2  
Make/Model- 126      Last 30 Days- 3  
Instrument- 4      Last 90 Days- 9  
Multi-Eng - UNK/NR      Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DURING A PERSONAL CROSS COUNTRY FLIGHT, THE PILOT SAID THE ENGINE LOST POWER. AN EMERGENCY LANDING WAS ATTEMPTED ON A RURAL GRAVEL ROAD, AND DURING THE ROLL-OUT, A ROAD SIGN WAS STRUCK CAUSING SUBSTANTIAL DAMAGE TO THE ACFT. SUBSEQUENT INVESTIGATION REVEALED NO MECHANICAL MALFUNCTION, LACK OF FUEL, OR FUEL CONTAMINATION. METEOROLOGICAL CONDITIONS WERE FAVORABLE FOR CARBURETOR ICING ACCORDING TO THE "ICING PROBABILITY CHARTS." TEMPERATURE WAS 36 DEGS F AND DEWPOINT WAS 25 DEGS F.

Brief of Accident (Continued)

File No. - 33

1/14/89

CLARION, IA

A/C Reg. No. N22997

Time (Lcl) - 1200 CST

Occurrence #1      LOSS OF ENGINE POWER  
Phase of Operation      CRUISE

Finding(s)

1. WEATHER CONDITION - CARBURETOR ICING CONDITIONS
2. CARBURETOR HEAT - DELAYED - PILOT IN COMMAND
3. FUEL SYSTEM, CARBURETOR - ICE

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING - ROLL

Finding(s)

4. OBJECT - SIGN

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT TO PROPERLY USE THE CARBURETOR HEAT DURING ICING CONDITIONS RESULTING IN CARBURETOR ICE  
FORMATION AND SUBSEQUENT LOSS OF ENGINE POWER.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 66 1/17/89 GREENFIELD,IA A/C Reg. No. N24658 Time (Lcl) - 1310 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - LANDING

Aircraft Damage

SUBSTANTIAL

Fire  
NONE

Fatal

Crew 0  
Pass 0

Injuries

Serious Minor

0 0  
0 0

None

1  
2

-----Aircraft Information-----

Make/Model - BEECH C-23  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 2450  
No. of Seats - 4

Eng Make/Model - LYCOMING O-360-A4J  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 180 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - FSS  
Method - TELEPHONE  
Completeness - FULL

Basic Weather - VMC

Wind Dir/Speed- 200/013 KTS  
Visibility - 20.0 SM  
Lowest Sky/Clouds - 25000 FT SCATTERED  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
FT. WAYNE, IN  
Destination  
GREENFIELD, IA

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

ATC/Airspace

Type of Flight Plan - IFR  
Type of Clearance - IFR  
Type Apch/Lndg - FORCED LANDING

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
COMMERCIAL,CFI  
SE LAND,ME LAND

Age - 26  
Biennial Flight Review  
Current - YES  
Months Since - 9  
Aircraft Type - C-172

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 1353  
Make/Model- 180  
Instrument- 197  
Multi-Eng - 241  
Last 24 Hrs - 8  
Last 30 Days- 52  
Last 90 Days- 115

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT SAID THAT HE WAS ABOUT TEN MILES FROM HIS DESTINATION ARPT, HAD IT IN SIGHT, THEN CLOSED HIS IFR FLIGHT PLAN. ABOUT 3 MILES FROM THE AIRPORT, THE ENGINE COUGHED, THEN STARTED TO QUIT. A SWITCH OF FUEL TANKS WAS MADE AND THE ENGINE RAN ABOUT 20 TO 30 SECONDS MORE BEFORE QUITTING COMPLETELY. AN EMERGENCY LANDING WAS ATTEMPTED WHICH CAUSED SUBSTANTIAL DAMAGE TO THE AIRCRAFT. POST ACCIDENT INVESTIGATION REVEALED THE FUEL TANKS TO BE EMPTY.

Brief of Accident (Continued)

File No. - 66

1/17/89

GREENFIELD,IA

A/C Reg. No. N24658

Time (Lc1) - 1310 CST

-----  
Occurrence #1            LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      APPROACH

Finding(s)

1. FLUID,FUEL - EXHAUSTION
  2. PREFLIGHT PLANNING/PREPARATION - POOR - PILOT IN COMMAND
  3. FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
- 

Occurrence #2            FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

-----

Occurrence #3            IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

4. TERRAIN CONDITION - NONE SUITABLE
  5. LANDING GEAR,MAIN GEAR - OVERLOAD
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO ASSURE AN AN ADEQUATE SUPPLY OF FUEL WAS ON BOARD IN ORDER TO COMPLETE THE FLIGHT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 67      2/25/89      HUDSON, IA      A/C Reg. No. N611CZ      Time (Lcl) - 1250 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage	Injuries			
		SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation	-PERSONAL	Fire	Crew 0	0	0	1
Flight Conducted Under	-14 CFR 91	NONE	Pass 0	0	0	0
Accident Occurred During	-LANDING					

-----Aircraft Information-----

Make/Model	- COMPOSITE AIRCRAFT MFG C COZY	Eng Make/Model	- LYCOMING O-235-L2C	ELT Installed/Activated	- YES/NO
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 1500	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 2	Rated Power	- 112 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary	Airport Proximity
Wx Briefing	- NWS	Last Departure Point	OFF AIRPORT/STRIP
Method	- ACFT RADIO	WATERLOO, IA	
Completeness	- FULL	Destination	Airport Data
Basic Weather	- VMC	LOCAL	
Wind Dir/Speed	- 230/006 KTS	ATC/Airspace	Runway Ident - N/A
Visibility	- 7.0 SM	Type of Flight Plan	- NONE
Lowest Sky/Clouds	- 10000 FT SCATTERED	Type of Clearance	- TRAFFIC ADVISORY
Lowest Ceiling	- 25000 FT OVERCAST	Type Apch/Lndg	- FORCED LANDING
Obstructions to Vision	- NONE		Runway Lth/Wid - N/A
Precipitation	- NONE		Runway Surface - N/A
Condition of Light	- DAYLIGHT		Runway Status - N/A

-----Personnel Information-----

Pilot-In-Command	Age - 57	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
PRIVATE	Current - YES	Total - 196	Last 24 Hrs - UNK/NR
SE LAND	Months Since - 17	Make/Model - 4	Last 30 Days - UNK/NR
	Aircraft Type - C-172	Instrument - 3	Last 90 Days - UNK/NR
		Multi-Eng - UNK/NR	Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT SAID THAT WHILE FLYING AN EXPERIMENTAL COZY ACFT ON A LOCAL FLIGHT, THE ENGINE QUIT. AN EMERGENCY LDG WAS ATTEMPTED IN A FARM FIELD AND THE LEFT GEAR WAS TORN OFF AND THE WINGS DAMAGED IN ADDITION TO OTHER SUBSTANTIAL DAMAGE. POST ACCIDENT INVESTIGATION REVEALED THE FUEL TANKS WERE EMPTY.



Brief of Accident (Continued)

File No. - 67

2/25/89

HUDSON, IA

A/C Reg. No. N611CZ

Time (Lcl) - 1250 CST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      CRUISE

Finding(s)

1. AIRCRAFT PREFLIGHT - IMPROPER - PILOT IN COMMAND
2. FLUID, FUEL - EXHAUSTION

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER PREFLIGHT BY THE PILOT WHICH RESULTED IN AN INADEQUATE FUEL SUPPLY AND FUEL EXHAUSTION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 139      2/25/89      UNIONVILLE,IA      A/C Reg. No. N7662X      Time (Lcl) - 1445 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -PERSONAL  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -LANDING

Aircraft Damage  
SUBSTANTIAL  
Fire      NONE

	Fatal	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	2

-----Aircraft Information-----

Make/Model      - CESSNA 172B  
Landing Gear      - TRICYCLE-FIXED  
Max Gross Wt      - 2200  
No. of Seats      - 4

Eng Make/Model      - CONTINENTAL O-300-D  
Number Engines      - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 145 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - NO RECORD OF BRIEFING  
Method      - N/A  
Completeness      - N/A

Basic Weather      - VMC

Wind Dir/Speed- 120/007 KTS  
Visibility      - 12.0 SM

Lowest Sky/Clouds      - 12000 FT SCATTERED

Lowest Ceiling      - 25000 FT BROKEN

Obstructions to Vision- NONE

Precipitation      - NONE

Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point  
FT. MADISON,IA

Destination

OSCEOLA,IA

ATC/Airspace

Type of Flight Plan      - NONE

Type of Clearance      - NONE

Type Apch/Lndg      - FORCED LANDING

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

Runway Ident      - N/A

Runway Lth/Wid      - N/A

Runway Surface      - N/A

Runway Status      - N/A

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

ATP,CFI,MILITARY

SE LAND,ME LAND

Age - 41

Biennial Flight Review

Current      - YES

Months Since      - 5

Aircraft Type      - DC-9

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total      - 11475

Make/Model- 490

Instrument- 1812

Multi-Eng - 9700

Last 24 Hrs - 1

Last 30 Days- 15

Last 90 Days- 105

Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT SAID THAT WHILE CRUISING TO HIS DESTINATION APT, THE ENGINE QUIT SUDDENLY. EMERGENCY PROCEDURES FAILED TO RECTIFY THE POWER LOSS AND AN EMERGENCY LANDING WAS ATTEMPTED ON A SNOW COVERED FARM FIELD. A COLLISION WITH A DITCH TORE OFF THE NOSE GEAR AND THE AIRCRAFT CONTINUED TO SLIDE ABOUT 300 FEET, COMING TO STOP ON IT'S NOSE. POST ACCIDENT INVESTIGATION REVEALED THE CARB HEAT BOX TO BE IMPROPERLY RIGGED AND A SEAL MISSING FROM THE FLAPPER VALVE. METEOROLOGICAL CONDITIONS AT THE TIME WERE CONDUCIVE FOR CARB ICING ACCORDING TO ICING PROBABILITY CHARTS. THE MIS-RIGGING OF THE CARB HEAT BOX PREVENTED FULL APPLICATION OF CARB HEAT. AFTER THE ENGINE QUIT THE PILOT ATTEMPTED TO RESTORE POWER WITH CARB HEAT BUT WAS UNABLE.

Brief of Accident (Continued)

File No. - 139

2/25/89

UNIONVILLE, IA

A/C Reg. No. N7662X

Time (Lcl) - 1445 CST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation      CRUISE

Finding(s)

1. WEATHER CONDITION - CARBURETOR ICING CONDITIONS
2. FUEL SYSTEM, CARBURETOR - ICE
3. CARBURETOR HEAT - IMPROPER USE OF - PILOT IN COMMAND
4. CARBURETOR HEAT CONTROL - INADEQUATE
5. MAINTENANCE, MODIFICATION - IMPROPER - OTHER MAINTENANCE PSNL

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

6. TERRAIN CONDITION - SNOW COVERED
7. TERRAIN CONDITION - DITCH

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE ENGINE DUE TO CARBURETOR ICE. CONTRIBUTING FACTORS INCLUDED CARBURETOR ICING CONDITIONS, IMPROPER USE OF THE CARBURETOR HEAT CONTROL BY THE PILOT, AND THE IMPROPERLY RIGGED CARBURETOR AIR BOX WHICH RESULTED IN REDUCED CARBURETOR HEATING CAPABILITY.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 68      2/25/89      FT. MADISON,IA      A/C Reg. No. N4314R      Time (Lcl) - 1330 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - TAKEOFF

Aircraft Damage

SUBSTANTIAL

Fire  
IN FLIGHT

Crew  
Pass

Fatal  
0  
0

Injuries

Serious  
0  
0

Minor  
0  
0

None  
1  
2

-----Aircraft Information-----

Make/Model - CESSNA 182RG  
Landing Gear - TRICYCLE-RETRACTABLE  
Max Gross Wt - 3100  
No. of Seats - 4

Eng Make/Model - LYCOMING O-540-L3CD  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 235 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC

Wind Dir/Speed- 150/008 KTS  
Visibility - 15.0 SM  
Lowest Sky/Clouds - UNK/NR  
Lowest Ceiling - 8000 FT OVERCAST  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
FT. MADISON,IA  
Destination  
SPRINGFIELD,MO

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

Airport Proximity  
ON AIRPORT

Airport Data

FT. MADISON  
Runway Ident - 16  
Runway Lth/Wid - 4000/ 75  
Runway Surface - ASPHALT  
Runway Status - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE  
SE LAND

Age - 39

Biennial Flight Review

Current - YES  
Months Since - 7  
Aircraft Type - UNK/NR

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total - 121  
Make/Model- 45  
Instrument- 9  
Multi-Eng - UNK/NR  
Last 24 Hrs - UNK/NR  
Last 30 Days- 7  
Last 90 Days- 29  
Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT SAID THAT SHORTLY AFTER TAKEOFF AND DURING INITIAL CLIMB, SMOKE WAS NOTICED COMING FROM THE DEFROSTER VENT ON THE PAX SIDE. TURNING DOWNWIND, THE SMOKE BECAME WORSE AND ERUPTED INTO A FIRE. THE SMOKE, ALONG WITH THE CHARRED WINDSHIELD, LIMITED VISIBILITY TO THE POINT THAT THE PAX DOOR AND THE PILOT'S WINDOW WERE OPENED BY THE CREW. THIS CAUSED THE FIRE TO BURN MORE INTENSELY. THE PLT EXISTED THE ACFT AFTER LANDING AND COMING TO A FULL STOP. THE FIRE WAS EXTINGUISHED BY THE LOCAL FBO. THE ACFT WAS NOT EQUIPPED WITH A FIRE EXTINGUISHER. POST ACCIDENT INVESTIGATION REVEALED THE HOT WIRE FROM THE AMPERAGE METER WAS RUBBING ON THE FUEL PRESSURE INDICATOR LINE, HAD SHORTED AND BURNED THROUGH, CAUSING THE INFLIGHT FIRE IN THE COCKPIT. THE ACFT WAS OVERDUE ANNUAL AND HAD ACCUMULATED ABOUT 234 HRS OF FLIGHT TIME SINCE THE LAST INSPECTION.

Brief of Accident (Continued)

File No. - 68

2/25/89

FT. MADISON, IA

A/C Reg. No. N4314R

Time (Lc1) - 1330 CST

Occurrence #1 FIRE  
Phase of Operation TAKEOFF - INITIAL CLIMB

Finding(s)

1. ELECTRICAL SYSTEM, ELECTRIC WIRING - SHORTED
2. MAINTENANCE, ANNUAL INSPECTION - NOT PERFORMED - PILOT IN COMMAND
3. FIRE EXTINGUISHER - NOT INSTALLED

Occurrence #2 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
AN ELECTRICAL WIRING SHORT THAT CAUSED AN IN FLIGHT FIRE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 93      3/03/89      CEDAR RAPIDS, IA      A/C Reg. No. N98934      Time (Lcl) - 1850 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage	Injuries			
	SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation - PERSONAL	Fire	Crew	0	0	0
Flight Conducted Under - 14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During - LANDING					

-----Aircraft Information-----

Make/Model - CESSNA 310	Eng Make/Model - CONTINENTAL IO-520-M	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 5500	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 285 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	ON AIRPORT
Method - UNK/NR	OMAHA, NE	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - IMC	AURORA, IL	CEDAR RAPIDS
Wind Dir/Speed- 070/015 KTS	ATC/Airspace	Runway Ident - 09
Visibility - 1.000 SM	Type of Flight Plan - IFR	Runway Lth/Wid - 7000/ 150
Lowest Sky/Clouds - 200 FT SCATTERED	Type of Clearance - IFR	Runway Surface - ASPHALT
Lowest Ceiling - 300 FT OVERCAST	Type Apch/Lndg - VISUAL	Runway Status - WET
Obstructions to Vision- FOG	TRAFFIC PATTERN	
Precipitation - RAIN		
Condition of Light - DUSK		

-----Personnel Information-----

Pilot-In-Command	Age - 44	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 1466
SE LAND, ME LAND	Months Since - 8	Last 24 Hrs - 2
	Aircraft Type - C-152	Make/Model- 1271
		Instrument- 270
		Multi-Eng - 1271
		Last 30 Days- 4
		Last 90 Days- 28

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT SAID THAT AFTER ABOUT 15 TO 20 MINUTES INTO A PERSONAL IFR CROSS COUNTRY FLIGHT, THE LEFT ENGINE BEGAN TO VIBRATE AND LOSE POWER. HE SHUT THE ENGINE DOWN, CONTACTED DES MOINES APPROACH FOR VECTORS TO THE ARPT. THE DSM WEATHER WAS BELOW MINIMUM SO VECTORS WERE GIVEN TO THE CEDAR RAPIDS ARPT. DURING THE APPROACH TO RUNWAY 9 AN AREA OF HEAVY RAIN WAS ENCOUNTERED CAUSING POOR VISIBILITY. THE ACFT LANDED SHORT OF THE RUNWAY STRIKING THE APPROACH LIGHTS AND SUBSTANTIALLY DAMAGING THE ACFT. POST ACCIDENT LEFT ENGINE TEARDOWN REVEALED A BROKE CRANKSHAFT.

Brief of Accident (Continued)

File No. - 93

3/03/89

CEDAR RAPIDS, IA

A/C Reg. No. N98934

Time (Lcl) - 1850 CST

Occurrence #1 LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF

Phase of Operation CRUISE

1. ENGINE ASSEMBLY, CRANKSHAFT - FAILURE, TOTAL
2. EMERGENCY PROCEDURE - PERFORMED - PILOT IN COMMAND
3. FLIGHT TO ALTERNATE DESTINATION - PERFORMED - PILOT IN COMMAND

Occurrence #3 UNDERSHOOT

Phase of Operation APPROACH

Finding(s)

4. WEATHER CONDITION - LOW CEILING
5. PROPER GLIDEPATH - EXCEEDED - PILOT IN COMMAND
6. WEATHER CONDITION - RAIN
7. VISUAL LOOKOUT - RESTRICTED - PILOT IN COMMAND
8. OBJECT - APPROACH LIGHT/NAVAID

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PROPER TOUCHDOWN POINT WAS NOT ATTAINED BY THE PILOT AND THE CRANKSHAFT FAILURE ON ONE ENGINE. CONTRIBUTING TO  
THE ACCIDENT WERE THE WEATHER CONDITIONS AND THE APPROACH LIGHTS WHICH WERE CONTACTED.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 64      3/03/89      DES MOINES, IA      A/C Reg. No. N5119C      Time (Lcl) - 0530 CST

-----Basic Information-----

Type Operating Certificate-ON-DEMAND AIR TAXI

Type of Operation - POSITIONING  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - LANDING

Aircraft Damage  
SUBSTANTIAL  
Fire  
NONE

	Fatal	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	0

-----Aircraft Information-----

Make/Model - CESSNA 310  
Landing Gear - TRICYCLE-RETRACTABLE  
Max Gross Wt - 5500  
No. of Seats - 2

Eng Make/Model - CONTINENTAL IO-520-M  
Number Engines - 2  
Engine Type - RECIP-FUEL INJECTED  
Rated Power - 285 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NWS  
Method - ACFT RADIO  
Completeness - FULL

Basic Weather - IMC

Wind Dir/Speed- 080/014 KTS

Visibility - 1.500 SM

Lowest Sky/Clouds - UNK/NR

Lowest Ceiling - 500 FT OVERCAST

Obstructions to Vision- FOG

Precipitation - FREEZING DRIZZLE

Condition of Light - NIGHT(DARK)

Itinerary

Last Departure Point

KANSAS CITY, MO

Destination

DES MOINES, IA

ATC/Airspace

Type of Flight Plan - IFR

Type of Clearance - IFR

Type Apch/Lndg - ILS-COMPLETE

Airport Proximity  
ON AIRPORT

Airport Data

DES MOINES

Runway Ident - 12

Runway Lth/Wid - UNK/NR-00150

Runway Surface - ASPHALT

Runway Status - WET

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL

SE LAND, ME LAND

Age - 26

Biennial Flight Review

Current - YES

Months Since - 3

Aircraft Type - C-310

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total - 3041

Make/Model- 1585

Instrument- 364

Multi-Eng - 1828

Last 24 Hrs - 6

Last 30 Days- 22

Last 90 Days- 90

Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE ON THE THIRD LANDING ATTEMPT, AFTER TWO GO-AROUNDS, THE ACFT LANDED HARD COLLAPSING THE RIGHT MAIN GEAR AND VEERED OFF THE RUNWAY. EXISTING WEATHER CONDITIONS WERE , DARK NIGHT, 500 FT CEILING, 1 1/2 MILES VIS AND LIGHT FREEZING DRIZZLE. THE PLT SAID THE CONTROL TOWER TURNED THE LIGHTS UP TO BRIGHT INTENSITY TO ASSIST HIM IN MAKING VISUAL CONTACT. THE PLT SAID THE BRIGHT LIGHTS CAUSED DISTORTION AND THE ILLUSION OF BEING LOWER THAN ACTUAL. THE ACFT HAD ACCUMULATED ICE ON THE AIRFRAME AND DEICING EQUIPMENT WAS BEING UTILIZED. THE PLT SAID HE USED HIGHER THAN NORMAL APPROACH SPEED BECAUSE OF THE ICE ACCUMULATION AND WEIGHT.



Brief of Accident (Continued)

File No. - 64

3/03/89

DES MOINES, IA

A/C Reg. No. N5119C

Time (Lcl) - 0530 CST

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Occurrence #1      HARD LANDING  
Phase of Operation      LANDING

Finding(s)

1. WEATHER CONDITION - ICING CONDITIONS
  2. ANTI-ICE/DE-ICE SYSTEM - INITIATED - PILOT IN COMMAND
  3. WEATHER CONDITION - LOW CEILING
  4. FLARE - IMPROPER - PILOT IN COMMAND
  5. VISUAL/AURAL PERCEPTION - PILOT IN COMMAND
  6. WEATHER CONDITION - DRIZZLE
  7. LIGHT CONDITION - DARK NIGHT
  8. LANDING GEAR, MAIN GEAR - OVERLOAD
  9. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE PILOT TO PROPERLY FLARE THE AIRPLANE. CONTRIBUTING TO THE ACCIDENT WERE THE WEATHER CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 96      3/05/89      CRESCO,IA      A/C Reg. No. N5371D      Time (Lcl) - 1240 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - LANDING

Aircraft Damage  
SUBSTANTIAL  
Fire NONE

	Fatal	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	3

-----Aircraft Information-----

Make/Model - CESSNA 172  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 2300  
No. of Seats - 4

Eng Make/Model - LYCOMING O-320-H2AD  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 160 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - FSS  
Method - TELEPHONE  
Completeness - FULL  
Basic Weather - VMC  
Wind Dir/Speed- 020/017 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  
ROCHESTER,MN  
Destination  
SAME AS ACC/INC

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FULL STOP

Airport Proximity  
ON AIRPORT

Airport Data

ELLEN CHURCH  
Runway Ident - 33  
Runway Lth/Wid - 2950/ 50  
Runway Surface - CONCRETE  
Runway Status - ICE COVERED

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
PRIVATE  
SE LAND

Age - 39  
Biennial Flight Review  
Current - YES  
Months Since - 18  
Aircraft Type - C-172

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)

Total	- 113	Last 24 Hrs	- UNK/NR
Make/Model-	88	Last 30 Days-	1
Instrument-	UNK/NR	Last 90 Days-	2
Multi-Eng	- UNK/NR	Rotorcraft	- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT SAID HE WAS MAKING HIS SECOND ATTEMPT TO LAND ON AN ICY SNOW COVERED RUNWAY THAT WAS CLOSED BY NOTAMS. DURING THE ROLLOUT, THE PLT SAID A GUST OF WIND BLEW HIM SIDEWAYS CAUSING A LOSS OF CONTROL. THE ACFT SPUN AROUND 180 DEGREES AND COLLIDED WITH A SNOW BANK. A RIGHT CROSS WIND OF 17 KNOTS EXISTED AT THE TIME OF THE ACCIDENT.

Brief of Accident (Continued)

File No. - 96

3/05/89

CRESCO, IA

A/C Reg. No. N5371D

Time (Lcl) - 1240 CST

---

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      LANDING

Finding(s)

1. NOTAMS - NOT OBTAINED - PILOT IN COMMAND
  2. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
  3. TERRAIN CONDITION - ICY
  4. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
  5. WEATHER CONDITION - CROSSWIND
- 

Occurrence #2      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING - ROLL  
6. TERRAIN CONDITION - SNOWBANK

---

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT TO MAINTAIN CONTROL OF THE AIRPLANE DURING THE LANDING ON A CLOSED RUNWAY.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 157      3/24/89      FORT DODGE, IA      A/C Reg. No. N35053      Time (Lcl) - 1400 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries Serious	Minor	None
Type of Operation - PERSONAL	Fire	Crew 0	0	0	1
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	0	0
Accident Occurred During -LANDING					

-----Aircraft Information-----

Make/Model - CESSNA 177	Eng Make/Model - LYCOMING O-360-A1F6	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2500	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 180 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	DES MOINES, IA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	FORT DODGE
Wind Dir/Speed- 180/016 KTS	ATC/Airspace	Runway Ident - 12
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4400/ 100
Lowest Sky/Clouds - 8000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - FULL STOP	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 68	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 2462
SE LAND, ME LAND	Months Since - 10	Last 24 Hrs - 2
	Aircraft Type - C-177	Make/Model- 1500
		Last 30 Days- 9
		Instrument- 277
		Last 90 Days- 17
		Multi-Eng - 17

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD THAT WHILE LANDING IN A GUSTY X-WIND CONDITION, THE ACFT ENCOUNTERED MODERATE TURBULENCE DURING THE LANDING FLARE. HE SAID THE ACFT PORPOISED TWO OR THREE TIMES, THEN IT DROPPED ON THE NOSE WHEEL & WAS DAMAGED. THE X-WIND WAS 60 DEGREES FROM THE RIGHT AT 16 GUSTING 20 KTS.

Brief of Accident (Continued)

File No. - 157

3/24/89

FORT DODGE, IA

A/C Reg. No. N35053

Time (Lcl) - 1400 CST

Occurrence #1        HARD LANDING  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

1. WEATHER CONDITION - CROSSWIND
2. WEATHER CONDITION - GUSTS
3. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
4. FLARE - IMPROPER - PILOT IN COMMAND
5. RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE PILOT TO ADEQUATELY COMPENSATE FOR EXISTING WIND CONDITIONS, TO FLARE PROPERLY, AND TO RECOVER PROPERLY FROM A BOUNCED LANDING. THE GUSTY X-WIND CONDITIONS CONTRIBUTED TO THE ACCIDENT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 19      1/30/89      ELK CITY, ID      A/C Reg. No. N52095      Time (Lcl) - 1315 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation - PERSONAL	Fire	Crew	0	0	0	1
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	3
Accident Occurred During -LANDING						

-----Aircraft Information-----

Make/Model - CESSNA 180J	Eng Make/Model - CONTINENTAL O-470-R	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3190	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 230 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRSTRIP
Method - N/A	BOISE, ID	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	ALLISON RANCH
Wind Dir/Speed- 360/002 KTS	ATC/Airspace	Runway Ident - UNK/NR
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - UNK/NR
Lowest Sky/Clouds - 2000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - SNOW
Lowest Ceiling - NONE	Type Apch/Lndg - FULL STOP	Runway Status - UNK/NR
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 42	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 400
SE LAND	Months Since - 17	Make/Model- 150
	Aircraft Type - UNK/NR	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- 3
		Last 90 Days- 9
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT MADE AND APPROACH TO A RANCH STRIP WHICH WAS COVERED WITH PACKED SNOW. ON LANDING, THE RIGHT WHEEL WAS NOT ON THE PACKED SNOW AND IT SANK INTO A FOOT OF SOFT SNOW. THE AIRPLANE THEN NOSED OVER.

Brief of Accident (Continued)

File No. - 19

1/30/89

ELK CITY, ID

A/C Reg. No. N52095

Time (Lcl) - 1315 MST

Occurrence #1 NOSE OVER  
Phase of Operation LANDING

Finding(s)

1. TERRAIN CONDITION - SNOW COVERED
2. PROPER ALIGNMENT - NOT ATTAINED - PILOT IN COMMAND

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO MAINTAIN A PROPER RUNWAY ALIGNMENT ON TOUCHDOWN. CONTRIBUTING TO THE ACCIDENT WERE THE SOFT  
SNOW CONDITIONS ON THE RANCH AIRSTRIIP.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 100      2/08/89      COTTONWOOD, ID      A/C Reg. No. N5620X      Time (Lcl) - 1300 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -PERSONAL  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -MANEUVERING

Aircraft Damage  
SUBSTANTIAL  
Fire      NONE  
Crew      0  
Pass      0

Injuries		Fatal	Serious	Minor	None
Crew	0	0	0	0	1
Pass	0	0	0	0	0

-----Aircraft Information-----

Make/Model      - AERO COMMANDER S2R  
Landing Gear      - TAILWHEEL-ALL FIXED  
Max Gross Wt      - 6000  
No. of Seats      - 1

Eng Make/Model      - P&W R-1340-AN1  
Number Engines      - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 600 HP

ELT Installed/Activated - NO -N/A  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - UNK/NR  
Method      - UNK/NR  
Completeness      - UNK/NR  
Basic Weather      - VMC  
Wind Dir/Speed- LIGHT AND VARIABLE  
Visibility      - 20.0 SM  
Lowest Sky/Clouds      - CLEAR  
Lowest Ceiling      - NONE  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point  
GRANGEVILLE, ID  
Destination  
LOCAL

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

Runway Ident      - N/A  
Runway Lth/Wid      - N/A  
Runway Surface      - N/A  
Runway Status      - N/A

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance      - NONE  
Type Apch/Lndg      - NONE

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
COMMERCIAL  
SE LAND  
HELICOPTER

Age - 34  
Biennial Flight Review  
Current      - YES  
Months Since      - 3  
Aircraft Type      - PA-28

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total      - 2000  
Make/Model- 2  
Instrument- 290  
Last 24 Hrs - 1  
Last 30 Days- 20  
Last 90 Days- 30  
Rotorcraft - 2000

Instrument Rating(s) - HELICOPTER

-----Narrative-----

THE PILOT WAS MAKING PRACTICE AERIAL APPLICATIONS IN PREPARATION FOR HIS CFR 137 CERTIFICATION. THE MAIN GEAR CONTACTED THE SNOW COVERED TERRAIN DURING A LOW LEVEL MANEUVER. THE AIRCRAFT THEN CARTWHEELED. THE PILOT REPORTED ONLY TWO HOURS OF FLIGHT EXPERIENCE IN THIS TYPE OF AIRCRAFT.



Brief of Accident (Continued)

File No. - 100

2/08/89

COTTONWOOD, ID

A/C Reg. No. N5620X

Time (Lcl) - 1300 PST

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Occurrence #1        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    MANEUVERING - AERIAL APPLICATION

Finding(s)

1. WEATHER CONDITION - WHITEOUT
  2. ALTITUDE - MISJUDGED - PILOT IN COMMAND
  3. LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
  4. LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT MISJUDGING HIS ALTITUDE DUE TO THE WHITE OUT CONDITIONS. CONTRIBUTING TO THE ACCIDENT WAS THE PILOTS LACK  
OF EXPERIENCE IN THIS AIRCRAFT AND THIS TYPE OF OPERATION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 106      4/17/89      GRANGEVILLE, ID      A/C Reg. No. N4340S      Time (Lcl) - 0915 PDT

-----Basic Information-----

Type Operating Certificate-AGRICULTURAL AIRCRAFT	Aircraft Damage	Injuries			
	SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation -AERIAL APPLICATION	Fire	Crew 0	0	1	0
Flight Conducted Under -14 CFR 137	ON GROUND	Pass 0	0	0	0
Accident Occurred During -LANDING					

-----Aircraft Information-----

Make/Model - AIR TRACTOR AT-301	Eng Make/Model - P&W R-1340-AN-1	ELT Installed/Activated - NO -N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 5000	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 1	Rated Power - 600 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	IDAHO COUNTY
Wind Dir/Speed- 045/002 KTS	ATC/Airspace	Runway Ident - 07
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4800/ 60
Lowest Sky/Clouds - N/A	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 2500 FT BROKEN	Type Apch/Lndg - FORCED LANDING	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - RAIN		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 33	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 2052
SE LAND,ME LAND	Months Since - 0	Make/Model- 38
	Aircraft Type - C-180	Instrument- 85
		Multi-Eng - 75
		Last 24 Hrs - 1
		Last 30 Days- 42
		Last 90 Days- 75

Instrument Rating(s) - AIRPLANE

-----Narrative-----

A PARTIAL POWER LOSS OCCURRED DRG INITIAL CLIMB. THE PLT JETTISONED HIS LOAD & LANDED IN A SOFT FIELD ABOUT 3/4 MI FROM THE RWY, WHERE THE ACFT NOSED OVER. A FIRE ERUPTED, WHICH SELF-EXTINGUISHED MINUTES LATER. THE OPERATOR RPRTD THAT A 10 INCH DROP IN MANIFOLD PRESSURE HAD OCCURRED & THAT A SUSPECTED BLOWER FAILURE WAS THE REASON FOR THE POWER LOSS.

Brief of Accident (Continued)

File No. - 106

4/17/89

GRANGEVILLE, ID

A/C Reg. No. N4340S

Time (Lcl) - 0915 PDT

Occurrence #1      LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation      TAKEOFF - INITIAL CLIMB

Finding(s)

1. ENGINE ASSEMBLY, BLOWER/IMPELLER - FAILURE, TOTAL

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

2. LOAD JETTISON - PERFORMED -

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING - ROLL

Finding(s)

3. TERRAIN CONDITION - SOFT

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
A PARTIAL POWER LOSS DUE TO A BLOWER FAILURE. A FACTOR RELATED TO THE ACCIDENT WAS THE SOFT FIELD CONDITION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 88 2/18/89 QUINCY,IL

A/C Reg. No. N6894H

Time (Lcl) - 1200 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation -PERSONAL  
Flight Conducted Under -14 CFR 91  
Accident Occurred During -LANDING

Aircraft Damage  
SUBSTANTIAL  
Fire  
NONE

	Fatal	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	2

-----Aircraft Information-----

Make/Model - CESSNA 172M  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 2300  
No. of Seats - 4

Eng Make/Model - LYCOMING O-320-E2D  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 150 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - FSS  
Method - TELEPHONE  
Completeness - UNK/NR  
Basic Weather - VMC  
Wind Dir/Speed- 080/008 KTS  
Visibility - 7.0 SM  
Lowest Sky/Clouds - N/A  
Lowest Ceiling - 10000 FT OVERCAST  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
ST. LOUIS,MO  
Destination  
QUINCY,IL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - TRAFFIC PATTERN  
FULL STOP

Airport Proximity  
ON AIRPORT

Airport Data

QUINCY MUNICIPAL  
Runway Ident - 04  
Runway Lth/Wid - 7097/ 150  
Runway Surface - ASPHALT  
Runway Status - ICE COVERED  
SNOW - COMPACTED

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE  
SE LAND

Age - 24  
Biennial Flight Review  
Current - YES  
Months Since - 2  
Aircraft Type - C-172M

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)

Total	- 111	Last 24 Hrs	- UNK/NR
Make/Model-	53	Last 30 Days-	2
Instrument-	3	Last 90 Days-	4
Multi-Eng -	2		

Instrument Rating(s) - NONE

-----Narrative-----

DURING LANDING FLARE/TOUCHDOWN PHASE OF FLIGHT, THE AIRCRAFT IMPACTED A SNOWBANK LOCATED ON THE APPROACH END OF THE RUNWAY WITH THE LEFT MAIN LANDING GEAR. THE PILOT VISUALLY CHECKED THE LEFT MAIN LANDING GEAR FROM HIS SIDE WINDOW AND NOTED THAT IT WAS "BENT BACK FARTHER THAN NORMAL". DURING THE ENSUING LANDING ROLL, THE LEFT MAIN LANDING GEAR COMPLETELY COLLAPSED. THE AIRCRAFT VEERED, AND DEPARTED THE LEFT SIDE OF THE RUNWAY.

Brief of Accident (Continued)

File No. - 88

2/18/89

QUINCY, IL

A/C Reg. No. N6894H

Time (Lcl) - 1200 CST

Occurrence #1 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

1. TERRAIN CONDITION - SNOWBANK
2. VISUAL LOOKOUT - NOT MAINTAINED - PILOT IN COMMAND
3. LANDING GEAR, MAIN GEAR - FAILURE, PARTIAL
4. PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND

Occurrence #2 GEAR COLLAPSED  
Phase of Operation LANDING - ROLL

Finding(s)

5. LANDING GEAR, MAIN GEAR - COLLAPSED

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO ACHIEVE A PROPER TOUCHDOWN POINT AND TO MAINTAIN ADEQUATE VISUAL LOOKOUT DURING THE LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 42 2/25/89 SPARTA,IL

A/C Reg. No. N4717D

Time (Lcl) - 1150 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

		Injuries			
		Fatal	Serious	Minor	None
Type of Operation	-PERSONAL				
Flight Conducted Under	-14 CFR 91				
Accident Occurred During	-LANDING				
Fire	NONE	Crew 0	0	0	1
		Pass 0	0	0	4

-----Aircraft Information-----

Make/Model - CESSNA 182A  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 2650  
No. of Seats - 1

Eng Make/Model - CONTINENTAL O-470-L  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 230 HP

ELT Installed/Activated - NO -N/A  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- 210/008 KTS  
Visibility - 7.0 SM  
Lowest Sky/Clouds - 14400 FT SCATTERED  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
SAME AS ACC/INC  
Destination  
LOCAL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
COMMERCIAL  
SE LAND

Age - 28  
Biennial Flight Review  
Current - YES  
Months Since - 18  
Aircraft Type - C-172

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)

Total	- 232	Last 24 Hrs	- UNK/NR
Make/Model-	15	Last 30 Days-	15
Instrument-	46	Last 90 Days-	20

Instrument Rating(s) - AIRPLANE

-----Narrative-----

ACCIDENT AIRPLANE WAS BEING USED FOR SPORT PARACHUTE ACTIVITY WHEN ENGINE FAILED DURING THE INITIAL CLIMB OF A JUMP SORTIE. THE PIC INSTRUCTED HIS FOUR SKYDIVER PASSENGERS TO ASSUME A CRASH POSITION AND ACCOMPLISHED AN OFF AIRPORT LANDING IN A SOFT FIELD. DURING THE LANDING ROLL THE NOSE LANDING GEAR COLLAPSED. POST ACCIDENT EXAMINATION OF THE ENGINE REVEALED A PIECE OF DUCT TAPE OBSTRUCTING THE CARBURETOR VENTURI RESTRICTING AIRFLOW TO THE ENGINE.

