

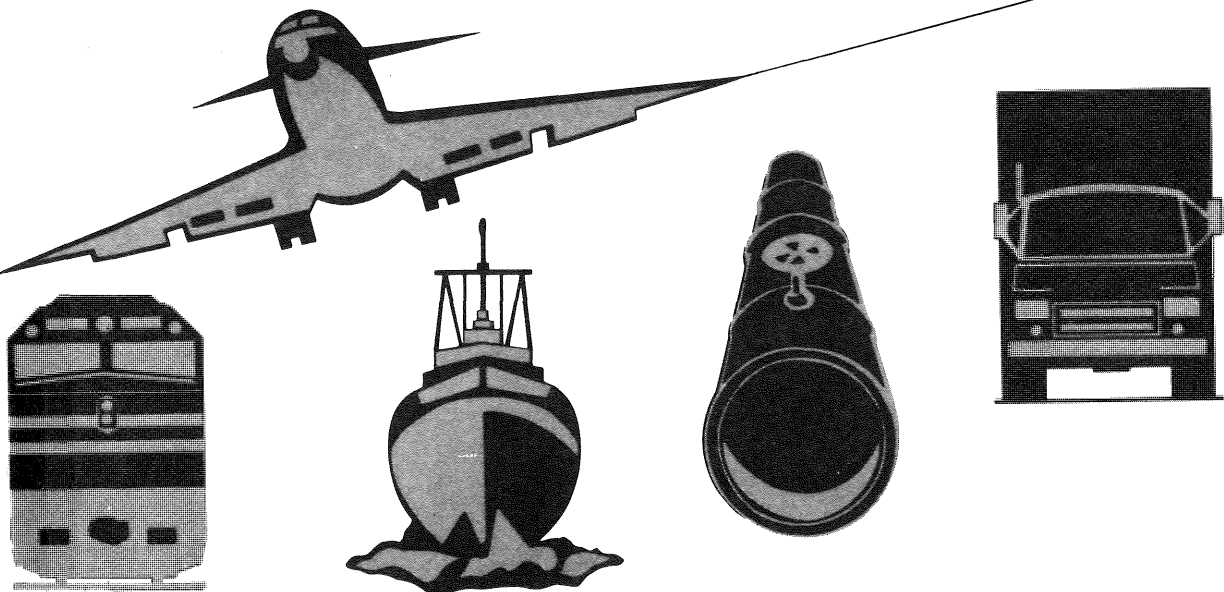
# NATIONAL TRANSPORTATION SAFETY BOARD

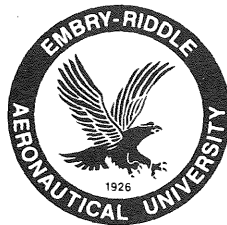
WASHINGTON, D.C. 20594



## AIRCRAFT ACCIDENT REPORTS

BRIEF FORMAT  
U.S. CIVIL AND FOREIGN AVIATION  
ISSUE NUMBER 3 OF 1989 ACCIDENTS





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# TECHNICAL REPORT DOCUMENTATION PAGE

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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 style="text-align: center;">File Numbers: 403 through 436 438 through 600</p>					
17. Key Words Aviation accident, probable cause, findings, certificate/rating, injuries, type of accident, type operating certificate, flight conducted under, accident occurred during, aircraft damage, basic weather				18. Distribution Statement This document is available to the public through the National Technical Information Service, Springfield, Virginia 22161	
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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 cowlings, 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 their 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 3

CALENDAR YEAR 1989

## File Order Listing - Issue No. 3, 1989

File Number -----	Aircraft Regist. -----	Date -----	Location -----	Make -----	Aircraft Model -----	Injury Index -----	Page -----
403	80542	031689	PASCAGOULA, MS	CESSNA	172M	FATAL	270
404	5572W	031389	HOLLEY, FL	PIPER	PA-28-160	FATAL	176
405	1010Z	021089	SAINT GEORGE, UT	SWEARINGEN	SA226TC	NONE	378
406	180SR	061989	ANCHORAGE, AK	CESSNA	180	NONE	20
407	4912Z	061889	ALDER CREEK, AK	PIPER	PA-22-108	NONE	18
408	15306	062389	TUNTUTULIAK, AK	PIPER	PA-32-300	NONE	26
409	94252	030889	LINCOLN PARK, NJ	CESSNA	152	NONE	296
410	4395N	031989	MOORE HAVEN, FL	CESSNA	195	NONE	178
411	73309	021289	SACRAMENTO, CA	CESSNA	172M	NONE	104
412	39752	032189	MARATHON, FL	WACO	UPF-7	NONE	182
413	2882F	031389	MIAMI, FL	CESSNA	402A	NONE	174
414	4971Q	061589	FORT BENTON, MT	CESSNA	A188B	NONE	274
415	9007S	020889	FLAGSTAFF, AZ	PIPER	PA-18	NONE	82
416	5726M	021389	SAN MARTIN, CA	MOONEY	M20J	NONE	106
417	7411N	030989	GOLDEN, CO	HILLER	UH-12E	NONE	148
418	36345	061689	LAS CRUCES, NM	PIPER	PA-34-200T	NONE	300
419	775CH	031089	TITUSVILLE, FL	NORTH AMERIC	T-28C	FATAL	172
420	7174L	011489	WESTLAKE, CA	GRUMMAN AMER	AA-1B	MINOR	98
421	544BM	062189	MORIARITY, NM	BEAUCHESNE/W	GLASAIR TD	NONE	302
422	8350V	030789	OCALA, FL	CHAMPION	7ECA	MINOR	168
423	28889	050289	SUMMERLAND KEY, FL	DOUGLAS	C-47	FATAL	194
424	8403N	012789	PARLIER, CA	BEECH	E33	NONE	102
425	1595Q	042689	NEW BERN, NC	CESSNA	150	NONE	282
426	5531N	050989	STAR, ID	DAVIS STARSH	ALPHA	SERIOUS	204
427	4948H	031289	OLIVE BRANCH, MS	CESSNA	152	NONE	268