Brief of Accident (Continued)

File No. - 42 2/25/89 SPARTA,IL

A/C Reg. No. N4717D

Time (Lcl) - 1150 CST

Occurrence #1 LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation TAKEOFF - INITIAL CLIMB

Finding(s)

1. FUEL SYSTEM,CARBURETOR - FOREIGN OBJECT
2. FUEL SYSTEM,CARBURETOR - BLOCKED(TOTAL)

Occurrence #2 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 NOSE GEAR COLLAPSED  
Phase of Operation LANDING - ROLL

Finding(s)

3. TERRAIN CONDITION - SOFT
4. LANDING GEAR,NOSE GEAR - OVERLOAD

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
POOR AND IMPROPER MAINTENANCE WHICH RESULTED IN THE CARBURETOR VENTURI BEING BLOCKED BY THE DUCT TAPE. CONTRIBUTING  
TO THE ACCIDENT WAS THE SOFT TERRAIN ON WHICH THE FORCED LANDING WAS MADE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 52      3/11/89      SANDWICH, IL      A/C Reg. No. N2096S      Time (Lcl) - 1115 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL					
Type of Operation - PERSONAL	Fire	Crew	Fatal	Injuries		
Flight Conducted Under -14 CFR 91	NONE	Pass	0	Serious	Minor	None
Accident Occurred During -LANDING			0	0	0	1
			0	0	0	0

-----Aircraft Information-----

Make/Model - CESSNA TR182 II	Eng Make/Model - LYCOMING O-540-J3C5D	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3100	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 235 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	CHICAGO, IL	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SANDWICH, IL	SANDWICH
Wind Dir/Speed- 340/012 KTS	ATC/Airspace	Runway Ident - 26
Visibility - 3.000 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2988/ 50
Lowest Sky/Clouds - 25000 FT THIN BKN	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Obstructions to Vision- HAZE	FULL STOP	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 58	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 511
SE LAND	Months Since - 4	Last 24 Hrs - 0
	Aircraft Type - C-182	Make/Model- 23
		Last 30 Days- 3
		Instrument- 140
		Last 90 Days- 7

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT EXECUTED A HARD LANDING, TOUCHING DOWN NOSE WHEEL FIRST, AND BOUNCED TWO TO THREE TIMES BEFORE THE NOSE GEAR BROKE OFF. THE AIRCRAFT NOSED DOWN. THE PILOT STEERED THE AIRCRAFT OFF THE RUNWAY INTO THE GRASS AS IT SLID TO A STOP. THE PILOT STATED THAT HE "NEEDED TO FLY MORE OFTEN."



Brief of Accident (Continued)

File No. - 52

3/11/89

SANDWICH, IL

A/C Reg. No. N2096S

Time (Lc1) - 1115 CST

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Occurrence #1      HARD LANDING  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

1. AIRCRAFT HANDLING - POOR - PILOT IN COMMAND
  2. FLARE - IMPROPER - PILOT IN COMMAND
  3. RECOVERY FROM BOUNCED LANDING - INADEQUATE - PILOT IN COMMAND
  4.      LACK OF RECENT TOTAL EXPERIENCE - PILOT IN COMMAND
- 

Occurrence #2      NOSE GEAR COLLAPSED  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

5. LANDING GEAR, NOSE GEAR - OVERLOAD
- 

Occurrence #3      NOSE DOWN  
Phase of Operation      LANDING - ROLL

---

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S POOR HANDLING OF THE AIRCRAFT, IMPROPER FLARE AND INADEQUATE RECOVERY FROM A BOUNCED LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 119      3/12/89      WEST CHICAGO,IL      A/C Reg. No. N3045M      Time (Lcl) - 1729 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -PERSONAL  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -LANDING

Aircraft Damage  
SUBSTANTIAL  
Fire      NONE

	Fatal	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	0

-----Aircraft Information-----

Make/Model      - PIPER PA-34-200T  
Landing Gear      - TRICYCLE-RETRACTABLE  
Max Gross Wt      - 4570  
No. of Seats      - 6

Eng Make/Model      - CONTINENTAL TS10-360-E  
Number Engines      - 2  
Engine Type      - RECIP-FUEL INJECTED  
Rated Power      - 200 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - NO RECORD OF BRIEFING  
Method      - N/A  
Completeness      - N/A  
Basic Weather      - VMC

Wind Dir/Speed- 050/009 KTS  
Visibility      - 8.0 SM  
Lowest Sky/Clouds      - N/A  
Lowest Ceiling      - 1400 FT OVERCAST  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point  
WEST CHICAGO,IL  
Destination  
LOCAL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance      - NONE  
Type Apch/Lndg      - TRAFFIC PATTERN  
FULL STOP

Airport Proximity  
ON AIRSTRIP

Airport Data

DUPAGE  
Runway Ident      - 10  
Runway Lth/Wid      - 4001/ 75  
Runway Surface      - ASPHALT  
Runway Status      - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
COMMERCIAL  
SE LAND,ME LAND

Age - 51  
Biennial Flight Review  
Current      - YES  
Months Since      - 12  
Aircraft Type      - PA-34

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)  
Total      - 1047  
Make/Model- 270  
Instrument- 222  
Multi-Eng - 270  
Last 24 Hrs - 7  
Last 30 Days- 16  
Last 90 Days- 33

Instrument Rating(s) - AIRPLANE

-----Narrative-----

ACCORDING TO WITNESSES, THE AIRCRAFT LANDED HARD ON RUNWAY 10 & THE NOSE GEAR COLLAPSED. THE WIND WAS FROM 050 DEG AT 9 KNOTS.

Brief of Accident (Continued)

File No. - 119

3/12/89

WEST CHICAGO, IL

A/C Reg. No. N3045M

Time (Lcl) - 1729 CST

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Occurrence #1        HARD LANDING  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)  
1. FLARE - IMPROPER - PILOT IN COMMAND

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Occurrence #2        NOSE GEAR COLLAPSED  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)  
2. LANDING GEAR, NOSE GEAR - OVERLOAD

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----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER FLARE BY THE PILOT. THE CROSSWIND (QUARTERING HEADWIND) WAS CONSIDERED TO BE A FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 178      4/25/89      OTTAWA, IL      A/C Reg. No. N98923      Time (Lcl) - 0800 CDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

		Injuries			
		Fatal	Serious	Minor	None
Crew	0	0	0	0	1
Pass	0	0	0	0	0

Type of Operation - INSTRUCTIONAL

Flight Conducted Under -14 CFR 91

Accident Occurred During -LANDING

Fire  
NONE

-----Aircraft Information-----

Make/Model - CESSNA 172D  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 2400  
No. of Seats - 4

Eng Make/Model - LYCOMING O-320-D2J  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 160 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- 040/008 KTS  
Visibility - 5.0 SM  
Lowest Sky/Clouds - 25000 FT THIN BKN  
Lowest Ceiling - NONE  
Obstructions to Vision- HAZE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
OTTAWA, IL  
Destination  
LOCAL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - TRAFFIC PATTERN  
FULL STOP

Airport Proximity  
ON AIRPORT

Airport Data  
OTTAWA

Runway Ident - 05  
Runway Lth/Wid - 3125/ 50  
Runway Surface - ASPHALT  
Runway Status - DRY

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
STUDENT

Age - 37  
Biennial Flight Review  
Current - N/A  
Months Since - N/A  
Aircraft Type - N/A

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 19      Last 24 Hrs - UNK/NR  
Make/Model- 19      Last 30 Days- UNK/NR  
Instrument- 0      Last 90 Days- 19

Instrument Rating(s) - NONE

-----Narrative-----

WHILE PRACTICING TAKEOFFS AND LANDINGS, THE STUDENT PILOT WAS OBSERVED TO "COME IN WAY TOO HIGH" ON FINAL APPROACH, AND THE AIRCRAFT TOUCHED DOWN ON THE LAST 500 FEET OF THE RUNWAY. THE STUDENT PILOT WAS UNABLE TO STOP THE AIRCRAFT BEFORE IT RAN OFF THE DEPARTURE END OF THE RUNWAY AND STRUCK A DITCH.

Brief of Accident (Continued)

File No. - 178

4/25/89

OTTAWA, IL

A/C Reg. No. N98923

Time (Lc1) - 0800 CDT

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Occurrence #1        OVERRUN  
Phase of Operation    LANDING - ROLL

Finding(s)

1. PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
  2. GO-AROUND - NOT PERFORMED - PILOT IN COMMAND
  3.     LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
- 

Occurrence #2        ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation    LANDING - ROLL

Finding(s)

4. TERRAIN CONDITION - DITCH
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
STUDENT PILOT'S CONTINUING AN APPROACH TO LANDING BEYOND THE POINT WHERE SHE COULD BRING THE AIRCRAFT TO A CONTROLLED  
STOP ON THE REMAINING RUNWAY SURFACE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 118      1/14/89      VALPARAISO, IN      A/C Reg. No. N3331R      Time (Lcl) - 1215 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL					
Type of Operation - PERSONAL	Fire	Crew	Fatal	Injuries	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -LANDING			0	0	0	2

-----Aircraft Information-----

Make/Model - PIPER PA-28-180	Eng Make/Model - LYCOMING O-360-A4A	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2400	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 180 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
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	PORTER COUNTY
Wind Dir/Speed- LIGHT AND VARIABLE	ATC/Airspace	Runway Ident - 09
Visibility - 6.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 6000/ 150
Lowest Sky/Clouds - N/A	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 3000 FT OVERCAST	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - ICE COVERED
Obstructions to Vision- NONE	FULL STOP	
Precipitation - FREEZING RAIN	PRECAUTIONARY LANDIN	
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 48	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 127
SE LAND	Months Since - 14	Last 24 Hrs - UNK/NR
	Aircraft Type - PA-38	Make/Model- 21
		Instrument- 0
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

NO PREFLIGHT WX BRIEFING WAS OBTAINED BEFORE THE FLT. DURING CLIMB-OUT, THE PLT HEARD ABOUT ICING CONDITIONS AT A NEARBY AIRPORT & ELECTED TO RETURN & LAND. BEFORE LANDING, HE ENCOUNTERED FREEZING RAIN & A RAPID ACCUMULATION OF ICE ON THE ACFT. ICE ON THE WINDSHIELD RESTRICTED THE PLT'S FORWARD VISIBILITY, REQUIRING HIM TO USE THE SIDE WINDOWS. DURING THE FLARE TO LAND, HE RAISED THE NOSE OF THE ACFT TO ARREST A SINK RATE, BUT THE ACFT LANDED HARD, COLLAPSING THE RIGHT MAIN GEAR.

Brief of Accident (Continued)

File No. - 118

1/14/89

VALPARAISO, IN

A/C Reg. No. N3331R

Time (Lcl) - 1215 CST

Occurrence #1 IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation APPROACH

Finding(s)

1. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
2. WEATHER CONDITION - ICING CONDITIONS
3. WING - ICE
4. WINDOW, FLIGHT COMPARTMENT WINDOW/WINDSHIELD - ICE
5. VISUAL/AURAL PERCEPTION - PILOT IN COMMAND

Occurrence #2 HARD LANDING  
Phase of Operation LANDING - FLARE/TOUCHDOWN  
6. FLARE - NOT ATTAINED - PILOT IN COMMAND

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE PREFLIGHT PREPARATION BY THE PILOT, WHICH RESULTED IN INADVERTENT FLIGHT IN ICING CONDITIONS  
AND RAPID ACCUMULATION OF AIRFRAME ICE, AND THE PILOT'S FAILURE TO MAINTAIN SUFFICIENT AIRSPEED TO FLARE  
DURING THE LANDING. FACTORS RELATED TO THE ACCIDENT WERE: ADVERSE WEATHER CONDITIONS AND THE PILOT'S LACK  
OF VISUAL PERCEPTION WITH ICE ON THE WINDSHIELD.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 161      4/12/89      INDIANAPOLIS, IN      A/C Reg. No. N4445W      Time (Lcl) - 2000 EDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL		Injuries		
Type of Operation -BUSINESS	Fire	Crew	Fatal	Serious	Minor
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During -APPROACH			0	0	0
					1
					0

-----Aircraft Information-----

Make/Model - BEECH A60	Eng Make/Model - LYCOMING TSIO-541-E1C4	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 6775	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 380 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	FT. WAYNE, IN	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	INDIANAPOLIS
Wind Dir/Speed- 290/006 KTS		Runway Ident - 22R
Visibility - 7.0 SM	ATC/Airspace	Runway Lth/Wid - 10005/ 150
Lowest Sky/Clouds - 3700 FT SCATTERED	Type of Flight Plan - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 6500 FT BROKEN	Type of Clearance - VFR	Runway Status - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - FULL STOP	
Precipitation - NONE		
Condition of Light - NIGHT(DARK)		

-----Personnel Information-----

Pilot-In-Command	Age - 59	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
ATP	Current - YES	Total - 5120
SE LAND, SE SEA	Months Since - 21	Make/Model- 2248
	Aircraft Type - BE-60	Instrument- 1184
		Multi-Eng - 3252
		Last 24 Hrs - 2
		Last 30 Days- 18
		Last 90 Days- 77

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE ON THE FINAL APPROACH, APPROXIMATELY 1000 FEET FROM THE APPROACH END OF THE RUNWAY, THE AIRCRAFT STRUCK THE FIRST OF A SERIES OF APPROACH LIGHTS AND SUPPORT STRUCTURES. THE AIRCRAFT DAMAGED SEVENTEEN APPROACH LIGHTS ON A TOTAL OF FIVE SUPPORT STRUCTURES, BUT WAS SAFELY LANDED AND TAXIED TO THE RAMP. THE PILOT REPORTED THAT HE EXECUTED A NON-STANDARD APPROACH AT A HIGHER THAN NORMAL AIRSPEED, IN AN EFFORT TO ACCOMMODATE FASTER TRAFFIC BEHIND HIM ON THE APPROACH. HE SAID HIS NON-STABILIZED APPROACH RESULTED IN "AN UNDETECTED INCREASE IN THE RATE OF DESCENT..." HE SAID THAT THE ACCIDENT OCCURRED AT THE END OF A FATIGUING DAY.



Brief of Accident (Continued)

File No. - 161

4/12/89

INDIANAPOLIS, IN

A/C Reg. No. N4445W

Time (Lcl) - 2000 EDT

Occurrence #1       UNDERSHOOT  
Phase of Operation   APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. LIGHT CONDITION - DARK NIGHT
2. DISTANCE - MISJUDGED - PILOT IN COMMAND
3. ALTITUDE - MISJUDGED - PILOT IN COMMAND
4.     FATIGUE - PILOT IN COMMAND

Occurrence #2       IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation   APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

5. OBJECT - APPROACH LIGHT/NAVAID

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT MISJUDGED ALTITUDE AND/OR DISTANCE TO THE RUNWAY WILE ON FINAL APPROACH TO LAND. FACTORS RELATED TO THE  
ACCIDENT WERE: DARK NIGHT AND PILOT FATIGUE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 54      1/27/89      GOODLAND,KS      A/C Reg. No. N47431      Time (Lcl) - 1220 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - TAKEOFF

Aircraft Damage  
SUBSTANTIAL  
Fire  
NONE

	Injuries			
	Fatal	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	1

-----Aircraft Information-----

Make/Model - PIPER PA-28-181  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 2550  
No. of Seats - 4

Eng Make/Model - LYCOMING O-360-A4M  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 180 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - FSS  
Method - IN PERSON  
Completeness - FULL  
Basic Weather - VMC

Wind Dir/Speed- 210/020 KTS  
Visibility - 15.0 SM

Lowest Sky/Clouds - 25000 FT SCATTERED  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
GARDEN CITY,KS  
Destination  
BRUSH,CO

ATC/Airspace

Type of Flight Plan - VFR  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
PRIVATE  
SE LAND

Age - 52

Biennial Flight Review

Current - YES  
Months Since - 9  
Aircraft Type - PA-28

Medical Certificate - UNK/NR

Flight Time (Hours)

Total	- 300	Last 24 Hrs	- UNK/NR
Make/Model-	UNK/NR	Last 30 Days-	UNK/NR
Instrument-	UNK/NR	Last 90 Days-	50
Multi-Eng -	UNK/NR	Rotorcraft	- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT REPORTED THAT THE ENGINE FAILED DURING CRUISE FLIGHT. AN EMERGENCY LANDING WAS ATTEMPTED IN A FARM FIELD WHICH RESULTED IN SUBSTANTIAL DAMAGE TO THE NOSE GEAR, FIREWALL AND PROPELLER. POST ACCIDENT INVESTIGATION REVEALED AN EXHAUST VALVE FAILURE IN THE NUMBER 3 CYLINDER.

Brief of Accident (Continued)

File No. - 54

1/27/89

GOODLAND,KS

A/C Reg. No. N47431

Time (Lcl) - 1220 MST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation      CRUISE

Finding(s)

1. ENGINE ASSEMBLY, VALVE, EXHAUST - FAILURE, TOTAL

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

2. TERRAIN CONDITION - NONE SUITABLE

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE LOSS OF ENGINE POWER RESULTING FROM AN EXHAUST VALVE FAILURE. CONTRIBUTING TO THE ACCIDENT WAS THE LACK OF  
SUITABLE TERRAIN FOR A FORCED LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 65      1/16/89      BOGALUSA, LA      A/C Reg. No. N8782L      Time (Lcl) - 1530 CST

-----Basic Information-----

Type Operating Certificate	NONE (GENERAL AVIATION)	Aircraft Damage					
		SUBSTANTIAL					
Type of Operation	-FERRY	Fire	Crew	Fatal	Injuries		
Flight Conducted Under	-14 CFR 91	NONE	Pass	0	Serious	Minor	None
Accident Occurred During	-LANDING			0	0	1	0
						0	0

-----Aircraft Information-----

Make/Model	- PIPER PA-25-235	Eng Make/Model	- LYCOMING O-540	ELT Installed/Activated	- NO	-N/A
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- NO	
Max Gross Wt	- 2900	Engine Type	- RECIPROCATING-CARBURETOR			
No. of Seats	- 1	Rated Power	- 235 HP			

-----Environment/Operations Information-----

Weather Data		Itinerary		Airport Proximity	
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point		OFF AIRPORT/STRIP	
Method	- N/A	SAME AS ACC/INC			
Completeness	- N/A	Destination		Airport Data	
Basic Weather	- VMC	HAMMOND, LA		Runway Ident	- N/A
Wind Dir/Speed	- LIGHT AND VARIABLE	ATC/Airspace		Runway Lth/Wid	- N/A
Visibility	- 10.0 SM	Type of Flight Plan	- NONE	Runway Surface	- N/A
Lowest Sky/Clouds	- UNK/NR SCATTERED	Type of Clearance	- NONE	Runway Status	- N/A
Lowest Ceiling	- NONE	Type Apch/Lndg	- FORCED LANDING		
Obstructions to Vision	- NONE				
Precipitation	- NONE				
Condition of Light	- DAYLIGHT				

-----Personnel Information-----

Pilot-In-Command	Age - 28	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL	Current - YES	Total - 1400	Last 24 Hrs - 5
SE LAND, ME LAND	Months Since - 5	Make/Model - 5	Last 30 Days - 10
	Aircraft Type - UNK/NR	Instrument - 31	Last 90 Days - 50
		Multi-Eng - 10	

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE ENGINE QUIT APPROXIMATELY FOUR MINUTES AFTER TAKEOFF, AND THE AIRPLANE HIT THE TOPS OF TREES THEN THE GROUND DURING THE FORCED LANDING. THE PILOT HAD STOPPED AT TWO AIRPORTS WHERE HE WAS UNABLE TO GET FUEL. HE SAID HE SAW ENOUGH FUEL IN THE TANK TO RUN THE ENGINE FOR FROM 45 MINUTES TO AN HOURS, AND THE GAUGE INDICATED 12 TO 13 GALLONS BEFORE TAKEOFF. THE ENGINE WAS INSTALLED IN ANOTHER AIRFRAME AFTER THE ACCIDENT AND IT STARTED AND RAN NORMALLY.

Brief of Accident (Continued)

File No. - 65

1/16/89

BOGALUSA, LA

A/C Reg. No. N8782L

Time (Lcl) - 1530 CST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      CRUISE - NORMAL

Finding(s)

1. FLUID, FUEL - EXHAUSTION
2. FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
3. REFUELING - MISJUDGED - PILOT IN COMMAND

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      LANDING

Finding(s)

4. OBJECT - TREE(S)

Occurrence #4      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING

Finding(s)

5. TERRAIN CONDITION - GROUND

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO REFUEL THE AIRPLANE PRIOR TO THE LAST TAKEOFF RESULTING IN AN INADEQUATE FUEL SUPPLY FOR THE FLIGHT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 48      2/11/89      WALKER, LA      A/C Reg. No. N11SE      Time (Lcl) - 1530 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - DESCENT

Aircraft Damage  
DESTROYED  
Fire  
NONE

	Fatal	Serious	Minor	None
Crew	0	0	1	0
Pass	0	1	0	0

-----Aircraft Information-----

Make/Model - PITTS S2B  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 1625  
No. of Seats - 2

Eng Make/Model - LYCOMING AEIO-540-D4A5  
Number Engines - 1  
Engine Type - RECIP-FUEL INJECTED  
Rated Power - 260 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- 320/007 KTS  
Visibility - 7.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
PENSACOLA, FL  
Destination  
LAFAYETTE, LA

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

ATP  
SE LAND, ME LAND

Age - 64

Biennial Flight Review

Current - YES  
Months Since - 20  
Aircraft Type - A-1

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total	- 30805	Last 24 Hrs	- 2
Make/Model-	250	Last 30 Days-	5
Instrument-	UNK/NR	Last 90 Days-	20
Multi-Eng	- 28165	Rotorcraft	- 100

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT SAID HE HAD STARTED THE FLIGHT WITH FULL TANKS, 28 GALLONS. HE TOLD FAA INSPECTORS THAT HE HAD NOT BEEN ABLE TO READ THE FUEL SIGHT GAGE IN HIS COCKPIT, THE REAR ONE. MINIMUM FUEL CONSUMPTION SHOULD HAVE BEEN 12.5 GPH. THE AIRPLANE AS IN THE AIR AT LEAST 1:44. THE PILOT STATED THAT HE HAD TRIED FOR A SUITABLE LANDING SPOT, BUT DUE TO THE GLIDE RATIO OF THE AIRPLANE, IT IMPACTED TREES AND THEN THE TERRAIN. THE FAA INSPECTORS WHO INSPECTED THE WRECKAGE AT THE SITE, SAID THERE WERE NO SIGNS OR SMELLS OF FUEL, THERE WAS ONLY UNUSABLE FUEL IN THE TANKS, AND THERE WERE NO INDICATIONS OF BREAKS OR LEAKS IN THE FUEL SYSTEM.

Brief of Accident (Continued)

File No. - 48

2/11/89

WALKER, LA

A/C Reg. No. N11SE

Time (Lcl) - 1530 CST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation      CRUISE - NORMAL

Finding(s)

1. FUEL SYSTEM, FUEL QUANTITY FLOAT/SENSOR - INADEQUATE
2. FUEL CONSUMPTION CALCULATIONS - IMPROPER - PILOT IN COMMAND
3. FLUID, FUEL - EXHAUSTION

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

4. OBJECT - TREE(S)

Occurrence #4      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      DESCENT - EMERGENCY

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
LOSS OF TOTAL ENGINE POWER DUE TO FUEL EXHAUSTION. FUEL EXHAUSTION OCCURRED DUE TO THE PILOT'S FAILURE TO PERFORM  
FUEL CONSUMPTION CALCULATIONS. CONTRIBUTING WAS THE INADEQUATE FUEL QUANTITY SIGHT GAUGE IN THE REAR COCKPIT, WHICH WAS  
OCCUPIED BY THE PIC.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 102      3/24/89      LAKE ARTHUR, LA      A/C Reg. No. N4836Q      Time (Lcl) - 0830 CST

-----Basic Information-----

Type Operating Certificate	ON-DEMAND AIR TAXI	Aircraft Damage					
Name of Carrier	-HAMMOND FLYING SERVICE	SUBSTANTIAL					
Type of Operation	-NON SCHED, DOMESTIC, PASSENGER	Fire	Crew	Fatal	0	0	0
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	1
Accident Occurred During	-LANDING						

-----Aircraft Information-----

Make/Model	- CESSNA A185F	Eng Make/Model	- CONTINENTAL IO-520	ELT Installed/Activated	- YES/NO
Landing Gear	- FLOAT	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 3350	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 4	Rated Power	- 300 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary	Airport Proximity	
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP	
Method	- N/A	HOUMA, LA		
Completeness	- N/A	Destination	Airport Data	
Basic Weather	- VMC	SAME AS ACC/INC		
Wind Dir/Speed	- CALM		Runway Ident	- N/A
Visibility	- 7.0 SM	ATC/Airspace	Runway Lth/Wid	- N/A
Lowest Sky/Clouds	- N/A	Type of Flight Plan	Runway Surface	- N/A
Lowest Ceiling	- 2500 FT OVERCAST	Type of Clearance	Runway Status	- N/A
Obstructions to Vision	- NONE	Type Apch/Lndg		
Precipitation	- NONE			
Condition of Light	- DAYLIGHT			

-----Personnel Information-----

Pilot-In-Command	Age - 57	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL	Current - UNK/NR	Total - 12757	Last 24 Hrs - 4
SE LAND, SE SEA	Months Since - UNK/NR	Make/Model - 8000	Last 30 Days - 40
	Aircraft Type - C-185	Instrument - 41	Last 90 Days - 130
		Multi-Eng - 0	Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING A LANDING IN A CANAL, THE RIGHT WING OF THE FLOATPLANE CONTACTED TREE LIMBS. THE AIRPLANE THEN PIVOTED TO THE RIGHT & STRUCK THE CANAL BANK. THE PILOT STATED THAT HE HAD VISUALLY INSPECTED THE CANAL IN FLIGHT, BUT DID NOT SEE THE TREE LIMBS THAT WERE SUBSEQUENTLY HIT DURING THE LANDING.



Brief of Accident (Continued)

File No. - 102

3/24/89

LAKE ARTHUR, LA

A/C Reg. No. N4836Q

Time (Lcl) - 0830 CST

-----  
Occurrence #1            ON GROUND COLLISION WITH OBJECT  
Phase of Operation       LANDING

Finding(s)

1. OBJECT - TREE(S)
  2. VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND
- 

Occurrence #2            ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation       LANDING

Finding(s)

3. TERRAIN CONDITION - DIRT BANK
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE PILOT TO SEE AND AVOID TREE LIMBS THAT EXTENDED OVER THE EDGE OF THE CANAL. FACTORS  
RELATED TO THE ACCIDENT WERE: THE TREE LIMBS AND DIRT BANK NEAR THE EDGE OF THE SELECTED LANDING AREA.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 58      2/25/89      FORT WASHINGTON, MD      A/C Reg. No. N8359L      Time (Lcl) - 2035 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	NONE					
Type of Operation -PERSONAL	Fire	Crew	Fatal	Injuries		
Flight Conducted Under -14 CFR 91	NONE	Pass	0	Serious	Minor	None
Accident Occurred During -STANDING			0	0	0	1
			0	1	0	0

-----Aircraft Information-----

Make/Model - CESSNA 172I	Eng Make/Model - LYCOMING O-320-E2D	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2300	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 150 HP	

-----Environment/Operations Information-----

<b>Weather Data</b>	<b>Itinerary</b>	<b>Airport Proximity</b>
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	<b>Airport Data</b>
Basic Weather - VMC	LOCAL	POTOMAC AIRPORT
Wind Dir/Speed- CALM		Runway Ident - UNK/NR
Visibility - 15.0 SM	<b>ATC/Airspace</b>	Runway Lth/Wid - UNK/NR
Lowest Sky/Clouds - CLEAR	Type of Flight Plan - NONE	Runway Surface - UNK/NR
Lowest Ceiling - NONE	Type of Clearance - NONE	Runway Status - UNK/NR
Obstructions to Vision- NONE	Type Apch/Lndg - NONE	
Precipitation - NONE		
Condition of Light - NIGHT(DARK)		

-----Personnel Information-----

Pilot-In-Command	Age - 34	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 425
SE LAND, ME SEA	Months Since - 1	Last 24 Hrs - 1
	Aircraft Type - PA-23	Make/Model- 326
		Last 30 Days- 13
		Instrument- 13
		Last 90 Days- 22
		Multi-Eng - 21

Instrument Rating(s) - NONE

-----Narrative-----

THE ACFT WAS STOPPED ON THE RAMP WITH THE PLT ABOARD. THE ENGINE WAS RUNNING. THE PAX CROSSED IN FRONT OF THE ACFT AND WALKED TOWARD THE RIGHT DOOR TO BOARD THE ACFT. WHEN SHE PASSED THE PROP SHE WAS STRUCK BY IT. THE EXTENT OF HER INJURIES WERE NOT REALIZED UNTIL SHE BOARDED SINCE ACCORDING TO THE PLT, THE PAX SAID SHE WAS JUST GRAZED BY THE PROP.

Brief of Accident (Continued)

File No. - 58

2/25/89

FORT WASHINGTON, MD

A/C Reg. No. N8359L

Time (Lcl) - 2035 EST

Occurrence #1 PROPELLER/ROTOR CONTACT TO PERSON  
Phase of Operation STANDING - ENGINE(S) OPERATING

Finding(s)

1. LIGHT CONDITION - DARK NIGHT
2. CLEARANCE - NOT MAINTAINED - PASSENGER
3. JUDGEMENT - POOR - PILOT IN COMMAND
4. SUPERVISION - INADEQUATE - PILOT IN COMMAND

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PASSENGER FAILED TO MAINTAIN ADEQUATE CLEARANCE FROM THE PROPELLER AS SHE ATTEMPTED TO BOARD THE AIRCRAFT. BOTH  
THE PILOT FAILURE TO SUPERVISE THE BOARDING OF THE PASSENGER AND THE NIGHT LIGHT CONDITIONS ARE CONTRIBUTING FACTORS  
TO THE ACCIDENT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 131      3/22/89      CORUNNA, MI      A/C Reg. No. N66688      Time (Lcl) - 1430 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage		Injuries				
		DESTROYED		Fatal	Serious	Minor	None	
Type of Operation	-INSTRUCTIONAL	Fire		1	0	0	0	
Flight Conducted Under	-14 CFR 91	NONE		0	0	0	0	
Accident Occurred During	-MANEUVERING							

-----Aircraft Information-----

Make/Model	- CESSNA 150M	Eng Make/Model	- CONTINENTAL O-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	- 2	Rated Power	- 100 HP		

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - NO RECORD OF BRIEFING</p> <p>Method - N/A</p> <p>Completeness - N/A</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- 180/007 KTS</p> <p>Visibility - 15.0 SM</p> <p>Lowest Sky/Clouds - CLEAR</p> <p>Lowest Ceiling - NONE</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point FLUSHING, MI</p> <p>Destination LOCAL</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - NONE</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - NONE</p>	<p>Airport Proximity OFF AIRPORT/STRIP</p> <p>Airport Data</p> <p>Runway Ident - N/A</p> <p>Runway Lth/Wid - N/A</p> <p>Runway Surface - N/A</p> <p>Runway Status - N/A</p>
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-----Personnel Information-----

<p>Pilot-In-Command</p> <p>Certificate(s)/Rating(s)</p> <p>STUDENT</p>	<p>Age - 34</p> <p>Biennial Flight Review</p> <p>Current - N/A</p> <p>Months Since - N/A</p> <p>Aircraft Type - N/A</p>	<p>Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <p>Total - 36</p> <p>Make/Model- 36</p> <p>Instrument- 0</p> <p>Last 24 Hrs - 1</p> <p>Last 30 Days- 5</p> <p>Last 90 Days- 11</p>
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Instrument Rating(s) - NONE

-----Narrative-----

AS THE STUDENT PILOT WAS PRACTICING STALLS, THE AIRCRAFT ENTERED A DESCENT & COLLIDED WITH SNOW COVERED TERRAIN. NO KNOWN WITNESSES SAW THE AIRCRAFT BEFORE IT IMPACTED THE GROUND, BUT A MOTORIST SAW A PLUME OF SNOW. WHEN HE INVESTIGATED THE OCCURRENCE, HE DISCOVERED THE PLANE HAD CRASHED. THE PLT WAS STILL ALIVE & STRAPPED IN THE AIRCRAFT. HE RPRTD TO PARAMEDICS, "IT WAS MY FAULT, I WAS PRACTICING STALL . . ." LATER, HE SUCCUMBED TO HIS INJURIES.

Brief of Accident (Continued)

File No. - 131

3/22/89

CORUNNA,MI

A/C Reg. No. N66688

Time (Lcl) - 1430 EST

Occurrence #1 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation MANEUVERING

Finding(s)

1. STALL - INTENTIONAL -
2. TERRAIN CONDITION - SNOW COVERED
3. PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
4. VISUAL/AURAL PERCEPTION - PILOT IN COMMAND

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE STUDENT PILOT TO MAINTAIN SUFFICIENT ALTITUDE TO RECOVER FROM A PRACTICE STALL MANEUVER.  
A FACTOR RELATED TO THE ACCIDENT WAS: THE PILOT'S VISUAL PERCEPTION OVER SNOW COVERED TERRAIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 120      4/02/89      ALLEGAN, MI      A/C Reg. No. N9504T      Time (Lcl) - 1220 EDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage	Injuries				
	SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation - INSTRUCTIONAL	Fire	Crew	0	0	0	2
Flight Conducted Under - 14 CFR 91	NONE	Pass	0	0	0	0
Accident Occurred During - TAKEOFF						

-----Aircraft Information-----

Make/Model - PIPER PA-38-112	Eng Make/Model - LYCOMING O-235-L2C	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1670	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 112 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - TELEPHONE	SAME AS ACC/INC	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LOCAL	PADGHAM FIELD
Wind Dir/Speed- 250/013 KTS	ATC/Airspace	Runway Ident - 28
Visibility - 12.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3500/ 75
Lowest Sky/Clouds - N/A	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 3300 FT OVERCAST	Type Apch/Lndg - NONE	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 26	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 591
SE LAND	Months Since - 4	Make/Model- 53
	Aircraft Type - PA-28	Instrument- 114
		Last 24 Hrs - 5
		Last 30 Days- 43
		Last 90 Days- 71

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE CFI REPORTED THAT THE DUAL STUDENT PILOT INITIATED THE TAKEOFF ROLL WITH AILERON INTO THE WIND (LEFT AILERON), BUT THAT HE RELAXED AILERON PRESSURE PREMATURELY. WHEN INSTRUCTED TO INCREASE LEFT AILERON, THE STUDENT REACTED BY APPLYING LEFT RUDDER & LEFT BRAKE. AT THAT TIME, THE ACFT WAS ESTIMATED TO BE TRAVELING ABOUT 45 TO 50 MPH. THE ACFT SWERVED TO THE LEFT & THE CFI WAS UNABLE TO REGAIN DIRECTIONAL CONTROL. SUBSEQUENTLY, THE ACFT WENT OFF THE LEFT SIDE OF THE RWY, ENCOUNTERED "SOFT GRASS" & WAS DAMAGED. THE STUDENT HAD ONLY 4 HRS OF FLT TIME. THE CFI HAD OBTAINED HIS CFI RATING ON 12/20/88 & HAD ACCUMULATED 82 HRS OF INSTRUCTION SINCE THAT TIME.

Brief of Accident (Continued)

File No. - 120

4/02/89

ALLEGAN, MI

A/C Reg. No. N9504T

Time (Lcl) - 1220 EDT

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

1. WEATHER CONDITION - CROSSWIND
2. FLIGHT CONTROLS - IMPROPER USE OF - DUAL STUDENT
3. DIRECTIONAL CONTROL - NOT MAINTAINED - DUAL STUDENT
4. GROUND LOOP/SWERVE - INADVERTENT - DUAL STUDENT
5. LACK OF TOTAL EXPERIENCE - DUAL STUDENT
6. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
7. LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND(CFI)

Occurrence #2      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      TAKEOFF

Finding(s)

8. TERRAIN CONDITION - SOFT

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was: IMPROPER USE OF FLIGHT CONTROLS BY THE STUDENT PILOT, WHICH RESULTED IN HIS LOSS OF DIRECTIONAL CONTROL AND AN INADVERTENT GROUND SWERVE; AND THE INSTRUCTOR PILOT'S (CFI'S) INADEQUATE SUPERVISION. FACTORS RELATED TO THE ACCIDENT WERE: THE CROSSWIND CONDITION, THE STUDENT PILOT'S LACK OF TOTAL EXPERIENCE, THE CFI'S LACK OF EXPERIENCE IN THE TYPE OF OPERATION, AND SOFT TERRAIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 179      5/01/89      WIXOM, MI      A/C Reg. No. N132BC      Time (Lcl) - 1500 EDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -OTHER WORK USE  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -DESCENT

Aircraft Damage  
DESTROYED  
Fire      NONE

		Injuries			
		Fatal	Serious	Minor	None
Crew		0	0	1	0
Pass		0	0	0	1

-----Aircraft Information-----

Make/Model      - CESSNA 320D  
Landing Gear      - TRICYCLE-RETRACTABLE  
Max Gross Wt      - 4300  
No. of Seats      - 6

Eng Make/Model      - CONTINENTAL TS10-520-B  
Number Engines      - 2  
Engine Type      - RECIP-FUEL INJECTED  
Rated Power      - 285 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - NO RECORD OF BRIEFING  
Method      - N/A  
Completeness      - N/A  
Basic Weather      - VMC

Itinerary

Last Departure Point  
PONTIAC, MI  
Destination  
LOCAL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Wind Dir/Speed- 060/015 KTS  
Visibility      - 12.0 SM  
Lowest Sky/Clouds      - 15000 FT SCATTERED  
Lowest Ceiling      - NONE  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance      - NONE  
Type Apch/Lndg      - FORCED LANDING

Runway Ident      - N/A  
Runway Lth/Wid      - N/A  
Runway Surface      - N/A  
Runway Status      - N/A

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
COMMERCIAL  
SE LAND, ME LAND

Age - 52

Biennial Flight Review  
Current      - YES  
Months Since      - 5  
Aircraft Type - C-320D

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

		Flight Time (Hours)	
Total	- 3275	Last 24 Hrs	- 2
Make/Model-	2110	Last 30 Days-	31
Instrument-	297	Last 90 Days-	41
Multi-Eng	- 2110		

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE MANEUVERING FOR PURPOSES OF AERIAL PHOTOGRAPHY, BOTH ENGINES ON THE CESSNA 320D FAILED DUE TO FUEL EXHAUSTION. THE PILOT DECLARED AN EMERGENCY AND WAS VECTORED TOWARD THE NEAREST AIRPORT. THE PILOT WAS UNABLE TO REACH THE AIRPORT, AND EXECUTED A FORCED LANDING IN A WOODED AREA APPROXIMATELY 1/2 MILE SOUTHEAST OF IT. THE PILOT STATED THAT HE HAD FORGOTTEN TO CHECK THE FUEL QUANTITY DURING THE PREFLIGHT INSPECTION.



Brief of Accident (Continued)

File No. - 179

5/01/89

WIXOM, MI

A/C Reg. No. N132BC

Time (Lc1) - 1500 EDT

Occurrence #1 LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL

Phase of Operation MANEUVERING

1. AIRCRAFT PREFLIGHT - POOR - PILOT IN COMMAND
2. FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
3. INATTENTIVE - PILOT IN COMMAND
4. FLUID, FUEL - EXHAUSTION

Occurrence #2 IN FLIGHT COLLISION WITH OBJECT

Phase of Operation DESCENT - EMERGENCY

Finding(s)

5. OBJECT - TREE(S)
6. TERRAIN CONDITION - NONE SUITABLE

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT'S INATTENTION TO THE FUEL SYSTEM DURING PREFLIGHT AND INADEQUATE FUEL SYSTEM MONITORING THROUGHOUT THE FLIGHT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 23      1/15/89      SOUTH ST. PAUL, MN      A/C Reg. No. N8726K      Time (Lcl) - 1800 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation -PERSONAL  
Flight Conducted Under -14 CFR 91  
Accident Occurred During -LANDING

Aircraft Damage  
SUBSTANTIAL  
Fire  
NONE

	Fatal	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	1

-----Aircraft Information-----

Make/Model - STINSON 108-1  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 2230  
No. of Seats - 4

Eng Make/Model - FRANKLIN 6A4-150-B3  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 150 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 290/020 KTS

Visibility - 10.0 SM

Lowest Sky/Clouds - 5000 FT SCATTERED

Lowest Ceiling - NONE

Obstructions to Vision- NONE

Precipitation - NONE

Condition of Light - NIGHT(DARK)

Itinerary

Last Departure Point  
NEW RICHMOND, WI

Destination

SAME AS ACC/INC

ATC/Airspace

Type of Flight Plan - NONE

Type of Clearance - NONE

Type Apch/Lndg - FULL STOP

Airport Proximity  
ON AIRPORT

Airport Data

SOUTH ST. PAUL

Runway Ident - 34

Runway Lth/Wid - 4000/ 100

Runway Surface - GRASS/TURF

Runway Status - SNOW - COMPACTED

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE

SE. LAND

Age - 34

Biennial Flight Review

Current - YES

Months Since - 16

Aircraft Type - C-172

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total - 296      Last 24 Hrs - 3

Make/Model- 67      Last 30 Days- 8

Instrument- UNK/NR      Last 90 Days- 12

Multi-Eng - UNK/NR      Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

WHILE ATTEMPTING TO LAND PARALLEL TO RUNWAY 34 ON A SOD, SNOW COVERED RUNWAY, AT NIGHT, THE SKI EQUIPPED AIRCRAFT LOST DIRECTIONAL CONTROL, GROUND LOOPED, AND ENDED UP ON IT'S NOSE. A 50 DEGREE LEFT CROSSWIND OF ABOUT 20 KNOTS EXISTED AT THE TIME.

Brief of Accident (Continued)

File No. - 23

1/15/89

SOUTH ST. PAUL, MN

A/C Reg. No. N8726K

Time (Lcl) - 1800 CST

Occurrence #1 LOSS OF CONTROL - ON GROUND  
Phase of Operation LANDING - ROLL

Finding(s)

1. WEATHER CONDITION - CROSSWIND
2. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2 ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation LANDING - ROLL

Occurrence #3 NOSE DOWN  
Phase of Operation LANDING - ROLL

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE PILOT TO MAINTAIN DIRECTIONAL CONTROL OF THE AIRPLANE. CONTRIBUTING TO THE ACCIDENT WERE THE  
CROSSWIND CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 138      2/13/89      CROOKSTON, MN

A/C Reg. No. N95975

Time (Lcl) - 1630 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -INSTRUCTIONAL  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -LANDING

Aircraft Damage  
SUBSTANTIAL

Fire  
NONE

	Fatal	Serious	Minor	None
Crew	0	0	0	2
Pass	0	0	0	0

-----Aircraft Information-----

Make/Model      - CESSNA 152  
Landing Gear      - TRICYCLE-FIXED  
Max Gross Wt      - 1670  
No. of Seats      - 2

Eng Make/Model      - LYCOMING O-235-L2C  
Number Engines      - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 110 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - FSS  
Method      - TELEPHONE  
Completeness      - FULL  
Basic Weather      - VMC  
Wind Dir/Speed- 290/010 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  
GRAND FORKS, ND  
Destination  
CROOKSTON, MN

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance      - NONE  
Type Apch/Lndg      - TOUCH AND GO

Airport Proximity  
ON AIRPORT

Airport Data

KIRKWOOD FLD  
Runway Ident      - 31  
Runway Lth/Wid      - 3502/ 75  
Runway Surface      - ASPHALT  
Runway Status      - DRY

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
COMMERCIAL, CFI  
SE LAND, ME LAND

Age - 25  
Biennial Flight Review  
Current      - YES  
Months Since      - 7  
Aircraft Type      - B-76

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

	Flight Time (Hours)	
Total	582	Last 24 Hrs - 1
Make/Model-	326	Last 30 Days- 58
Instrument-	78	Last 90 Days- 130
Multi-Eng -	35	Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE CFI AND STUDENT PILOT HAD COMPLETED 3 TOUCH AND GOES WITHOUT INCIDENT, AND ON THE FOURTH ATTEMPT THE CFI WAS GOING TO FLY JUST ABOVE THE RUNWAY TO ASSIST THE STUDENT JUDGE HIS FLARE HEIGHT. THE LEFT MAIN GEAR TOUCHED DOWN AND A GO AROUND MANUEVER WAS INITIATED. THE STUDENT ADDED FULL POWER AND THE CFI RETRACTED THE FLAPS TO THE 20 DEGREE POSITION. THE ACFT DESCENDED, DRIFTED TO THE LEFT, STRUCK A SNOW BANK AND CAME TO REST INVERTED. A SLIGHT RIGHT CROSS WIND EXISTED AT THE TIME OF THE ACCIDENT. THE PRE-SOLO STUDENT HAD 9 HOURS OF FLIGHT EXPERIENCE, ALL IN THE CESSNA 152.

Brief of Accident (Continued)

File No. - 138

2/13/89

CROOKSTON, MN

A/C Reg. No. N95975

Time (Lcl) - 1630 CST

Occurrence #1      LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      LANDING - ABORTED

Finding(s)

1. GO-AROUND - ATTEMPTED - DUAL STUDENT
2. RAISING OF FLAPS - PREMATURE - PILOT IN COMMAND(CFI)
3. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND(CFI)
4. WEATHER CONDITION - CROSSWIND

Occurrence #2      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - ABORTED

Finding(s)

5. TERRAIN CONDITION - SNOWBANK

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PREMATURE RAISING OF FLAPS AND THE FAILURE OF THE INSTRUCTOR PILOT TO MAINTAIN RUNWAY ALIGNMENT DURING THE ATTEMPTED  
GO AROUND.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 69      2/28/89      GRAND RAPIDS, MN      A/C Reg. No. N6418D      Time (Lcl) - 1330 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries Serious	Minor	None
Type of Operation - INSTRUCTIONAL	Fire	0	0	0	1
Flight Conducted Under - 14 CFR 91	NONE	0	0	0	0
Accident Occurred During - LANDING					

-----Aircraft Information-----

Make/Model - CESSNA 172	Eng Make/Model - LYCOMING O-320-H2AD	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2300	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 160 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - PATWAS	Last Departure Point	ON AIRPORT
Method - TELEPHONE	GRAND RAPIDS, MN	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LOCAL	GRAND RAPIDS
Wind Dir/Speed- 280/010 KTS	ATC/Airspace	Runway Ident - 34
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 5740/ 100
Lowest Sky/Clouds - 3000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - FULL STOP	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 19	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 34
	Months Since - N/A	Make/Model- 34
	Aircraft Type - N/A	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- 6
		Last 90 Days- 13
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

WHILE PRACTICING TAKE-OFFS AND LDGS, THE STUDENT PILOT SAID THAT PRIOR TO TOUCH-DOWN DURING THE LANDING FLARE, A GUST OF WIND CAUSED HIM TO LOSE DIRECTIONAL CONTROL. THE ACFT VEERED OFF THE RUNWAY INTO A SNOW BANK, THEN OVERTURNED. A 60 DEGREE CROSSWIND OF ABOUT 10 KNOTS EXISTED AT THE TIME OF THE ACCIDENT.

Brief of Accident (Continued)

File No. - 69

2/28/89

GRAND RAPIDS, MN

A/C Reg. No. N6418D

Time (Lcl) - 1330 CST

Occurrence #1      LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

1. WEATHER CONDITION - CROSSWIND
2. WEATHER CONDITION - GUSTS
3. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
4. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND

Occurrence #2      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

5. TERRAIN CONDITION - SNOWBANK

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO ADEQUATELY COMPENSATE FOR THE CROSSWIND CONDITIONS. CONTRIBUTING TO THE ACCIDENT WERE THE  
GUSTY CROSSWIND CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 71      3/01/89      CROOKSTON,MN      A/C Reg. No. N5329B      Time (Lcl) - 1615 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage						
	SUBSTANTIAL						
Type of Operation - INSTRUCTIONAL	Fire	Crew	Fatal	Injuries			
Flight Conducted Under -14 CFR 91	NONE	Pass	0	Serious	Minor	None	
Accident Occurred During -LANDING			0	0	0	1	0

-----Aircraft Information-----

Make/Model - CESSNA 152	Eng Make/Model - LYCOMING O-235-N2C	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1670	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 110 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - COMMERCIAL WX SERVICE	Last Departure Point	ON AIRPORT
Method - TELETYPE	GRAND FORKS,ND	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	CROOKSTON,MN	CROOKSTON
Wind Dir/Speed- 320/014 KTS	ATC/Airspace	Runway Ident - 31
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3502/ 75
Lowest Sky/Clouds - 25000 FT THIN BKN	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - TOUCH AND GO	Runway Status - SNOW - COMPACTED
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 24	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 16
	Months Since - N/A	Last 24 Hrs - 1
	Aircraft Type - N/A	Make/Model- 16
		Last 30 Days- 10
		Instrument- UNK/NR
		Last 90 Days- 16
		Multi-Eng - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PILOT SAID THAT AFTER PERFORMING 4 OR 5 TOUCH AND GOES WITH THE INSTRUCTOR ONBOARD, THE CFI DEPLANNED AND SIGNED THE STUDENT OFF FOR FIRST SOLO FLIGHT. THE FIRST LANDING WAS ACCOMPLISHED WITHOUT INCIDENT, BUT ON THE SECOND LANDING, DIRECTIONAL CONTROL WAS LOST, AND THE ACFT VEERED OFF THE RUNWAY INTO DEEPER SNOW AND NOSED OVER. THE RUNWAY HAD BEEN PLOWED, BUT WAS STILL COVERED WITH PATCHES OF ICE AND SNOW. THE PLT SAID THE RUNWAY SURFACE WAS QUITE ROUGH IN PLACES.



Brief of Accident (Continued)

File No. - 71

3/01/89

CROOKSTON, MN

A/C Reg. No. N5329B

Time (Lc1) - 1615 CST

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      LANDING - ROLL

Finding(s)

1. TERRAIN CONDITION - ICY
2. TERRAIN CONDITION - SNOW COVERED
3. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING - ROLL

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING - ROLL

Finding(s)

4. TERRAIN CONDITION - SNOWBANK

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO MAINTAIN CONTROL OF THE AIRPLANE DURING THE LANDING ROLL. CONTRIBUTING TO THE ACCIDENT WAS  
THE ICY/SNOW COVERED RUNWAY.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 186      4/08/89      LAKE ELMO, MN      A/C Reg. No. N9424V      Time (Lcl) - 0800 CDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage SUBSTANTIAL		Injuries			
Type of Operation	-PERSONAL	Fire	Crew	Fatal	Serious	Minor	None
Flight Conducted Under	-14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During	-LANDING			0	0	0	1

-----Aircraft Information-----

Make/Model	- MOONEY M20E	Eng Make/Model	- LYCOMING IO-360-A1A	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 2575	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 4	Rated Power	- 200 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary	Airport Proximity	
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP	
Method	- N/A	LAKE ELMO, MN		
Completeness	- N/A	Destination	Airport Data	
Basic Weather	- VMC	FARGO, ND	LAKE ELMO	
Wind Dir/Speed	- 350/017 KTS		Runway Ident	- 31
Visibility	- 15.0 SM	ATC/Airspace	Runway Lth/Wid	- 2850/ 75
Lowest Sky/Clouds	- 2000 FT SCATTERED	Type of Flight Plan	Runway Surface	- ASPHALT
Lowest Ceiling	- NONE	Type of Clearance	Runway Status	- DRY
Obstructions to Vision	- NONE	Type Apch/Lndg		
Precipitation	- NONE			
Condition of Light	- DAYLIGHT			

-----Personnel Information-----

Pilot-In-Command	Age - 24	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
PRIVATE	Current	Total	- 227
SE LAND	Months Since	Make/Model	- 109
	Aircraft Type	Instrument	- 8
		Multi-Eng	- 0
		Last 24 Hrs	- 1
		Last 30 Days	- UNK/NR
		Last 90 Days	- 8
		Rotorcraft	- 0

Instrument Rating(s) - NONE

-----Narrative-----

SHORTLY AFTER DEPARTURE FOR A PERSONAL CROSS COUNTY FLIGHT, THE PLT NOTICED A LOSS OF FUEL PRESSURE. HE SWITCHED ON THE AUXILIARY FUEL PUMP WHICH FAILED TO RESTORE FUEL PRESSURE. HE TURNED TO RETURN TO THE AIRPORT, WHEN THE ENGINE FAILED. AN EMERGENCY LANDING WAS ATTEMPTED ON A SOFT, MUDDY FARM FIELD RESULTING IN SUBSTANTIAL DAMAGE TO THE AIRPLANE. POST ACCIDENT INVESTIGATION REVEALED THE FUEL SELECTOR TO BE ON THE RIGHT HAND TANK, IN WHICH THERE WAS NO VISABLE FUEL. THE ACFT WAS OUT OF ANNUAL INSPECTION.

Brief of Accident (Continued)

File No. - 186

4/08/89

LAKE ELMO,MN

A/C Reg. No. N9424V

Time (Lcl) - 0800 CDT

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      CLIMB

Finding(s)

1. FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND
2. FLUID,FUEL - STARVATION
3. MAINTENANCE,ANNUAL INSPECTION - NOT PERFORMED -

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

4. EMERGENCY PROCEDURE - IMPROPER - PILOT IN COMMAND

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

5. TERRAIN CONDITION - NONE SUITABLE

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FUEL TANK SELECTOR IMPROPERLY POSITIONED, EMERGENCY PROCEDURE IMPROPERLY PERFORMED BY THE PILOT, AND FUEL STARVATION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 185      4/15/89      ROSEAU,MN

A/C Reg. No. N23702

Time (Lcl) - 1000 CDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

		Injuries			
		Fatal	Serious	Minor	None
Fire	Crew	0	0	0	1
NONE	Pass	0	0	0	0

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - LANDING

-----Aircraft Information-----

Make/Model - AIR TRACTOR AT-301  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 5000  
No. of Seats - 1

Eng Make/Model - P&W R-1340-AN1  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 600 HP

ELT Installed/Activated - NO -N/A  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- 180/015 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  
ROSEAU,MN  
Destination  
THIEF RIVER FLS,MN

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
COMMERCIAL  
SE LAND,ME LAND

Age - 63  
Biennial Flight Review  
Current - YES  
Months Since - 25  
Aircraft Type - C-172

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)

Total	- 26671	Last 24 Hrs	- UNK/NR
Make/Model	- 1250	Last 30 Days	- UNK/NR
Instrument	- 1248	Last 90 Days	- UNK/NR
Multi-Eng	- 2020	Rotorcraft	- UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT SAID THAT SHORTLY AFTER TAKEOFF AND REACHING AN ALTITUDE OF ABOUT 500 FT AGL, THE ENGINE QUIT. HE SAID HE WAS ABLE TO GET SEVERAL SHORT BURSTS OF POWER BY OPERATING THE HAND FUEL PUMP, BUT WAS UNABLE TO SUSTAIN ENGINE POWER. AN EMERGENCY LDG WAS ATTEMPTED IN A SWAMP AREA WHICH RESULTED IN THE ACFT NOSING OVER. THE PLT FELT THERE WAS A POSSIBILITY OF ICE IN THE FUEL LINES DUE TO THE EXISTING SUB-FREEZING TEMPERATURE. THE PLANE WAS BEING FLOWN TO ANOTHER APT FOR AN ANNUAL INSPECTION.

Brief of Accident (Continued)

File No: - 185

4/15/89

ROSEAU,MN

A/C Reg. No. N23702

Time (Lcl) - 1000 CDT

Occurrence #1      LOSS OF ENGINE POWER  
Phase of Operation      TAKEOFF - INITIAL CLIMB

Finding(s)

1. FUEL SYSTEM - ICE
2. FLUID,FUEL - STARVATION
3. WEATHER CONDITION - TEMPERATURE EXTREMES

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

4. TERRAIN CONDITION - NONE SUITABLE

Occurrence #4      NOSE OVER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FUEL STARVATION DUE TO FUEL ICE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 40      2/11/89      WAYLAND, MO      A/C Reg. No. N61064      Time (Lcl) - 1124 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - DESCENT

Aircraft Damage

SUBSTANTIAL

Fire  
NONE

Crew  
Pass

Fatal  
0  
0

Injuries

Serious  
0  
0

Minor  
0  
0

None  
1  
0

-----Aircraft Information-----

Make/Model - CESSNA 150  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 1600  
No. of Seats - 2

Eng Make/Model - CONTINENTAL O-200-A  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 100 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 300/007 KTS  
Visibility - 10.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
CREVE COEUR, MO  
Destination  
JACKSONVILLE, IL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE  
SE LAND

Age - 42

Biennial Flight Review

Current - YES  
Months Since - 9  
Aircraft Type - PA-28

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total	- 1774	Last 24 Hrs	- 2
Make/Model	- 1725	Last 30 Days	- 6
Instrument	- 14	Last 90 Days	- 30
Multi-Eng	- UNK/NR	Rotorcraft	- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PVT PILOT SAID THAT HE INTENDED TO FLY DUE NORTH ABOUT 65 MILES TO PURCHASE ACFT FUEL. AFTER ABOUT TWO HOURS FLIGHT TIME HE WAS ABLE TO IDENTIFY HIS POSITION BY CIRCLING A MUNICIPAL WATER TOWER. HE WAS AWARE OF HIS DWINDLING FUEL SUPPLY AND HAD PICKED OUT A FARM FIELD TO LAND ON, WHEN THE ENGINE FAILED. DURING THE EMERGENCY DESCENT, HE CLIPPED SOME TREES, THEN COLLIDED WITH THE TERRAIN. THE ACCIDENT OCCURRED ABOUT 100 MILES NORTHWEST OF HIS ORIGINAL INTENDED DESTINATION APT. AFTER THE ACCIDENT THE PLT LEFT THE SCENE OF THE ACCIDENT.

Brief of Accident (Continued)

File No. - 40

2/11/89

WAYLAND, MO

A/C Reg. No. N61064

Time (Lcl) - 1124 CST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      CRUISE

Finding(s)

1. BECAME LOST/DISORIENTED - ENCOUNTERED - PILOT IN COMMAND
2. FLUID, FUEL - EXHAUSTION

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

3. OBJECT - TREE(S)

Occurrence #4      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      DESCENT - UNCONTROLLED

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT BECOMING LOST DURING THE FLIGHT WHICH RESULTED IN FUEL EXHAUSTION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 55      2/23/89      KANSAS CITY, MO      A/C Reg. No. N25909      Time (Lcl) - 1420 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - LANDING

Aircraft Damage

SUBSTANTIAL

Fire  
NONE

Fatal

Crew 0  
Pass 0

Injuries

Serious

Minor

None

0  
0

0  
0

1  
0

-----Aircraft Information-----

Make/Model - CESSNA 152  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 1670  
No. of Seats - 2

Eng Make/Model - LYCOMING O-235-L2C  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 110 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 160/005 KTS

Visibility - 10.0 SM

Lowest Sky/Clouds - 20000 FT SCATTERED

Lowest Ceiling - NONE

Obstructions to Vision- NONE

Precipitation - NONE

Condition of Light - DAYLIGHT

Itinerary

Last Departure Point

LAWRENCE, KS

Destination

LIBERTY, MO

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A

Runway Lth/Wid - N/A

Runway Surface - N/A

Runway Status - N/A

ATC/Airspace

Type of Flight Plan - NONE

Type of Clearance - NONE

Type Apch/Lndg - PRECAUTIONARY LANDING

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL

SE LAND, ME LAND

Age - 30

Biennial Flight Review

Current - YES

Months Since - 11

Aircraft Type - PA-44

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total - 1196

Make/Model- 154

Instrument- 195

Multi-Eng - 31

Last 24 Hrs - 8

Last 30 Days- 78

Last 90 Days- 252

Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT SAID WHILE IN NORMAL CRUISE CONFORMATION, THE ENGINE MISFIRED. HE APPLIED CARB HEAT AND THE ENGINE PERFORMED NORMALLY. HE REMOVED THE CARB HEAT AND IN ABOUT 2 TO 3 MINUTES THE ENGINE LOST SUBSTANTIAL POWER. CARB HEAT WAS THEN APPLIED WHICH RESULTED IN A GAIN IN POWER, BUT NOT TO NORMAL SPECIFICATIONS. THE PLT MADE A DECISION TO MAKE AN EMERGENCY LDG ON THE ONLY AVAILABLE SPACE. HE REDUCED THE POWER TO IDLE, APPLIED FULL FLAPS AND ATTEMPTED TO LAND ON A FIELD. HE FELT THE ENGINE HAD CLEARED ENOUGH FOR A POSSIBILITY FOR CONTINUATION OF THE FLIGHT BUT ELECTED TO CONTINUE WITH THE LANDING. THE ACFT LANDED ON A FIELD, RAN ONTO A ROAD AND STRUCK A TELEPHONE POLE WITH THE RIGHT WING. METEOROLOGICAL CONDITIONS WERE CONDUCIVE FOR THE FORMATION OF CARB ICE ACCORDING TO THE "CARBURETOR ICING PROBABILITY CHARTS." THE TEMP WAS 26 DEG F AND DEWPOINT WAS 3 DEGS F.



Brief of Accident (Continued)

File No. - 55

2/23/89

KANSAS CITY, MO

A/C Reg. No. N25909

Time (Lcl) - 1420 CST

Occurrence #1      LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation      CRUISE

Finding(s)

1. WEATHER CONDITION - CARBURETOR ICING CONDITIONS
2. CARBURETOR HEAT - IMPROPER USE OF - PILOT IN COMMAND

Occurrence #2      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING - ROLL

Finding(s)

3. OBJECT - POLE
4. PRECAUTIONARY LANDING - PERFORMED - PILOT IN COMMAND

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER USE OF THE CARBURETOR HEAT CONTROL BY PILOT IN COMMAND.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 91      3/10/89      MONROE CITY, MO      A/C Reg. No. N8079S      Time (Lcl) - 1830 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries		
Type of Operation - PERSONAL	Fire	0	Serious	Minor	None
Flight Conducted Under - 14 CFR 91	NONE	0	0	0	1
Accident Occurred During - LANDING		0	0	0	0

-----Aircraft Information-----

Make/Model - CESSNA 150	Eng Make/Model - CONTINENTAL O-200-A	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1600	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 100 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	HANNIBAL, MO	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	Runway Ident - N/A
Wind Dir/Speed- 160/004 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 4.000 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DUSK		

-----Personnel Information-----

Pilot-In-Command	Age - 58	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 223
SE LAND	Months Since - 19	Make/Model- 38
	Aircraft Type - C-172	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 2
		Last 30 Days- 5
		Last 90 Days- 10
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT SAID THAT HE WAS ATTEMPTING TO LAND BUT WAS DISSATISFIED WITH HIS APPROACH SO ELECTED TO GO AROUND. ABOUT 20 TO 30 SECONDS LATER, THE ENGINE BEGAN LOSING POWER AND AN EMERGENCY LANDING WAS ATTEMPTED. SHORTLY AFTER TOUCHDOWN IN A SOFT MUDDY FIELD, THE ACFT NOSED OVER. POST ACCIDENT INVESTIGATION REVEALED CONSIDERABLE WATER AND SAND IN THE FUEL SYSTEM. THE ACFT DID NOT HAVE A STC FOR AUTO FUEL.

Brief of Accident (Continued)

File No. - 91

3/10/89

MONROE CITY, MO

A/C Reg. No. N8079S

Time (Lc1) - 1830 CST

Occurrence #1      LOSS OF ENGINE POWER  
Phase of Operation      GO-AROUND (VFR)

Finding(s)

1. FLUID, FUEL GRADE - IMPROPER
2. FLUID, FUEL - CONTAMINATION
3. OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - IMPROPER USE OF - PILOT IN COMMAND

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING - ROLL

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FUEL CONTAMINATION AND THE PILOT'S FAILURE TO COMPLY WITH A MAINTENANCE AD. CONTRIBUTING TO THE ACCIDENT WAS THE  
PILOT'S OPERATION OF THE AIRPLANE WITH A KNOWN DEFICIENCY.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 124      1/06/89      GREENWOOD, MS      A/C Reg. No. N590GC      Time (Lcl) - 1940 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL					
Type of Operation -PERSONAL	Fire	Crew	Fatal	Injuries	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -LANDING			0	0	0	4

-----Aircraft Information-----

Make/Model - CESSNA 210L	Eng Make/Model - CONTINENTAL TS10-520-H	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3400	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 285 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	ON AIRPORT
Method - UNK/NR	ATLANTA, GA	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	GREENWOOD LEFLORE
Wind Dir/Speed- 170/004 KTS	ATC/Airspace	Runway Ident - 18
Visibility - 7.0 SM	Type of Flight Plan - IFR	Runway Lth/Wid - 4996/ 150
Lowest Sky/Clouds - CLEAR	Type of Clearance - IFR	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - FULL STOP	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - NIGHT(DARK)		

-----Personnel Information-----

Pilot-In-Command	Age - 28	Medical Certificate - UNK/NR
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 500
SE LAND	Months Since - 4	Make/Model- 300
	Aircraft Type - UNK/NR	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD THAT AFTER A BOUNCED LANDING AT NIGHT, THE ACFT WENT OFF THE RGT SIDE OF THE RUNWAY. SHE APPLIED POWER FOR A GO-AROUND. A WITNESS RPRTD THE ACFT "STAGGERED" INTO THE AIR. SUBSEQUENTLY, THE ACFT HIT A BALE OF HAY, APRX 150 FT TO THE RGT OF THE RUNWAY & WAS DAMAGED. THE PLT RPRTD THAT SHE BELIEVED THE RGT BRAKE HAD SEIZED. HOWEVER, AN OPERATIONAL CHECK & DISASSEMBLY OF THE BRAKE REVEALED NO EVIDENCE OF A MALFUNCTION OR FAILURE.

Brief of Accident (Continued)

File No. - 124

1/06/89

GREENWOOD, MS

A/C Reg. No. N590GC

Time (Lcl) - 1940 CST

-----  
Occurrence #1        LOSS OF CONTROL - ON GROUND  
Phase of Operation    LANDING - ROLL

Finding(s)

1. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
  2. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
- 

Occurrence #2        IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation    LANDING - ABORTED

-----  
----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT TO MAINTAIN DIRECTIONAL CONTROL, WHICH RESULTED IN AN INADVERTENT GROUND SWERVE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 122      1/10/89      ROSE HILL, MS      A/C Reg. No. N9378N      Time (Lcl) - 1912 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL		Injuries			
Type of Operation -BUSINESS	Fire	Crew	Fatal	Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	1	0	0
Accident Occurred During -LANDING			0	0	0	0

-----Aircraft Information-----

Make/Model - PIPER PA-28R-200	Eng Make/Model - LYCOMING IO-360-C1C	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2600	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 200 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	GASTONIA, NC	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - IMC	MERIDIAN, MS	Runway Ident - N/A
Wind Dir/Speed- 040/007 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 2.000 SM	Type of Flight Plan - IFR	Runway Surface - N/A
Lowest Sky/Clouds - N/A	Type of Clearance - IFR	Runway Status - N/A
Lowest Ceiling - 600 FT OVERCAST	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- FOG		
Precipitation - NONE		
Condition of Light - NIGHT(DARK)		

-----Personnel Information-----

Pilot-In-Command	Age - 54	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 976
SE LAND	Months Since - 6	Last 24 Hrs - 5
	Aircraft Type - PA-28	Make/Model- 271
		Last 30 Days- 5
		Instrument- 221
		Last 90 Days- 35

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD THAT DURING AN INSTRUMENT ARRIVAL AT NIGHT, HE ENCOUNTERED ELECTRICAL PROBLEMS & WAS HAVING DIFFICULTY RECEIVING THE ILS SIGNAL. HE ABANDONED THE APCH & FINALLY HAD TO USE HIS FLASHLIGHT TO FLY THE ACFT. SUBSEQUENTLY, THE ENG LOST POWER & THE ACFT CRASHED DURING A FORCED LANDING IN POOR WX CONDS AT NIGHT. AFTER THE ACDNT, THE MASTER SW WAS TURNED ON & THE FUEL PUMPS, RADIOS & ELECTRICALLY POWERED FLT & NAV INSTRUMENTS OPERATED WITH NO EVIDENCE OF A FAILURE OR MALFUNCTION. THE AIRPORT ILS SYS WAS FLT TESTED BY THE FAA & WAS FOUND TO BE WITHIN NORMAL LIMITS. A CHECK OF THE INTACT FUEL SYS REVEALED THERE WAS TWO QUARTS OF FUEL IN THE RIGHT TANK & 9 QUARTS IN THE LEFT TANK. THE FUEL SELECTOR WAS FOUND POSITIONED TO THE RIGHT TANK. ALSO, NO FUEL WAS FOUND IN THE INJECTOR LINES TO THE CYLINDERS.

Brief of Accident (Continued)

File No. - 122

1/10/89

ROSE HILL,MS

A/C Reg. No. N9378N

Time (Lc1) - 1912 CST

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation APPROACH

Finding(s)

1. ELECTRICAL SYSTEM - INOPERATIVE
2. UNDETERMINED

Occurrence #2 LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation APPROACH

Finding(s)

3. FLUID,FUEL - STARVATION
4. FUEL TANK SELECTOR POSITION - IMPROPER USE OF - PILOT IN COMMAND

Occurrence #3 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

Occurrence #4 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation LANDING

Finding(s)

5. LIGHT CONDITION - NIGHT
6. WEATHER CONDITION - LOW CEILING
7. WEATHER CONDITION - FOG

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
LOSS OF ELECTRICAL POWER FOR AN UNDETERMINED REASON AND FUEL STARVATION FROM IMPROPER USE OF THE FUEL  
SELECTOR. FACTORS RELATED TO THE ACCIDENT WERE: NIGHT AND ADVERSE WEATHER CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 164      1/19/89      MEDICINE LAKE, MT      A/C Reg. No. N83596      Time (Lcl) - 1030 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -PERSONAL  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -LANDING

Aircraft Damage  
SUBSTANTIAL  
Fire      NONE

	Injuries			
	Fatal	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	1

-----Aircraft Information-----

Make/Model      - PIPER PA-18-150  
Landing Gear      - SKI  
Max Gross Wt      - 1750  
No. of Seats      - 2

Eng Make/Model      - LYCOMING O-320-A2B  
Number Engines      - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 150 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - NO RECORD OF BRIEFING  
Method      - N/A  
Completeness      - N/A  
Basic Weather      - VMC  
Wind Dir/Speed- 220/015 KTS  
Visibility      - 50.0 SM  
Lowest Sky/Clouds      - CLEAR  
Lowest Ceiling      - NONE  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point  
PLENTYWOOD, MT  
Destination  
BAINEVILLE, MT

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident      - N/A  
Runway Lth/Wid      - N/A  
Runway Surface      - N/A  
Runway Status      - N/A

ATC/Airspace

Type of Flight Plan      - NONE  
Type of Clearance      - NONE  
Type Apch/Lndg      - STRAIGHT-IN

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
COMMERCIAL  
SE LAND

Age - 37

Biennial Flight Review

Current      - YES  
Months Since      - 22  
Aircraft Type      - C-172

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total	- 5000	Last 24 Hrs	- 2
Make/Model-	1200	Last 30 Days-	30
Instrument-	46	Last 90 Days-	100

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE COMMERCIAL PLT AND A FRIEND LANDED IN A SNOW COVERED FIELD DURING A PERSONAL TRANSPORTATION FLT. THE LEFT SKI STRUCK COMPACTED SNOW DRIFTS AND THE LEFT AXLE BROKE. WITH THE LEFT SKI GONE, THE LANDING GEAR DUG INTO THE SNOW AND THE ACFT NOSED DOWN.



Brief of Accident (Continued)

File No. - 164

1/19/89

MEDICINE LAKE, MT

A/C Reg. No. N83596

Time (Lcl) - 1030 MST

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Occurrence #1      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - ROLL

Finding(s)

1. TERRAIN CONDITION - SNOWBANK
  2. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
- 

Occurrence #2      NOSE DOWN  
Phase of Operation      LANDING - ROLL

---

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
SELECTION OF UNSUITABLE TERRAIN BY THE PILOT, RESULTING IN A COLLISION WITH SNOWDRIFTS DURING LANDING GROUND RUN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 168      3/25/89      GREAT FALLS, MT      A/C Reg. No. N4273Z      Time (Lcl) - 1201 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL		Injuries		
Type of Operation - PERSONAL	Fire	Crew	Fatal	Serious	Minor
Flight Conducted Under - 14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During - TAXI			0	0	0
					None
					1
					0

-----Aircraft Information-----

Make/Model - PIPER PA-18-150	Eng Make/Model - LYCOMING O-320-A2A	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1750	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 150 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	LAUREL, MT	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	GREAT FALLS INTERNATIONAL
Wind Dir/Speed- 230/020 KTS		Runway Ident - 21
Visibility - 50.0 SM	ATC/Airspace	Runway Lth/Wid - 10502/ 150
Lowest Sky/Clouds - 4500 FT SCATTERED	Type of Flight Plan - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type of Clearance - NONE	Runway Status - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - TRAFFIC PATTERN	
Precipitation - NONE	FULL STOP	
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 41	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 182
	Months Since - N/A	Make/Model- 82
	Aircraft Type - N/A	Instrument- 1
		Multi-Eng - UNK/NR
		Last 24 Hrs - 3
		Last 30 Days- 22
		Last 90 Days- 69
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT REPORTED THAT AFTER LANDING ON RUNWAY 21, HE WAS CLEARED TO TAXI DOWN THE ACTIVE RUNWAY UNTIL REACHING A TAXIWAY. WHILE TAXIING DOWN THE RUNWAY, THE RIGHT WING LIFTED UP AND THE LEFT WING STRUCK THE GROUND. THE PLT LOST CONTROL OF THE ACFT AND IT FLIPPED OVER ON ITS BACK. THE WINDS WERE REPORTED TO BE 20 KNOTS, GUSTING TO 26 KNOTS. THE FAA CONTROL TOWER HAD ADVISED THE PLT OF CURRENT WIND INFO AT INITIAL CONTACT.

Brief of Accident (Continued)

File No. - 168

3/25/89

GREAT FALLS, MT

A/C Reg. No. N4273Z

Time (Lc1) - 1201 MST

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      TAXI - FROM LANDING

Finding(s)

1. WEATHER CONDITION - GUSTS
2. WEATHER OBSERVATION - DISREGARDED - PILOT IN COMMAND
3. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
4. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2      NOSE OVER  
Phase of Operation      TAXI - FROM LANDING

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE PILOT IN COMPENSATE ADEQUATELY FOR WIND CONDITIONS, AND LANDING DESPITE HAVING BEEN ALERTED TO  
WIND CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 132      1/21/89      LARIMORE,ND      A/C Reg. No. N9439B      Time (Lcl) - 0950 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries Serious	Minor	None
Type of Operation - INSTRUCTIONAL	Fire	0	0	0	2
Flight Conducted Under -14 CFR 91	NONE	0	0	0	0
Accident Occurred During -LANDING					

-----Aircraft Information-----

Make/Model - CESSNA 172RG	Eng Make/Model - LYCOMING O-360-F1A6	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2650	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 180 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	GRAND FORKS,ND	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	LARIMORE
Wind Dir/Speed- 180/010 KTS	ATC/Airspace	Runway Ident - 12
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2800/ 50
Lowest Sky/Clouds - 15000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - ICE COVERED
Obstructions to Vision- NONE	TOUCH AND GO	SNOW - COMPACTED
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 21	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 589
SE LAND,ME LAND	Months Since - 13	Last 24 Hrs - 1
	Aircraft Type - BE-76	Make/Model- 59
		Last 30 Days- 3
		Instrument- 61
		Last 90 Days- 29
		Multi-Eng - 132

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE CFI SAID THE STUDENT PLT WAS AT THE CONTROLS & WAS MAKING A TOUCH-&-GO LANDING ON RWY 12, WHICH WAS 2800 X 50 FT. THE WIND WAS FROM THE SOUTH AT 10 KTS. THE TRAINEE LANDED LONG, & BY THE TIME THE ACFT WAS RECONFIGURED FOR TAKEOFF, ONLY ABOUT 800 FT OF RWY WAS REMAINING. THE CFI THOUGHT THE TRAINEE WOULD STOP & TAXI BACK FOR TAKEOFF; HOWEVER, THE TRAINEE ADVANCED THE THROTTLE FOR TAKEOFF. AT THAT TIME, THE CFI TOOK THE CONTROLS, CLOSED THE THROTTLE & ATTEMPTED TO STOP. THE ACFT SLID TO THE LEFT ON THE PACKED SNOW & ICE COVERED RWY, COLLIDED WITH A SNOW BANK BESIDE THE RWY & NOSED OVER.

Brief of Accident (Continued)

File No. - 132

1/21/89

LARIMORE,ND

A/C Reg. No. N9439B

Time (Lc1) - 0950 CST

Occurrence #1 ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation LANDING

Finding(s)

1. TOUCH-AND-GO - INITIATED -
2. PROPER TOUCHDOWN POINT - NOT ATTAINED - DUAL STUDENT
3. TOUCH-AND-GO - DELAYED - DUAL STUDENT
4. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
5. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - SNOW COVERED
6. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - ICY
7. TERRAIN CONDITION - SNOWBANK

Occurrence #2 NOSE OVER  
Phase of Operation LANDING

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE SUPERVISION BY THE FLIGHT INSTRUCTOR. FACTORS RELATED TO THE ACCIDENT WERE: FAILURE OF THE  
STUDENT PILOT TO ATTAIN A PROPER TOUCHDOWN POINT, HIS DELAY IN CONFIGURING THE AIRCRAFT & EXECUTING THE  
GO-AROUND, ICY/SNOWY RUNWAY CONDITIONS, AND THE SNOWBANK.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 17      2/06/89      GRAND FORKS,ND      A/C Reg. No. N89038      Time (Lcl) - 1530 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage	Injuries			
	SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation - INSTRUCTIONAL	Fire	Crew 0	0	0	1
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	0	0
Accident Occurred During -TAKEOFF					

-----Aircraft Information-----

Make/Model - CESSNA 152	Eng Make/Model - LYCOMING O-235-L2C	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1670	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 110 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - ACFT RADIO	SAME AS ACC/INC	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	LOCAL	GRAND FORKS
Wind Dir/Speed- 260/008 KTS	ATC/Airspace	Runway Ident - 26
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4300/ 100
Lowest Sky/Clouds - 7000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - CONCRETE
Lowest Ceiling - NONE	Type Apch/Lndg - TOUCH AND GO	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 18	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 9      Last 24 Hrs - 2
	Months Since - N/A	Make/Model- 9      Last 30 Days- 9
	Aircraft Type - N/A	Instrument- 1      Last 90 Days- 9

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PLT WAS PRACTICING TOUCH AND GO LANDINGS ON HIS FIRST SUPERVISED SOLO. AFTER LANDING ON RWY 26, A 4,300 X 100 FT CONCRETE RWY, THE PLT ADDED POWER AND ALLOWED THE ACFT TO TURN LEFT OF THE CENTERLINE. RIGHT RUDDER WAS APPLIED BUT DID NOT CORRECT THE LEFT TURN. THE ACFT CONTACTED A SNOW BANK AND GROUND LOOPED TO THE LEFT. THE ACFT CAME TO REST OFF THE LEFT SIDE OF THE RWY.