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428	4235R	012789	GUALALA, CA	PIPER	PA-32-300	NONE	100
429	49PB	020489	HYANNIS, MA	CESSNA	402B	NONE	220
430	6822Q	060189	LISSIE, TX	GRUMMAN	G-164B	NONE	370
431	1722B	051989	EAST BERNARD, TX	BOEING	A75	MINOR	364
432	4766X	043089	HUDSON, NY	CESSNA	150G	NONE	312
433	51RM	031889	ERIE, CO	MILLER	S.A.L. 2/3	MINOR	150
434	3042Z	032789	LAMAR, CO	BEECH	F33A	NONE	154
435	11789	051489	WOODSTOCK, CT	CESSNA	150	NONE	166
436	94822	041089	BEDFORD, MA	CESSNA	152	NONE	222
438	1961P	062389	MIDDLETOWN, OH	PIPER	PA-18-150	MINOR	334
439	4756B	032889	BOULDER, CO	CESSNA	180	NONE	156
440	4734L	052889	CRANDON, WI	PIPER	PA-28-180	MINOR	392
441	3613U	030989	TOOELE, UT	CESSNA	182	NONE	380
442	5008Q	032389	LEADVILLE, CO	BELL	222	NONE	152
443	757MY	031889	PICKENS, SC	CESSNA	182Q	NONE	354
444	29HJ	043089	WATERTOWN, WI	TESMER GLASS	SH-2	NONE	388
445	6071K	033189	GARRISON, ND	CESSNA	150	NONE	290
446	43YP	061789	SHELBYVILLE, IN	BOEING	E75	NONE	212
447	13630	052789	INDIAN TRAIL, NC	CESSNA	177	SERIOUS	286
448	7523K	040589	DEVILS LAKE, ND	PIPER	PA-18	NONE	292
449	739US	021789	WILMINGTON, OH	CESSNA	172	MINOR	322
450	4898G	041289	XENIA, OH	CESSNA	172	NONE	332
451	1434Y	062089	FRANKLIN, GA	CESSNA	172	MINOR	196
452	8032A	021889	CLEVELAND, TN	CESSNA	170B	NONE	360
453	784K	010789	PADUCAH, KY	BEECH	B-90	SERIOUS	216

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454	7VC	050789	FUQUAY-VARINA, NC	SMITHGALL PI	S-1C	SERIOUS	284
455	1769	060389	TOWNSVILLE, NC	BLOODWORTH	PITTS SPEC	FATAL	288
456	4724R	062389	GRYGLA, MN	CESSNA	188B	NONE	250
457	6513Y	062189	BEMIDJI, MN	PIPER	PA-23-250	NONE	246
458	8272W	041489	MILBANK, SD	PIPER	PA-28-180	NONE	358
459	77BR	032289	JACKSONVILLE, FL	PIPER	AEROSTAR 6	FATAL	184
460	7450Z	053189	SCANDIA, KS	PIPER	PA-25-235	NONE	214
461	83GB	061189	STANTON, MN	GLASER-DIRKS	DG-101	NONE	244
462	7385Y	070189	TELLURIDE, CO	CESSNA	R182	MINOR	162
463	3814S	062289	SAUK RAPIDS, MN	CESSNA	172	NONE	248
464	9330B	011189	MADISON, NC	CESSNA	208B	SERIOUS	278
465	1480F	032189	MELBOURNE, FL	CESSNA	172H	SERIOUS	180
466	6852Q	030989	DAYTONA BEACH, FL	BEECH	S35	FATAL	170
467	373TC	060489	CEDAR RAPIDS, IA	OLSON	BD-4	SERIOUS	198
468	38329	060489	BUFFALO, MN	PIPER	PA-38	NONE	242
469	8063K	060789	WYNNE, AR	GULFSTREAM-S	G-164B	MINOR	76
470	3952K	060389	BOLIVAR, MO	PIPER	PA-28	NONE	256
471	29309	060689	CREVE COEUR, MO	WACO	UPF-7	NONE	258
472	34306	021189	ONEONTA, AL	CESSNA	177B	NONE	62
473	63535	060689	PINE BLUFF, AR	CESSNA	172	NONE	74
474	32062	071589	QUINHAGAK, AK	PIPER	PA-32-300	NONE	46
475	5056Q	021089	FAIRBANKS, AK	DEHAVILLAND	DHC-3	NONE	4
476	2747X	050989	TOGIAK, AK	CESSNA	180H	NONE	6
477	9360N	053189	TOKSOOK BAY, AK	CESSNA	185F	NONE	10
478	6366N	072389	ALEXANDER CREEK, AK	CHAMPION	7GCBC	NONE	48