Brief of Accident (Continued)

File No. - 17

2/06/89

GRAND FORKS,ND

A/C Reg. No. N89038

Time (Lcl) - 1530 CST

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

1. TOUCH-AND-GO - ATTEMPTED - PILOT IN COMMAND
2. GROUND LOOP/SWERVE - NOT CORRECTED - PILOT IN COMMAND
3. LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND

Occurrence #2      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

4. TERRAIN CONDITION - SNOWBANK

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE PILOT TO CORRECT A GROUND LOOP SWERVE. A LACK OF TOTAL FLIGHT EXPERIENCE IS CONSIDERED TO BE A CONTRIBUTING FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 18      2/06/89      MAYVILLE,ND      A/C Reg. No. N9459D      Time (Lcl) - 1540 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Injuries			
Type of Operation - INSTRUCTIONAL	Fire	Fatal	Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Crew 0	0	0	1
Accident Occurred During -LANDING		Pass 0	0	0	0

-----Aircraft Information-----

Make/Model - CESSNA 172RG	Eng Make/Model - LYCOMING O-360-F1A6	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2658	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 180 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - TELEPHONE	GRAND FORKS,ND,	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	MAYVILLE
Wind Dir/Speed- 260/010 KTS	ATC/Airspace	Runway Ident - 18
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2110/ 60
Lowest Sky/Clouds - 7000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - TOUCH AND GO	Runway Status - ICE COVERED
Obstructions to Vision- NONE		SNOW - DRY
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 20	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review.	Flight Time (Hours)
PRIVATE	Current - YES	Total - 120
SE LAND	Months Since - 8	Make/Model- 9
	Aircraft Type - C-152	Instrument- 2
		Last 24 Hrs - UNK/NR
		Last 30 Days- 9
		Last 90 Days- 9

Instrument Rating(s) - NONE

-----Narrative-----

WHEN LANDING ON A TOUCH-AND-GO THE PLT LANDED LEFT OF CENTERLINE AND DEPARTED THE LEFT SIDE OF THE RUNWAY INTO A SNOW BANK. RUNWAY CONDITIONS WERE ICY WITH A 10 KT CROSSWIND.



Brief of Accident (Continued)

File No. - 18

2/06/89

MAYVILLE,ND

A/C Reg. No. N9459D

Time (Lc1) - 1540 CST

Occurrence #1

Phase of Operation LANDING - ROLL

Finding(s)

1. TERRAIN CONDITION - ICY
2. PROPER ALIGNMENT - NOT OBTAINED - PILOT IN COMMAND
3. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
4. WEATHER CONDITION - CROSSWIND

Occurrence #2

ON GROUND COLLISION WITH OBJECT

Phase of Operation LANDING - ROLL

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO MAINTAIN CONTROL OF THE AIRPLANE AFTER TOUCHDOWN ON AN ICY RUNWAY. CONTRIBUTING TO THE ACCIDENT  
WAS IMPROPER ALIGNMENT WITH THE RUNWAY FOR TOUCHDOWN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 92      4/18/89      KINDRED,ND      A/C Reg. No. N527Y      Time (Lcl) - 1930 CST

-----Basic Information-----

Type Operating Certificate-AGRICULTURAL AIRCRAFT	Aircraft Damage SUBSTANTIAL		Injuries		
Type of Operation - FERRY	Fire	Crew	Fatal	Serious	Minor
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During -TAKEOFF			0	0	0
					None

-----Aircraft Information-----

Make/Model - GRUMMAN G-164	Eng Make/Model - P&W R-985-AN1	ELT Installed/Activated - NO -N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2300	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 1	Rated Power - 450 HP	

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - NO RECORD OF BRIEFING</p> <p>Method - N/A</p> <p>Completeness - N/A</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- 040/003 KTS</p> <p>Visibility - 20.0 SM</p> <p>Lowest Sky/Clouds - CLEAR</p> <p>Lowest Ceiling - NONE</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DUSK</p>	<p>Itinerary</p> <p>Last Departure Point SAME AS ACC/INC</p> <p>Destination LEONARD,ND</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - NONE</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - NONE</p>	<p>Airport Proximity ON AIRPORT</p> <p>Airport Data</p> <p>HAMRY FIELD</p> <p>Runway Ident - 33</p> <p>Runway Lth/Wid - 2700/ 50</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - DRY</p>
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-----Personnel Information-----

<p>Pilot-In-Command</p> <p>Certificate(s)/Rating(s)</p> <p>COMMERCIAL</p> <p>SE LAND</p>	<p>Age - 37</p> <p>Biennial Flight Review</p> <p>Current - YES</p> <p>Months Since - 1</p> <p>Aircraft Type - C-172</p>	<p>Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <table border="0" style="width: 100%;"> <tr> <td>Total - 1302</td> <td>Last 24 Hrs - 0</td> </tr> <tr> <td>Make/Model- 576</td> <td>Last 30 Days- 0</td> </tr> <tr> <td>Instrument- 14</td> <td>Last 90 Days- 1</td> </tr> </table>	Total - 1302	Last 24 Hrs - 0	Make/Model- 576	Last 30 Days- 0	Instrument- 14	Last 90 Days- 1
Total - 1302	Last 24 Hrs - 0							
Make/Model- 576	Last 30 Days- 0							
Instrument- 14	Last 90 Days- 1							

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT SAID HE LOST CONTROL ON THE TAKEOFF ROLL AND THE ACFT GROUNDLOOPED. HE SAID THE RT WING LIFTED AND HE APPLIED RT AILERON BUT NOTHING HAPPENED. HE APPLIED RT RUDDER AND THE LT BOOM STRUCK THE GROUND. THE ACFT VEERED LT AND DEPARTED THE RWY, STRIKING THE DITCH.

Brief of Accident (Continued)

File No. - 92

4/18/89

KINDRED,ND

A/C Reg. No. N527Y

Time (Lc1) - 1930 CST

-----  
Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

1. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
  2. WEATHER CONDITION - CROSSWIND
  3. WEATHER CONDITION - GUSTS
- 

Occurrence #2      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

4. TERRAIN CONDITION - DITCH
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO COMPENSATE FOR THE WIND CONDITIONS DURING THE TAKEOFF. CONTRIBUTING TO THE ACCIDENT WERE  
THE CROSSWIND CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 8 1/08/89 CHADRON, NE A/C Reg. No. N3799R Time (Lcl) - 1845 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation -BUSINESS  
Flight Conducted Under -14 CFR 91  
Accident Occurred During -DESCENT

Aircraft Damage  
SUBSTANTIAL

Fire  
NONE

Crew  
Pass

Fatal  
0  
0

Injuries  
Serious  
0  
0

Minor  
1  
0

None  
0  
0

-----Aircraft Information-----

Make/Model - CESSNA 172  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 2300  
No. of Seats - 4

Eng Make/Model - LYCOMING O-360-A1A  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 180 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- 230/005 KTS  
Visibility - 1.000 SM  
Lowest Sky/Clouds - 15000 FT SCATTERED  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - NIGHT(DARK)

Itinerary

Last Departure Point  
CHADRON, NE  
Destination  
CASPER, WY

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - NONE

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
PRIVATE  
SE LAND

Age - 36  
Biennial Flight Review  
Current - YES  
Months Since - 23  
Aircraft Type - BE-23

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)

Total - 246  
Make/Model- 94  
Instrument- 5  
Multi-Eng - UNK/NR  
Last 24 Hrs - UNK/NR  
Last 30 Days- UNK/NR  
Last 90 Days- 10  
Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

SHORTLY AFTER TAKEOFF ON A DARK NIGHT, THE PVT PILOT SAID HE TURNED AROUND TO RETRIEVE SOMETHING FROM THE BACK SEAT. HE BECAME AWARE OF THE ENGINE'S RPM INCREASING, AND WHEN HE TURNED AROUND FACING FORWARD, HE COULD NOT SEE THE HORIZON. HE STARTED TO SCAN THE INSTRUMENT PANEL WHEN THE AIRCRAFT STRUCK THE TERRAIN, LEFT WING FIRST. THE WING FOLDED UNDER THE FUSELAGE AND THE AIRCRAFT SLID ABOUT 120 FEET.

Brief of Accident (Continued)

File No. - 8

1/08/89

CHADRON,NE

A/C Reg. No. N3799R

Time (Lcl) - 1845 MST

Occurrence #1 LOSS OF CONTROL - IN FLIGHT  
Phase of Operation TAKEOFF - INITIAL CLIMB

Finding(s)

1. LIGHT CONDITION - DARK NIGHT
2. VFR PROCEDURES - NOT FOLLOWED - PILOT IN COMMAND
3. INATTENTIVE - PILOT IN COMMAND
4. ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation DESCENT - UNCONTROLLED

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PLT FAILED TO DEVOTE FULL TIME & ATTENTION TO FLYING THE ACFT, WITH A RESULTING LOSS OF CONTROL AND COLLISION WITH  
THE GROUND. CONTRIBUTING TO THE ACCIDENT WAS THE DARK NIGHT CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 39      1/29/89      AINSWORTH, NE      A/C Reg. No. N4843G      Time (Lcl) - 1345 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries Serious	Minor	None
Type of Operation -PERSONAL	Fire	Crew 0	0	0	1
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	0	1
Accident Occurred During -LANDING					

-----Aircraft Information-----

Make/Model - CESSNA 172	Eng Make/Model - LYCOMING O-360-A4M	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2550	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 180 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - TELEPHONE	ALLIANCE, NE	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	AINSWORTH
Wind Dir/Speed- 260/015 KTS	ATC/Airspace	Runway Ident - 30
Visibility - 20.0 SM	Type of Flight Plan - VFR	Runway Lth/Wid - 5500/ 75
Lowest Sky/Clouds - 10000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - GO AROUND	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 36	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 79
SE LAND	Months Since - 18	Make/Model- 41
	Aircraft Type - UNK/NR	Instrument- 5
		Multi-Eng - UNK/NR
		Last 24 Hrs - 1
		Last 30 Days- 6
		Last 90 Days- 13
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PVT PLT SAID HE WAS ATTEMPTING TO LAND ON RUNWAY 30, WITH A 40 DEGREE LEFT CROSSWIND OF ABOUT 15 KNOTS. DISSATISFIED WITH HIS APPROACH, HE ELECTED TO GO-AROUND BEFORE TOUCHDOWN. AFTER ESTABLISHING A POSITIVE RATE OF CLIMB AND ATTAINING ABOUT 150 FEET AGL, HE SAID THE ENGINE FAILED. HE WENT THROUGH NORMAL EMERGENCY PROCEDURES IN AN EFFORT TO RESTART THE ENGINE WITHOUT SUCCESS. HE ATTEMPTED TO LAND ON A ROUGH FARM FIELD, BUT SAID HE FELT HE HAD LET HIS AIRSPEED DETERIORATE AND THE AIRCRAFT MUSH-STALLED COLLIDING WITH THE TERRAIN. POST ACCIDENT INVESTIGATION AND ENGINE RUN UP FAILED TO REVEAL THE CAUSE OF ENGINE FAILURE. THE CARBURETOR AND HEAT BOX WERE DESTROYED BY THE IMPACT SO A REPLACEMENT CARBURETOR HAD TO BE FITTED FOR THE RUNUP. THERE WAS NO EVIDENCE OF FUEL CONTAMINATION OR STARVATION/EXHAUSTION. METEOROLOGICAL CONDITIONS WERE NOT CONDUCIVE FOR CARBURETOR ICING. THE PLT HAD BEEN WELL TRAINED IN THE USAGE OF CARBURETOR LEANING TECHNIQUES AND CARBURETOR HEAT CONTROL USAGE.

Brief of Accident (Continued)

File No. - 39

1/29/89

AINSWORTH, NE

A/C Reg. No. N4843G

Time (Lc1) - 1345 CST

Occurrence #1 IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. WEATHER CONDITION - CROSSWIND
2. COMPENSATION FOR WIND CONDITIONS - NOT CORRECTED - PILOT IN COMMAND
3. PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND

Occurrence #2 LOSS OF ENGINE POWER  
Phase of Operation GO-AROUND (VFR)

Finding(s)

4. UNDETERMINED

Occurrence #3 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

Occurrence #4 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation LANDING

Finding(s)

5. TERRAIN CONDITION - ROUGH/UNEVEN

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE LOSS OF POWER FROM UNDETERMINED REASONS DURING AN ATTEMPTED GO-AROUND. CONTRIBUTING TO THE ACCIDENT WAS THE PILOT'S  
FAILURE TO MAINTAIN DIRECTIONAL CONTROL OF THE AIRPLANE AND THE CROSSWIND CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 95      3/02/89      NORFOLK, NE      A/C Reg. No. N69806      Time (Lcl) - 0030 CST

-----Basic Information-----

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage					
Name of Carrier	-MID PLAINS AVIATION	SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation	-NON SCHED, DOMESTIC, PASSENGER	Fire	Crew	0	0	0	1
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	1
Accident Occurred During	-LANDING						

-----Aircraft Information-----

Make/Model	- CESSNA 310Q	Eng Make/Model	- CONTINENTAL 10-470-VO	ELT Installed/Activated	- YES/NO
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 2	Stall Warning System	- YES
Max Gross Wt	- 5300	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 6	Rated Power	- 260 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary		Airport Proximity	
Wx Briefing	- NWS	Last Departure Point		ON AIRPORT	
Method	- ACFT RADIO	DES MOINES, IA			
Completeness	- FULL	Destination		Airport Data	
Basic Weather	- IMC	SAME AS ACC/INC		KARL STEPHAN	
Wind Dir/Speed	- 060/007 KTS			Runway Ident	- 01
Visibility	- 2.000 SM	ATC/Airspace		Runway Lth/Wid	- 5800/ 150
Lowest Sky/Clouds	- UNK/NR	Type of Flight Plan	- IFR	Runway Surface	- ASPHALT
Lowest Ceiling	- 1300 FT OVERCAST	Type of Clearance	- IFR	Runway Status	- SNOW - COMPACTED
Obstructions to Vision	- BLOWING SNOW	Type Apch/Lndg	- ILS-LOCALIZER		
Precipitation	- SNOW				
Condition of Light	- NIGHT(DARK)				

-----Personnel Information-----

Pilot-In-Command	Age - 35	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL, CFI	Current - YES	Total - 4745	Last 24 Hrs - 1
SE LAND, ME LAND	Months Since - 1	Make/Model - 438	Last 30 Days - 19
	Aircraft Type - C-172	Instrument - 342	Last 90 Days - 43
		Multi-Eng - 1597	Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING AN ILS LOCALIZER APPROACH, THE ACFT LANDED HARD CAUSING SUBSTANTIAL DAMAGE TO THE WING SPAR. THE PLT SAID HE HAD ACCUMULATED SUBSTANTIAL ICE ON THE ACFT AND UTILIZED THE DEICING EQUIPMENT SHORTLY BEFORE LDG. HE SAID HE CROSSED THE RUNWAY THRESHOLD AT 100 KNOTS AND REDUCED POWER. THE ACFT PITCHED DOWN SUDDENLY, THEN POWER AND BACK PRESSURE WERE APPLIED TO CUSHION THE LDG. THE ACFT HIT HARD, BOUNCED, THEN SETTLED ON THE RUNWAY. IT WAS THEN TAXIED BACK TO THE RAMP.



Brief of Accident (Continued)

File No. - 95

3/02/89

NORFOLK, NE

A/C Reg. No. N69806

Time (Lcl) - 0030 CST

-----  
Occurrence #1      LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      LANDING

Finding(s)

1. WEATHER CONDITION - ICING CONDITIONS
  2. WEATHER CONDITION - SNOW
  3. AIRSPEED - INADEQUATE - PILOT IN COMMAND
- 

Occurrence #2      HARD LANDING  
Phase of Operation      LANDING

Finding(s)

4. WING - ICE
  5. FLARE - INADEQUATE - PILOT IN COMMAND
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO MAINTAIN ADEQUATE AIRSPEED DURING THE LANDING WHICH RESULTED IN AN INADEQUATE FLARE. CONTRIBUTING  
TO THE ACCIDENT WERE THE ICING CONDITIONS AND ICE ACCUMULATION OF THE WINGS OF THE AIRPLANE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 184      3/11/89      LINCOLN, NE      A/C Reg. No. N81GU      Time (Lcl) - 1045 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - TAKEOFF

Aircraft Damage  
SUBSTANTIAL  
Fire - NONE

		Injuries			
		Fatal	Serious	Minor	None
Crew		0	0	0	1
Pass		0	0	0	0

-----Aircraft Information-----

Make/Model - JENNINGS PIETENPOL AIRCAMPER      Eng Make/Model - FORD FIESTA  
Landing Gear - TAILWHEEL-ALL FIXED      Number Engines - 1  
Max Gross Wt - 1350      Engine Type - RECIPROCATING-CARBURETOR  
No. of Seats - 2      Rated Power - 85 HP

ELT Installed/Activated - NO -N/A  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- 040/008 KTS  
Visibility - 3.000 SM  
Lowest Sky/Clouds - 25000 FT THIN BKN  
Lowest Ceiling - NONE  
Obstructions to Vision- HAZE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
LINCOLN, NE  
Destination  
LOCAL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - NONE

Airport Proximity  
ON AIRPORT

Airport Data

LINCOLN  
Runway Ident - 35  
Runway Lth/Wid - 5500/ 100  
Runway Surface - ASPHALT  
Runway Status - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
PRIVATE  
SE LAND

Age - 56

Biennial Flight Review

Current - YES  
Months Since - UNK/NR  
Aircraft Type - UNK/NR

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total	- 59	Last 24 Hrs	- 0
Make/Model	- 0	Last 30 Days	- 6
Instrument	- 2	Last 90 Days	- 14
Multi-Eng	- 0	Rotorcraft	- 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PVT PLT SAID THAT DURING THE TAKEOFF ROLL OF THE HOMEBUILT ACFT, THE PLANE VEERED TO THE LEFT. THE PLT WAS UNABLE TO DIRECTIONALLY CONTROL THE ACFT, AND IT VEERED OFF THE RUNWAY AND ROLLED OVER. POST ACCIDENT INVESTIGATION REVEALED THE FRONT SEAT CUSHION, OF THE OPEN COCKPIT TANDEM SEATED ACFT, HAD FALLEN TO THE COCKPIT FLOOR CAUSING A RESTRICTION OF THE FRONT PASSENGER'S BRAKE PEDALS. THE FRONT COCKPIT HAD A COVER OVER IT MAKING IT INCONVENIENT TO VISUALLY INSPECT IT DURING THE PREFLIGHT.

Brief of Accident (Continued)

File No. - 184

3/11/89

LINCOLN, NE

A/C Reg. No. N81GJ

Time (Lcl) - 1045 CST

-----  
Occurrence #1            LOSS OF CONTROL - ON GROUND  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

1. LANDING GEAR, NORMAL BRAKE SYSTEM - MOVEMENT RESTRICTED
  2. CONTROL INTERFERENCE - NOT UNDERSTOOD - PILOT IN COMMAND
  3. FUSELAGE, SEAT - NOT SECURED
  4. AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
- 

Occurrence #2            NOSE OVER  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

5. TERRAIN CONDITION - SOFT
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT IN COMMAND TO ADEQUATELY PREFLIGHT THE AIRCRAFT RESULTING IN A FRONT COCKPIT SEAT CUSHION  
INTERFERING WITH THE RUDDER PEDALS AND BRAKES.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 187      3/26/89      PAPILLION, NE      A/C Reg. No. N3832J      Time (Lcl) - 1230 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

		Injuries			
		Fatal	Serious	Minor	None
Crew	0	1	0	0	0
Pass	0	0	0	0	0

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - TAKEOFF

-----Aircraft Information-----

Make/Model - CESSNA 150  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 1600  
No. of Seats - 2

Eng Make/Model - LYCOMING O-320-E2D  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 150 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING

Method - N/A

Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 180/016 KTS

Visibility - 15.0 SM

Lowest Sky/Clouds - 2000 FT SCATTERED

Lowest Ceiling - NONE

Obstructions to Vision- NONE

Precipitation - NONE

Condition of Light - DAYLIGHT

Itinerary

Last Departure Point

PAPILLION, NE

Destination

LOCAL

ATC/Airspace

Type of Flight Plan - NONE

Type of Clearance - NONE

Type Apch/Lndg - FORCED LANDING

Airport Proximity  
ON AIRPORT

Airport Data

SOUTH OMAHA

Runway Ident - 14

Runway Lth/Wid - 2500/ 150

Runway Surface - GRASS/TURF

Runway Status - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE

SE LAND

Age - 50

Biennial Flight Review

Current - YES

Months Since - 5

Aircraft Type - C-150

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total	-	100	Last 24 Hrs -	0
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Make/Model-	90	Last 30 Days-	0
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Instrument-	4	Last 90 Days-	6
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Multi-Eng -	0	Rotorcraft -	0
-------------	---	--------------	---

Instrument Rating(s) - NONE

-----Narrative-----

THE PVT PLT SAID HE WAS PRACTICING TAKEOFFS AND LDGS. DURING A TAKEOFF THE ENGINE HESITATED, SO HE ABORTED THE T.O. AND RE-LANDED ON THE REMAINING RUNWAY. AFTER TAXIING BACK, HE RAN THE ENGINE UP AND CHECKED AND CONFIRMED NORMAL OPERATION. HE THEN TOOK OFF AND AFTER ATTAINING ABOUT 150 TO 200 FEET AGL, THE ENGINE BEGAN LOSING POWER AND AN EMERGENCY LANDING WAS ATTEMPTED ON THE AIRPORT PROPERTY, RESULTING IN COLLISION WITH A TERRACE AND NOSING OVER. POST ACCIDENT INVESTIGATION AND ENGINE RUNUP REVEALED FOREIGN MATTER IN THE CARBURETOR FINGER SCREEN. THE ACFT HAD BEEN INACTIVE OVER AN EXTENSIVE PERIOD OF TIME BEFORE PURCHASE BY THE PRESENT OWNER.

Brief of Accident (Continued)

File No. - 187

3/26/89

PAPILLION,NE

A/C Reg. No. N3832J

Time (Lc1) - 1230 CST

Occurrence #1      LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation      TAKEOFF - INITIAL CLIMB

Finding(s)

1. FUEL SYSTEM,SCREEN - BLOCKED(PARTIAL)
2. OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - INTENTIONAL - PILOT IN COMMAND
3. FLUID,FUEL - STARVATION

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

4. TERRAIN CONDITION - NONE SUITABLE

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE CONTAMINATION OF THE FUEL SCREEN BY FOREIGN MATTER AND OPERATION OF THE AIRCRAFT WITH KNOWN DEFICIENCIES.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 77      3/16/89      LAKEWOOD,NJ      A/C Reg. No. N41692      Time (Lcl) - 1500 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries			
Type of Operation -PERSONAL	Fire	Crew	0	Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -LANDING			0	0	0	0

-----Aircraft Information-----

Make/Model - BELLANCA 7GCBC	Eng Make/Model - LYCOMING O-320-A2B	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1650	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 150 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	LAKEWOOD,NJ	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	LAKEWOOD
Wind Dir/Speed- 330/008 KTS	ATC/Airspace	Runway Ident - 06
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2457/ 50
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling -	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 62	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 399
SE LAND	Months Since - 5	Last 24 Hrs - UNK/NR
	Aircraft Type - PA-28	Make/Model- 75
		Instrument- 23
		Last 30 Days- 3
		Last 90 Days- 6

Instrument Rating(s) - NONE

-----Narrative-----

DURING LANDING ROLL, THE LEFT WING OF THE AIRCRAFT STARTED TO LIFT AND IMMEDIATELY THE PILOT APPLIED FULL LEFT STICK AND RIGHT RUDDER, BUT THE WING CONTINUED TO LIFT AND THE AIRCRAFT TURNED TOWARDS THE EDGE OF THE RUNWAY. THE AIRCRAFT BECAME AIRBORNE FOR A SHORT TIME THEN CRASHED AND NOSED OVER. PILOT STATED THE WINDS WERE 300 TO 330 DEGREES AT 8 KNOTS.

Brief of Accident (Continued)

File No. - 77

3/16/89

LAKEWOOD,NJ

A/C Reg. No. N41692

Time (Lcl) - 1500 EST

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      LANDING - ROLL

Finding(s)

1. WEATHER CONDITION - CROSSWIND
2. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND

Occurrence #2      NOSE OVER  
Phase of Operation      LANDING - ROLL

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO ADEQUATELY COMPENSATE FOR THE CROSSWIND CONDITIONS. CONTRIBUTING TO THE ACCIDENT WERE THE  
CROSSWIND CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 198      3/24/89      PITTSTOWN, NJ      A/C Reg. No. N4385L      Time (Lcl) - 1315 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage DESTROYED	Injuries			
Type of Operation	-PERSONAL	Fire	Fatal	Serious	Minor	None
Flight Conducted Under	-14 CFR 91	NONE	Crew 0	1	0	0
Accident Occurred During	-LANDING		Pass 0	0	2	0

-----Aircraft Information-----

Make/Model	- PIPER PA-28-181	Eng Make/Model	- LYCOMING O-360-A4M	ELT Installed/Activated	- YES-UNK/NR
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 2450	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 4	Rated Power	- 180 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary	Airport Proximity
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method	- N/A	RICHMOND HTS, OH	
Completeness	- N/A	Destination	Airport Data
Basic Weather	- IMC	PRINCETON, NJ	
Wind Dir/Speed	- UNK/NR	ATC/Airspace	Runway Ident
Visibility	- 1.500 SM	Type of Flight Plan	- N/A
Lowest Sky/Clouds	- N/A	Type of Clearance	- N/A
Lowest Ceiling	- 1500 FT BROKEN	Type Apch/Lndg	- N/A
Obstructions to Vision	- FOG		
Precipitation	- NONE		
Condition of Light	- DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 25	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
PRIVATE	Current - YES	Total - 184	Last 24 Hrs - UNK/NR
SE LAND	Months Since - 3	Make/Model - 93	Last 30 Days - 6
	Aircraft Type - PA-28	Instrument - 52	Last 90 Days - 9

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT OF THE PIPER PA-28 WAS AT CRUISE ALTITUDE WHEN HE REPORTED TO ATC THAT HE WAS RUNNING LOW ON FUEL. AT THAT POINT HE WAS 7 MILES FROM ALLENTOWN AIRPORT, BUT CHOSE TO CONTINUE TO HIS DESTINATION AIRPORT. ABOUT 10 MINUTES LATER HE ASKED ATC TO GET HIM TO THE NEAREST AIRPORT BECAUSE FUEL WAS GETTING CRITICAL. ABOUT 23 MINUTES AFTER FIRST REPORTING LOW FUEL TO ATC THE ENGINE QUIT. THE AIRCRAFT WAS VECTORED TO THE NEAREST AIRPORT. RADAR CONTACT WAS LOST AT 1100 FEET AND 2 1/2 MILES NORTH OF ALEXANDRIA AIRPORT. AFTER BREAKING OUT OF THE CLOUDS ON APPROACH TO THE AIRPORT THE AIRCRAFT STARTED CLIPPING TREES. THE PILOT FLARED THE AIRCRAFT TO SLOW THE FORWARD SPEED AND CRASHED INTO THE TREES.



Brief of Accident (Continued)

File No. - 198

3/24/89

PITTSTOWN,NJ

A/C Reg. No. N4385L

Time (Lcl) - 1315 EST

-----  
Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      CRUISE

Finding(s)

1. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
  2. FLUID,FUEL - EXHAUSTION
- 

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

-----

Occurrence #3      IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      LANDING

Finding(s)

3. OBJECT - TREE(S)
  4. TERRAIN CONDITION - NONE SUITABLE
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER INFLIGHT PLANNING WHICH LED TO ENGINE FAILURE DUE TO FUEL EXHAUSTION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 146      1/02/89      SANTA FE,NM      A/C Reg. No. N9739L      Time (Lcl) - 1316 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -INSTRUCTIONAL  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -LANDING

Aircraft Damage  
SUBSTANTIAL  
Fire      NONE

	Fatal	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	0

-----Aircraft Information-----

Make/Model      - BEECH 19  
Landing Gear      - TRICYCLE-FIXED  
Max Gross Wt      - 2000  
No. of Seats      - 4

Eng Make/Model      - LYCOMING O-320-E2C  
Number Engines      - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 150 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - FSS  
Method      - ACFT RADIO  
Completeness      - WEATHER NOT PERTINENT

Basic Weather      - VMC

Wind Dir/Speed- 240/009 KTS

Visibility      - 40.0 SM

Lowest Sky/Clouds      - 7000 FT SCATTERED

Lowest Ceiling      - 20000 FT BROKEN

Obstructions to Vision- NONE

Precipitation      - NONE

Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point

SAME AS ACC/INC

Destination

LOCAL

ATC/Airspace

Type of Flight Plan - NONE

Type of Clearance      - NONE

Type Apch/Lndg      - TRAFFIC PATTERN

Airport Proximity  
ON AIRPORT

Airport Data

SANTA FE COUNTY MUNI

Runway Ident      - 20

Runway Lth/Wid      - 8323/ 150

Runway Surface      - ASPHALT

Runway Status      - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

STUDENT

Age - 49

Biennial Flight Review

Current      - N/A

Months Since      - N/A

Aircraft Type      - N/A

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total	- 37	Last 24 Hrs	- 1
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Make/Model-	16	Last 30 Days-	UNK/NR
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Instrument-	1	Last 90 Days-	UNK/NR
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Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PILOT WAS FLYING HER FIRST SUPERVISED SOLO. SHE LANDED ON RUNWAY 20 WITH A WIND FROM 240 DEGREES AT 9 KTS. WITNESSES SAID SHE FLARED HIGH & THE AIRCRAFT BOUNCED DURING TOUCHDOWN. ON THE THIRD BOUNCE, THE NOSE GEAR COLLAPSED, THEN THE ACFT SKIDDED TO A STOP ON ITS NOSED.

Brief of Accident (Continued)

File No. - 146

1/02/89

SANTA FE,NM

A/C Reg. No. N9739L

Time (Lc1) - 1316 MST

Occurrence #1      HARD LANDING  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

1. FLARE - IMPROPER - PILOT IN COMMAND
2. RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND

Occurrence #2      NOSE GEAR COLLAPSED  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

3. LANDING GEAR, NOSE GEAR - OVERLOAD

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S IMPROPER FLARE AND IMPROPER RECOVERY FROM A BOUNCED LANDING, WHICH RESULTED IN A HARD LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 143      1/05/89      QUEMADO, NM      A/C Reg. No. N312BH      Time (Lcl) - 1430 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL					
Type of Operation -PERSONAL	Fire	Crew	Fatal	0	0	0
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	0
Accident Occurred During -LANDING						

-----Aircraft Information-----

Make/Model - BUMGARTNER/HIRT STEEN SKYBOLT	Eng Make/Model - CONTINENTAL R-670-5	ELT Installed/Activated - NO -N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1950	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 220 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRSTRIP
Method - TELEPHONE	GRANTS, NM	
Completeness - PARTIAL, LMTD BY PILOT	Destination	Airport Data
Basic Weather - VMC	ST JOHNS, AZ	QUEMADO
Wind Dir/Speed- 260/015 KTS	ATC/Airspace	Runway Ident - 23
Visibility - 25.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 5000/ 25
Lowest Sky/Clouds - 10000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - DIRT
Lowest Ceiling - NONE	Type Apch/Lndg - PRECAUTIONARY LANDING	Runway Status - SOFT
Obstructions to Vision- NONE	FULL STOP	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 25	Medical Certificate - EXPIRED
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 400
SE LAND	Months Since - 18	Make/Model- 105
	Aircraft Type - BE-33	Instrument- 5
		Last 24 Hrs - 3
		Last 30 Days- 13
		Last 90 Days- 18

Instrument Rating(s) - NONE

-----Narrative-----

THE PRIVATE PLT WAS ON A X-COUNTRY FLIGHT IN HIS HOMEBUILT ACFT. HE REPORTED THAT HE DIVERTED SOUTH OF HIS INTENDED ROUTE TO AVOID WEATHER. HE SAID HE NOTICED THE HIGHER ELEVATIONS ALONG HIS ROUTE WERE HAZY AND OBSCURED, SO HE ELECTED TO LAND NEAR QUEMADO, NEW MEXICO, ON A DIRT STRIP. THE PLT SAID THAT DURING THE LANDING, THE MAIN GEAR ENTERED SOFT DIRT AND HE LOST DIRECTIONAL CONTROL. THE ACFT THEN NOSED OVER AND CAME TO REST INVERTED. THE PILOT'S LAST FAA MED EXAM IN ABOUT JULY 1986.

Brief of Accident (Continued)

File No. - 143

1/05/89

QUEMADO,NM

A/C Reg. No. N312BH

Time (Lc1) - 1430 MST

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Occurrence #1            IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation      CRUISE - NORMAL

Finding(s)

1. TERRAIN CONDITION - HIGH TERRAIN
  2. WEATHER CONDITION - LOW CEILING
  3. WEATHER CONDITION - HAZE/SMOKE
  4. FLIGHT TO ALTERNATE DESTINATION
  5. PRECAUTIONARY LANDING
- 

Occurrence #2            LOSS OF CONTROL - ON GROUND  
Phase of Operation      LANDING - ROLL

Finding(s)

6. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - SOFT
  7. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
  8. DIRECTIONAL CONTROL - NOT MAINTAINED -
  9. GROUND LOOP/SWERVE - UNCONTROLLED -
- 

Occurrence #3            NOSE OVER  
Phase of Operation      LANDING

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-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT TO SELECT A SUITABLE LANDING STRIP/AREA. FACTORS RELATED TO THE ACCIDENT WERE:  
HIGH TERRAIN AND LOW CEILING ALONG THE ROUTE OF FLIGHT, HAZE, AND THE SOFT CONDITION OF THE SELECTED  
LANDING STRIP.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 163      1/18/89      FARMINGTON, NM      A/C Reg. No. N2652N      Time (Lcl) - 1500 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL		Injuries			
Type of Operation - PERSONAL	Fire	Crew	Fatal	Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -LANDING			0	0	0	0

-----Aircraft Information-----

Make/Model - CESSNA 140	Eng Make/Model - CONTINENTAL C-85-12	ELT Installed/Activated - NO -N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1500	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 85 HP	

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - NO RECORD OF BRIEFING</p> <p>Method - N/A</p> <p>Completeness - N/A</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- CALM</p> <p>Visibility - 100.0 SM</p> <p>Lowest Sky/Clouds - CLEAR</p> <p>Lowest Ceiling - NONE</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point SAME AS ACC/INC</p> <p>Destination LOCAL</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - NONE</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - TRAFFIC PATTERN FULL STOP</p>	<p>Airport Proximity ON AIRPORT</p> <p>Airport Data FARMINGTON</p> <p>Runway Ident - 25</p> <p>Runway Lth/Wid - 6700/ 100</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - DRY</p>
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-----Personnel Information-----

<p>Pilot-In-Command</p> <p>Certificate(s)/Rating(s) PRIVATE SE LAND</p>	<p>Age - 49</p> <p>Biennial Flight Review Current - YES Months Since - 3 Aircraft Type - C-170</p>	<p>Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <table border="0" style="width: 100%;"> <tr> <td>Total - 850</td> <td>Last 24 Hrs - UNK/NR</td> </tr> <tr> <td>Make/Model- 28</td> <td>Last 30 Days- UNK/NR</td> </tr> <tr> <td>Instrument- UNK/NR</td> <td>Last 90 Days- UNK/NR</td> </tr> <tr> <td>Multi-Eng - UNK/NR</td> <td>Rotorcraft - UNK/NR</td> </tr> </table>	Total - 850	Last 24 Hrs - UNK/NR	Make/Model- 28	Last 30 Days- UNK/NR	Instrument- UNK/NR	Last 90 Days- UNK/NR	Multi-Eng - UNK/NR	Rotorcraft - UNK/NR
Total - 850	Last 24 Hrs - UNK/NR									
Make/Model- 28	Last 30 Days- UNK/NR									
Instrument- UNK/NR	Last 90 Days- UNK/NR									
Multi-Eng - UNK/NR	Rotorcraft - UNK/NR									

Instrument Rating(s) - NONE

-----Narrative-----

THE PRIVATE PLT WAS PRACTICING LANDINGS ON RWY 25. DURING A LANDING, HE APPLIED LEFT BRAKING TO TURN OFF ONTO A TAXIWAY. THE PLT SAID THAT HE ADDED RIGHT BRAKING TO CORRECT AND THE ACFT GROUND LOOPED TO THE RIGHT. AS THE ACFT DEPARTED THE RIGHT SIDE OF THE RWY, THE LEFT MAIN GEAR COLLAPSED. THE FUSELAGE AND BOTH WINGS WERE BENT.

Brief of Accident (Continued)

File No. - 163

1/18/89

FARMINGTON, NM

A/C Reg. No. N2652N

Time (Lc1) - 1500 MST

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Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      LANDING - ROLL

Finding(s)

1. BRAKES(NORMAL) - IMPROPER USE OF - PILOT IN COMMAND
  2. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
- 

Occurrence #2      MAIN GEAR COLLAPSED  
Phase of Operation      LANDING - ROLL

Finding(s)

3. LANDING GEAR, MAIN GEAR - OVERLOAD
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER USE OF BRAKES WHICH RESULTED IN AN INADVERTENT GROUND SWERVE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 158      1/23/89      LAS CRUCES, NM      A/C Reg. No. N3070M      Time (Lc1) - 1705 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage	Injuries			
		SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation	-INSTRUCTIONAL	Fire	Crew 0	0	0	2
Flight Conducted Under	-14 CFR 91	NONE	Pass 0	0	0	1
Accident Occurred During	-LANDING					

-----Aircraft Information-----

Make/Model	- PIPER PA-34-200T	Eng Make/Model	- CONTINENTAL TS10-360-E	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 2	Stall Warning System	- YES
Max Gross Wt	- 4570	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 4	Rated Power	- 200 HP		

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - UNK/NR</p> <p>Method - UNK/NR</p> <p>Completeness - WEATHER NOT PERTINENT</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- LIGHT AND VARIABLE</p> <p>Visibility - 50.0 SM</p> <p>Lowest Sky/Clouds - CLEAR</p> <p>Lowest Ceiling - NONE</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point</p> <p>EL PASO, TX</p> <p>Destination</p> <p>SAME AS ACC/INC</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - NONE</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - FORCED LANDING</p>	<p>Airport Proximity</p> <p>OFF AIRPORT/STRIP</p> <p>Airport Data</p> <p>LAS CRUCES INTL</p> <p>Runway Ident - 26</p> <p>Runway Lth/Wid - 6073/ 100</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - DRY</p>
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-----Personnel Information-----

<p>Pilot-In-Command</p> <p>Certificate(s)/Rating(s)</p> <p>COMMERCIAL,CFI</p> <p>SE LAND,ME LAND</p>	<p>Age - 22</p> <p>Biennial Flight Review</p> <p>Current - YES</p> <p>Months Since - 1</p> <p>Aircraft Type - UNK/NR</p>	<p>Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <p>Total - 785</p> <p>Make/Model- 46</p> <p>Instrument- 65</p> <p>Multi-Eng - 46</p> <p>Last 24 Hrs - 3</p> <p>Last 30 Days- 129</p> <p>Last 90 Days- 408</p>
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Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE INSTRUCTOR PLT (CFI) HAD SIMULATED A LOSS OF PWR IN THE RGT ENG & THE STUDENT WAS MAKING AN APCH. THE CFI THEN PULLED THE CIRCUIT BREAKER (CB) FOR THE NORMAL GEAR EXTENTION SYS. THE STUDENT TRIED TO EXTEND THE GEAR WITH THE ALTN SYS, BUT THE LEFT GEAR DID NOT LOCK DOWN. THE CFI PUT THE CB BACK IN & RECYCLED THE GEAR, BUT THE LEFT GEAR STILL DID NOT SHOW DOWN & LOCKED. THE CFI THEN ORDERED A GO-AROUND. THE GO-AROUND WAS INITIATED AT ABOUT 300 FT AGL. WHEN THE THROTTLES WERE ADVANCED, THE CFI NOTED A LACK OF PWR IN THE RGT ENG & TOOK CONTROL OF THE ACFT. HE TRIED TO RESTORE FULL PWR TO THE RGT ENG, WHICH HE PERCEIVED WAS PRODUCING SOME PWR. THE PROP WASN'T FEATHERED. IN THAT CONFIGURATION, THE ACFT MAINTAINED LEVEL FLT, BUT WOULD NOT CLIMB. SUBSEQUENTLY, IT BEGAN TO DESCEND & THE CFI MADE A FORCED LANDING ON ROUGH DESERT TERRAIN. NO REASON FOR THE RPRTD LOSS OF ENG POWER WAS FOUND DRG A SUBSEQUENT INVESTIGATION.



Brief of Accident (Continued)

File No. - 158

1/23/89

LAS CRUCES,NM

A/C Reg. No. N3070M

Time (Lc1) - 1705 MST

Occurrence #1        GEAR NOT EXTENDED  
Phase of Operation    APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND(CFI)
2. LANDING GEAR,GEAR LOCKING MECHANISM - NOT ENGAGED
3. GO-AROUND - INITIATED -

Occurrence #2        LOSS OF ENGINE POWER  
Phase of Operation    GO-AROUND (VFR)

Finding(s)

4. 1 ENGINE -
5. UNDETERMINED

Occurrence #3        FORCED LANDING  
Phase of Operation    DESCENT - UNCONTROLLED

Finding(s)

6. PROPELLER FEATHERING - NOT PERFORMED - PILOT IN COMMAND(CFI)

Occurrence #4        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    LANDING

Finding(s)

7. TERRAIN CONDITION - ROUGH/UNEVEN
8. WHEELS UP LANDING

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE LOSS OF RIGHT ENGINE POWER FOR UNDETERMINED REASON(S), AND THE FAILURE OF THE INSTRUCTOR PILOT TO  
FEATHER THE RIGHT ENGINE. FACTORS RELATED TO THE ACCIDENT WERE: FAILURE OF THE LEFT MAIN GEAR LOCKING  
MECHANISM TO ENGAGE AND THE UNPREPARED (ROUGH/UNEVEN) TERRAIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 156      4/05/89      LOS LUNAS, NM      A/C Reg. No. N1672M      Time (Lcl) - 1215 MDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation -BUSINESS  
Flight Conducted Under -14 CFR 91  
Accident Occurred During -LANDING

Aircraft Damage

SUBSTANTIAL

Fire  
NONE

Crew  
Pass

Fatal  
0  
0

Injuries

Serious  
0  
0

Minor  
1  
0

None  
0  
0

-----Aircraft Information-----

Make/Model - CESSNA 182P  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 2950  
No. of Seats - 4

Eng Make/Model - CONTINENTAL O-470-S  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 230 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- 340/008 KTS  
Visibility - 80.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
ALBUQUERQUE, NM  
Destination  
BELEN, NM

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL  
SE LAND, ME LAND

Age - 54

Biennial Flight Review

Current - YES  
Months Since - 10  
Aircraft Type - PA-34

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total	-	3930	Last 24 Hrs -	0
Make/Model-	102		Last 30 Days-	21
Instrument-	892		Last 90 Days-	39
Multi-Eng -	1152			

Instrument Rating(s) - AIRPLANE

-----Narrative-----

BEFORE THE FLT, THE PLT PREFLIGHTED THE ACFT & DRAINED THE WING SUMPS. HE DID NOT NOTICE ANY WATER OR OTHER CONTAMINANTS IN THE FUEL. HE DID NOT VISUALLY CHECK THE TANK CAPS OR FUEL LEVEL, BUT RELIED ON THE FUEL GAGES, WHICH HE BELIEVED WERE ACCURATE. HE KNEW THE LEFT TANK WAS NEAR EMPTY & ESTIMATED THERE WAS 35 GAL REMAINING IN THE RGT TANK. ABOUT 10 MIN AFTER TAKING OFF ON A FLT FROM ALBUQUERQUE TO BELEN, NM, THE ENG LOST POWER & WOULD NOT RESTART. THE PLT RPRTD THAT DURING AN EMERGENCY LANDING, HE BEGAN HIS FLARE TOO LOW, THE ACFT TOUCHED DOWN "TOO FLAT" & THEN THE NOSE WHEEL HIT A MOUND & THE ACFT NOSED OVER. NO FUEL WAS FOUND IN EITHER TANK, THOUGH FUEL WAS FOUND IN THE FUEL LINES & GASCOLATOR. THE ENGINE WAS OPERATIONALLY CHECKED & IT RAN SMOOTHLY TO 2100 RPM.

Brief of Accident (Continued)

File No. - 156

4/05/89

LOS LUNAS, NM

A/C Reg. No. N1672M

Time (Lc1) - 1215 MDT

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      CRUISE - NORMAL

Finding(s)

1. AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
2. ENGINE INSTRUMENTS, FUEL QUANTITY GAGE - FALSE INDICATION
3. FLUID, FUEL - EXHAUSTION
4. FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING

Finding(s)

5. FLARE - IMPROPER - PILOT IN COMMAND
6. TERRAIN CONDITION - ROUGH/UNEVEN

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE PREFLIGHT BY THE PILOT, WHICH RESULTED IN FUEL EXHAUSTION FROM AN INADEQUATE SUPPLY OF FUEL.  
FACTORS RELATED TO THE ACCIDENT WERE: FALSE FUEL QUANTITY INDICATION, HARD LANDING BY THE PILOT, AND  
UNEVEN TERRAIN CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 30      1/14/89      CARSON CITY, NV      A/C Reg. No. N7343E      Time (Lcl) - 1335 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL					
Type of Operation - PERSONAL	Fire	Crew	Fatal	0	0	0
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	0
Accident Occurred During -LANDING						

-----Aircraft Information-----

Make/Model - CESSNA 210	Eng Make/Model - CONTINENTAL IO-470-E	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2900	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 260 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - IN PERSON	SAN JOSE, CA	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	CARSON CITY
Wind Dir/Speed- 360/009 KTS	ATC/Airspace	Runway Ident - 27
Visibility - 40.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 5900/ 75
Lowest Sky/Clouds - 3200 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - GO AROUND	Runway Status - DRY
Obstructions to Vision- NONE	FORCED LANDING	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 57	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 1167
SE LAND	Months Since - 11	Make/Model- 289
	Aircraft Type - C-210	Instrument- 38
		Last 24 Hrs - 1
		Last 30 Days- 2
		Last 90 Days- 14

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT REPORTED THAT THE ENG FAILED TO RESPOND WHEN POWER WAS APPLIED TO MAKE A GO-AROUND. THE PLT MADE A FORCED LANDING ON UNPREPARED TERRAIN BEYOND THE RUNWAY. INSPECTION REVEALED THAT THE THROTTLE CABLE HAD SEPARATED DUE TO WEAR.

Brief of Accident (Continued)

File No. - 30

1/14/89

CARSON CITY, NV

A/C Reg. No. N7343E

Time (Lc1) - 1335 PST

Occurrence #1 LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF

Phase of Operation GO-AROUND (VFR)

1. THROTTLE/POWER LEVER, CABLE - SEPARATION

2. THROTTLE/POWER LEVER, CABLE - WORN

Occurrence #2 FORCED LANDING

Phase of Operation DESCENT - EMERGENCY

Occurrence #3 NOSE OVER

Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

3. TERRAIN CONDITION - ROUGH/UNEVEN

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
SEPARATION OF THE THROTTLE CABLE DUE TO WEAR AS POWER WAS APPLIED FOR A LANDING GO-AROUND. CONTRIBUTING TO THE ACCIDENT  
WAS ROUGH TERRAIN AT THE TOUCHDOWN POINT OF THE FORCED LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 43      1/29/89      MINDEN,NV      A/C Reg. No. N48688      Time (Lcl) - 1006 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
DESTROYED

Injuries			
Fatal	Serious	Minor	None
1	0	0	0
1	0	0	0

Type of Operation -PERSONAL  
Flight Conducted Under -14 CFR 91  
Accident Occurred During -DESCENT

Fire  
NONE

Crew  
Pass

-----Aircraft Information-----

Make/Model - AERONCA 0-58B  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 1260  
No. of Seats - 2

Eng Make/Model - CONTINENTAL A-65-8F  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 65 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING

Method - N/A

Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 270/009 KTS

Visibility - 50.0 SM

Lowest Sky/Clouds - 15000 FT SCATTERED

Lowest Ceiling - NONE

Obstructions to Vision- NONE

Precipitation - NONE

Condition of Light - DAYLIGHT

Itinerary

Last Departure Point

PLACERVILLE,CA

Destination

SILVER SPRINGS,NV

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A

Runway Lth/Wid - N/A

Runway Surface - N/A

Runway Status - N/A

ATC/Airspace

Type of Flight Plan - NONE

Type of Clearance - NONE

Type Apch/Lndg - NONE

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL

SE LAND

Age - 64

Biennial Flight Review

Current - YES

Months Since - 3

Aircraft Type - A-058

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total - 2138

Make/Model- 364

Instrument- 167

Multi-Eng - 43

Last 24 Hrs - 2

Last 30 Days- 5

Last 90 Days- 27

Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE CLIMBING INTO MOUNTAINOUS TERRAIN, PLT EXPERIENCED STRONG HEADWIND ON LEE SIDE OF CREST (MOUNTAIN WAVE). THE ACFT WAS OBSERVED TO BE FLYING AT A SLOW GROUNDSPED 100-150 FT ABOVE THE TERRAIN BEFORE IT STALLED AND SPUN.

Brief of Accident (Continued)

File No. - 43

1/29/89

MINDEN, NV

A/C Reg. No. N48688

Time (Lcl) - 1006 PST

Occurrence #1        LOSS OF CONTROL - IN FLIGHT  
Phase of Operation    CLIMB

Finding(s)

1. WEATHER CONDITION - UNFAVORABLE WIND
2. WEATHER CONDITION - MOUNTAIN WAVE
3. PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
4. TERRAIN CONDITION - MOUNTAINOUS/HILLY
5. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
6. STALL/SPIN

Occurrence #2        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    DESCENT - UNCONTROLLED

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE PILOT TO MAINTAIN ADEQUATE AIRSPEED AND AIRPLANE CONTROL. CONTRIBUTING TO THE ACCIDENT WAS THE  
MOUNTAINOUS TERRAIN AND MOUNTAIN WAVE CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 97 1/29/89 RENO,NV

A/C Reg. No. N4639W

Time (Lc1) - 1520 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	0	2
0	0	0	0

Type of Operation -INSTRUCTIONAL

Flight Conducted Under -14 CFR 91

Accident Occurred During -LANDING

Fire Crew  
NONE Pass

-----Aircraft Information-----

Make/Model - GULFSTREAM COMMANDER 112TCA

Landing Gear - TRICYCLE-RETRACTABLE

Max Gross Wt - 2950

No. of Seats - 4

Eng Make/Model - LYCOMING T0-360-C1A6D

Number Engines - 1

Engine Type - RECIPROCATING-CARBURETOR

Rated Power - 210 HP

ELT Installed/Activated - YES/NO

Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING

Method - N/A

Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 220/004 KTS

Visibility - 25.0 SM

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

LOCAL

ATC/Airspace

Type of Flight Plan - NONE

Type of Clearance - NONE

Type Apch/Lndg - TOUCH AND GO

Airport Proximity  
ON AIRPORT

Airport Data

RENO

Runway Ident - 25

Runway Lth/Wid - 6101/ 150

Runway Surface - ASPHALT

Runway Status - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE

SE LAND

Age - 43

Biennial Flight Review

Current - UNK/NR

Months Since - UNK/NR

Aircraft Type - UNK/NR

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total - 440

Make/Model- UNK/NR

Instrument- UNK/NR

Multi-Eng - UNK/NR

Last 24 Hrs - UNK/NR

Last 30 Days- UNK/NR

Last 90 Days- UNK/NR

Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

ON FOURTH POWER-OFF APPROACH TO TOUCH-AND-GO LANDING, THE PLT OVERSHOT THE CENTERLINE AND BANKED BACK STEEPLY, DRAGGING WINGTIP BEFORE TOUCHDOWN. THE CFI TOOK CONTROL AND EXECUTED A TAKEOFF AND FLEW AROUND THE PATTERN TO LAND AGAIN. IT WAS LATER DISCOVERED THAT THE LEFT WING WAS BENT.



Brief of Accident (Continued)

File No. - 97

1/29/89

RENO,NV

A/C Reg. No. N4639W

Time (Lcl) - 1520 PST

-----  
Occurrence #1 DRAGGED WING, ROTOR, POD, OR FLOAT  
Phase of Operation LANDING

Finding(s)

1. AIRCRAFT HANDLING - NOT MAINTAINED - DUAL STUDENT
  2. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
  3. TOUCH-AND-GO - PERFORMED - PILOT IN COMMAND(CFI)
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE PILOT TO MAINTAIN CONTROL OF THE AIRPLANE AND THE CFI'S INADEQUATE SUPERVISION OF THE PILOT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 104      5/01/89      GERLACH,NV      A/C Reg. No. N4439E      Time (Lcl) - 1300 PDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage		Injuries	
		SUBSTANTIAL			
Type of Operation	-INSTRUCTIONAL	Fire	Crew	Fatal	Serious
Flight Conducted Under	-14 CFR 91	NONE	Pass	0	0
Accident Occurred During	-LANDING			0	0
				Minor	None
				0	2
				0	0

-----Aircraft Information-----

Make/Model	- PIPER PA-38-112	Eng Make/Model	- LYCOMING O-235-L2C	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 1670	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 2	Rated Power	- 112 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING		Last Departure Point	OFF AIRPORT/STRIP
Method - N/A		RENO,NV	
Completeness - N/A		Destination	Airport Data
Basic Weather - VMC		LOCAL	SPOO RANCH STRIP
Wind Dir/Speed- CALM			Runway Ident - 18
Visibility - 20.0 SM		ATC/Airspace	Runway Lth/Wid - 2500/ 150
Lowest Sky/Clouds - 7000 FT SCATTERED		Type of Flight Plan - NONE	Runway Surface - DIRT
Lowest Ceiling - NONE		Type of Clearance - NONE	Runway Status - DRY
Obstructions to Vision- NONE		Type Apch/Lndg - GO AROUND	
Precipitation - NONE			
Condition of Light - DAYLIGHT			

-----Personnel Information-----

Pilot-In-Command	Age - 34	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 831
SE LAND	Months Since - 3	Make/Model- 22
GLIDER	Aircraft Type - SGS-233	Instrument- 63
		Multi-Eng - 1
		Last 24 Hrs - 1
		Last 30 Days- 8
		Last 90 Days- 8

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE INSTRUCTOR PLT (CFI) ELECTED TO DEMONSTRATE A SOFT FIELD LANDING AT AN UNIMPROVED RANCH STRIP. AS HE WAS ABOUT TO LAND, HE SAW MOUNDS OF SOFT DIRT ON THE STRIP & INCREASED POWER TO "CARRY THE GLIDE BEYOND THEM." SUBSEQUENTLY, HE REALIZED THERE WAS INSUFFICIENT RWY REMAINING TO COMPLETE THE LANDING, SO HE INITIATED A GO-AROUND. HE APPLIED FULL POWER & RAISED THE ACFT'S NOSE TO CLEAR A FENCE, BUT THE ACFT LOST FLYING SPEED & SETTLED INTO A FIELD BEYOND THE LANDING AREA. THE LANDING GEAR THEN HIT AN IRRIGATION PIPE & WAS DAMAGED.

Brief of Accident (Continued)

File No. - 104

5/01/89

GERLACH,NV

A/C Reg. No. N4439E

Time (Lcl) - 1300 PDT

Occurrence #1 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation LANDING - ABORTED

Finding(s)

1. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - ROUGH/UNEVEN
2. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND(CFI)
3. ABORTED LANDING - DELAYED - PILOT IN COMMAND(CFI)
4. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND(CFI)
5. STALL/MUSH

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
A DELAY BY THE PILOT IN ABORTING THE LANDING AND HIS FAILURE TO ASSURE SUFFICIENT AIRSPEED FOR THE  
GO-AROUND (ABORTED LANDING). A FACTOR RELATED TO THE ACCIDENT WAS: THE UNSUITABLE LANDING AREA THAT  
WAS SELECTED BY THE PILOT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 78      1/13/89      ALBANY, NY      A/C Reg. No. N2361K      Time (Lcl) - 1900 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage		Injuries			
		SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation	-PERSONAL	Fire	Crew	0	0	0	1
Flight Conducted Under	-14 CFR 91	NONE	Pass	0	0	0	0
Accident Occurred During	-LANDING						

-----Aircraft Information-----

Make/Model	- PIPER PA-38-112	Eng Make/Model	- LYCOMING O-235-L2C	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 1670	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 2	Rated Power	- 112 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary	Airport Proximity
Wx Briefing	- UNK/NR	Last Departure Point	OFF AIRPORT/STRIP
Method	- UNK/NR	GAITHERSBURG, MD	
Completeness	- UNK/NR	Destination	Airport Data
Basic Weather	- VMC	ALBANY, NY	
Wind Dir/Speed	- 320/020 KTS	ATC/Airspace	Runway Ident
Visibility	- 20.0 SM	Type of Flight Plan	- N/A
Lowest Sky/Clouds	- 3500 FT	Type of Clearance	- N/A
Lowest Ceiling	- 3500 FT OVERCAST	Type Apch/Lndg	- N/A
Obstructions to Vision	- NONE		
Precipitation	- NONE		
Condition of Light	- NIGHT(DARK)		

-----Personnel Information-----

Pilot-In-Command	Age - 50	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
PRIVATE	Current - YES	Total - 931	Last 24 Hrs - 4
SE LAND	Months Since - 13	Make/Model - 708	Last 30 Days - 21
	Aircraft Type - C-152	Instrument - 202	Last 90 Days - 43

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE ACFT COLLIDED WITH TREES AND TERRAIN, NEAR THE LAKESHORE VILLAGE APARTMENTS IN ALBANY, NY. THE PILOT, SOLE OCCUPANT, WAS NOT INJURED, HOWEVER, THE AIRCRAFT RECEIVING SUBSTANTIAL DAMAGE. THE PILOT SAID HE RAN OUT OF GAS BUT WAS AT A LOSS AS TO WHY, AFTER ONLY 4 HOURS OF FLIGHT.

Brief of Accident (Continued)

File No. - 78

1/13/89 ALBANY, NY

A/C Reg. No. N2361K

Time (Lc1) - 1900 EST

Occurrence #1 LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation CRUISE - HOLDING(IFR)

Finding(s)

1. FLUID, FUEL - EXHAUSTION
2. IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
3. FUEL CONSUMPTION CALCULATIONS - MISJUDGED - PILOT IN COMMAND

Occurrence #2 ON GROUND COLLISION WITH OBJECT  
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

4. OBJECT - FENCE
5. OBJECT - TREE(S)

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FUEL EXHAUSTION RESULTING FROM THE PILOT'S INADEQUATE IN-FLIGHT PLANNING AND MISJUDGED FUEL CONSUMPTION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 199      1/14/89      SHIRLEY, NY      A/C Reg. No. N6888G      Time (Lcl) - 1100 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	0	1
0	0	0	1

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - LANDING

Fire  
NONE

Crew  
Pass

-----Aircraft Information-----

Make/Model - CESSNA 150L  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 1600  
No. of Seats - 2

Eng Make/Model - CONTINENTAL O-200-A  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 100 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----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 - CLEAR  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
E. MARICHES, NY  
Destination  
SHIRLEY, NY

Airport Proximity  
ON AIRPORT

Airport Data

BROOKHAVEN  
Runway Ident - 33  
Runway Lth/Wid - 4325/ 150  
Runway Surface - ASPHALT  
Runway Status - DRY

ATC/Airspace

Type of Flight Plan - VFR  
Type of Clearance - NONE  
Type Apch/Lndg - TRAFFIC PATTERN

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
PRIVATE  
SE LAND

Age - 65  
Biennial Flight Review  
Current - YES  
Months Since - 15  
Aircraft Type - C-150

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)

Total - 325	Last 24 Hrs - UNK/NR
Make/Model- UNK/NR	Last 30 Days- UNK/NR
Instrument- UNK/NR	Last 90 Days- UNK/NR
Multi-Eng - UNK/NR	Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT REPORTED THAT ON HIS INITIAL APPROACH TO RWY 33 AT BROOKHAVEN AIRPORT HE BECAME LOW AND SLOW. HE STATED THAT THE AIRPLANE TOUCHED DOWN HARD, NOSE WHEEL FIRST. THE AIRPLANE THEN BOUNCED. THE PLT SAID HE ADDED POWER TO GO AROUND BUT THE AIRPLANE STALLED AND BOUNCED AGAIN. THE PLT CLOSED THE THROTTLE AND ATTEMPTED TO STOP THE PITCH OSCILLATIONS. THE AIRPLANE SUSTAINED SUBSTANTIAL DAMAGE AND CAME TO REST OFF THE END OF RWY IN A NOSE DOWN ATTITUDE. THE PLT REPORTED THAT THERE WERE NO AIRPLANE MALFUNCTIONS.

Brief of Accident (Continued)

File No. - 199

1/14/89

SHIRLEY, NY

A/C Reg. No. N6888G

Time (Lcl) - 1100 EST

Occurrence #1      HARD LANDING  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

1. PLANNED APPROACH - POOR - PILOT IN COMMAND
2. FLARE - IMPROPER - PILOT IN COMMAND

Occurrence #2      OVERRUN  
Phase of Operation      LANDING - ROLL

Finding(s)

3. RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND
4. PORPOISE - INADVERTENT -

Occurrence #3      MAIN GEAR COLLAPSED  
Phase of Operation      LANDING - ROLL

Finding(s)

5. LANDING GEAR, NOSE GEAR - OVERLOAD

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
A POORLY PLANNED FINAL APPROACH, AN IMPROPER LANDING FLARE, AND FAILURE OF THE PILOT TO CORRECT A BOUNCED LANDING.

Brief of Accident

File No. - 197      3/29/89      FARMINGDALE, NY

A/C Reg. No. N2553X

Time (Lcl) - 1455 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	0	2
0	0	0	0

Type of Operation      -INSTRUCTIONAL  
Flight Conducted Under    -14 CFR 91  
Accident Occurred During -MANEUVERING

Fire      Crew      0  
NONE      Pass      0

-----Aircraft Information-----

Make/Model      - ROBINSON R-22B  
Landing Gear    - SKID  
Max Gross Wt    - 1370  
No. of Seats    - 2

Eng Make/Model - LYCOMING O-320-BC  
Number Engines - 1  
Engine Type    - RECIPROCATING-CARBURETOR  
Rated Power    - 160 HP

ELT Installed/Activated - NO -N/A  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - NO RECORD OF BRIEFING  
Method           - N/A  
Completeness    - N/A  
Basic Weather    - VMC

Wind Dir/Speed- 240/010 KTS  
Visibility       - 10.0 SM  
Lowest Sky/Clouds - N/A  
Lowest Ceiling   - 4000 FT OVERCAST  
Obstructions to Vision- NONE  
Precipitation    - NONE  
Condition of Light   - DAYLIGHT

Itinerary

Last Departure Point  
FARMINGDALE, NY  
Destination  
LOCAL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance   - NONE  
Type Apch/Lndg      - NONE

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident      - N/A  
Runway Lth/Wid    - N/A  
Runway Surface    - N/A  
Runway Status     - N/A

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
COMMERCIAL  
  
HELICOPTER

Age - 25  
Biennial Flight Review  
Current           - UNK/NR  
Months Since      - UNK/NR  
Aircraft Type      - UNK/NR

Medical Certificate - UNK/NR  
Flight Time (Hours)  
Total              - 870  
Make/Model-       848  
Instrument- UNK/NR  
Multi-Eng - UNK/NR

Last 24 Hrs - 4  
Last 30 Days- 60  
Last 90 Days- 200  
Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DURING A QUICK STOP DEMONSTRATION BY THE INSTRUCTOR PILOT, THE AIRCRAFT SKIDS HIT THE GROUND HARD. THE MAIN ROTOR BLADES STRUCK THE TAIL AND BROKE IT OFF. THE HELICOPTER THEN ROLLED OVER ONTO ITS LEFT SIDE AND CAME TO REST. THE PILOT REPORTED THAT HE "APPARENTLY GOT TOO LOW" DURING THE DEMONSTRATION.



Brief of Accident (Continued)

File No. - 197

3/29/89

FARMINGDALE, NY

A/C Reg. No. N2553X

Time (Lcl) - 1455 EST

-----  
Occurrence #1      DRAGGED WING, ROTOR, POD, OR FLOAT  
Phase of Operation      MANEUVERING

Finding(s)

1. ROTORCRAFT FLIGHT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND(CFI)
  2. ALTITUDE - MISJUDGED - PILOT IN COMMAND(CFI)
- 

Occurrence #2      ROLL OVER  
Phase of Operation      MANEUVERING

-----  
-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT'S FAILURE TO CONTROL THE ALTITUDE OF THE HELICOPTER WHILE DEMONSTRATING A QUICK STOP MANEUVER TO A STUDENT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 133      1/09/89      WILMINGTON, OH      A/C Reg. No. N6Y      Time (Lcl) - 0901 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
DESTROYED

Injuries

Type of Operation - DEMO  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - DESCENT

Fire  
ON GROUND

Crew  
Pass

Fatal	Serious	Minor	None
1	0	0	0
1	0	0	0

-----Aircraft Information-----

Make/Model - SWEARINGEN SX-300  
Landing Gear - TRICYCLE-RETRACTABLE  
Max Gross Wt - 2400  
No. of Seats - 2

Eng Make/Model - LYCOMING IO-540-L1C5  
Number Engines - 1  
Engine Type - RECIP-FUEL INJECTED  
Rated Power - 300 HP

ELT Installed/Activated - UNK/NR  
Stall Warning System - UNK/NR

-----Environment/Operations Information-----

Weather Data

Wx Briefing - MILITARY  
Method - IN PERSON  
Completeness - FULL  
Basic Weather - VMC

Itinerary

Last Departure Point  
DAYTON, OH  
Destination  
LOCAL

Airport Proximity

OFF AIRPORT/STRIP

Wind Dir/Speed- 220/010 KTS  
Visibility - 15.0 SM  
Lowest Sky/Clouds - 3500 FT SCATTERED  
Lowest Ceiling - 12000 FT BROKEN  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

ATC/Airspace

Type of Flight Plan - IFR  
Type of Clearance - IFR  
Type Apch/Lndg - NONE

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
COMMERCIAL  
SE LAND, ME LAND  
GLIDER

Age - 55  
Biennial Flight Review  
Current - YES  
Months Since - 6  
Aircraft Type - SWIFT

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)	
Total	7754
Make/Model-	145
Instrument-	600
Multi-Eng -	2332
Last 24 Hrs -	5
Last 30 Days-	22
Last 90 Days-	30

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THIS SX-300 (SA-29) WAS A PROOF-OF-CONCEPT ACFT BEING DEMONSTRATED FOR THE USAF AT WRIGHT-PATTERSON AFB. THE ACFT WAS CLEARED TO RESTRICTED AREA R5503 AT 8000 FT FOR A DEMONSTRATION. RADIO COMMUNICATIONS WITH INDIANAPOLIS ARTCC WERE ROUTINE; THERE WERE NO DISTRESS TRANSMISSIONS. ABOUT 7 MINUTES AFTER TAKEOFF THE ACFT WAS INVOLVED IN AN INFLIGHT BREAKUP. THE WRECKAGE PATH WAS ABOUT 1 MILE IN LENGTH WITH THE RT WING 3000 FEET FROM THE MAIN WRECKAGE. THE RT WING LOWER ATTACHMENT FITTING EXHIBITED A FATIGUE AREA WHICH PROGRESSED TO FAILURE FROM A WELD NUGGET NEAR THE INTERSECTION OF TWO WELD BEADS. PRE-EXISTING CRACKS WERE ALSO PRESENT IN THE LUG WELD AREA OF THE LEFT WING UPPER AND LOWER ATTACHMENT FITTINGS. THE ACFT HAD BEEN IN SVC 571 HRS. IT WAS CERTIFIED AS AN EXPERIMENTAL CATEGORY EXHIBITION ACFT. THE DESIGNER HAD STATIC LOAD TESTED THE WINGS TO 6 G'S & SUSPECTED THE ACFT HAD BEEN SUBJECTED TO FLT LOADS APCHG 6 G'S. THE PLT TOLD AN ACQUAINTANCE THAT HE HAD ROUTINELY EXCEEDED THE "RED LINE" BY 85 MPH.

Brief of Accident (Continued)

File No. - 133

1/09/89

WILMINGTON, OH

A/C Reg. No. N6Y

Time (Lcl) - 0901 EST

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation CRUISE - NORMAL

Finding(s)

1. WING, WING ATTACHMENT FITTING - FATIGUE
2. MATERIAL DEFECT (INADEQUATE QUALITY CONTROL) - PRODUCTION/DESIGN PERSONNEL
3. WING, WING ATTACHMENT FITTING - FRACTURED
4. WING - SEPARATION

Occurrence #2 LOSS OF CONTROL - IN FLIGHT  
Phase of Operation CRUISE - NORMAL

Finding(s)

5. AIRCRAFT CONTROL - NOT POSSIBLE -

Occurrence #3 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation DESCENT - UNCONTROLLED

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FATIGUE AND RESULTING FAILURE OF THE RIGHT WING'S LOWER ATTACHMENT FITTING AND INADEQUATE QUALITY CONTROL BY THE  
SWEARINGEN SX-300 PRODUCTION/DESIGN PERSONNEL.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 36      1/19/89      WILLIAMSBURG, OH      A/C Reg. No. N8774B      Time (Lcl) - 1530 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -PERSONAL  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -LANDING

Aircraft Damage  
SUBSTANTIAL

Fire  
NONE

	Fatal	Serious	Minor	None
Crew	0	0	1	0
Pass	0	0	1	0

-----Aircraft Information-----

Make/Model      - CESSNA 172  
Landing Gear      - TRICYCLE-FIXED  
Max Gross Wt      - 2200  
No. of Seats      - 4

Eng Make/Model - CONTINENTAL O-300-A  
Number Engines - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 145 HP

ELT Installed/Activated - YES-UNK/NR  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - NO RECORD OF BRIEFING  
Method      - N/A  
Completeness      - N/A  
Basic Weather      - VMC  
Wind Dir/Speed- 230/012 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  
SAME AS ACC/INC  
Destination  
SAME AS ACC/INC

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance      - NONE  
Type Apch/Lndg      - STRAIGHT-IN  
FORCED LANDING

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident      - N/A  
Runway Lth/Wid      - N/A  
Runway Surface      - N/A  
Runway Status      - N/A

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
PRIVATE  
SE LAND

Age - 37  
Biennial Flight Review  
Current      - YES  
Months Since      - 5  
Aircraft Type - C-172

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total      - 780      Last 24 Hrs - 1  
Make/Model- 450      Last 30 Days- 12  
Instrument- 52      Last 90 Days- 42

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT COMPLETED A NORMAL RUNUP BEFORE ATTEMPTING A TAKEOFF. DURING THE INITIAL CLIMB THE ACFT STARTED LOSING POWER. THE PLT PUMPED THE THROTTLE TO MAINTAIN POWER, BUT COULD NOT MAINTAIN CLIMB RPM. THE ACFT WAS DITCHED IN 8 FT OF WATER APRX 1/2 MILE FROM THE RWY. EXAM OF THE WRECKAGE DISCLOSED THAT THE FUEL STRAINER GASKET WAS DEFECTIVE, WHICH CAUSED THE ENGINE TO RUN LEAN.

Brief of Accident (Continued)

File No. - 36

1/19/89

WILLIAMSBURG, OH

A/C Reg. No. N8774B

Time (Lc1) - 1530 EST

Occurrence #1      LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation      TAKEOFF - INITIAL CLIMB

Finding(s)

1. FUEL SYSTEM, STRAINER - IMPROPER

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
A DEFECTIVE GASKET IN THE FUEL STRAINER WHICH CAUSED A RESTRICTION IN FUEL FLOW DURING CLIMBOUT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 37      1/22/89      CAMBRIDGE, OH      A/C Reg. No. N14970      Time (Lcl) - 1130 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries		
Type of Operation - PERSONAL	Fire	Crew 0	Serious 0	Minor 0	None 1
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	0	1
Accident Occurred During -LANDING					

-----Aircraft Information-----

Make/Model - CESSNA 150	Eng Make/Model - CONTINENTAL O-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 - 2	Rated Power - 100 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NWS	Last Departure Point	ON AIRPORT
Method - TELEPHONE	SAME AS ACC/INC	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	CAMBRIDGE CITY
Wind Dir/Speed- UNK/NR	ATC/Airspace	Runway Ident - 22
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4300/ 75
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 53	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 283
SE LAND	Months Since - 11	Last 24 Hrs - 1
	Aircraft Type - C-150	Make/Model- UNK/NR
		Last 30 Days- 1
		Instrument- UNK/NR
		Last 90 Days- 5
		Multi-Eng - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DURING A LANDING ATTEMPT, THE PILOT EXPERIENCED A WIND CONDITION WHICH FORCED THE AIRPLANE RIGHT OF RWY 22. WHEN THE PILOT ADVANCED THE THROTTLE TO CORRECT THE DRIFT, THE ENGINE FAILED TO RESPOND. THE AIRPLANE CRASHED IN A SWAMPY AREA ADJACENT TO RWY 22. THE ENGINE EXAMINATION DISCLOSED THAT THE IDLE SPEED WAS ADJUSTED TOO LOW TO MAINTAIN ENGINE OPERATION.

Brief of Accident (Continued)

File No. - 37

1/22/89

CAMBRIDGE, OH

A/C Reg. No. N1497Q

Time (Lcl) - 1130 EST

Occurrence #1      LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
2. WEATHER CONDITION - CROSSWIND
3. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2      LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation      APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

4. FUEL SYSTEM, CARBURETOR - INCORRECT
5. MAINTENANCE, ADJUSTMENT - IMPROPER - OTHER MAINTENANCE PSNL

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      APPROACH - VFR PATTERN - FINAL APPROACH

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL IN CROSSWIND CONDITIONS WHILE ON SHORT FINAL AND THE IMPROPERLY  
ADJUSTED CARBURETOR IDLE FLOW.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 51      3/14/89      HENRYETTA,OK

A/C Reg. No. N9023D

Time (Lcl) - 1830 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	0	1
0	0	0	0

Type of Operation -PERSONAL  
Flight Conducted Under -14 CFR 91  
Accident Occurred During -LANDING

Fire NONE  
Crew Pass

-----Aircraft Information-----

Make/Model - PIPER PA-22-160  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 1840  
No. of Seats - 4

Eng Make/Model - LYCOMING O-290-D  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 125 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NWS  
Method - IN PERSON  
Completeness - UNK/NR  
Basic Weather - VMC  
Wind Dir/Speed- 350/011 KTS  
Visibility - 20.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - NONE  
Obstructions to Vision- BLOWING DUST  
Precipitation - NONE  
Condition of Light - DUSK

Itinerary

Last Departure Point  
WACO,TX  
Destination  
HASKELL,OK

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
COMMERCIAL  
SE LAND,ME LAND

Age - 26  
Biennial Flight Review  
Current - YES  
Months Since - 12  
Aircraft Type - C-150

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 1040  
Last 24 Hrs - 10  
Make/Model- 10  
Last 30 Days- 10  
Instrument- 100  
Last 90 Days- 10  
Multi-Eng - 180

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT SAID HE ENCOUNTERED UNFORECAST STRONG HEADWINDS AND BLOWING DUST. WHEN HE WAS 30 NM FROM HIS DESTINATION, HE LET THE LEFT FUEL TANK RUN DRY AND SWITCHED TO THE RIGHT TANK WHICH HAD 3.5 GALLONS REMAINING. HE WAS UNABLE TO GET THE ENGINE RUNNING AGAIN, AND MADE A FORCED LANDING. HE RAN INTO TREES DURING THE LANDING ROLL.



Brief of Accident (Continued)

File No. - 51

3/14/89

HENRYETTA,OK

A/C Reg. No. N9023D

Time (Lcl) - 1830 CST

-----  
Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      CRUISE - NORMAL

Finding(s)

1. IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
  2. FLUID,FUEL - STARVATION
  3. WEATHER CONDITION - UNFAVORABLE WIND
  4. WEATHER CONDITION - SAND/DUST STORM
- 

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

-----

Occurrence #3      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING - ROLL

Finding(s)

5. OBJECT - TREE(S)
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE LOSS OF ENGINE POWER FROM FUEL STARVATION DUE TO INADEQUATE INFLIGHT PLANNING/DECISION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 101      3/22/89      CAT00SA,OK      A/C Reg. No. N1790E      Time (Lcl) - 1830 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation -PERSONAL  
Flight Conducted Under -14 CFR 91  
Accident Occurred During -LANDING

Aircraft Damage  
SUBSTANTIAL  
Fire  
NONE

	Fatal	Serious	Minor	None
Crew	0	0	1	0
Pass	0	0	1	0

-----Aircraft Information-----

Make/Model - AERONCA 7AC  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 1220  
No. of Seats - 2

Eng Make/Model - CONTINENTAL A-65  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 65 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- 130/009 KTS  
Visibility - 15.0 SM  
Lowest Sky/Clouds - 10000 FT SCATTERED  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DUSK

Itinerary

Last Departure Point  
TULSA,OK  
Destination  
LOCAL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
PRIVATE  
SE LAND

Age - 46

Biennial Flight Review

Current - UNK/NR  
Months Since - UNK/NR  
Aircraft Type - UNK/NR

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total	- 1100	Last 24 Hrs	- 1
Make/Model-	400	Last 30 Days-	10
Instrument-	29	Last 90 Days-	30

Instrument Rating(s) - AIRPLANE

-----Narrative-----

ACCORDING TO THE PILOT, THE AIRPLANE WAS IN LEVEL FLIGHT WHEN THE ENGINE STOPPED PRODUCING POWER. HE WAS UNABLE TO RESTORE POWER AND HAD TO LAND ON ROUGH TERRAIN. HE SAID HE BELIEVED THE LOSS OF POWER WAS DUE TO CARBURETOR ICE. THE TEMPERATURE & DEW POINT WERE 50 & 25 DEG, RESPECTIVELY. ACCORDING TO CARBURETOR ICING CHARTS, CONDITIONS WERE CONDUCIVE TO CARBURETOR ICING AT GLIDE & CRUISE POWER.