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479	8510L	021989	WAYNESVILLE, OH	PIPER	PA-25-235	NONE	324
480	1113E	070289	EVANSTON, WY	STITTS	SA7D	NONE	394
481	9038T	072089	WESTON, CO	CESSNA	182C	MINOR	164
482	8562X	040889	CRESTED BUTTE, CO	CESSNA	P172D	MINOR	158
483	6588Z	072689	ILIAMNA, AK	CESSNA	206G	MINOR	52
484	6662M	040889	LIVERMORE, CA	STINSON	108-3	NONE	122
485	248ER	040589	PRESCOTT, AZ	CESSNA	172N	NONE	88
486	3508Z	040189	LANCASTER, CA	PIPER	PA-22	NONE	120
487	756EA	020989	FAIRBANKS, AK	CESSNA	U206G	FATAL	2
488	9541S	071389	KING SALMON, AK	CHAMPION	7ECA	MINOR	40
489	27024	071389	PARKER LAKE, AK	PIPER	J-3	NONE	42
490	4104D	062789	KING SALMON, AK	HELIO	H800	NONE	34
491	6305E	063089	DILLINGHAM, AK	CESSNA	185F	NONE	36
492	5745W	071389	NAKNEK, AK	PIPER	PA-28	NONE	38
493	6908D	061689	KENAI, AK	PIPER	PA-22	FATAL	14
494	9926B	061989	TYONEK, AK	CESSNA	182A	NONE	24
495	7847U	040989	MORGAN, UT	CESSNA	172F	NONE	382
496	9858D	050389	BOZEMAN, MT	PIPER	PA-18-150	MINOR	272
497	6318K	070789	BOUNTIFUL, UT	CESSNA	150M	SERIOUS	384
498	49925	031989	SAN JOSE, CA	CESSNA	152	MINOR	116
499	2377Y	022689	YUBA CITY, CA	CESSNA	177	NONE	108
500	2802J	070789	FORT BENTON, MT	CESSNA	T188C	NONE	276
501	4831N	070489	NEWCASTLE, WY	HENRY VICKER	HCV-110	MINOR	396
502	6754Q	070889	HOLDEN, UT	GRUMMAN/SCHW	G-164B	NONE	386
503	51313	031589	RIO VISTA, CA	CESSNA	172	MINOR	114

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504	42859	030489	UPLAND, CA	CESSNA	182L	NONE	110
505	4899B	030989	LONG BEACH, CA	CESSNA	310	NONE	112
506	8419W	062089	BROOMFIELD, CO	PIPER	PA28-180	MINOR	160
507	70289	032589	LUGOFF, SC	UPCHURCH	ROTORWAY E	NONE	356
508	2805S	022889	SPRINGBORO, OH	CESSNA	150G	NONE	328
509	13188	031189	SANFORD, NC	CESSNA	172M	NONE	280
510	25524	030489	BLOUNTVILLE, TN	CESSNA	152	MINOR	362
511	1139X	022189	TIPP CITY, OH	PIPER	PA-28R-200	SERIOUS	326
512	3627G	070489	WILLOWS, CA	SCHWEIZER	G-164B	NONE	138
513	6938H	070989	CRYSTAL, MN	CESSNA	172	NONE	252
514	7739R	042289	HOT SPRINGS, AR	BEECH	BE-55	NONE	68
515	88RA	050989	REGINA, NM	ENSTROM	F-28C	NONE	298
516	599WB	040889	REDDINGTON BCH., FL	BEECH	F-33A	NONE	188
517	81VA	032989	PONTE VEDRA BCH, FL	LEE, DAVID	VELOCITY	NONE	186
518	701AS	071889	DES MOINES, IA	GATES	LEARJET 35	MINOR	202
519	4968X	031789	HETH, AR	ROCKWELL INT	S2R T34	NONE	66
520	4607C	050889	MONTROSE, AR	WEATHERLY	620TP	NONE	70
521	18307	052789	STRONG, AR	BEECH	V35	NONE	72
522	2892A	071489	CAMDENTON, MO	PIPER	PA-32-300	NONE	266
523	80440	040989	WEST PALM BEACH, FL	CESSNA	172M	NONE	190
524	1DQ	021989	GLEN FALLS, NY	BEECH	A36	FATAL	308
524	232C	021989	GLEN FALLS, NY	STINSON	108-2	FATAL	310
525	7298N	041589	TAVERNIER, FL	CESSNA	182P	NONE	192
526	2746H	070189	ELMIRA, NY	SCHWEIZER	1-26	MINOR	316
527	60812	060289	ERWINNA, PA	BOEING - STE	A75N1	NONE	346

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528	2756Y	053089	LEWISTON, ID	BELL	206B III	NONE	206
529	2990P	041489	YAMHILL, OR	CONSOLIDATED	LA-4	NONE	342
530	23972	040189	TUCSON, AZ	BEECH	C24R	NONE	86
531	4374T	032489	LAKE ELSINORE, CA	PIPER	PA-34-200	MINOR	118
532	767AA	021989	TUCSON, AZ	AEROSTAR	RAVEN 560	SERIOUS	84
533	1057X	011489	TURNERS FALLS, MA	PIPER	PA-28-180	NONE	218
534	2127J	042389	DUSHORE, PA	PIPER	PA-28-161	NONE	344
535	3420Y	061389	PITTSBURGH, PA	CESSNA	180	NONE	348
536	6556A	011489	NEWPORT, RI	CESSNA	T210	MINOR	352
537	17109	012989	SENECA FALLS, NY	CESSNA	150L	NONE	304
537	12679	012989	SENECA FALLS, NY	CESSNA	172	NONE	306
538	52HR	061889	NIAGARA FALLS, NY	CESSNA	172N	MINOR	314
539	2752M	070989	BEVERLY, MA	PIPER	PA-28-161	MINOR	226
540	1731R	070289	FISHERS, NY	CESSNA	185	NONE	318
541	4953B	070289	ONEIDA, NY	CESSNA	152	NONE	320
542	91867	072389	EIGHTY FOUR, PA	SCHWEIZER	1-23	SERIOUS	350
543	6010G	022289	PEMBERTON, MN	CESSNA	150K	FATAL	240
544	9965D	060389	UXBRIDGE, MA	PIPER	PA22-150	MINOR	224
545	52010	060489	GLENNALLEN, AK	CESSNA	180-J	NONE	12
546	9949N	052289	ANCHORAGE, AK	CESSNA	180J	NONE	8
547	6370H	081189	TANANA, AK	CESSNA	207-A	SERIOUS	56
548	1118D	080989	SPARREVOHN, AK	CESSNA	140	NONE	54
549	5354G	071389	KODIAK, AK	DE HAVILLAND	DHC-2	SERIOUS	44
550	37209	062789	ILIAMNA, AK	INTERSTATE	S-1A	NONE	32
551	5087Y	061889	RAINBOW LAKE, AK	PIPER	PA-18	NONE	16