Brief of Accident (Continued)

File No. - 101

3/22/89

CAT00SA,OK

A/C Reg. No. N1790E

Time (Lcl) - 1830 CST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      CRUISE - NORMAL

Finding(s)

1. WEATHER CONDITION - CARBURETOR ICING CONDITIONS
2. FUEL SYSTEM,CARBURETOR - ICE
3. CARBURETOR HEAT - IMPROPER USE OF - PILOT IN COMMAND

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

4. TERRAIN CONDITION - ROUGH/UNEVEN

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
CARBURETOR ICE AND IMPROPER USE OF CARBURETOR HEAT. FACTORS RELATED TO THE OCCURRENCE WERE:  
CARBURETOR ICING CONDITIONS AND ROUGH/UNEVEN TERRAIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 22      2/15/89      BEAVER MARSH,OR      A/C Reg. No. N95286      Time (Lcl) - 1220 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL					
Type of Operation -PERSONAL	Fire	Crew	Fatal	Injuries Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -LANDING			0	0	0	1

-----Aircraft Information-----

Make/Model - PIPER PA28-140	Eng Make/Model - LYCOMING O-320-E2A	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2150	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 150 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	BEND,OR	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	HEALDSBURG,CA	BEAVER MARSH STATE
Wind Dir/Speed- 170/010 KTS	ATC/Airspace	Runway Ident - 18
Visibility - 45.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4500/ 60
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - DIRT
Lowest Ceiling - 20000 FT OVERCAST	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - SNOW - DRY
Obstructions to Vision- NONE	FULL STOP	
Precipitation - NONE	PRECAUTIONARY LANDIN	
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 38	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 751
SE LAND	Months Since - 23	Make/Model- 730
	Aircraft Type - PA-28	Instrument- 25
		Multi-Eng - UNK/NR
		Last 24 Hrs - 1
		Last 30 Days- 29
		Last 90 Days- 29
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DURING CRUISE FLT, THE ENG MISFIRED AND BEGAN OPERATING ON 3 CYLINDERS. DUE TO ROUGH TERRAIN BTW HIMSELF AND A KNOWN SUITABLE AIRPORT, THE PLT ELECTED TO MAKE A PRECAUTIONARY LANDING AT A SMALL SNOW-COVERED AIRSTRIIP. THE ACFT NOSED OVER ON LANDING IN 4 FT OF SNOW. INSPECTION OF THE ENGINE REVEALED THE #3 CYLINDER EXHAUST VALVE HAD FAILED.

Brief of Accident (Continued)

File No. - 22

2/15/89

BEAVER MARSH,OR

A/C Reg. No. N95286

Time (Lcl) - 1220 PST

Occurrence #1 LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation CRUISE - NORMAL

Finding(s)

1. ENGINE ASSEMBLY, VALVE, EXHAUST - FAILURE, TOTAL

Occurrence #2 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 NOSE OVER  
Phase of Operation LANDING - ROLL  
2. TERRAIN CONDITION - MOUNTAINOUS/HILLY  
3. TERRAIN CONDITION - RUNWAY  
4. TERRAIN CONDITION - SNOW COVERED

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
AN LOSS OF ENGINE POWER DUE TO A FAILED EXHAUST VALVE. CONTRIBUTING TO THE ACCIDENT WAS THE SNOW COVERED TERRAIN ON  
WHICH A PRECAUTIONARY LANDING WAS MADE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 32      2/25/89      ALBANY,OR      A/C Reg. No. N97764      Time (Lcl) - 1410 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage	Injuries				
		SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation	-PERSONAL	Fire	Crew	0	0	0	1
Flight Conducted Under	-14 CFR 91	NONE	Pass	0	0	0	0
Accident Occurred During	-LANDING						

-----Aircraft Information-----

Make/Model	- STINSON 108-1	Eng Make/Model	- FRANKLIN 6A4-150-B3	ELT Installed/Activated	- YES/NO
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 2230	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 4	Rated Power	- 150 HP		

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - NO RECORD OF BRIEFING</p> <p>Method - N/A</p> <p>Completeness - N/A</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- 280/005 KTS</p> <p>Visibility - 20.0 SM</p> <p>Lowest Sky/Clouds - CLEAR</p> <p>Lowest Ceiling - NONE</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point</p> <p style="padding-left: 20px;">SAME AS ACC/INC</p> <p>Destination</p> <p style="padding-left: 20px;">LOCAL</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - NONE</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - TRAFFIC PATTERN</p> <p style="padding-left: 20px;">FULL STOP</p>	<p>Airport Proximity</p> <p style="padding-left: 20px;">ON AIRPORT</p> <p>Airport Data</p> <p style="padding-left: 20px;">ALBANY</p> <p>Runway Ident - 16</p> <p>Runway Lth/Wid - 3000/ 75</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - DRY</p>
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-----Personnel Information-----

Pilot-In-Command	Age - 44	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 20
	Months Since - N/A	Make/Model- 20
	Aircraft Type - N/A	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PILOT WAS ON THE FIRST SOLO FLIGHT WHEN THE ACFT WAS LANDED ON THE LEFT SIDE OF THE RWY BECAUSE OF THE CROSSWIND. WHEN THE LEFT WING DROPPED, THE STUDENT USED RIGHT RUDDER VS AILERON TO CORRECT, RESULTING IN A SWERVE TO THE RIGHT. THE LEFT WINGTIP WAS DRAGGED ON THE GROUND, THE LEFT MAIN GEAR FAILED AND THE ACFT DEPARTED THE RWY WHERE IT NOSED OVER.

Brief of Accident (Continued)

File No. - 32

2/25/89

ALBANY,OR

A/C Reg. No. N97764

Time (Lcl) - 1410 PST

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      LANDING - ROLL

Finding(s)

1. WEATHER CONDITION - CROSSWIND
2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
3. LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
4. FLIGHT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND

Occurrence #2      NOSE OVER  
Phase of Operation      LANDING - ROLL

Finding(s)

5. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
6. LANDING GEAR,WHEEL - OVERLOAD
7. LANDING GEAR,WHEEL - FAILURE,TOTAL
8. LANDING GEAR,TIRE - PENETRATED

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE STUDENT PILOT TO MAINTAIN DIRECTIONAL CONTROL OF THE AIRPLANE DURING LANDING AND THE IMPROPER  
USE OF FLIGHT CONTROLS. CONTRIBUTING TO THE ACCIDENT WERE THE CROSSWIND AND THE PILOT'S LACK OF TOTAL EXPERIENCE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 109      4/06/89      INDEPENDENCE, OR      A/C Reg. No. N504JT      Time (Lcl) - 1915 PDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

		Injuries			
		Fatal	Serious	Minor	None
Crew	0	0	0	0	1
Pass	0	0	0	0	0

Type of Operation      -MAINT TEST  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -MANEUVERING

Fire  
NONE

-----Aircraft Information-----

Make/Model      - THIESSEN RV-4  
Landing Gear      - TAILWHEEL-ALL FIXED  
Max Gross Wt      - 1500  
No. of Seats      - 2

Eng Make/Model      - LYCOMING O-320-E2D  
Number Engines      - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 150 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - NO RECORD OF BRIEFING  
Method      - N/A  
Completeness      - N/A  
Basic Weather      - VMC  
Wind Dir/Speed- 360/005 KTS  
Visibility      - 20.0 SM  
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  
LOCAL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident      - N/A  
Runway Lth/Wid      - N/A  
Runway Surface      - N/A  
Runway Status      - N/A

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance      - NONE  
Type Apch/Lndg      - FORCED LANDING

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
PRIVATE  
SE LAND

Age - 51  
Biennial Flight Review  
Current      - YES  
Months Since      - 11  
Aircraft Type      - C-172

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)

Total	- 638	Last 24 Hrs	- UNK/NR
Make/Model-	55	Last 30 Days-	4
Instrument-	2	Last 90 Days-	11

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT HAD INSTALLED A USED "SCIMITAR" PROP WHILE WAITING FOR HIS TO BE REFINISHED. DURING A SPEED RUN AT 190 MPH, WITH ABOUT 2900 RPM, PART OF PROP SEPARATED. THE PLT SHUT DOWN THE ENG & INITIATED AN EMERGENCY LANDING. HOWEVER, WHILE MANEUVERING TO AVOID WIRES, AT ABOUT 25 TO 50 FT AGL, THE ACFT STALLED, THEN MUSHED INTO THE GROUND.



Brief of Accident (Continued)

File No. - 109

4/06/89

INDEPENDENCE,OR

A/C Reg. No. N504JT

Time (Lcl) - 1915 PDT

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation CRUISE

Finding(s)

1. PROPELLER SYSTEM/ACCESSORIES, BLADE - FAILURE, TOTAL

Occurrence #2 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation LANDING

Finding(s)

2. OBJECT - WIRE, TRANSMISSION
3. MANEUVER - PERFORMED - PILOT IN COMMAND
4. STALL/MUSH

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PROPELLER. A RELATED FACTOR WAS THE OBSTRUCTION (TRANSMISSION LINE) IN THE EMERGENCY  
LANDING AREA.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 129      4/29/89      MILTON-FREEWTR,OR      A/C Reg. No. N4072G      Time (Lcl) - 1030 PDT

-----Basic Information-----

Type Operating Certificate-AGRICULTURAL AIRCRAFT	Aircraft Damage SUBSTANTIAL	Fatal	Injuries Serious	Minor	None
Type of Operation - AERIAL APPLICATION	Fire	Crew 0	0	1	0
Flight Conducted Under -14 CFR 137	NONE	Pass 0	0	0	0
Accident Occurred During -MANEUVERING					

-----Aircraft Information-----

Make/Model - BELL/SOLOY 47G3B2	Eng Make/Model - ALLISON 250-C20	ELT Installed/Activated - YES/YES
Landing Gear - SKID	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 3200	Engine Type - TURBOSHAFT	
No. of Seats - 3	Rated Power - 400 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	
Wind Dir/Speed- 180/003 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 42	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 7800
SE LAND	Months Since - 9	Make/Model- 450
HELICOPTER	Aircraft Type - BH-206	Instrument- 175
		Multi-Eng - 0
		Last 24 Hrs - 7
		Last 30 Days- 70
		Last 90 Days- 85
		Rotorcraft - 7750

Instrument Rating(s) - HELICOPTER

-----Narrative-----

THE PLT STATED THAT THE ENG LOST POWER DURING A PROCEDURE TURN-AROUND & THAT INSUFFICIENT SPEED & ALTITUDE WERE AVAILABLE TO PREVENT A HARD AUTOROTATIVE LANDING. DURING TOUCHDOWN, THE MAIN ROTOR SEVERED THE TAILBOOM. ONLY ABOUT 1/2 GAL OF FUEL WAS REMAINING IN THE INTACT FUEL SYSTEM.

Brief of Accident (Continued)

File No. - 129

4/29/89

MILTON-FREEWTR,OR

A/C Reg. No. N4072G

Time (Lc1) - 1030 PDT

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      MANEUVERING - AERIAL APPLICATION

Finding(s)

1. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
2. FLUID,FUEL - EXHAUSTION
3. FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND

Occurrence #2      FORCED LANDING  
Phase of Operation      MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Finding(s)

4. AUTOROTATION

Occurrence #3      HARD LANDING  
Phase of Operation      LANDING

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER PLANNING/DECISION BY THE PILOT, WHICH RESULTED IN FUEL EXHAUSTION FROM AN INADEQUATE SUPPLY OF FUEL.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 142      1/16/89      CAROLINA, PR      A/C Reg. No. N457SA      Time (Lcl) - 1814 AST

-----Basic Information-----

Type Operating Certificate	-COMMUTER	Aircraft Damage					
Name of Carrier	-VIEQUES AIR LINK, INC.	SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation	-SCHEDULED, DOMESTIC, PASSENGER	Fire	Crew	0	0	0	1
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	5
Accident Occurred During	-LANDING						

-----Aircraft Information-----

Make/Model	- BRITTEN-NORMAN BN-2A	Eng Make/Model	- LYCOMING O-540-E4C5	ELT Installed/Activated	- YES/NO
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 2	Stall Warning System	- YES
Max Gross Wt	- 6000	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 10	Rated Power	- 260 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary		Airport Proximity	
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point		OFF AIRPORT/STRIP	
Method	- N/A	VIEQUES, PR			
Completeness	- N/A	Destination		Airport Data	
Basic Weather	- VMC	SAN JUAN, PR		Runway Ident	- N/A
Wind Dir/Speed	- 120/005 KTS	ATC/Airspace		Runway Lth/Wid	- N/A
Visibility	- 12.0 SM	Type of Flight Plan	- VFR	Runway Surface	- N/A
Lowest Sky/Clouds	- 1200 FT SCATTERED	Type of Clearance	- NONE	Runway Status	- N/A
Lowest Ceiling	- 9000 FT BROKEN	Type Apch/Lndg	- FORCED LANDING		
Obstructions to Vision	- NONE				
Precipitation	- NONE				
Condition of Light	- DUSK				

-----Personnel Information-----

Pilot-In-Command	Age - 35	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
ATP, CFI	Current - YES	Total - 7200	Last 24 Hrs - 2
SE LAND, ME LAND	Months Since - 7	Make/Model - 2100	Last 30 Days - 60
	Aircraft Type - BN-2A	Instrument - 422	Last 90 Days - 150
		Multi-Eng - 4750	

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT ORDERED 42 GALLONS OF FUEL TO BE ADDED TO THE ACFT WHICH WOULD BRING THE TOTAL FUEL LOAD TO 60 GALLONS. THE LINEMAN ADDED 4.2 GALLONS BRINGING THE TOTAL FUEL LOAD TO 22.2 GALLONS. THE PLT DID NOT VERIFY THE FUEL LOAD PRIOR TO DEPARTURE. THE ACFT WAS FLOWN FROM SAN JUAN TO VIEQUES IN WHICH 12 GALLONS WERE BURNED. NO FUEL WAS ADDED AND THE PLT AGAIN DID NOT VERIFY HIS FUEL LOAD. THE FLT DEPARTED VIEQUES EN ROUTE BACK TO SAN JUAN WITH 10.2 GALLONS OF FUEL. ON DESCENT INTO SAN JUAN BOTH ENGINES FAILED AND A FORCED LANDING WAS MADE IN A SUGAR CANE FIELD. AFTER ROLLING ABOUT 100 YDS THE LEFT LDG GR COLLAPSED. POST CRASH EXAMINATION OF THE ACFT REVEALED IT CONTAINED 36 OUNCES OF FUEL WITH NO EVIDENCE OF LEAKAGE. THE ENGINES WERE OPERATED TO FULL POWER WITH NO EVIDENCE OF MECHANICAL FAILURE OR MALFUNCTION AFTER THE ACCIDENT. THE LINEMAN HAD BEEN HIRED AS A PART-TIME EMPLOYEE ON 1/2/89. HE STATED HE WAS WORKING ONLY HIS FIFTH DAY AND THAT HE HAD NO FORMAL REFUELING TRNG.

Brief of Accident (Continued)

File No. - 142

1/16/89

CAROLINA, PR

A/C Reg. No. N457SA

Time (Lcl) - 1814 AST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      DESCENT - NORMAL

Finding(s)

1. REFUELING - IMPROPER - FBO PERSONNEL
2. IMPROPER INITIAL TRAINING - FBO PERSONNEL
3. AIRCRAFT PREFLIGHT - IMPROPER - PILOT IN COMMAND
4. PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND
5. FLUID, FUEL - EXHAUSTION

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT

Occurrence #3      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - ROLL

Finding(s)

6. TERRAIN CONDITION - CROP
7. TERRAIN CONDITION - WET

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FUEL EXHAUSTION AND THE FAILURE OF THE PILOT TO INSURE THAT THE PROPER FUEL LOAD WAS PLACED ON THE AIRCRAFT FOR THE  
FLIGHT. CONTRIBUTING FACTORS INCLUDED THE IMPROPER REFUELING OF THE AIRCRAFT, IMPROPER INITIAL TRAINING OF THE  
REFUELER AND THE CROP, WHICH CAUSED SUBSTANTIAL DAMAGE TO THE AIRCRAFT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 105      1/14/89      FLORENCE, SC      A/C Reg. No. N5289Y      Time (Lcl) - 1748 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL		Injuries		
Type of Operation -BUSINESS	Fire	Crew	Fatal	Serious	Minor
Flight Conducted Under -14 CFR 91	IN FLIGHT	Pass	0	0	0
Accident Occurred During -LANDING			0	0	0
					1
					1

-----Aircraft Information-----

Make/Model - CESSNA T210N	Eng Make/Model - CONTINENTAL TIO-520	ELT Installed/Activated - UNK/NR
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 4000	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 310 HP	

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - FSS</p> <p>Method - TELEPHONE</p> <p>Completeness - UNK/NR</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- 360/007 KTS</p> <p>Visibility - 7.0 SM</p> <p>Lowest Sky/Clouds - N/A</p> <p>Lowest Ceiling - 1900 FT OVERCAST</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - RAIN</p> <p>Condition of Light - DUSK</p>	<p>Itinerary</p> <p>Last Departure Point FLORENCE, SC</p> <p>Destination GAINESVILLE, FL</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - IFR</p> <p>Type of Clearance - IFR</p> <p>Type Apch/Lndg - FORCED LANDING</p>	<p>Airport Proximity OFF AIRPORT/STRIP</p> <p>Airport Data</p> <p>FLORENCE CITY</p> <p>Runway Ident - 18</p> <p>Runway Lth/Wid - 6498/ 150</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - WET</p>
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-----Personnel Information-----

<p>Pilot-In-Command</p> <p>Certificate(s)/Rating(s)</p> <p>COMMERCIAL, CFI</p> <p>SE LAND, ME LAND</p>	<p>Age - 51</p> <p>Biennial Flight Review</p> <p>Current - YES</p> <p>Months Since - 17</p> <p>Aircraft Type - C-172</p>	<p>Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <p>Total - 8927</p> <p>Make/Model - 710</p> <p>Instrument - 75</p> <p>Multi-Eng - 1079</p> <p>Last 24 Hrs - 3</p> <p>Last 30 Days - 65</p> <p>Last 90 Days - 220</p>
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Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT REPORTED HEARING A KNOCKING SOUND WHILE CLIMBING THROUGH 5000 FT AFTER TKOF. THE KNOCKING WAS FOLLOWED BY A LOUD NOISE AND ENGINE VIBRATION. THE PLT REPORTED THAT HE APPARENTLY HAD LOST A CYLINDER AND OIL PRESSURE WAS DROPPING. HE DECLARED AN EMERGENCY AND RECEIVED RADAR VECTORS. AFTER DESCENDING THROUGH CLOUDS, THE PLT REPORTED THAT SMOKE AND FLAMES WERE COMING FROM THE COWLING. THE PLT ELECTED TO MAKE A FORCED LDG IN A SMALL FIELD. ON TOUCHDOWN, THE NOSEGEAR COLLAPSED AND THE ACFT NOSED OVER. EXAM OF THE ENGINE REVEALED TWO BROKEN CONNECTING RODS AND THAT TWO CRANKCASE THROUGH BOLTS WERE UNDERTORQUED. THE CRANKSHAFT MN BRG HAD ROTATED, BLOCKING THE OIL PASSAGE TO THE OTHER CRANKSHAFT BRGS. OVERHEATING OF THE CONNECTING ROD JOURNALS AND BRGS WAS EVIDENT. THE NO 2 CYLINDER HAD BEEN REPLACED JAN 2, 1989, 28 HRS BEFORE THE ACFT.

Brief of Accident (Continued)

File No. - 105

1/14/89

FLORENCE, SC

A/C Reg. No. N5289Y

Time (Lcl) - 1748 EST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation      CLIMB - TO CRUISE

Finding(s)

1. ENGINE ASSEMBLY, CYLINDER - UNDERTORQUED
2. MAINTENANCE, INSTALLATION - IMPROPER - COMPANY MAINTENANCE PSNL
3. FLUID, OIL - STARVATION
4. ENGINE ASSEMBLY, CONNECTING ROD - FAILURE, TOTAL

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      NOSE GEAR COLLAPSED  
Phase of Operation      LANDING - ROLL

Finding(s)

5. TERRAIN CONDITION - ROUGH/UNEVEN

Occurrence #4      NOSE OVER  
Phase of Operation      LANDING - ROLL

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF MAINTENANCE PERSONNEL TO PROPERLY TORQUE THE THRU BOLTS DURING NUMBER 2 CYLINDER INSTALLATION.  
CONTRIBUTING FACTORS TO THE ACCIDENT WERE TERRAIN FEATURES WHICH LED TO THE COLLAPSE OF THE NOSE GEAR DURING LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 49      1/01/89      AUSTIN, TX      A/C Reg. No. N66385      Time (Lcl) - 1710 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage	Injuries				
		SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation	-PERSONAL	Fire	Crew	0	0	0	1
Flight Conducted Under	-14 CFR 91	NONE	Pass	0	0	0	0
Accident Occurred During	-DESCENT						

-----Aircraft Information-----

Make/Model	- CESSNA 150	Eng Make/Model	- CONTINENTAL O-200-A	ELT Installed/Activated	- YES-UNK/NR
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 1600	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 2	Rated Power	- 100 HP		

-----Environment/Operations Information-----

Weather Data		Itinerary	Airport Proximity	
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP	
Method	- N/A	LIVINGSTON, TX		
Completeness	- N/A	Destination	Airport Data	
Basic Weather	- VMC	SAME AS ACC/INC	Runway Ident	- N/A
Wind Dir/Speed	- 160/004 KTS	ATC/Airspace	Runway Lth/Wid	- N/A
Visibility	- 20.0 SM	Type of Flight Plan	Runway Surface	- N/A
Lowest Sky/Clouds	- N/A	Type of Clearance	Runway Status	- N/A
Lowest Ceiling	- 3100 FT OVERCAST	Type Apch/Lndg	- FORCED LANDING	
Obstructions to Vision	- NONE			
Precipitation	- NONE			
Condition of Light	- DAYLIGHT			

-----Personnel Information-----

Pilot-In-Command	Age - 41	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
PRIVATE	Current - YES	Total - 77	Last 24 Hrs - 4
SE LAND	Months Since - 1	Make/Model - 24	Last 30 Days - 10
	Aircraft Type - C-150	Instrument - 1	Last 90 Days - 31

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT WAS RETURNING FROM A CROSS-COUNTRY FLIGHT WHEN THE ENGINE STOPPED PRODUCING POWER. DURING THE FORCED LANDING, THE AIRPLANE STRUCK WIRES, THEN THE TERRAIN. THE FUEL SYSTEM WAS CHECKED, AND NO BREAKS WERE FOUND. THERE WAS LITTLE OR NO FUEL LEFT IN THE TANKS. THE ENGINES RAN NORMALLY ON ANOTHER AIRPLANE.



Brief of Accident (Continued)

File No. - 49

1/01/89

AUSTIN, TX

A/C Reg. No. N66385

Time (Lcl) - 1710 CST

Occurrence #1 LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
2. FLUID, FUEL - EXHAUSTION
3. REFUELING - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation DESCENT - EMERGENCY

Finding(s)

4. OBJECT - WIRE, TRANSMISSION

Occurrence #4 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation DESCENT - EMERGENCY

Finding(s)

5. TERRAIN CONDITION - ROADWAY/HIGHWAY

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT DID NOT HAVE AN ADEQUATE FUEL SUPPLY TO COMPLETE THE FLIGHT. THE PLTS FLT PLANNING WAS INADEQUATE AND THE  
IGNORED OPPORTUNITIES TO OBTAIN FUEL ENROUTE LED TO FUEL EXHAUSTION, PRIOR TO REACHING DESTINATION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 176      1/22/89      SANTA FE, TX      A/C Reg. No. N9961      Time (Lcl) - 1530 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL					
Type of Operation - PERSONAL	Fire	Crew	Fatal	Injuries		
Flight Conducted Under -14 CFR 91	NONE	Pass	0	Serious	Minor	None
Accident Occurred During -APPROACH			0	1	0	0
			0	0	0	0

-----Aircraft Information-----

Make/Model - PITTS S1A	Eng Make/Model - LYCOMING O-320	ELT Installed/Activated - NO -N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1100	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 1	Rated Power - 150 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
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	REBEL FIELD
Wind Dir/Speed- UNK/NR	ATC/Airspace	Runway Ident - 17
Visibility - 5.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 1600/ 100
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - NONE	Type Apch/Lndg - STRAIGHT-IN	Runway Status - DRY
Obstructions to Vision- NONE	FULL STOP	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 54	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 1450
SE LAND	Months Since - 19	Make/Model- 394
	Aircraft Type - C-152	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 1
		Last 30 Days- 5
		Last 90 Days- 10
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

ACFT SETTLED ON FINAL APP, STRUCK PWR LINES, AND SUBSEQUENTLY CRASHED ON THE AIRPORT. PLT WAS FAMILIAR WITH THE AIRPORT AND THE LINES WERE MARKED WITH HIGH VIS BALLS. PLT COULD NOT REMEMBER ANYTHING ABOUT THE ACCIDENT.

Brief of Accident (Continued)

File No. - 176

1/22/89

SANTA FE, TX

A/C Reg. No. N9961

Time (Lc1) - 1530 CST

Occurrence #1 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. OBJECT - WIRE, TRANSMISSION (MARKED)
2. CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation DESCENT - UNCONTROLLED

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT IN COMMAND FAILED TO MAINTAIN ADEQUATE ALTITUDE AND CLEARANCE ON FINAL APPROACH.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 28      2/02/89      RICHARDS, TX

A/C Reg. No. N6675H

Time (Lcl) - 1745 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	1	0
0	0	1	0

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - DESCENT

Fire NONE  
Crew Pass

-----Aircraft Information-----

Make/Model - PIPER J-3C-65  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 1220  
No. of Seats - 2

Eng Make/Model - CONTINENTAL C-85-8F  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 85 HP

ELT Installed/Activated - NO -N/A  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC

Wind Dir/Speed- 320/014 KTS  
Visibility - 7.0 SM  
Lowest Sky/Clouds - N/A  
Lowest Ceiling - 800 FT OVERCAST  
Obstructions to Vision- FOG  
Precipitation - RAIN  
Condition of Light - DUSK

Itinerary

Last Departure Point  
SAME AS ACC/INC  
Destination  
LOCAL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - TRAFFIC PATTERN  
FULL STOP

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - 18  
Runway Lth/Wid - 2600/ 40  
Runway Surface - GRASS/TURF  
Runway Status - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
COMMERCIAL  
SE LAND, ME LAND

Age - 45  
Biennial Flight Review  
Current - YES  
Months Since - 5  
Aircraft Type - C-206

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)	
Total - 3750	Last 24 Hrs - UNK/NR
Make/Model- 250	Last 30 Days- 2
Instrument- UNK/NR	Last 90 Days- 2
Multi-Eng - 10	Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT HAD DEPARTED HIS PRIVATE AIRSTRIP 15 MINUTES EARLIER AND WAS TURNING FINAL FOR A LANDING TO THE SOUTH WHEN THE AIRPLANE HIT FIRST A TREE AND THEN THE GROUND. THE PILOT STATED A GUST OF WIND MADE THE AIRPLANE UNCONTROLLABLE AND BLEW IT INTO THE TREE. THE PILOT ALSO STATED THE WIND WAS FROM THE WEST-SOUTHWEST AT AN ESTIMATED 18 KNOTS GUSTING TO 25 KNOTS. WEATHER LISTED ABOVE UNDER WEATHER DATA WAS OBSERVED AT COLLEGE STATION, TEXAS, 38 NM FROM THE ACCIDENT SITE.

Brief of Accident (Continued)

File No. - 28

2/02/89

RICHARDS, TX

A/C Reg. No. N6675H

Time (Lcl) - 1745 CST

Occurrence #1      LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      APPROACH - VFR PATTERN - BASE LEG/BASE TO FINAL

Finding(s)

1. WEATHER CONDITION - CROSSWIND
2. WEATHER CONDITION - HIGH WIND
3. WEATHER CONDITION - GUSTS
4. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
5. WIND INFORMATION - DISREGARDED - PILOT IN COMMAND
6. COMPENSATION FOR WIND CONDITIONS - NOT POSSIBLE - PILOT IN COMMAND
7.      OVER CONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND

Occurrence #2      IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      APPROACH - VFR PATTERN - BASE LEG/BASE TO FINAL

Finding(s)

8. OBJECT - TREE(S)

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      DESCENT - UNCONTROLLED

Finding(s)

9. TERRAIN CONDITION - GROUND

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S INADEQUATE PREFLIGHT PLANNING/PREPARATION IN DISREGARDING WIND INFORMATION. CONTRIBUTING TO THE ACCIDENT  
WERE THE GUSTING CROSSWIND CONDITIONS AND THE PILOT'S OVERCONFIDENCE IN PERSONAL ABILITY.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 113      2/26/89      EL PASO, TX      A/C Reg. No. N91363      Time (Lcl) - 1650 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage	Injuries			
		SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation	-PERSONAL	Fire	Crew 0	1	0	0
Flight Conducted Under	-14 CFR 91	NONE	Pass 0	0	0	0
Accident Occurred During	-APPROACH					

-----Aircraft Information-----

Make/Model	- ICA BRASOR IS-28B2	Eng Make/Model	- N/A	ELT Installed/Activated	- NO -N/A
Landing Gear	- HULL	Number Engines	- N/A	Stall Warning System	- NO
Max Gross Wt	- 1301	Engine Type	- N/A		
No. of Seats	- 2	Rated Power	- N/A		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing	Last Departure Point	ON AIRPORT
Method	SAME AS ACC/INC	
Completeness	Destination	Airport Data
Basic Weather	LOCAL	WEST TEXAS
Wind Dir/Speed	ATC/Airspace	Runway Ident
Visibility	Type of Flight Plan	- 26
Lowest Sky/Clouds	- NONE	Runway Lth/Wid
Lowest Ceiling	- NONE	- 4100/ 50
Obstructions to Vision	- NONE	Runway Surface
Precipitation	- NONE	- ASPHALT
Condition of Light	- DAYLIGHT	Runway Status
	- TRAFFIC PATTERN	- DRY

-----Personnel Information-----

Pilot-In-Command	Age - 48	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
PRIVATE, MILITARY, FOREIGN	Current - YES	Total - 214	Last 24 Hrs - 2
	Months Since - 0	Make/Model - 44	Last 30 Days - 2
GLIDER	Aircraft Type - IS-28B2	Instrument - UNK/NR	Last 90 Days - 2
		Multi-Eng - 0	Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT STATED THAT AFTER ABOUT 25 MIN OF FLYING IN MODERATE TURBULENCE, HE DECIDED TO LAND. AS HE WAS TURNING FROM RIGHT BASE TO FINAL, HE LOST CONTROL OF THE GLIDER & IT ENTERED A RIGHT SPIN. AFTER 2 TURNS, HE RECOVERED FROM THE SPIN & WAS LEVELING THE GLIDER, WHEN IT STRUCK A TREE & THE GROUND.

Brief of Accident (Continued)

File No. - 113

2/26/89

EL PASO, TX

A/C Reg. No. N91363

Time (Lc1) - 1650 MST

Occurrence #1      LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      APPROACH - VFR PATTERN - BASE LEG/BASE TO FINAL

Finding(s)

1. WEATHER CONDITION - TURBULENCE
2. AIRSPEED - INADEQUATE - PILOT IN COMMAND
3. STALL/SPIN - INADVERTENT - PILOT IN COMMAND

Occurrence #2      IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      DESCENT - UNCONTROLLED

Finding(s)

4. OBJECT - TREE(S)

Occurrence #3      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      DESCENT - UNCONTROLLED

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE PILOT TO MAINTAIN ADEQUATE AIRSPEED, WHILE MANEUVERING TO LAND IN TURBULENT WEATHER,  
WHICH RESULTED IN A STALL/SPIN AND SUBSEQUENT COLLISION WITH A TREE AND THE GROUND. TURBULENCE WAS A FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 182      2/26/89      EL PASO, TX      A/C Reg. No. N375MC      Time (Lcl) - 1645 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage	Injuries			
		SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation	-GLIDER TOW	Fire	0	0	1	0
Flight Conducted Under	-14 CFR 91	Crew	0	0	0	0
Accident Occurred During	-APPROACH	Pass	0	0	0	0

-----Aircraft Information-----

Make/Model	- INTERMOUNTAIN CALLAIR A-9B	Eng Make/Model	- LYCOMING IO-540-G1G5	ELT Installed/Activated	- NO -N/A
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 3000	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 1	Rated Power	- 290 HP		

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - NO RECORD OF BRIEFING</p> <p>Method - N/A</p> <p>Completeness - N/A</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- 270/011 KTS</p> <p>Visibility - 70.0 SM</p> <p>Lowest Sky/Clouds - 250 FT SCATTERED</p> <p>Lowest Ceiling - NONE</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point</p> <p>SAME AS ACC/INC</p> <p>Destination</p> <p>LOCAL</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - NONE</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - STRAIGHT-IN</p> <p>FORCED LANDING</p>	<p>Airport Proximity</p> <p>ON AIRPORT</p> <p>Airport Data</p> <p>WEST TEXAS</p> <p>Runway Ident - 26</p> <p>Runway Lth/Wid - 4100/ 50</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - DRY</p>
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-----Personnel Information-----

Pilot-In-Command	Age - 47	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE, COMMERCIAL, FOREIGN	Current - YES	Total - 1934
SE LAND	Months Since - 9	Make/Model- 13
GLIDER	Aircraft Type - C-150	Instrument- 50
		Last 24 Hrs - 2
		Last 30 Days- 20
		Last 90 Days- 29

Instrument Rating(s) - NONE

-----Narrative-----

ACFT EXPERIENCED AN ENG FAILURE DURING A LOW PASS OVER THE AIRPORT TO DROP A GLIDER TOW ROPE. THE ACFT SUBSEQUENTLY STALLED AND IMPACTED THE GROUND AFTER THE PLT FAILED TO PROPERLY SET UP THE ACFT FOR A FORCED LANDING. INVESTIGATION REVEALED ABOUT 5 GALLONS OF FUEL IN THE RT TANK AND ZERO IN THE LEFT. THE RIGHT TANK WAS SELECTED WHEN THE ACFT WAS INSPECTED. NO FUEL WAS FOUND IN EITHER THE FLOW DIVIDER OR THE LINES.



Brief of Accident (Continued)

File No. - 182

2/26/89

EL PASO, TX

A/C Reg. No. N375MC

Time (Lc1) - 1645 MST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      MANEUVERING

Finding(s)

1. FLUID, FUEL - STARVATION
2. FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

3. EMERGENCY PROCEDURE - IMPROPER - PILOT IN COMMAND

Occurrence #3      LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

4. AIRSPEED(VS) - NOT MAINTAINED - PILOT IN COMMAND
5. STALL/SPIN - INADVERTENT -

Occurrence #4      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      DESCENT - UNCONTROLLED

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
ENGINE FAILURE DUE TO THE PILOT'S FAILURE TO SELECT THE FULLEST TANKS AND, FAILURE TO MAINTAIN ADEQUATE FLYING SPEED.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 50      3/03/89      SAN ANTONIO, TX      A/C Reg. No. N5999M      Time (Lcl) - 0245 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage		Injuries			
		DESTROYED		Fatal	Serious	Minor	None
Type of Operation	-BUSINESS	Fire	Crew	0	0	0	1
Flight Conducted Under	-14 CFR 91	ON GROUND	Pass	0	0	0	1
Accident Occurred During	-LANDING						

-----Aircraft Information-----

Make/Model - CESSNA 421B	Eng Make/Model - CONTINENTAL GTSIO-520-H	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 7450	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 7	Rated Power - 375 HP	

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - FSS</p> <p>Method - TELEPHONE</p> <p>Completeness - FULL</p> <p>Basic Weather - IMC</p> <p>Wind Dir/Speed- 150/006 KTS</p> <p>Visibility - .250 SM</p> <p>Lowest Sky/Clouds - UNK/NR</p> <p>Lowest Ceiling - 100 FT OBSCURED</p> <p>Obstructions to Vision- FOG</p> <p>Precipitation - DRIZZLE</p> <p>Condition of Light - NIGHT(DARK)</p>	<p>Itinerary</p> <p>Last Departure Point</p> <p>MEMPHIS, TN</p> <p>Destination</p> <p>SAME AS ACC/INC</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - IFR</p> <p>Type of Clearance - IFR</p> <p>Type Apch/Lndg - ILS-COMPLETE</p> <p>TRAFFIC PATTERN</p> <p>FULL STOP</p>	<p>Airport Proximity</p> <p>ON AIRPORT</p> <p>Airport Data</p> <p>SAN ANTONIO INTERNATIONAL</p> <p>Runway Ident - 30</p> <p>Runway Lth/Wid - 8502/ 150</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - WET</p>
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-----Personnel Information-----

Pilot-In-Command	Age - 45	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 732
ME LAND	Months Since - 13	Make/Model- 34
	Aircraft Type - C-421-B	Instrument- 194
		Multi-Eng - 572
		Last 24 Hrs - 8
		Last 30 Days- 11
		Last 90 Days- 36

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE AIRPLANE HAD MADE ONE APPROACH, FOLLOWED BY A MISSED APPROACH DURING A DARK NIGHT WITH LOW CEILINGS AND LOW VISIBILITY. DURING THE NEXT APPROACH THE AIRPLANE WAS HIGH ON THE GLIDE SLOPE AND TOUCHED DOWN FAST AND LONG. THE AIRPLANE HIT THE TERRAIN 300 FEET PAST THE END OF THE RUNWAY, HIT A SECOND TIME 115 FEET FURTHER DOWN, THEN FLEW INTO THE ILS LOCALIZER. PART OF THE LEFT WING BURNED. THERE WERE NO INDICATIONS OF AN ATTEMPTED GO-AROUND.

Brief of Accident (Continued)

File No. - 50

3/03/89

SAN ANTONIO, TX

A/C Reg. No. N5999M

Time (Lcl) - 0245 CST

Occurrence #1            OVERRUN  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

1. LIGHT CONDITION - DARK NIGHT
2. WEATHER CONDITION - LOW CEILING
3. IFR PROCEDURE - NOT FOLLOWED - PILOT IN COMMAND
4. WEATHER CONDITION - OBSCURATION
5. PROPER GLIDEPATH - NOT FOLLOWED - PILOT IN COMMAND
6. PLANNED APPROACH - NOT FOLLOWED - PILOT IN COMMAND
7. GO-AROUND - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2            IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN  
8. TERRAIN CONDITION - ROUGH/UNEVEN

Occurrence #3            IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

9. OBJECT - APPROACH LIGHT/NAVAID

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE PILOT TO FOLLOW THE PROPER PROCEDURES/DIRECTIVES BY NOT FOLLOWING THE GLIDESLOPE WHICH RESULTED  
IN NOT BEING ABLE TO ATTAIN THE PROPER TOUCHDOWN POINT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 83      3/03/89      BASTROP, TX      A/C Reg. No. N7407T      Time (Lcl) - 0015 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -BUSINESS  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -LANDING

Aircraft Damage

SUBSTANTIAL

Fire

NONE

Fatal

0

Crew

0

Pass

0

Injuries

Serious

0

Minor

0

None

1

0

-----Aircraft Information-----

Make/Model      - CESSNA 172  
Landing Gear      - TRICYCLE-FIXED  
Max Gross Wt      - 2200  
No. of Seats      - 4

Eng Make/Model      - CONTINENTAL O-300-C

Number Engines      - 1

Engine Type      - RECIPROCATING-CARBURETOR

Rated Power      - 145 HP

ELT Installed/Activated - YES/NO

Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - FSS  
Method      - TELEPHONE  
Completeness      - FULL

Basic Weather      - IMC

Wind Dir/Speed- 180/010 KTS

Visibility      - 5.0 SM

Lowest Sky/Clouds      - UNK/NR

Lowest Ceiling      - 400 FT OVERCAST

Obstructions to Vision- FOG

Precipitation      - NONE

Condition of Light      - NIGHT(BRIGHT)

Itinerary

Last Departure Point

DALLAS, TX

Destination

HARLINGEN, TX

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

Runway Ident      - N/A

Runway Lth/Wid      - N/A

Runway Surface      - N/A

Runway Status      - N/A

ATC/Airspace

Type of Flight Plan      - NONE

Type of Clearance      - NONE

Type Apch/Lndg      - FORCED LANDING

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE

SE LAND

Age - 38

Biennial Flight Review

Current      - YES

Months Since      - 14

Aircraft Type      - C-172

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total      - 620

Make/Model- 500

Instrument- 30

Last 24 Hrs - 5

Last 30 Days- 8

Last 90 Days- 25

Instrument Rating(s) - NONE

-----Narrative-----

THE NON-INSTRUMENT RATED PILOT RECEIVED TWO WEATHER BRIEFINGS AND WAS TOLD VFR FLIGHT WAS NOT RECOMMENDED. HE FLEW TO TWO TOWNS WHICH WERE BOTH IFR, THEN TO ANOTHER, WHERE HE LET DOWN THROUGH THE CLOUDS. HE WAS CIRCLING A TOWN, WHEN THE ENGINE QUIT DUE TO FUEL EXHAUSTION. DURING THE FORCED LANDING ROLL, THE AIRPLANE RAN INTO TREES.