File Number -----	Aircraft Regist. -----	Date -----	Location -----	Make -----	Aircraft Model -----	Injury Index -----	Page -----
552	2435F	062589	NAKNEK, AK	CESSNA	180H	NONE	30
553	7400K	072389	CHITINA, AK	PIPER	PA-20	NONE	50
554	202T	082289	MCGRATH, AK	PIPER	PA-18	NONE	60
555	5595M	062489	ILIAMNA, AK	DE HAVILLAND	DHC-2	SERIOUS	28
556	7735K	061989	SHESHALIK, AK	PIPER	PA-20	NONE	22
557	3669N	081489	RAINY PASS, AK	PIPER	PA-12	NONE	58
558	8116K	072889	PORTLAND, AR	GRUMMAN	G-164B	NONE	80
559	757EJ	070489	TUNAS, MO	CESSNA	152	MINOR	264
560	49554	070389	ST. CHARLES, MO	CESSNA	152	NONE	262
561	6629Q	070289	STOCKVILLE, NE	GRUMMAN	G-164B	NONE	294
562	97984	072389	DULUTH, MN	CESSNA	172	NONE	254
563	1066	071089	PERRY, IA	BRISTOW	KR-2	MINOR	200
564	9440T	062589	KAISER, MO	CESSNA	210	NONE	260
565	3653M	062889	LONOKE, AR	AIR TRACTOR	301	NONE	78
566	19950	062689	WADSWORTH, OH	CESSNA	C172M	NONE	336
567	32340	051189	TECUMSEH, MI	PORTERFIELD	CP-55	NONE	232
568	8535Q	060189	FLUSHING, MI	CESSNA	206	NONE	236
569	4526Z	052789	NECEDAH, WI	PIPER	PA-22-108	SERIOUS	390
570	7531G	051689	EUREKA, MI	CESSNA	150 L	NONE	234
571	77201	051289	TERRE HAUTE, IN	CESSNA	140	NONE	210
572	455RT	042389	LANSING, MI	WACO	YMF	NONE	228
573	444EA	042589	DETROIT, MI	CESSNA	411	NONE	230
574	21170	071489	ALPINE, WY	PIPER	PA-28-161	NONE	398
575	23414	071389	GRANITE, OK	PIPER	PA-38-112	NONE	340
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578	17130	052989	ONALASKA, TX	CESSNA	150L	NONE	368
579	72279	052789	SAINT JO, TX	CESSNA	206D	NONE	366
580	47SV	060289	BARTLESVILLE, OK	NORD	STAMPE SV4	NONE	338
581	24258	061189	KAUFMAN, TX	CESSNA	152	NONE	372
582	151C	061089	CEDAR, MI	STINSON	108-2	NONE	238
583	7002E	051189	MOJAVE, CA	CESSNA	175A	NONE	124
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585	2667L	080689	DANA POINT, CA	CESSNA	172H	FATAL	146
586	9924N	050389	COTTONWOOD, AZ	CESSNA	180	NONE	90
587	18789	072789	LOWER LAKE, CA	BEECHCRAFT	C24R	NONE	142
588	761JA	071789	CHANDLER, AZ	CESSNA	T210	MINOR	96
589	421S	061789	PICACHO, AZ	CESSNA	421	MINOR	94
590	9729V	061789	BAGDAD, AZ	CESSNA	175K	NONE	92
591	29339	061789	BANNING, CA	CESSNA	177	MINOR	132
592	24521	052689	CONCORD, CA	CESSNA	152	MINOR	130
593	23916	070989	HOLLISTER, CA	PIPER	PA-38-112	NONE	140
594	5712E	070189	KELSEYVILLE, CA	CESSNA	150	NONE	136
595	6084P	061789	FALLBROOK, CA	CESSNA	182P	NONE	134
596	5368V	051289	UPLAND, CA	CESSNA	T210L	SERIOUS	126
597	76675	051989	PLACERVILLE, CA	CESSNA	140	NONE	128
598	7580D	022589	JACKSONVILLE, AR	PIPER	PA-18	FATAL	64
599	128MP	031589	WEST LAFAYETTE, IN	NIHON	YS-11A-600	FATAL	208
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AIRCRAFT ACCIDENT REPORTS

BRIEF FORMAT

U.S. CIVIL AND FOREIGN AVIATION

ISSUE NUMBER 3 OF 1989 ACCIDENTS

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 487      2/09/89      FAIRBANKS,AK      A/C Reg. No. N756EA      Time (Lcl) - 0905 AST

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

Type Operating Certificate	COMMUTER	Aircraft Damage						
Name of Carrier	-ARCTIC CIRCLE AIR SERVICE	DESTROYED						
Type of Operation	-NON SCHED,DOMESTIC,CARGO	Fire	Crew	Fatal		Injuries		
Flight Conducted Under	-14 CFR 135	NONE	Pass	1	0	Serious	Minor	None
Accident Occurred During	-LANDING			0	0	0	0	0

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

Make/Model	- CESSNA U206G	Eng Make/Model	- CONTINENTAL IO-520-F	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 3600	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
Method	- N/A	FAIRBANKS,AK
Completeness	- N/A	Destination
Basic Weather	- VMC	FORT YUKON,AK
Wind Dir/Speed	- 180/005 KTS	ATC/Airspace
Visibility	- 90.0 SM	Type of Flight Plan
Lowest Sky/Clouds	- 6000 FT	- COMPANY (VFR)
Lowest Ceiling	- 6000 FT BROKEN	Type of Clearance
Obstructions to Vision	- NONE	- NONE
Precipitation	- NONE	Type Apch/Lndg
Condition of Light	- DAYLIGHT	- FORCED LANDING

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

-----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 - 2500	Last 24 Hrs - 5
SE LAND,ME LAND,SE SEA	Months Since - 4	Make/Model - 600	Last 30 Days - 45
	Aircraft Type - U206G	Instrument - 150	Last 90 Days - 193
		Multi-Eng - 50	

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING FLIGHT, THE PILOT REPORTED AN ENGINE FAILURE. SUBSEQUENTLY, THE AIRPLANE CRASHED AS IT WAS LANDED IN A STAND OF PINE TREES. AN EXAM OF THE ENGINE REVEALED THAT ONE OF THE REAR TORSION VIBRATION DAMPERS HAD SEPARATED FROM THE CRANKSHAFT BOSS. THERE WAS EVIDENCE THAT THIS RESULTED IN MASSIVE INTERNAL ENGINE DAMAGE & A SUBSEQUENT LOSS OF POWER.

Brief of Accident (Continued)

File No. - 487

2/09/89

FAIRBANKS, AK

A/C Reg. No. N756EA

Time (Lc1) - 0905 AST

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

Finding(s)

1. ENG ASSEMBLY, CRANKSHAFT COUNTERWEIGHTS/VIB DAMPER - SEPARATION

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

2. 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:  
SEPARATION OF THE TORSIONAL VIBRATION DAMPERS FROM THE CRANKSHAFT BOSS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 475      2/10/89      FAIRBANKS,AK      A/C Reg. No. N5056Q      Time (Lcl) - 0945 AST

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

Type Operating Certificate	ON-DEMAND AIR TAXI	Aircraft Damage						
Name of Carrier	-40 MILE AIR, LTD	SUBSTANTIAL		Fatal		Serious	Minor	None
Type of Operation	-NON SCHED,DOMESTIC,CARGO	Fire	Crew	0	0	0	0	1
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	0	0
Accident Occurred During	-TAKEOFF							

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

Make/Model	- DEHAVILLAND DHC-3	Eng Make/Model	- P&W R-1340-59	ELT Installed/Activated	- YES/NO
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 8000	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 AIRPORT
Method - N/A	FAIRBANKS,AK	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	EAGLE,AK	FAIRBANKS
Wind Dir/Speed- 360/005 KTS	ATC/Airspace	Runway Ident - 01
Visibility - 90.0 SM	Type of Flight Plan - COMPANY (VFR)	Runway Lth/Wid - 10300/ 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 - 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)
ATP	Current - YES	Total - 9153
SE LAND,ME LAND,SE SEA	Months Since - 5	Last 24 Hrs - 8
	Aircraft Type - DHC-3	Make/Model- 600
		Instrument- 913
		Last 30 Days- 53
		Last 90 Days- 230
		Multi-Eng - 2963

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD THAT BEFORE THE FLT, THE WINGS & STABILIZER WERE SWEPT, LEAVING A LAYER OF "POLISHED" FROST. FREIGHT WAS LOADED & THE ACFT WAS SERVICED TO BRING THE FUEL LEVEL UP TO 120 GAL. AFTER START, TAXI & RUN-UP, THE PLT BEGAN HIS TAKEOFF FROM THE APPROACH END OF THE 10,300 FT RWY (WITH 35" MP & 2250 RPM). AT ABOUT 100 FT AGL, HE ADJUSTED THE POWER (TO 30' MP & 2000 RPM) & RAISED THE FLAPS TO CLIMB AT 82 KTS. HOWEVER, THE ACFT DID NOT CLIMB & WOULD NOT ACCELERATE IN LEVEL FLT. THE PLT INCREASED THE POWER (TO 31" MP & 2100 RPM), BUT HE BELIEVED THERE WAS A DEFINITE LOSS OF POWER. SUBSEQUENTLY, THE ACFT WAS DAMAGED WHEN THE PLT ABORTED THE TAKEOFF ON SNOW COVERED TERRAIN BEYOND THE END OF THE RWY. NO PRE-ACDNT PART FAILURE OR MALFUNCTION OF THE ACFT OR ENG WAS FOUND. AN INV REVEALED THE ENTIRE ACFT WAS COVERED WITH A COATING OF FROST. COMPANY RECORDS SHOWED THE EMPTY WEIGHT OF THE ACFT WAS 5088 LBS; THE ACFT'S ACTUAL EMPTY WEIGHT WAS 5285 LBS. AN FAA INSPECTOR CALCULATED THAT THE TAKEOFF GROSS WEIGHT EXCEEDED THE MAX LIMIT BY 130 LBS.

Brief of Accident (Continued)

File No. - 475

2/10/89

FAIRBANKS, AK

A/C Reg. No. N5056Q

Time (Lcl) - 0945 AST

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Occurrence #1        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    TAKEOFF - ABORTED

Finding(s)

1. ICE/FROST REMOVAL FROM AIRCRAFT - NOT PERFORMED - PILOT IN COMMAND
  2. AIRCRAFT WEIGHT AND BALANCE - IMPROPER - COMPANY/OPERATOR MGMT
  3. ABORTED TAKEOFF
  4. TERRAIN CONDITION - SNOW COVERED
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT TO REMOVE FROST FROM THE AIRCRAFT. CONTRIBUTING FACTORS WERE: IMPROPER WEIGHT AND BALANCE AND  
SNOW COVERED TERRAIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 476      5/09/89      TOGIAC,AK      A/C Reg. No. N2747X      Time (Lcl) - 2315 ADT