Brief of Accident (Continued)

File No. - 83

3/03/89

BASTROP, TX

A/C Reg. No. N7407T

Time (Lcl) - 0015 CST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      MANEUVERING

Finding(s)

1. WEATHER CONDITION - LOW CEILING
2. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
3. WEATHER CONDITION - FOG
4. FLUID, FUEL - EXHAUSTION

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING - ROLL

Finding(s)

5. OBJECT - TREE(S)

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE PREFLIGHT PLANNING AND PREPARATION BY THE PILOT WHICH RESULTED IN FUEL EXHAUSTION. CONTRIBUTING TO THE  
ACCIDENT WERE THE LOW CEILINGS AND FOG.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 181      4/17/89      ATHENS, TX      A/C Reg. No. N50703      Time (Lcl) - 1545 CDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries			
Type of Operation - PERSONAL	Fire	Crew 0	Serious 0	Minor 1	None 0	
Flight Conducted Under - 14 CFR 91	NONE	Pass 0	0	1	0	
Accident Occurred During - LANDING						

-----Aircraft Information-----

Make/Model - CESSNA 150J	Eng Make/Model - CONTINENTAL O-200A	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1600	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 100 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	MALAKOFF, TX	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	
Wind Dir/Speed- 200/012 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 12.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 4000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 60	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 5000
SE LAND	Months Since - 5	Make/Model- UNK/NR
	Aircraft Type - UNK/NR	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- 2
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT DID NOT CHECK THE FUEL TANKS DURING THE PREFLIGHT, BUT HE SAID THE GAGES INDICATED HE HAD SUFFICIENT FUEL WHEN THE ENGINE SPUTTERED AND QUIT, "INDICATING FUEL STARVATION." HE SAID THAT DURING THE LANDING ROLL STRONG, GUSTY, CROSSWINDS CAUGHT THE AIRPLANE AND CAUSED IT TO FLIP OVER. ONE GALLON OF FUEL WAS FOUND IN EACH WING TANK AFTER THE ACDT. THERE WAS NO SMELL OF FUEL LEAKAGE.

Brief of Accident (Continued)

File No. - 181

4/17/89

ATHENS, TX

A/C Reg. No. N50703

Time (Lcl) - 1545 CDT

-----  
Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      CRUISE - NORMAL

Finding(s)

1. FUEL SYSTEM - EXHAUSTION
  2. AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
- 

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

-----

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING - ROLL

Finding(s)

3. WEATHER CONDITION - CROSSWIND
  4. WEATHER CONDITION - GUSTS
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FUEL EXHAUSTION DUE TO INADEQUATE PREFLIGHT BY THE PILOT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 180      5/20/89      DECATUR, TX      A/C Reg. No. N5874P      Time (Lcl) - 1630 CDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -PERSONAL  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -TAKEOFF

Aircraft Damage

SUBSTANTIAL

Fire

NONE

Crew

Pass

Fatal

0

0

Injuries

Serious

0

0

Minor

0

0

None

1

1

-----Aircraft Information-----

Make/Model      - PIPER PA-24-250  
Landing Gear      - TRICYCLE-RETRACTABLE  
Max Gross Wt      - 2800  
No. of Seats      - 4

Eng Make/Model      - LYCOMING O-540-A1A5

Number Engines      - 1

Engine Type      - RECIPROCATING-CARBURETOR

Rated Power      - 250 HP

ELT Installed/Activated - YES/YES

Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - NO RECORD OF BRIEFING

Method      - N/A

Completeness      - N/A

Basic Weather      - VMC

Wind Dir/Speed- 160/010 KTS

Visibility      - 7.0 SM

Lowest Sky/Clouds      - CLEAR

Lowest Ceiling      - NONE

Obstructions to Vision- NONE

Precipitation      - NONE

Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point

DECATUR, TX

Destination

LOCAL

ATC/Airspace

Type of Flight Plan      - NONE

Type of Clearance      - NONE

Type Apch/Lndg      - FORCED LANDING

Airport Proximity

ON AIRPORT

Airport Data

DECATUR MUNICIPAL

Runway Ident      - 17

Runway Lth/Wid      - 2550/ 60

Runway Surface      - ASPHALT

Runway Status      - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL, CFI

SE LAND, ME LAND

Age      - 38

Biennial Flight Review

Current      - YES

Months Since      - 12

Aircraft Type      - C-152

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total      - 2295

Make/Model-      23

Instrument-      142

Multi-Eng      - 522

Last 24 Hrs      - 2

Last 30 Days-      65

Last 90 Days-      142

Instrument Rating(s)      - AIRPLANE

-----Narrative-----

THE PILOT STATED THAT IMMEDIATELY AFTER TAKEOFF, THE EXHAUST SYSTEM HEATER MUFF FAILED, RESULTING IN EXTREME HEAT AND SMOKE UNDER THE COWLING, AND LOTS OF SMOKE IN THE CABIN. NEXT CAME A LOSS OF ENGINE POWER, AND THE PILOT WAS NOT ABLE TO GET THE AIRPLANE ALIGNED WITH THE RUNWAY FOR THE FORCED LANDING. AFTER THE HARD LANDING, THE NOSE GEAR COLLAPSED. THE MOST RECENT ANNUAL INSPECTION WAS CONDUCTED 10 OPERATING HOURS BEFORE THE ACFT.



Brief of Accident (Continued)

File No. - 180

5/20/89

DECATUR, TX

A/C Reg. No. N5874P

Time (Lc1) - 1630 CDT

Occurrence #1      LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation      TAKEOFF - INITIAL CLIMB

Finding(s)

1. EXHAUST SYSTEM, MUFFLER - FAILURE, PARTIAL
2. MAINTENANCE, INSPECTION OF AIRCRAFT - INADEQUATE - OTHER MAINTENANCE PSNL

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

3. EXHAUST SYSTEM, MUFFLER - SMOKE
4. EXHAUST SYSTEM, MUFFLER - OVERTEMPERATURE

Occurrence #3      NOSE GEAR COLLAPSED  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

5. LANDING GEAR, NOSE GEAR - OVERLOAD

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE INSPECTION OF THE EXHAUST SYSTEM BY THE MAINTENANCE PERSONNEL DURING THE LATEST ANNUAL INSPECTION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 150      1/08/89      PARK CITY,UT      A/C Reg. No. N16733      Time (Lcl) - 1427 MST

-----Basic Information-----

Type Operating Certificate-ON-DEMAND AIR TAXI

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	0	1
0	0	0	0

Type of Operation      -OTHER WORK USE  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -LANDING

Fire      Crew      Fatal  
NONE      Pass      0

-----Aircraft Information-----

Make/Model      - BELL 206B III  
Landing Gear      - HIGH SKID  
Max Gross Wt      - 3200  
No. of Seats      - 5

Eng Make/Model      - ALLISON 250-C20B  
Number Engines      - 1  
Engine Type      - TURBOSHAFT  
Rated Power      - 420 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - NO

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - NO RECORD OF BRIEFING  
Method      - N/A  
Completeness      - N/A  
Basic Weather      - VMC  
Wind Dir/Speed- 270/010 KTS  
Visibility      - 50.0      SM  
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  
LOCAL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident      - N/A  
Runway Lth/Wid      - N/A  
Runway Surface      - N/A  
Runway Status      - N/A

ATC/Airspace

Type of Flight Plan      - COMPANY (VFR)  
Type of Clearance      - NONE  
Type Apch/Lndg      - FORCED LANDING

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
PRIVATE,COMMERCIAL,CFI  
SE LAND  
HELICOPTER

Age - 43  
Biennial Flight Review  
Current      - YES  
Months Since      - 1  
Aircraft Type      - BH-206B

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)

Total	-	7404	Last 24 Hrs	-	2
Make/Model-	2663	Last 30 Days-	33		
Instrument-	3	Last 90 Days-	107		
		Rotorcraft	-	7163	

Instrument Rating(s) - NONE

-----Narrative-----

THE COMMERCIAL PLT FLEW A RESCUE TEAM TO A MOUNTAIN AVALANCHE AREA. THE TEAM DEPLANED AND DURING THE UNLOADING PROCEDURE THE HELICOPTER SETTLED BACKWARDS INTO LOOSE SNOW. THE PLT ADDED COLLECTIVE PITCH AND ATTEMPTED TO HOVER. AS THE HELICOPTER LEFT THE GROUND, AN UNCOMMANDED RIGHT SPIN BEGAN. THE PLT PERFORMED A HOVERING AUTOROTATION 30 FEET AWAY FROM THE GROUND PERSONNEL. AT TOUCHDOWN THE TAIL BOOM ENTERED DEEP SNOW AND THE ACFT CAME TO REST NOSE HIGH. THE PLT DISCOVERED THE TAIL ROTOR SHAFT HAD BROKEN FORWARD OF THE TAIL ROTOR GEAR BOX. A POST ACCIDENT INVESTIGATION SHOWED EVIDENCE THAT THE TAIL ROTOR BLADES ENTERED LOOSE SNOW AND WERE SUBJECTED TO RAPID DECELERATION. THE SHAFT HAD SHEARED UNDER APPLIED TORQUE.

Brief of Accident (Continued)

File No. - 150

1/08/89

PARK CITY,UT

A/C Reg. No. N16733

Time (Lcl) - 1427 MST

Occurrence #1      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      STANDING - IDLING ROTORS

Finding(s)

1. TERRAIN CONDITION - SNOW COVERED
2. TERRAIN CONDITION - UPHILL
3. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
4. CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2      LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      HOVER

Finding(s)

5. ROTOR DRIVE SYSTEM, TAIL ROTOR DRIVE SHAFT - SHEARED
6. DIRECTIONAL CONTROL - NOT POSSIBLE -

Occurrence #3      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

7. AUTOROTATION - PERFORMED -

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE SELECTION OF AN UNSUITABLE LANDING SITE BY THE PILOT, RESULTING IN TAIL ROTOR CONTACT WITH THE TERRAIN AND  
SHEARING OF THE TAIL ROTOR DRIVESHAFT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 123      3/12/89      ROY,UT

A/C Reg. No. N26RS

Time (Lcl) - 2105 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	1	0
0	0	0	0

Type of Operation      -BUSINESS  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -LANDING

Fire      Crew      0  
NONE      Pass      0

-----Aircraft Information-----

Make/Model      - CESSNA T210L  
Landing Gear      - TRICYCLE-RETRACTABLE  
Max Gross Wt      - 3800  
No. of Seats      - 6

Eng Make/Model - CONTINENTAL IO-520-L  
Number Engines - 1  
Engine Type      - RECIP-FUEL INJECTED  
Rated Power      - 300 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - NO RECORD OF BRIEFING  
Method      - N/A  
Completeness      - N/A  
Basic Weather      - VMC  
Wind Dir/Speed- 150/006 KTS  
Visibility      - 25.0      SM  
Lowest Sky/Clouds      - CLEAR  
Lowest Ceiling      - NONE  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - NIGHT(DARK)

Itinerary

Last Departure Point  
LAS VEGAS,NV  
Destination  
SAME AS ACC/INC

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance      - NONE  
Type Apch/Lndg      - FORCED LANDING

Airport Proximity  
ON AIRPORT

Airport Data

OGDEN MUNI  
Runway Ident      - 34  
Runway Lth/Wid      - 5349/      20  
Runway Surface      - ASPHALT  
Runway Status      - DRY

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
PRIVATE  
SE LAND

Age - 56

Biennial Flight Review

Current      - YES  
Months Since      - 17  
Aircraft Type      - C-T210L

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total	- 2160	Last 24 Hrs	- 4
Make/Model-	2100	Last 30 Days-	13
Instrument-	UNK/NR	Last 90 Days-	32
Multi-Eng	- UNK/NR	Rotorcraft	- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT STATED AFTER THE ACDNT THAT HE HAD FLOWN FROM OGDEN, UT TO LAS VEGAS, NV EARLIER IN THE DAY & WAS RTRNG TO OGDEN WHEN THE ACDNT OCCURRED. HE SAID HE HAD A "LANDING GEAR PROBLEM" APRX 5 MI FROM THE ARPT & "SPENT TOO MUCH TIME" CORRECTING IT. WHILE ON A DOWNWIND FOR RWY 16, THE ENG LOST POWER. THE PLT TRANSMITTED THAT HE HAD "RUN OUT OF GAS." SUBSEQUENTLY, THE ACFT COLLIDED WITH TREES APRX 300 FT SHORT OF RWY 34.

Brief of Accident (Continued)

File No. - 123

3/12/89

ROY,UT

A/C Reg. No. N26RS

Time (Lcl) - 2105 MST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      APPROACH - VFR PATTERN - DOWNWIND

Finding(s)

1. LANDING GEAR - UNDETERMINED
2. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
3. DIVERTED ATTENTION - PILOT IN COMMAND
4. FLUID,FUEL - EXHAUSTION
5. FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

6. LIGHT CONDITION - DARK NIGHT
7. OBJECT - TREE(S)

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT ALLOWED HIMSELF TO BECOME DISTRACTED BY A LANDING GEAR PROBLEM, WHICH RESULTED IN FUEL EXHAUSTION,  
WHEN HE HAD INSUFFICIENT FUEL TO DELAY HIS LANDING. FACTORS RELATED TO THE ACCIDENT WERE: THE LANDING GEAR  
PROBLEM AND TREES IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 90 4/05/89 PARK CITY,UT

A/C Reg. No. N16733

Time (Lcl) - 1020 MDT

-----Basic Information-----

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage						
Name of Carrier	-AVMAN, INC.	SUBSTANTIAL						
Type of Operation	-NON SCHED,DOMESTIC,PASSENGER	Fire	Crew	Fatal	Serious	Minor	None	
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	1	
Accident Occurred During	-DESCENT			0	0	0	4	

-----Aircraft Information-----

Make/Model	- BELL 206B-III	Eng Make/Model	- ALLISON 250C-20B	ELT Installed/Activated	- YES/YES
Landing Gear	- HIGH SKID	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 3200	Engine Type	- TURBOSHAFT		
No. of Seats	- 5	Rated Power	- 420 HP		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity	
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point	
Method	- N/A	PARK CITY,UT	
Completeness	- N/A	Destination	
Basic Weather	- VMC	LOCAL	
Wind Dir/Speed	- 330/020 KTS	Runway Ident	- N/A
Visibility	- 50.0 SM	Runway Lth/Wid	- N/A
Lowest Sky/Clouds	- CLEAR	Runway Surface	- N/A
Lowest Ceiling	- NONE	Runway Status	- N/A
Obstructions to Vision	- NONE		
Precipitation	- NONE		
Condition of Light	- DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 44	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL	Current - YES	Total - 7400	Last 24 Hrs - 1
SE SEA	Months Since - 3	Make/Model- 2790	Last 30 Days- 47
HELICOPTER	Aircraft Type - BH-206B	Instrument- 3	Last 90 Days- 130
			Rotorcraft - 7291

Instrument Rating(s) - NONE

-----Narrative-----

WHILE TRANSPORTING SKIERS IN A REMOTE AREA NEAR PARK CITY, UT, A BELL 206B-III HELICOPTER CRASHED ON TAKEOFF AFTER ENCOUNTERING STRONG DOWN-SLOPE WINDS WITH GUSTS DURING A CRITICAL PHASE OF FLIGHT WHICH CAUSED PWR REQUIRED TO EXCEED PWR AVAILABLE.

Brief of Accident (Continued)

File No. - 90

4/05/89

PARK CITY,UT

A/C Reg. No. N16733

Time (Lcl) - 1020 MDT

Occurrence #1 IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation TAKEOFF - GROUND RUN

Finding(s)

1. TERRAIN CONDITION - DOWNHILL
2. PROPER CLIMB RATE - NOT ATTAINED - PILOT IN COMMAND
3. WEATHER CONDITION - DOWNDRAFT
4. AIRCRAFT PERFORMANCE, CLIMB CAPABILITY - EXCEEDED

Occurrence #2 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation DESCENT - UNCONTROLLED

Finding(s)

5. OBJECT - ELECTRICAL TOWER

Occurrence #3 ROLL OVER  
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

6. MISC ROTORCRAFT, TAIL BOOM - SHEARED

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
AN ENCOUNTER WITH STRONG DOWN-SLOPE WINDS AND GUSTS DURING A CRITICAL PHASE OF FLIGHT WHICH CAUSED POWER REQUIRED TO  
EXCEED POWER AVAILABLE. CONTRIBUTING FACTORS TO THE ACCIDENT WAS THE DOWNHILL TERRAIN AND THE DOWNDRAFT CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 6      1/15/89      ASHLAND, VA      A/C Reg. No. N901ZZ      Time (Lcl) - 1745 EST

-----Basic Information-----

Type Operating Certificate-ON-DEMAND AIR TAXI

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - LANDING

Aircraft Damage

SUBSTANTIAL

Fire  
NONE

Crew  
Pass

Fatal  
0  
0

Injuries

Serious      Minor  
0      0  
0      0

None  
1  
0

-----Aircraft Information-----

Make/Model - CESSNA 172N  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 2300  
No. of Seats - 4

Eng Make/Model - LYCOMING O-320-2AD  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 160 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - UNK/NR  
Method - UNK/NR  
Completeness - WEATHER NOT PERTINENT  
Basic Weather - VMC  
Wind Dir/Speed - CALM  
Visibility - 10.0 SM  
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  
LOCAL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - TRAFFIC PATTERN  
TOUCH AND GO

Airport Proximity  
ON AIRPORT

Airport Data

HANOVER COUNTY  
Runway Ident - 34  
Runway Lth/Wid - 4650/ 80  
Runway Surface - ASPHALT  
Runway Status - DRY

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
PRIVATE  
SE LAND

Age - 31  
Biennial Flight Review  
Current - YES  
Months Since - 1  
Aircraft Type - C-152

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 66  
Make/Model - 1  
Instrument - 1  
Last 24 Hrs - 0  
Last 30 Days - 0  
Last 90 Days - 25

Instrument Rating(s) - NONE

-----Narrative-----

THIS WAS THE PILOT'S FIRST FLIGHT & LANDING IN A CESSNA 172 SINCE HE CHECKED IN THIS MAKE AND MODEL ACFT. THE PLT STATED HE USED FULL FLAPS AND AN APPROACH SPEED OF 60 KNOTS. AFTER TOUCH DOWN THE ACFT BEGAN TO FLOAT AND YAW LEFT. THE PLT APPLIED FULL POWER TO MAKE A GO-AROUND BUT HE COULD NOT CLIMB OUT OF GROUND EFFECT. THE ACFT WAS GOING TOWARD THE ARPT RAMP SO THE PLT CUT POWER AND THE ACFT TOUCHED DOWN ABOUT 200 FT LEFT OF THE RWY WHERE IT NOSED OVER WHEN THE NOSE GEAR COLLAPSED IN SOFT TERRAIN. THE PLT REPORTED THAT THERE WAS NO MALFUNCTION OF THE ACFT.



Brief of Accident (Continued)

File No. - 6

1/15/89

ASHLAND,VA

A/C Reg. No. N901ZZ

Time (Lcl) - 1745 EST

-----  
Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      LANDING

Finding(s)

1. FLARE - IMPROPER - PILOT IN COMMAND
  2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
  3. GO-AROUND - INITIATED - PILOT IN COMMAND
  4. AIRSPEED - INADEQUATE - PILOT IN COMMAND
  5. CLIMB - NOT ATTAINED - PILOT IN COMMAND
- 

Occurrence #2      NOSE OVER  
Phase of Operation      LANDING

Finding(s)

6. TERRAIN CONDITION - SOFT
  7. LANDING GEAR,NOSE GEAR - OVERLOAD
  8. LANDING GEAR,NOSE GEAR - COLLAPSED
- 

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL OF THE AIRPLANE DURING LANDING AND THE FAILURE TO ACHIEVE  
SUFFICIENT AIRSPEED DURING THE GO-AROUND TO INITIATE A CLIMB.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 137      3/17/89      CHESAPEAKE,VA      A/C Reg. No. N339RH      Time (Lcl) - 1102 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	DESTROYED					
Type of Operation -TEST FLIGHT	Fire	Crew	Fatal	Injuries	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -APPROACH			0	0	0	0

-----Aircraft Information-----

Make/Model - HALSTEAD SANDPIPER	Eng Make/Model - CONTINENTAL C-75-12	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1063	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 75 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
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	HAMPTON ROADS
Wind Dir/Speed- 230/015 KTS	ATC/Airspace	Runway Ident - 10
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4000/ 40
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - GO AROUND	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 66	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 178
SE LAND	Months Since - 19	Last 24 Hrs - 0
	Aircraft Type - C-172	Make/Model- 0
		Last 30 Days- 2
		Instrument- UNK/NR
		Last 90 Days- 2
		Multi-Eng - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE ACCIDENT OCCURRED ON THE MAIDEN TEST FLIGHT OF THE RECENTLY CERTIFICATED HOMEBUILT ACFT. THE PLT/BUILDER REPORTED NO PROBLEMS DURING HIGH SPEED TAXI RUNS. AFTER TAKEOFF THE PLT ENCOUNTERED PROBLEMS AT SLOW SPEEDS WHICH DECREASED AS AIRSPEED INCREASED. DURING LANDING, THE ACFT STALLED HIGH AND BOUNCED TWICE ON THE RWY. THE PLT INITIATED A GO-AROUND AND DURING CLIMB OUT WAS UNABLE TO DECREASE PITCH TO GAIN AIRSPEED. THE ACFT CRASHED INTO TREES NEAR THE RWY. THE PLT DESIGNED AND BUILT THE ACFT WITH THE EXCEPTION OF THE DAVIS MIXING UNIT WHICH CONTROLS PITCH AND RUDDER INPUT TO THE RUDDERVADOR. THE DESIGN PLANS CALLED FOR 9 DEGS PITCH UP TRAVEL AND 8 DEGS PITCH DOWN TRAVEL. INVESTIGATION REVEALED THE RUDDERVADOR HAD BEEN INSTALLED WITH 12.5 DEGS NOSE UP TRAVEL AND 4.5 DEGS NOSE DOWN TRAVEL, THUS LIMITING THE PLTS ABILITY TO LOWER THE NOSE DURING CLIMB.

Brief of Accident (Continued)

File No. - 137

3/17/89

CHESAPEAKE,VA

A/C Reg. No. N339RH

Time (Lcl) - 1102 EST

Occurrence #1 LOSS OF CONTROL - IN FLIGHT  
Phase of Operation GO-AROUND (VFR)

Finding(s)

1. RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND
2. FLIGHT CONTROL, RUDDERVATOR - MOVEMENT RESTRICTED
3. MAINTENANCE, INSTALLATION - IMPROPER - PILOT IN COMMAND
4. INADEQUATE CERTIFICATION/APPROVAL, AIRCRAFT - FAA(ORGANIZATION)

Occurrence #2 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation DESCENT - UNCONTROLLED

Finding(s)

5. OBJECT - TREE(S)

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT/BUILDERS IMPROPER INSTALLATION OF THE RUDDERVATOR AND THE PILOT'S IMPROPER RECOVERY FROM A BOUNCED LANDING.  
A CONTRIBUTING FACTOR WAS THE FAILURE OF THE FAA TO DETECT THE FLAW DURING THE CERTIFICATION OF THE AIRCRAFT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 29      1/16/89      SEKIU,WA      A/C Reg. No. N732FN      Time (Lcl) - 0945 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL		Injuries			
Type of Operation -BUSINESS	Fire	Crew	Fatal	Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	1	0
Accident Occurred During -APPROACH			0	0	0	1

-----Aircraft Information-----

Make/Model - CESSNA 206	Eng Make/Model - CONTINENTAL IO-520-L	ELT Installed/Activated - YES/YES
Landing Gear - AMPHIBIAN	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3600	Engine Type - RECIP FUEL INJECTED	
No. of Seats - 4	Rated Power - 300 HP	

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - FSS</p> <p>Method - TELEPHONE</p> <p>Completeness - UNK/NR</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- 260/030 KTS</p> <p>Visibility - 5.0 SM</p> <p>Lowest Sky/Clouds - UNK/NR</p> <p>Lowest Ceiling - 8000 FT BROKEN</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - RAIN</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point LAKE STEVENS,WA</p> <p>Destination NEAH BAY,WA</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - VFR</p> <p>Type of Clearance - VFR</p> <p>Type Apch/Lndg - STRAIGHT-IN FULL STOP</p>	<p>Airport Proximity ON AIRSTRIP</p> <p>Airport Data SEKIU</p> <p>Runway Ident - 26</p> <p>Runway Lth/Wid - 2980/ 35</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - WET</p>
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-----Personnel Information-----

<p>Pilot-In-Command</p> <p>Certificate(s)/Rating(s)</p> <p>PRIVATE</p> <p>SE LAND,SE SEA</p>	<p>Age - 55</p> <p>Biennial Flight Review</p> <p>Current - YES</p> <p>Months Since - 20</p> <p>Aircraft Type - C-206</p>	<p>Medical Certificate - EXPIRED</p> <p>Flight Time (Hours)</p> <p>Total - 500</p> <p>Make/Model- 375</p> <p>Instrument- UNK/NR</p> <p>Multi-Eng - UNK/NR</p> <p>Last 24 Hrs - 0</p> <p>Last 30 Days- 4</p> <p>Last 90 Days- 9</p> <p>Rotorcraft - UNK/NR</p>
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Instrument Rating(s) - NONE

-----Narrative-----

THE PLT WAS PASSING THROUGH MOUNTAIN STRAITS ON A BUSINESS TRIP TO A COASTAL DESTINATION WHEN STRONG WINDS AND TURBULENCE WERE ENCOUNTERED. THE PLT ELECTED TO ATTEMPT AN LANDING AT A STRIP SHORT OF THE DESTINATION. THE PLT LOST CONTROL OF THE ACFT DURING THE APPROACH AND IT CONTACTED THE TERRAIN ON SHORT FINAL. WINDS WERE 30 KTS GUSTING TO 40 KTS WHEN THE ACCIDENT OCCURRED.

Brief of Accident (Continued)

File No. - 29

1/16/89

SEKIU,WA

A/C Reg. No. N732FN

Time (Lcl) - 0945 PST

Occurrence #1      LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. WEATHER CONDITION - TURBULENCE
2. IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND
3. SELF-INDUCED PRESSURE - PILOT IN COMMAND
4. WEATHER CONDITION - GUSTS
5. FLIGHT INTO KNOWN ADVERSE WEATHER - CONTINUED - PILOT IN COMMAND
6. AIRCRAFT HANDLING - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #2      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      DESCENT - UNCONTROLLED

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT ATTEMPTED A LANDING IN ADVERSE WEATHER CONDITIONS, RATHER THAN POSTPONE THE BUSINESS TRIP AND RETURN TO ORIGIN  
OR OTHER SAFE AREA. CONTRIBUTING TO THE ACCIDENT WERE TURBULENCE AND GUSTY WINDS ALONG WITH THE SELF INDUCED PRESSURE  
TO MAKE THE BUSINESS FLT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 45      1/19/89      ARLINGTON,WA      A/C Reg. No. N9104R      Time (Lcl) - 1530 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage	Injuries			
	SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation -PERSONAL	Fire	Crew 0	0	0	0
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	0	0
Accident Occurred During -TAXI					

-----Aircraft Information-----

Make/Model - CESSNA 180A	Eng Make/Model - CONTINENTAL O-470-K	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2650	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 230 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
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	UNK/NR	ARLINGTON MUNICIPAL
Wind Dir/Speed- 350/004 KTS	ATC/Airspace	Runway Ident - UNK/NR
Visibility - 75.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - UNK/NR
Lowest Sky/Clouds - 25000 FT THIN OVC	Type of Clearance - NONE	Runway Surface - UNK/NR
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	Runway Status - UNK/NR
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 37	Medical Certificate - EXPIRED
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - UNK/NR	Total - 1500
SE LAND,SE SEA	Months Since - UNK/NR	Last 24 Hrs - UNK/NR
	Aircraft Type - UNK/NR	Make/Model- UNK/NR
		Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT ATTEMPTED TO HAND-PROP THE ENG WITH THE ACFT UNSECURED AND NO ONE AT THE CONTROLS. THE ACFT MOVED AWAY AND COLLIDED WITH TAXIWAY SIGNS AND PARKED ACFT.

Brief of Accident (Continued)

File No. - 45

1/19/89

ARLINGTON, WA

A/C Reg. No. N9104R

Time (Lcl) - 1530 PST

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Occurrence #1 MISCELLANEOUS/OTHER  
Phase of Operation STANDING - STARTING ENGINE(S)

Finding(s)

1. STARTING PROCEDURE - IMPROPER - PILOT IN COMMAND
  2. AIRCRAFT UNATTENDED/ENGINE(S) RUNNING
- 

Occurrence #2 ON GROUND COLLISION WITH OBJECT  
Phase of Operation TAXI

Finding(s)

3. OBJECT - AIRCRAFT PARKED
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT ATTEMPTED TO HAND-PROP THE ENGINE WITHOUT PROPERLY SECURING IT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 59      1/22/89      PORT TOWNSEND, WA      A/C Reg. No. N2582F      Time (Lcl) - 1300 PST

-----Basic Information-----

Type Operating Certificate-OTHER LARGE AIRCRAFT	Aircraft Damage					
	SUBSTANTIAL					
Type of Operation - PERSONAL	Fire	Crew	Fatal	Injuries	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -LANDING			0	0	0	1

-----Aircraft Information-----

Make/Model - CHAMPION 7ECA	Eng Make/Model - LYCOMING O-320-A1B	ELT Installed/Activated - YES/YES
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1650	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 150 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
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	
Wind Dir/Speed- 260/004 KTS	ATC/Airspace	Runway Ident - 36
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4350/ 80
Lowest Sky/Clouds - 600 FT SCATTERED	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - NONE	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - WET
Obstructions to Vision- NONE	FULL STOP	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 40	Medical Certificate - UNK/NR
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 255
SE LAND	Months Since - 6	Make/Model- 128
	Aircraft Type - PA-18	Instrument- 2
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT SIDE-SLIPPED THE AIRPLANE DURING THE LANDING APPROACH. A SINK RATE DEVELOPED WHICH THE PLT WAS UNABLE TO ARREST WITH POWER AND FLARE. THE AIRPLANE WAS LANDED HARD.



Brief of Accident (Continued)

File No. - 59

1/22/89

PORT TOWNSEND, WA

A/C Reg. No. N2582F

Time (Lc1) - 1300 PST

Occurrence #1            HARD LANDING  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

1. TERRAIN CONDITION - HIGH OBSTRUCTION(S)
2. AIRCRAFT HANDLING - NOT PERFORMED - PILOT IN COMMAND
3. FLARE - IMPROPER - PILOT IN COMMAND

Occurrence #2            MAIN GEAR COLLAPSED  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

4. LANDING GEAR, MAIN GEAR - OVERLOAD

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER APPROACH AND FLARE TECHNIQUE ON THE PART OF THE PILOT, RESULTING IN A HARD LANDING. CONTRIBUTING TO THE  
ACCIDENT WERE TALL TREES SURROUNDING THE AIRSTRIP.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 20      1/25/89      PUYALLUP, WA      A/C Reg. No. N49104      Time (Lcl) - 1630 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage	Injuries			
Type of Operation	-PERSONAL	SUBSTANTIAL	Fatal	Serious	Minor	None
Flight Conducted Under	-14 CFR 91	Fire	Crew 0	0	0	1
Accident Occurred During	-LANDING	NONE	Pass 0	0	0	0

-----Aircraft Information-----

Make/Model	- CESSNA 152	Eng Make/Model	- LYCOMING O-235-L2C	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 1670	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 2	Rated Power	- 108 HP		

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - NO RECORD OF BRIEFING</p> <p>Method - N/A</p> <p>Completeness - N/A</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- 260/004 KTS</p> <p>Visibility - 30.0 SM</p> <p>Lowest Sky/Clouds - 10000 FT SCATTERED</p> <p>Lowest Ceiling - NONE</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point</p> <p style="padding-left: 20px;">SPANAWAY, WA</p> <p>Destination</p> <p style="padding-left: 20px;">SAME AS ACC/INC</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - NONE</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - TOUCH AND GO</p>	<p>Airport Proximity</p> <p style="padding-left: 20px;">ON AIRPORT</p> <p>Airport Data</p> <p style="padding-left: 20px;">PIERCE COUNTY</p> <p>Runway Ident - 17</p> <p>Runway Lth/Wid - 3300/ 45</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - DRY</p>
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-----Personnel Information-----

Pilot-In-Command	Age - 37	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 18
	Months Since - N/A	Make/Model- 18
	Aircraft Type - N/A	Instrument- 2
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- 3
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PILOT MADE A FAST, FLAT APPROACH TO A TOUCH AND GO LANDING. WHEN POWER WAS INCREASED FOR THE TAKEOFF, THE ACFT VEERED OFF THE LEFT SIDE OF THE RUNWAY. THIS WAS THE STUDENTS FIRST FLIGHT AFTER NOT HAVING FLOWN FOR 36 DAYS.

Brief of Accident (Continued)

File No. - 20

1/25/89

PUYALLUP, WA

A/C Reg. No. N49104

Time (Lcl) - 1630 PST

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      TAKEOFF

Finding(s)

1. TOUCH-AND-GO - PERFORMED - PILOT IN COMMAND
2. FLARE - IMPROPER - PILOT IN COMMAND
3. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
4.      LACK OF RECENT EXPERIENCE - PILOT IN COMMAND
5. GROUND LOOP/SWERVE

Occurrence #2      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      TAKEOFF

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE ON THE PART OF THE STUDENT PILOT TO MAINTAIN DIRECTIONAL CONTROL OF THE AIRCRAFT. CONTRIBUTING TO THE ACCIDENT  
WERE POOR APPROACH AND FLARE TECHNIQUE AND LACK OF RECENT EXPERIENCE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 21 1/30/89 N. BONNEVILLE,WA A/C Reg. No. N3254Y Time (Lcl) - 1630 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation -PERSONAL  
Flight Conducted Under -14 CFR 91  
Accident Occurred During -LANDING

Aircraft Damage  
SUBSTANTIAL

Fire  
NONE

Crew  
Pass

Fatal  
0  
0

Injuries  
Serious  
0  
0

Minor  
0  
0

None  
1  
0

-----Aircraft Information-----

Make/Model - CESSNA 182  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 2550  
No. of Seats - 4

Eng Make/Model - CONTINENTAL O-470-L  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 230 HP

ELT Installed/Activated - YES/NO  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 230/015 KTS  
Visibility - 20.0 SM  
Lowest Sky/Clouds - UNK/NR  
Lowest Ceiling - 4500 FT BROKEN  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
ONTARIO,OR  
Destination  
YELM,WA

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - N/A  
Runway Status - N/A

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE  
SE LAND

Age - 41

Biennial Flight Review

Current - YES  
Months Since - 7  
Aircraft Type - C-172

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total - 420  
Make/Model- 12  
Instrument- 26  
Multi-Eng - UNK/NR  
Last 24 Hrs - UNK/NR  
Last 30 Days- UNK/NR  
Last 90 Days- UNK/NR  
Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT PURCHASED THE ACFT AND OBTAINED A FERRY PERMIT (DELINQUENT ANNUAL). AFTER THE FIRST STOP, THE PLT EXPERIENCED DIFFICULTY STARTING THE ENG. THE ENG WOULD START THEN DIE ON THROTTLE APPLICATION. A MECHANIC ADVISED THE PLT THAT THE CARB HEAT WAS IN NEED OF AN OVERHAUL. DURING CRUISE FLT, THE PLT NOTED VISIBLE MOISTURE ON THE WINDSHIELD AND APPLIED CARB HEAT. THE PLT LATER NOTED THE CARB HEAT TEMP "IN YELLOW" AND ADDED MORE HEAT AFTER WHICH THE ENG QUIT. THE PLT ATTEMPTED TO RESTART THE ENG AND THE ENG WOULD FIRE BUT DIE ON THROTTLE APPLICATION. A FORCED LANDING WAS ATTEMPTED ON AN ISLAND. THE ACFT TOUCHED DOWN 100 FT SHORT AND SANK. DISASSEMBLY AND INSPECTION OF THE CARB SHOWED NO MECH FAILURE OR UNDUE WEAR/TEAR; HOWEVER, INSPECTION FAILED TO REVEAL IF THE CARB WAS SET WITHIN SPECS.

Brief of Accident (Continued)

File No. - 21

1/30/89

N. BONNEVILLE,WA

A/C Reg. No. N3254Y

Time (Lcl) - 1630 PST

Occurrence #1 LOSS OF ENGINE POWER  
Phase of Operation CRUISE

Finding(s)

1. WEATHER CONDITION - CLOUDS
2. FUEL SYSTEM,CARBURETOR - ERRATIC

Occurrence #2 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 UNDERSHOOT  
Phase of Operation LANDING

Finding(s)

3. WEATHER CONDITION - HIGH WIND
4. PLANNED APPROACH - MISJUDGED - PILOT IN COMMAND

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
SOME FORM OF CARBURETOR MALFUNCTION OR FAILURE WHICH RESULTED IN A LOSS OF ENGINE POWER. CONTRIBUTING TO THE ACCIDENT  
WAS THE PLANNED FORCED LANDING APPROACH BY THE PLT WHICH RESULTED IN THE AIRPLANE LANDING SHORT OF THE DESIRED LANDING  
SITE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 103      2/17/89      SPOKANE, WA      A/C Reg. No. N54US      Time (Lcl) - 0713 PST

-----Basic Information-----

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage					
Name of Carrier	-RICHARDSON AVIATION	SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation	-NON SCHED, DOMESTIC, CARGO	Fire	Crew	0	0	0	1
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	0
Accident Occurred During	-LANDING						

-----Aircraft Information-----

Make/Model	- MITSUBISHI MU-2B-35J	Eng Make/Model	- GARRETT TPE-331-6	ELT Installed/Activated	- YES/NO
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 2	Stall Warning System	- YES
Max Gross Wt	- 10800	Engine Type	- TURBOPROP		
No. of Seats	- 2	Rated Power	- 715 HP		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity	
Wx Briefing	- FSS	ON AIRPORT	
Method	- TELEPHONE		
Completeness	- FULL	Airport Data	
Basic Weather	- IMC	SPOKANE INT'L	
Wind Dir/Speed	- 040/011 KTS	Runway Ident	- 03
Visibility	- 2.500 SM	Runway Lth/Wid	- 9000/ 150
Lowest Sky/Clouds	- UNK/NR	Runway Surface	- ASPHALT
Lowest Ceiling	- 900 FT OBSCURED	Runway Status	- ICE COVERED
Obstructions to Vision	- BLOWING SNOW		SNOW - DRY
Precipitation	- NONE		
Condition of Light	- DAWN		

ATC/Airspace	Type of Flight Plan	- IFR
	Type of Clearance	- IFR
	Type Apch/Lndg	- ILS-COMPLETE
		FULL STOP

-----Personnel Information-----

Pilot-In-Command	Age - 44	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
ATP, CFI	Current	- YES	Total - 6471
SE LAND, ME LAND	Months Since	- 6	Make/Model - 520
	Aircraft Type	- MU-2B	Instrument - 1430
			Multi-Eng - 4476
			Last 24 Hrs - 4
			Last 30 Days - 92
			Last 90 Days - 240
			Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE LANDING AT DAWN WITH SNOW & ICE ON THE RWY, THE ACFT DRIFTED LEFT INTO RUNWAY LIGHTS, WHICH WERE BURIED IN A SNOW BERM FROM PREVIOUS PLOWING. THE PLT SAID THERE WAS 16 INCHES OF SNOW ON THE GND & UP TO 2 INCHES ON THE RWY. HE SAID HE THOUGHT HE HAD LANDED ON THE CENTERLINE, LOST CONTROL IN A SNOWDRIFT, THEN THE ACFT DRIFTED INTO SNOW ADJACENT TO THE RWY.

Brief of Accident (Continued)

File No. - 103

2/17/89

SPOKANE,WA

A/C Reg. No. N54US

Time (Lc1) - 0713 PST

Occurrence #1 ON GROUND COLLISION WITH OBJECT  
Phase of Operation LANDING - ROLL

Finding(s)

1. LIGHT CONDITION - DAWN
2. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - SNOW COVERED
3. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - ICY
4. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
5. OBJECT - RUNWAY LIGHT
6. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE PILOT TO MAINTAIN DIRECTIONAL CONTROL AND RUNWAY ALIGNMENT DURING THE LANDING ROLL.  
FACTORS RELATED TO THE ACCIDENT WERE: LIGHT CONDITIONS AT DAWN, SNOW AND ICE ON THE RUNWAY, AND THE  
RUNWAY LIGHTS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 44 3/12/89 SEABECK,WA A/C Reg. No. N3576W Time (Lcl) - 1440 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL					
Type of Operation -PERSONAL	Fire	Crew	Fatal	Injuries	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -LANDING			0	0	0	3

-----Aircraft Information-----

Make/Model - PIPER PA-32	Eng Make/Model - LYCOMING O-540	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3400	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 6	Rated Power - 260 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NWS	Last Departure Point	OFF AIRPORT/STRIP
Method - UNK/NR	SEQUIM VALLEY,WA	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	BREMERTON,WA	
Wind Dir/Speed- 260/013 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 2.000 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 1200 FT SCATTERED	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - 1900 FT BROKEN	Type Apch/Lndg - FORCED LANDING	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 44	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE,COMMERCIAL	Current - YES	Total - 534
SE LAND	Months Since - 8	Last 24 Hrs - UNK/NR
GLIDER	Aircraft Type - BE-035	Make/Model- 9
		Last 30 Days- UNK/NR
		Instrument- 2
		Last 90 Days- UNK/NR
		Multi-Eng - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT MADE A FORCED LANDING ON A ROCKY BEACH AFTER THE ENGINE LOST POWER DURING CRUISE FLT OVER WATER. THE LEFT LANDING GEAR COLLAPSED DURING THE LANDING. INVESTIGATION REVEALED THAT CRANKSHAFT SUFFERED A FATIGUE FAILURE AT 298 HOURS SINCE OVERHAUL.



Brief of Accident (Continued)

File No. - 44

3/12/89

SEABECK,WA

A/C Reg. No. N3576W

Time (Lc1) - 1440 PST

Occurrence #1 LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation CRUISE

Finding(s)

1. ENGINE ASSEMBLY,CRANKSHAFT - FATIGUE

Occurrence #2 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 MAIN GEAR COLLAPSED  
Phase of Operation LANDING - ROLL

Finding(s)

2. TERRAIN CONDITION - NONE SUITABLE
3. LANDING GEAR,MAIN GEAR - OVERLOAD

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
A FATIGUE FAILURE OF THE ENGINE CRANKSHAFT. CONTRIBUTING TO THE ACCIDENT WAS THE LACK OF SUITABLE LANDING AREA.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 108

3/18/89

ANACORTES, WA

A/C Reg. No. N7551Z

Time (Lcl) - 1335 PST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	0	1
0	0	0	1

Type of Operation - PERSONAL  
Flight Conducted Under - 14 CFR 91  
Accident Occurred During - LANDING

Fire  
NONE

Crew  
Pass

-----Aircraft Information-----

Make/Model - CESSNA TU206  
Landing Gear - FLOAT  
Max Gross Wt - 3616  
No. of Seats - 6

Eng Make/Model - CONTINENTAL TS10-520-M  
Number Engines - 1  
Engine Type - RECIP-FUEL INJECTED  
Rated Power - 310 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed - CALM  
Visibility - 20.0 SM  
Lowest Sky/Clouds - N/A  
Lowest Ceiling - 4000 FT BROKEN  
Obstructions to Vision - NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
RENTON, WA  
Destination  
LOCAL

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FULL STOP

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

BRIGANTINE BAY  
Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - WATER  
Runway Status - WATER-CALM

-----Personnel Information-----

Pilot-In-Command

Certificate(s)/Rating(s)  
PRIVATE  
SE LAND, SE SEA

Age - 39

Biennial Flight Review

Current - YES  
Months Since - 15  
Aircraft Type - C-206

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total	- 384	Last 24 Hrs	- 0
Make/Model	- 318	Last 30 Days	- 0
Instrument	- 2	Last 90 Days	- 0
Multi-Eng	- 0	Rotorcraft	- 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT WAS ON HIS 1ST FLT IN 90 DAYS. HE STATED THAT WHILE ON AN APCH FOR A WATER LNDG, HE WAS FOCUSING ON THE BEACH TO GAUGE HIS DISTANCE FROM THE SHORE, WHEN THE FLOATPLANE HIT THE WATER BEFORE HE HAD EXPECTED. THE FLOATPLANE THEN BOUNCED HIGH & CONTACTED THE WATER AGAIN. ON THE 2ND TOUCHDOWN, THE RIGHT FLOAT BUCKLED, THEN THE PLANE NOSED OVER.

Brief of Accident (Continued)

File No. - 108

3/18/89

ANACORTES, WA

A/C Reg. No. N7551Z

Time (Lcl) - 1335 PST

-----  
Occurrence #1      HARD LANDING  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

1. FLARE - IMPROPER - PILOT IN COMMAND
  2.      DIVERTED ATTENTION - PILOT IN COMMAND
  3.      LACK OF RECENT EXPERIENCE - PILOT IN COMMAND
- 

Occurrence #2      OTHER GEAR COLLAPSED  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

4. LANDING GEAR, FLOAT ASSEMBLY - OVERLOAD
- 

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING

-----

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT DIVERTED HIS ATTENTION DURING THE LANDING, WHICH RESULTED IN AN IMPROPER FLARE & HARD LANDING.  
HIS LACK OF RECENT FLYING EXPERIENCE WAS A RELATED FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 46      3/25/89      ROSALIA, WA      A/C Reg. No. N8792H      Time (Lcl) - 0915 PST

-----Basic Information-----

Type Operating Certificate-AGRICULTURAL AIRCRAFT		Aircraft Damage	Injuries			
		SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation	-AERIAL APPLICATION	Fire	0	0	0	1
Flight Conducted Under	-14 CFR 137	Pass	0	0	0	0
Accident Occurred During	-LANDING					

-----Aircraft Information-----

Make/Model	- GRUMMAN/SCHWEIZER G-164A	Eng Make/Model	- P&W R-1340-AN1	ELT Installed/Activated	- NO -N/A
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 5200	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 1	Rated Power	- 600 HP		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing	Last Departure Point	OFF AIRPORT/STRIP
Method	SAME AS ACC/INC	
Completeness	Destination	Airport Data
Basic Weather	LOCAL	Runway Ident
Wind Dir/Speed		- N/A
Visibility	ATC/Airspace	Runway Lth/Wid
- 10.0 SM	Type of Flight Plan	- N/A
Lowest Sky/Clouds	- NONE	Runway Surface
- UNK/NR	Type of Clearance	- N/A
Lowest Ceiling	- NONE	Runway Status
- 6000 FT OVERCAST	Type Apch/Lndg	- N/A
Obstructions to Vision	- FORCED LANDING	
- NONE		
Precipitation		
- NONE		
Condition of Light		
- DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 41	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 14000
SE LAND	Months Since - 13	Make/Model - 5000
	Aircraft Type - C-182	Instrument - UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days - UNK/NR
		Last 90 Days - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT EXPERIENCED A PWR LOSS ON TAKEOFF AND JETTISONED THE LOAD. A FORCED LANDING WAS MADE IN A PLOWED FIELD DURING WHICH THE ACFT NOSED OVER. INVESTIGATION REVEALED THE PWR LOSS WAS DUE TO A SUPERCHARGER FAILURE.

Brief of Accident (Continued)

File No. - 46

3/25/89

ROSALIA,WA

A/C Reg. No. N8792H

Time (Lcl) - 0915 PST

Occurrence #1      LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation      TAKEOFF - INITIAL CLIMB

Finding(s)

1. ENGINE ASSEMBLY,BLOWER/IMPELLER - FAILURE,TOTAL

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

2. PRECAUTIONARY LANDING - INITIATED - PILOT IN COMMAND

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING - ROLL

Finding(s)

3. TERRAIN CONDITION - SOFT

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
A LOSS OF ENGINE POWER DUE TO A SUPERCHARGER FAILURE. CONTRIBUTING TO THE ACCIDENT WAS THE SOFT TERRAIN ON WHICH  
THE FORCED LANDING WAS MADE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 127      4/19/89      ARLINGTON, WA      A/C Reg. No. N6866Q      Time (Lcl) - 1810 PDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage	Injuries			
		DESTROYED	Fatal	Serious	Minor	None
Type of Operation	-MAINT TEST	Fire	Crew 0	0	0	2
Flight Conducted Under	-14 CFR 91	ON GROUND	Pass 0	0	0	0
Accident Occurred During -TAKEOFF						

-----Aircraft Information-----

Make/Model	- BEECH A55	Eng Make/Model	- CONTINENTAL IO-470-L	ELT Installed/Activated	- YES-UNK/NR
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 2	Stall Warning System	- YES
Max Gross Wt	- 4880	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 6	Rated Power	- 260 HP		

-----Environment/Operations Information-----

<p>Weather Data</p> <p>Wx Briefing - NO RECORD OF BRIEFING</p> <p>Method - N/A</p> <p>Completeness - N/A</p> <p>Basic Weather - VMC</p> <p>Wind Dir/Speed- CALM</p> <p>Visibility - 7.0 SM</p> <p>Lowest Sky/Clouds - CLEAR</p> <p>Lowest Ceiling - NONE</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point</p> <p style="padding-left: 20px;">SAME AS ACC/INC</p> <p>Destination</p> <p style="padding-left: 20px;">EVERETT, WA</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - NONE</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - TOUCH AND GO</p>	<p>Airport Proximity</p> <p style="padding-left: 20px;">ON AIRPORT</p> <p>Airport Data</p> <p style="padding-left: 20px;">ARLINGTON</p> <p>Runway Ident - 16</p> <p>Runway Lth/Wid - 5333/ 100</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - DRY</p>
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-----Personnel Information-----

<p>Pilot-In-Command</p> <p>Certificate(s)/Rating(s)</p> <p style="padding-left: 20px;">ATP,CFI,MILITARY</p> <p style="padding-left: 20px;">SE LAND,ME LAND</p> <p style="padding-left: 20px;">HELICOPTER</p>	<p>Age - 43</p> <p>Biennial Flight Review</p> <p style="padding-left: 20px;">Current - YES</p> <p style="padding-left: 20px;">Months Since - 7</p> <p style="padding-left: 20px;">Aircraft Type - U-21</p>	<p>Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <table border="0" style="width: 100%;"> <tr> <td>Total - 9500</td> <td>Last 24 Hrs - 0</td> </tr> <tr> <td>Make/Model- 100</td> <td>Last 30 Days- 56</td> </tr> <tr> <td>Instrument- 445</td> <td>Last 90 Days- 84</td> </tr> <tr> <td>Multi-Eng - 600</td> <td>Rotorcraft - 8200</td> </tr> </table>	Total - 9500	Last 24 Hrs - 0	Make/Model- 100	Last 30 Days- 56	Instrument- 445	Last 90 Days- 84	Multi-Eng - 600	Rotorcraft - 8200
Total - 9500	Last 24 Hrs - 0									
Make/Model- 100	Last 30 Days- 56									
Instrument- 445	Last 90 Days- 84									
Multi-Eng - 600	Rotorcraft - 8200									

Instrument Rating(s) - AIRPLANE,HELICOPTER

-----Narrative-----

THE OWNER (AN EXPERIENCE PLT) ACCOMPANIED THE PLT-IN-COMMAND (PIC) TO ASSIST IN A MAINTENANCE TEST FLT. THE PIC RPRTD THAT WHILE HE WAS MAKING A TOUCH-&-GO LANDING, THE OWNER RAISED THE LANDING GEAR HANDLE, WHILE THE ACFT WAS STILL ON THE GROUND. THE LANDING GEAR RETRACTED & THE ACFT SETTLED TO THE GROUND & SLID TO A STOP. A FIRE ERUPTED & SUBSEQUENTLY DESTROYED THE ACFT.

Brief of Accident (Continued)

File No. - 127

4/19/89

ARLINGTON, WA

A/C Reg. No. N6866Q

Time (Lcl) - 1810 PDT

Occurrence #1        GEAR COLLAPSED  
Phase of Operation    TAKEOFF - GROUND RUN

Finding(s)

1. GEAR RETRACTION - PREMATURE - COPILOT/SECOND PILOT

Occurrence #2        FIRE  
Phase of Operation    OTHER

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
A PREMATURE/IMPROPER RETRACTION OF THE LANDING GEAR BY THE SECOND PILOT (AIRCRAFT OWNER), WHO WAS  
OCCUPYING THE RIGHT FRONT SEAT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 126      4/20/89      STANWOOD,WA      A/C Reg. No. N4409D      Time (Lcl) - 0930 PDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL					
Type of Operation -PERSONAL	Fire	Crew	Fatal	Injuries Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -LANDING			0	0	0	1

-----Aircraft Information-----

Make/Model - DONNER/PARTON AVID FLYER	Eng Make/Model - CUYUNA 43OR	ELT Installed/Activated - NO	-N/A
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 764	Engine Type - RECIPROCATING-CARBURETOR		
No. of Seats - 2	Rated Power - 43 HP		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	ARLINGTON,WA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	
Wind Dir/Speed- 135/010 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 3000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 52	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 606
SE LAND,ME LAND,SE SEA	Months Since - 18	Last 24 Hrs - UNK/NR
	Aircraft Type - 7AC	Make/Model- 39
		Instrument- 13
		Multi-Eng - 15
		Last 30 Days- 5
		Last 90 Days- 6

Instrument Rating(s) - NONE

-----Narrative-----

DURING FLIGHT, THERE WAS A LOSS OF POWER FROM ONE OF THE CYLINDERS OF THE AIRCRAFT'S TWO CYLINDER ENGINE. WITH INSUFFICIENT POWER TO CONTINUE FLIGHT, THE PILOT TRIED TO LAND IN A SOD FIELD. HOWEVER, THE AIRCRAFT TOUCHED DOWN IN A PLOWED FIELD, SHORT OF THE INTENDED LANDING AREA, AND NOSED OVER. THE PILOT BELIEVED THAT ONE OF THE SPARK PLUG LEADS MAY HAVE BECOME DISCONNECTED.



Brief of Accident (Continued)

File No. - 126

4/20/89

STANWOOD, WA

A/C Reg. No. N4409D

Time (Lcl) - 0930 PDT

Occurrence #1      LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation      CRUISE - NORMAL

Finding(s)

1. IGNITION SYSTEM, IGNITION LEAD - DISCONNECTED

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

2. TERRAIN CONDITION - SOFT

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
AN IGNITION LEAD BECAME DISCONNECTED FROM ONE CYLINDER, WHICH RESULTED IN A PARTIAL POWER LOSS. A  
FACTOR RELATED TO THE ACCIDENT WAS: SOFT TERRAIN IN THE TOUCHDOWN AREA.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 128      5/04/89      LYNDEN, WA      A/C Reg. No. N6064R      Time (Lcl) - 1430 PDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries		
Type of Operation - PERSONAL	Fire	Crew 0	Serious 0	Minor 0	None 1
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	0	1
Accident Occurred During -LANDING					

-----Aircraft Information-----

Make/Model - CESSNA 172	Eng Make/Model - CONTINENTAL O-300-D	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2300	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 145 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - PATWAS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	SEATTLE, WA	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	LOCAL	LYNDEN
Wind Dir/Speed- 270/005 KTS	ATC/Airspace	Runway Ident - 25
Visibility - 25.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2400/ 40
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - GO AROUND	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 61	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 812
SE LAND	Months Since - 9	Make/Model- 254
	Aircraft Type - C-172	Instrument- 57
		Multi-Eng - 0
		Last 24 Hrs - 0
		Last 30 Days- 9
		Last 90 Days- 9
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

ON FINAL APCH TO LAND, THE PLT STAYED HIGH TO AVOID TREES & WIRES & THE ACFT TOUCHED DOWN LONG. AFTER APPLYING BRAKES, THE PLT ATTEMPTED TO GO AROUND, BUT THE ACFT WOULD NOT CLIMB. SUBSEQUENTLY, IT MUSHED INTO A SMALL TREE, THEN HIT A FENCE & WAS DAMAGED. THE PLT REPORTED THAT HE "RAN OUT OF RUNWAY - RUNWAY TOO SHORT."

Brief of Accident (Continued)

File No. - 128

5/04/89

LYNDEN, WA

A/C Reg. No. N6064R

Time (Lcl) - 1430 PDT

Occurrence #1 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation LANDING - ABORTED

Finding(s)

1. TERRAIN CONDITION - HIGH OBSTRUCTION(S)
2. PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
3. ABORTED LANDING - DELAYED - PILOT IN COMMAND
4. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
5. STALL/MUSH
6. OBJECT - TREE(S)
7. OBJECT - FENCE

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT DELAYED IN ABORTING THE LANDING AND FAILED OBTAIN OR MAINTAIN SUFFICIENT AIRSPEED TO KEEP THE AIRCRAFT FROM MUSHING AFTER LIFT-OFF. FACTORS RELATED TO THE ACCIDENT WERE: OBSTRUCTIONS NEAR THE APPROACH END OF THE RUNWAY, FAILURE OF THE PILOT TO ATTAIN THE PROPER TOUCHDOWN POINT, AND THE TREE AND FENCE NEAR THE DEPARTURE END OF THE RUNWAY.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 98      5/04/89      LACEY, WA      A/C Reg. No. N24508      Time (Lcl) - 1530 PDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL					
Type of Operation - PERSONAL	Fire	Crew	Fatal	Injuries	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -LANDING			0	0	0	0

-----Aircraft Information-----

Make/Model - PIPER PA-38-112	Eng Make/Model - LYCOMING O-235-L2A	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1670	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 112 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRSTRIP
Method - N/A	OLYMPIA, WA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	GOWER FIELD
Wind Dir/Speed- 240/002 KTS	ATC/Airspace	Runway Ident - 06
Visibility - 25.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 1800/ 60
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - NONE	Type Apch/Lndg - FULL STOP	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 57	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 261
SE LAND	Months Since - 23	Last 24 Hrs - 2
	Aircraft Type - PA-38	Make/Model- 228
		Instrument- 3
		Last 30 Days- 11
		Last 90 Days- 21
		Rotorcraft - UNK/NR
		Multi-Eng - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT REPORTED THAT A GUST OF WIND CAUSED THE AIRPLANE TO DRIFT TO THE LEFT DURING THE LANDING. THE AIRPLANE TOUCHED DOWN LEFT OF THE CENTERLINE AND THE LEFT GEAR ENTERED AN AREA OF TALL GRASS RESULTING IN SUBSTANTIAL DAMAGE.

Brief of Accident (Continued)

File No. - 98

5/04/89

LACEY, WA

A/C Reg. No. N24508

Time (Lc1) - 1530 PDT

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Occurrence #1      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING

Finding(s)

1. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND
  2. TERRAIN CONDITION - HIGH VEGETATION
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT TO MAINTAIN PROPER ALIGNMENT DURING LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 159      2/11/89      BALDWIN,WI      A/C Reg. No. N4028D      Time (Lcl) - 1545 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage								
	SUBSTANTIAL	Fatal	0	Serious	0	Minor	0	None	1
Type of Operation - PARACHUTING	Fire	Crew	0	0	0	0	0	0	0
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	0	0	0	0
Accident Occurred During -LANDING									

-----Aircraft Information-----

Make/Model - CESSNA 182A	Eng Make/Model - CONTINENTAL D-470-L	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2650	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 1	Rated Power - 230 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
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	BALDWIN
Wind Dir/Speed- 290/015 KTS	ATC/Airspace	Runway Ident - 18
Visibility - 20.0 SM	Type of Flight Plan - VFR	Runway Lth/Wid - 2500 -UNK/NR
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - NONE	Type Apch/Lndg - FULL STOP	Runway Status - ICE COVERED
Obstructions to Vision- NONE		SNOW - COMPACTED
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 19	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 317
SE LAND,ME LAND	Months Since - 11	Last 24 Hrs - 2
	Aircraft Type - UNK/NR	Make/Model- 48
		Instrument- 53
		Multi-Eng - 47
		Last 30 Days- UNK/NR
		Last 90 Days- 39

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD HIS APCH SPEED WAS SLIGHTLY FAST & THAT HE HAD LANDED LONG ON THE 2500' GRASS STRIP. SUBSEQUENTLY, HE WAS UNABLE TO STOP THE ACFT BEFORE IT STRUCK A SNOWBANK AT THE END OF THE STRIP & IT NOSED OVER. THE SELECTED RUNWAY WAS ALIGNED TO THE SOUTH. THE WIND WAS RPRTD TO BE FROM THE WEST AT ABOUT 15 KTS. ALSO, THE GRASS STRIP WAS DESCRIBED AS "SLIPPERY" WITH PATCHES OF SNOW/ICE.

Brief of Accident (Continued)

File No. - 159

2/11/89

BALDWIN,WI

A/C Reg. No. N4028D

Time (Lcl) - 1545 CST

Occurrence #1            OVERRUN  
Phase of Operation      LANDING - ROLL

Finding(s)

1. AIRSPEED - EXCESSIVE - PILOT IN COMMAND
2. WEATHER CONDITION - CROSSWIND
3. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - SNOW COVERED
4. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - ICY
5. PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
6. GO-AROUND - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2            ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - ROLL

Finding(s)

7. TERRAIN CONDITION - SNOWBANK

Occurrence #3            NOSE OVER  
Phase of Operation      LANDING

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT TO GO AROUND WHEN HE LANDED LONG WITH TOO MUCH SPEED FOR THE CONDITIONS. FACTORS  
RELATED TO THE ACCIDENT WERE: THE PILOT'S EXCESSIVE AIRSPEED, HIS FAILURE TO ATTAIN THE PROPER TOUCHDOWN  
POINT, THE CROSSWIND, SNOWY/ICY RUNWAY CONDITIONS, AND THE SNOWBANK.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 56      3/05/89      PINE CREEK, WI      A/C Reg. No. N9044L      Time (Lcl) - 1430 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL					
Type of Operation -PERSONAL	Fire	Crew	Fatal	0	0	0
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -TAKEOFF						

-----Aircraft Information-----

Make/Model - AERONCA 7KCAB	Eng Make/Model - LYCOMING IO-320-E2A	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1650	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 2	Rated Power - 150 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	PINE CREEK, WI	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	PINE CREEK, WI	Runway Ident - N/A
Wind Dir/Speed- 340/015 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling -	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 30	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 95
SE LAND	Months Since - 18	Last 24 Hrs - 1
	Aircraft Type - 7KCAB	Make/Model- 75
		Last 30 Days- 2
		Instrument- 0
		Last 90 Days- 3

Instrument Rating(s) - NONE

-----Narrative-----

DURING AN ATTEMPT TO DEPART FROM A SNOW-COVERED HAY FIELD THE PILOT WAS UNABLE TO ATTAIN SUFFICIENT ALTITUDE TO CLEAR OBSTACLES. THE AIRCRAFT COLLIDED WITH TREES AT THE TOP OF A HILL LOCATED OFF THE DEPARTURE END OF THE FIELD. THE HAY FIELD WAS LOCATED IN WHAT THE PILOT DESCRIBED AS A VALLEY WITH WOODED HILLS ON THREE SIDES. THE AIRCRAFT WAS BEING OPERATED WITHIN WEIGHT AND BALANCE LIMITATIONS.



Brief of Accident (Continued)

File No. - 56

3/05/89

PINE CREEK, WI

A/C Reg. No. N9044L

Time (Lcl) - 1430 CST

Occurrence #1 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation TAKEOFF - INITIAL CLIMB

Finding(s)

1. TERRAIN CONDITION - UPHILL
2. OBJECT - TREE(S)
3. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
4. TERRAIN CONDITION - SNOW COVERED
5. PROPER CLIMB RATE - NOT ATTAINED - PILOT IN COMMAND
6. CLEARANCE - INADEQUATE - PILOT IN COMMAND

Occurrence #2 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation DESCENT - UNCONTROLLED

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S SELECTION OF UNSUITABLE TERRAIN WHICH RESULTED IN THE FAILURE TO ACHIEVE A PROPER CLIMB RATE WHICH RESULTED  
IN THE COLLISION WITH TREES. CONTRIBUTING TO THE ACCIDENT WAS THE UPHILL, SNOW COVERED TERRAIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 107      3/05/89      SUPERIOR,WI      A/C Reg. No. N5315D      Time (Lcl) - 1200 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL					
Type of Operation -INSTRUCTIONAL	Fire	Crew	Fatal	Injuries		
Flight Conducted Under -14 CFR 91	NONE	Pass	0	Serious	Minor	None
Accident Occurred During -LANDING			0	0	0	1
				0	0	0

-----Aircraft Information-----

Make/Model - CESSNA 172N	Eng Make/Model - LYCOMING O-320-H2AD	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2300	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 160 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	SUPERIOR,WI	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	RICHARD I BONG
Wind Dir/Speed- 130/005 KTS	ATC/Airspace	Runway Ident - 13
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4000/ 75
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - SNOW - COMPACTED
Obstructions to Vision- NONE	TOUCH AND GO	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 49	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 80
	Months Since - N/A	Last 24 Hrs - UNK/NR
	Aircraft Type - N/A	Make/Model- 16
		Last 30 Days- UNK/NR
		Instrument- UNK/NR
		Last 90 Days- UNK/NR
		Multi-Eng - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

SHORTLY AFTER TOUCHDOWN ON A SNOW AND ICE COVERED RUNWAY, THE STUDENT PILOT EXPERIENCED A LOSS OF DIRECTIONAL CONTROL AS HE APPLIED BRAKES IN AN ATTEMPT TO SLOW THE AIRCRAFT. THE AIRCRAFT VEERED TO THE LEFT AND DEPARTED THE LEFT SIDE OF THE RUNWAY, WHERE IT IMPACTED A SNOWBANK.

Brief of Accident (Continued)

File No. - 107

3/05/89

SUPERIOR, WI

A/C Reg. No. N5315D

Time (Lcl) - 1200 CST

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      LANDING - ROLL

Finding(s)

1. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - SNOW COVERED
2. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - ICY
3. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
4. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
5. LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND

Occurrence #2      ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - ROLL

Finding(s)

6. TERRAIN CONDITION - SNOWBANK

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT TO MAINTAIN DIRECTIONAL CONTROL DURING THE LANDING, WHICH RESULTED IN AN INADVERTENT  
GROUND SWERVE. FACTORS RELATED TO THE ACCIDENT WERE THE ICY AND SNOW COVERED RUNWAY CONDITIONS AND THE  
SNOWBANK.

Brief of Accident

File No. - 155      3/27/89      WEST BEND, WI      A/C Reg. No. N9578V      Time (Lcl) - 1245 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -PERSONAL  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -LANDING

Aircraft Damage  
SUBSTANTIAL  
Fire  
NONE

	Fatal	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	3

-----Aircraft Information-----

Make/Model      - CESSNA 172M  
Landing Gear      - TRICYCLE-FIXED  
Max Gross Wt      - 2300  
No. of Seats      - 4

Eng Make/Model      - LYCOMING O-320-E2D  
Number Engines      - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 150 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - FSS  
Method      - TELEPHONE  
Completeness      - FULL  
Basic Weather      - VMC  
Wind Dir/Speed- 220/013 KTS  
Visibility      - 10.0 SM  
Lowest Sky/Clouds      - 15000 FT THIN BKN  
Lowest Ceiling      - 25000 FT BROKEN  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point  
MILWAUKEE, WI  
Destination  
SAME AS ACC/INC

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance      - NONE  
Type Apch/Lndg      - FORCED LANDING

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

WEST BEND MUNI  
Runway Ident      - 24  
Runway Lth/Wid      - 3900/ 75  
Runway Surface      - CONCRETE  
Runway Status      - DRY

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
PRIVATE  
SE LAND

Age - 28  
Biennial Flight Review  
Current      - YES  
Months Since      - 12  
Aircraft Type      - C-172M

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)	
Total	93
Last 24 Hrs	1
Last 30 Days	UNK/NR
Last 90 Days	4

Instrument Rating(s) - NONE

-----Narrative-----

WHILE ON FINAL APPROACH TO LAND, THE PILOT ADVANCED THE THROTTLE TO DECREASE HIS RATE OF DESCENT; HOWEVER, HE WAS UNABLE TO OBTAIN AN INCREASE IN ENGINE POWER, THOUGH THE ENGINE CONTINUED TO RUN. HE SELECTED THE DRYEST AVAILABLE FIELD FOR AN EMERGENCY LANDING. AFTER CROSSING OVER AN OBSTRUCTION (POWER LINE), HE LANDED. AFTER LANDING, THE AIRCRAFT ENCOUNTERED SOFT TERRAIN & STARTED TO NOSE OVER AS IT WAS CROSSING UNDER A SECOND POWER LINE. BEFORE NOSING OVER, ITS TAIL SNAGGED ON THE SECOND POWER LINE & THE AIRCRAFT CAME TO REST ON ITS NOSE. AN EXAM OF THE AIRCRAFT REVEALED THE THROTTLE CABLE HAD PARTIALLY FAILED IN SUCH A MANNER THAT THROTTLE MOVEMENT WOULD NOT OPERATE THE THROTTLE ARM.

Brief of Accident (Continued)

File No. - 155

3/27/89

WEST BEND, WI

A/C Reg. No. N9578V

Time (Lc1) - 1245 CST

Occurrence #1      LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation      APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. THROTTLE/POWER LEVER, CABLE - FAILURE, PARTIAL

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

2. TERRAIN CONDITION - NONE SUITABLE

Occurrence #3      NOSE DOWN  
Phase of Operation      LANDING

Finding(s)

3. TERRAIN CONDITION - SOFT

Occurrence #4      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING

Finding(s)

4. OBJECT - WIRE, TRANSMISSION

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PARTIAL FAILURE OF THE THROTTLE CABLE. UNSUITABLE (SOFT) TERRAIN AND TRANSMISSION WIRES IN THE LANDING  
AREA WERE CONSIDERED TO BE FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 57      4/02/89      FREEDOM,WI      A/C Reg. No. N3016A      Time (Lcl) - 1630 CDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation - PERSONAL	Fire	Crew	0	0	0	1
Flight Conducted Under - 14 CFR 91	NONE	Pass	0	0	0	0
Accident Occurred During - TAKEOFF						

-----Aircraft Information-----

Make/Model - CESSNA 170B	Eng Make/Model - CONTINENTAL C-145	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2200	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 145 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	FREEDOM,WI	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	FREEDOM,WI	
Wind Dir/Speed- 180/010 KTS	ATC/Airspace	Runway Ident - UNK/NR
Visibility - 30.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - UNK/NR
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - 10000 FT BROKEN	Type Apch/Lndg - NONE	Runway Status - WET
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 42	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 709
SE LAND	Months Since - 4	Last 24 Hrs - 1
	Aircraft Type - C-170B	Make/Model- 91
		Instrument- 15
		Last 30 Days- 1
		Last 90 Days- 1

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT EXPERIENCED A LOSS OF DIRECTIONAL CONTROL DURING AN ATTEMPTED TAKEOFF ON A ROADWAY WHICH RAN PARALLEL TO THE PILOT'S SOD STRIP. THE AIRCRAFT SWERVED TO THE LEFT AND DEPARTED THE ROADWAY, WHERE IT ENCOUNTERED SOFT, MARSHY SOD AND A SHALLOW DITCH. THE AIRCRAFT NOSED OVER AND CAME TO A REST. THE PILOT STATED THAT HE WAS ATTEMPTING THE TAKEOFF FROM THE ROADWAY INSTEAD OF THE SOD STRIP BECAUSE OF THE SOFT, WET CONDITION OF THE STRIP.

Brief of Accident (Continued)

File No. - 57

4/02/89

FREEDOM,WI

A/C Reg. No. N3016A

Time (Lcl) - 1630 CDT

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

1. TERRAIN CONDITION - ROADWAY/HIGHWAY
2. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
3. LACK OF RECENT EXPERIENCE - PILOT IN COMMAND
4. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2      NOSE OVER  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

5. TERRAIN CONDITION - DITCH
6. TERRAIN CONDITION - WET
7. TERRAIN CONDITION - SOFT

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL DURING THE ATTEMPTED TAKEOFF ON UNSUITABLE TERRAIN. THE PILOT'S  
LACK OF RECENT FLIGHT EXPERIENCE WAS A CONTRIBUTING FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 145      1/02/89      CHEYENNE,WY      A/C Reg. No. N4440L      Time (Lcl) - 1545 MST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -BUSINESS  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -TAXI

Aircraft Damage  
SUBSTANTIAL  
Fire      NONE

	Fatal	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	0

-----Aircraft Information-----

Make/Model      - CESSNA 172  
Landing Gear      - TRICYCLE-FIXED  
Max Gross Wt      - 2300  
No. of Seats      - 4

Eng Make/Model      - CONTINENTAL O-300-D  
Number Engines      - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 145 HP

ELT Installed/Activated - YES/YES  
Stall Warning System - YES

-----Environment/Operations Information-----

Weather Data

Wx Briefing      - NWS  
Method      - ACFT RADIO  
Completeness      - PARTIAL,LMTD BY PILOT  
Basic Weather      - VMC  
Wind Dir/Speed-      VARIABLE/030 KTS  
Visibility      - 60.0      SM  
Lowest Sky/Clouds      - 10000 FT SCATTERED  
Lowest Ceiling      - 25000 FT BROKEN  
Obstructions to Vision-      NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point  
SAME AS ACC/INC  
Destination  
GREELEY,CO

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance      - NONE  
Type Apch/Lndg      - NONE

Airport Proximity  
ON AIRPORT

Airport Data

CHEYENNE  
Runway Ident      - 26  
Runway Lth/Wid      - 9199/ 150  
Runway Surface      - CONCRETE  
Runway Status      - DRY

-----Personnel Information-----

Pilot-In-Command  
Certificate(s)/Rating(s)  
COMMERCIAL,ATP,CFI  
SE LAND,ME LAND

Age - 34  
Biennial Flight Review  
Current      - YES  
Months Since      - 7  
Aircraft Type - C-172RG

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total      - 5103      Last 24 Hrs - 2  
Make/Model- 1700      Last 30 Days- 40  
Instrument- 341      Last 90 Days- 188  
Multi-Eng - 338

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE ATP RATED PLT WAS TAXIING THE ACFT ON TAXIWAY "B" TO RWY 26 FOR TAKEOFF. HE REPORTED THAT AS HE WAS TAXIING, A GUST LIFTED THE ACFT'S TAIL. THE ACFT THEN NOSED OVER & CAME TO REST INVERTED. THE PLT REPORTED THE WIND WAS FROM 250 DEG WITH GUSTS TO 45 KTS. DURING THE 1516 MST WX OBSERVATION, THE WIND WAS FROM 280 DEG AT 30 GUSTING 45 KTS.



Brief of Accident (Continued)

File No. - 145

1/02/89

CHEYENNE,WY

A/C Reg. No. N4440L

Time (Lcl) - 1545 MST

Occurrence #1 ON GROUND ENCOUNTER WITH WEATHER  
Phase of Operation TAXI - TO TAKEOFF

Finding(s)

1. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
2. WEATHER CONDITION - HIGH WIND
3. WEATHER CONDITION - GUSTS
4. COMPENSATION FOR WIND CONDITIONS - NOT POSSIBLE -

Occurrence #2 NOSE OVER  
Phase of Operation TAXI - TO TAKEOFF

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER PLANNING/DECISION BY THE PILOT. FACTORS RELATED TO THE ACCIDENT WERE THE HIGH WIND AND GUSTS,  
WHICH HE WAS UNABLE TO COMPENSATE FOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 177      4/05/89      CHEYENNE,WY      A/C Reg. No. N83864      Time (Lcl) - 0540 MDT

-----Basic Information-----

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage					
Name of Carrier	-SKY HARBOR AIR SVC.	SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation	-NON SCHED,DOMESTIC,CARGO	Fire	Crew	0	0	0	1
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	0
Accident Occurred During	-LANDING						

-----Aircraft Information-----

Make/Model	- PIPER PA-34-220T	Eng Make/Model	- CONTINENTAL TS10-360B	ELT Installed/Activated	- YES/NO
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 2	Stall Warning System	- YES
Max Gross Wt	- 4750	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 6	Rated Power	- 220 HP		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - TELEPHONE	DENVER,CO	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	CHEYENNE MUNICIPAL
Wind Dir/Speed- 270/010 KTS	ATC/Airspace	Runway Ident - 26
Visibility - 10.0 SM	Type of Flight Plan - COMPANY (VFR)	Runway Lth/Wid - 9200/ 150
Lowest Sky/Clouds - CLEAR	Type of Clearance - VFR	Runway Surface - CONCRETE
Lowest Ceiling - NONE	Type Apch/Lndg - FULL STOP	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - NIGHT(BRIGHT)		

-----Personnel Information-----

Pilot-In-Command	Age - 40	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 1513
SE LAND,ME LAND	Months Since - 2	Make/Model- 142
	Aircraft Type - PA-34	Instrument- 293
		Multi-Eng - 185
		Last 24 Hrs - 2
		Last 30 Days- 82
		Last 90 Days- 170
		Rotorcraft - 836

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE AIRPLANE WAS BEING OPERATED UNDER 14 CFR 135 ON A NIGHT CARGO FLT. THE PLT APPROACHED THE ARPT FROM THE SOUTH AND DECIDED TO LAND ON RUNWAY 26. HE ACTIVATED THE PLT CONTROLLED RUNWAY LIGHTS TO THE HIGHEST INTENSITY. THE PLT RETARDED THE THROTTLES OVER THE RUNWAY AND THE AIRPLANE BOUNCED WHEN IT TOUCHED DOWN. THE AIRPLANE BOUNCED A SECOND TIME AND TWO OF THE THREE LANDING GEAR COLLAPSED ON TOUCHDOWN.

Brief of Accident (Continued)

File No. - 177

4/05/89

CHEYENNE,WY

A/C Reg. No. N83864

Time (Lcl) - 0540 MDT

Occurrence #1        HARD LANDING  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

1. LIGHT CONDITION - NIGHT
2. FLARE - MISJUDGED - PILOT IN COMMAND
3. VISUAL/AURAL DETECTION - PILOT IN COMMAND
4. RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT-IN-COMMAND TO PROPERLY RECOVER FROM A BOUNCED LANDING.





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1773

EMBRY-RIDDLE AERO U., DAYTONA BEACH

3 1745 00081 6796

## DATE DUE

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