-----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

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

Make/Model - CESSNA 180H	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 - 2800	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 6	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	DILLINGHAM,AK	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	
Wind Dir/Speed- 360/010 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 - TRAFFIC PATTERN	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DUSK		

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

Pilot-In-Command	Age - 54	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 3500
SE LAND,SE SEA	Months Since - 2	Make/Model- 1400
	Aircraft Type - F-19	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 1
		Last 30 Days- 20
		Last 90 Days- 50
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

WHILE LANDING ON A BEACH IN POOR LIGHTING CONDITIONS, THE PILOT FAILED TO SEE A 55-GALLON DRUM IN TIME TO AVOID HITTING IT. HE HAD INTENTIONALLY LANDED SLIGHTLY RIGHT OF THE USUAL LANDING AREA TO AVOID CLOSE PROXIMITY WITH ACFT ON THE LEFT. THE DRUM CONTAINED GASOLINE WHICH SOMEONE HAD LEFT NEAR THE RIGHT EDGE OF THE USUAL LANDING AREA.

Brief of Accident (Continued)

File No. - 476

5/09/89

TOGIAK, AK

A/C Reg. No. N2747X

Time (Lc1) - 2315 ADT

---

Occurrence #1      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING - ROLL

Finding(s)

1. UNSAFE/HAZARDOUS CONDITION
  2. LIGHT CONDITION - DUSK
  3. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER PLANNING/DECISION BY THE PILOT. CONTRIBUTING FACTORS WERE: LIGHT CONDITIONS AT DUSK, AN UNSAFE/HAZARDOUS  
CONDITION (DRUM THAT SOMEONE HAD LEFT NEAR THE LANDING AREA).

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 546      5/22/89      ANCHORAGE, AK      A/C Reg. No. N9949N      Time (Lcl) - 1553 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 - TAKEOFF			0	0	0
					1
					3

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

Make/Model - CESSNA 180J	Eng Make/Model - CONTINENTAL O-470R	ELT Installed/Activated - YES/NO
Landing Gear - FLOAT	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2950	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	OFF AIRPORT/STRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	SAND LAKE
Wind Dir/Speed- 260/009 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 90.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 4500 FT SCATTERED	Type of Clearance - NONE	Runway Surface - WATER
Lowest Ceiling - 6500 FT BROKEN	Type Apch/Lndg - NONE	Runway Status - WATER-CALM
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 29	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
ATP	Current - YES	Total - 4423
SE LAND, ME LAND	Months Since - 12	Make/Model- 270
	Aircraft Type - PA-31	Instrument- 837
		Multi-Eng - 2685
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- 7

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE AIRLINE TRANSPORT CERTIFICATED PILOT WAS ATTEMPTING TO TAKE OFF FROM A 3,500' LAKE AT GROSS WEIGHT IN A FLOAT EQUIPPED CESSNA 180 AIRPLANE. THE PILOT WAS UNABLE TO BECOME AIRBORNE ON THE FIRST TAKE OFF ATTEMPT. HIS SECOND ATTEMPT WAS SUCCESSFUL, BUT HE BECAME AIRBORNE LATE IN THE TAKE OFF RUN AND COLLIDED WITH TREES ON THE SHORE LINE, NARROWLY MISSING TWO HOUSES. THE PILOT WAS NOT RATED FOR, AND HAD TAKEN NO FORMAL INSTRUCTION IN, SEAPLANE OPERATIONS PRIOR TO THE ACCIDENT FLIGHT. A LOCAL PILOT/WITNESS SAID THAT HE WATCHED THE TAKE OFF AND SAW WHAT HE DESCRIBED AS OBVIOUSLY POOR TECHNIQUE.



Brief of Accident (Continued)

File No. - 546

5/22/89

ANCHORAGE, AK

A/C Reg. No. N9949N

Time (Lcl) - 1553 ADT

Occurrence #1 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation TAKEOFF - INITIAL CLIMB

Finding(s)

1. JUDGEMENT - POOR - PILOT IN COMMAND
2. INADEQUATE INITIAL TRAINING - PILOT IN COMMAND
3. PREFLIGHT PLANNING/PREPARATION - IMPROPER - PILOT IN COMMAND
4. LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
5. PERFORMANCE DATA - NOT UNDERSTOOD - PILOT IN COMMAND
6. OVER CONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND
7. OVER CONFIDENCE IN AIRCRAFT'S ABILITY - PILOT IN COMMAND

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT-IN-COMMAND'S POOR JUDGEMENT, AND HIS LACK OF INITIAL TRAINING (NONE) IN SEAPLANE OPERATIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 477      5/31/89      TOKSOOK BAY, AK      A/C Reg. No. N9360N      Time (Lcl) - 2115 ADT

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

Type Operating Certificate	COMMUTER	Aircraft Damage					
Name of Carrier	-HARBOR AIR	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	-LANDING			0	0	0	1

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

Make/Model	- CESSNA 185F	Eng Make/Model	- CONTINENTAL IO-520	ELT Installed/Activated	- YES/YES
Landing Gear	- AMPHIBIAN	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	- UNK/NR	OFF AIRPORT/STRIP	
Method	- UNK/NR		
Completeness	- WEATHER NOT PERTINENT	Airport Data	
Basic Weather	- VMC	Runway Ident	- N/A
Wind Dir/Speed	- 360/005 KTS	Runway Lth/Wid	- N/A
Visibility	- 15.0 SM	Runway Surface	- N/A
Lowest Sky/Clouds	- N/A	Runway Status	- N/A
Lowest Ceiling	- 3000 FT OVERCAST		
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)	
COMMERCIAL	Current - YES	Total - 1800	Last 24 Hrs - 5
SE LAND, SE SEA	Months Since - 6	Make/Model - 400	Last 30 Days - 120
	Aircraft Type - C-172	Instrument - 44	Last 90 Days - 300

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE AMPHIBIOUS FLOAT PLANE NOSED OVER IMMEDIATELY AFTER LANDING ON WATER. THE PLT STATED THE WHEELS WERE RETRACTED, BUT THE PASSENGER SAID ALL FOUR WHEELS WERE DOWN WHEN THE ACFT TOUCHED DOWN. WHEN THE ACFT WAS PULLED FROM THE WATER, ALL WHEELS WERE IN THE DOWN POSITION. DRG A POST-ACCIDENT CHECK, ALL OF THE GEAR OPERATED PROPERLY & ALL REMAINED IN THE UP POSITION.

Brief of Accident (Continued)

File No. - 477

5/31/89

TOKS00K BAY, AK

A/C Reg. No. N9360N

Time (Lcl) - 2115 ADT

-----  
Occurrence #1        GEAR NOT RETRACTED  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

1. WHEELS DOWN LANDING IN WATER - INADVERTENT - PILOT IN COMMAND
- 

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:  
THE PILOT INADVERTENTLY LANDED ON WATER WITH THE GEAR EXTENDED.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 545      6/04/89      GLENNALLEN,AK      A/C Reg. No. N52010      Time (Lcl) - 1650 ADT

-----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	2

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

Make/Model - CESSNA 180-J  
Landing Gear - FLOAT  
Max Gross Wt - 2800  
No. of Seats - 4

Eng Make/Model - CONTINENTAL O-470-R  
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- 060/012 KTS  
Visibility - 60.0 SM  
Lowest Sky/Clouds - 8000 FT  
Lowest Ceiling - 8000 FT BROKEN  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
SAME AS ACC/INC  
Destination  
EAGLE RIVER,AK

ATC/Airspace

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

Airport Proximity  
ON AIRPORT

Airport Data

LAKE LOUISE  
Runway Ident - 18  
Runway Lth/Wid - 5000/ 400  
Runway Surface - WATER  
Runway Status - WATER - CHOPPY

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

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

Age - 51  
Biennial Flight Review  
Current - YES  
Months Since - 12  
Aircraft Type - C-180

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 1350  
Make/Model- 1200  
Instrument- UNK/NR  
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-----

THIS PRIVATE PILOT TOOK OFF FROM THE WATER TOWARD RISING TERRAIN, WITH STRONG GUSTY WINDS. HE HAD ABOUT ONE MILE TAKEOFF DISTANCE AVAILABLE, YET WAS ONLY ABOUT 60 FEET ABOVE THE WATER APPROACHING THE SHORELINE. THE PILOT STATED THAT HE ENCOUNTERED A DOWNDRAFT THAT EXCEEDED THE AIRPLANES CLIMB CAPABILITY, AND CRASHED ABOUT 1/4 MILE PAST THE SHORELINE.

Brief of Accident (Continued)

File No. - 545

6/04/89

GLENNALLEN, AK

A/C Reg. No. N52010

Time (Lcl) - 1650 ADT

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

Finding(s)

1. TERRAIN CONDITION - RISING
2. ALL AVAILABLE RUNWAY - NOT USED - PILOT IN COMMAND
3. WEATHER CONDITION - GUSTS
4. COMPENSATION FOR WIND CONDITIONS - POOR - PILOT IN COMMAND
5. WEATHER CONDITION - HIGH WIND
6. JUDGEMENT - POOR - PILOT IN COMMAND
7. WEATHER CONDITION - DOWNDRAFT

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 USED POOR JUDGEMENT AND PLANNING FOR HIS TAKEOFF.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 493      6/16/89      KENAI, AK

A/C Reg. No. N6908D

Time (Lcl) - 1300 ADT

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

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
1	0	0	0
3	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  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 1850  
No. of Seats - 4

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 - 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  
PORT ALSWORTH, AK  
Destination  
SOLDOTNA, 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 - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - FORCED LANDING

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

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

Age - 49  
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 - 2350  
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-----

DRG FLT, THE PLT RPRTD THE ACFT WAS LOW ON FUEL. HE INDICATED HE WAS GOING TO DITCH THE ACFT IN COOK INLET, ABOUT ONE MILE OFF SHORE, NEAR "WEST FORELANDS." NEITHER THE ACFT NOR THE OCCUPANTS WERE FOUND, EXCEPT A MAIN WHEEL & STRUT WERE FOUND IN THE WATER NEAR CAPE NINILCHICK THAT MATCHED THE COLOR & DESCRIPTION OF THE ACFT.

Brief of Accident (Continued)

File No. - 493

6/16/89

KENAI, AK

A/C Reg. No. N6908D

Time (Lc1) - 1300 ADT

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

Finding(s)

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

Occurrence #2            FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

-----

Occurrence #3            DITCHING  
Phase of Operation      LANDING

-----

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE PREFLIGHT BY THE PILOT AND FUEL EXHAUSTION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 551      6/18/89      RAINBOW LAKE, AK      A/C Reg. No. N5087Y      Time (Lcl) - 1700 ADT

-----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 -DESCENT			0	0	0	1	
			0	0	0	1	

-----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 - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	SAME AS ACC/INC	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LOCAL	
Wind Dir/Speed- 310/010 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 40.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 3000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - DIRT
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 - 45	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - UNK/NR
SE LAND	Months Since - 5	Last 24 Hrs - UNK/NR
	Aircraft Type - PA-18	Make/Model- 400
		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 PILOT AND HIS PASSENGER WERE RETURNING FROM A LOCAL FISHING TRIP AND HAD JUST TAKEN OFF FROM A SAND BAR NEAR THEIR FISHING SITE. SHORTLY AFTER BECOMING AIRBORNE, THE PILOT SAID THAT THE "WIND STALLED THE RIGHT WING". HE LOST CONTROL OF THE AIRPLANE AND WAS UNABLE TO RECOVER PRIOR TO CRASHING INTO A LAKE.



Brief of Accident (Continued)

File No. - 551

6/18/89

RAINBOW LAKE, AK

A/C Reg. No. N5087Y

Time (Lcl) - 1700 ADT

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

Finding(s)

1. AIRSPEED(VS) - NOT MAINTAINED - PILOT IN COMMAND
  2. STALL - 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:  
PILOT IN COMMAND'S FAILURE TO MAINTAIN AN AIRSPEED (ANGLE OF ATTACK) THAT WOULD PRECLUDE A STALL.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 407      6/18/89      ALDER CREEK, AK      A/C Reg. No. N4912Z      Time (Lcl) - 1700 ADT

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

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

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

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

Fire  
NONE

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

Make/Model - PIPER PA-22-108  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 1650  
No. of Seats - 4

Eng Make/Model - LYCOMING O-235  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 108 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- 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 - NONE

Airport Proximity  
ON AIRSTRIP

Airport Data

ALDER CREEK  
Runway Ident - 06  
Runway Lth/Wid - 950/ 150  
Runway Surface - GRASS/TURF  
Runway Status - ROUGH

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

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

Age - 54  
Biennial Flight Review  
Current - YES  
Months Since - 22  
Aircraft Type - PA-22

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)

Total	- 2000	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 RPRTD HE LOST CONTROL OF THE ACFT DURING TAKEOFF ON A SOFT/ROUGH STRIP COVERED WITH LOW BUSHES. SUBSEQUENTLY, THE ACFT WENT OFF THE RWY, RAN INTO ALDERS, & NOSED OVER. THE PLT BELIEVED THE ACDNT MAY HAVE BEEN AVOIDED, IF THE STRIP HAD BEEN MOWED SO THAT ITS ROUGH AREAS WOULD HAVE BEEN SEEN.

Brief of Accident (Continued)

File No. - 407

6/18/89

ALDER CREEK, AK

A/C Reg. No. N4912Z

Time (Lc1) - 1700 ADT

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

Finding(s)

1. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
2. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - HIGH VEGETATION
3. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - SOFT
4. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - ROUGH/UNEVEN
5. GROUND LOOP/SWERVE - UNCONTROLLED -

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

Finding(s)

6. TERRAIN CONDITION - HIGH VEGETATION

Occurrence #3            NOSE OVER  
Phase of Operation       TAKEOFF

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
SELECTION OF UNSUITABLE TERRAIN (UNIMPROVED STRIP) BY THE PILOT. SOFT/UNEVEN TERRAIN & LOW BUSHES ON THE STRIP,  
AS WELL AS ALDERS BESIDE THE STRIP, WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 406      6/19/89      ANCHORAGE, AK      A/C Reg. No. N18OSR      Time (Lcl) - 2225 ADT

-----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	3

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

Make/Model - CESSNA 180  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 2800  
No. of Seats - 4

Eng Make/Model - CONTINENTAL O-470-R  
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- CALM  
Visibility - 60.0 SM  
Lowest Sky/Clouds - 18000 FT THIN BKN  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
THEODORE RIVER, AK  
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

MERRILL  
Runway Ident - 06  
Runway Lth/Wid - 3999/ 100  
Runway Surface - ASPHALT  
Runway Status - DRY

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

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

Age - 40  
Biennial Flight Review  
Current - YES  
Months Since - 6  
Aircraft Type - C-180

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 471  
Make/Model- 316  
Instrument- 0  
Last 24 Hrs - 2  
Last 30 Days- 29  
Last 90 Days- 73

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT DRG THE LANDING, HE LOST DIRECTIONAL CONTROL AFTER TOUCHDOWN. SUBSEQUENTLY, THE ACFT GROUND LOOPED TO THE RIGHT & THE LEFT MAIN GEAR FAILED.

Brief of Accident (Continued)

File No. - 406

6/19/89

ANCHORAGE, AK

A/C Reg. No. N18OSR

Time (Lc1) - 2225 ADT

-----  
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            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:  
LOSS OF DIRECTIONAL CONTROL BY THE PILOT & INADVERTENT GROUND LOOP/SWERVE OF THE AIRCRAFT DURING THE LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 556      6/19/89      SHESHALIK,AK      A/C Reg. No. N7735K      Time (Lcl) - 1330 ADT

-----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	2
Accident Occurred During -LANDING					

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

Make/Model - PIPER PA-20	Eng Make/Model - LYCOMING O-320A2B	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1950	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	OFF AIRPORT/STRIP
Method - N/A	KOTZEBUE,AK	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	Runway Ident - N/A
Wind Dir/Speed- LIGHT AND VARIABLE	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 100.0 SM	Type of Flight Plan - NONE	Runway Surface - GRAVEL
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Status - DRY
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 40	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
ATP	Current - YES	Total - 2900
SE LAND,ME LAND	Months Since - 6	Make/Model- 500
	Aircraft Type - PA-44	Instrument- UNK/NR
		Multi-Eng - 20
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT REPORTED THAT HE WAS LANDING AT AN OFF AIRPORT SITE (GRAVEL SPIT) THAT HE FREQUENTLY USES. DURING THE FINAL PHASE OF THE LANDING ROLL, HE APPLIED THE BRAKES AND THE LEFT BRAKE LOCKED, CAUSING THE AIRPLANE TO SLOWLY NOSE OVER. A POST ACCIDENT INSPECTION OF THE BRAKES BY THE PILOT REVEALED THAT THE LEFT BRAKE WAS OXIDIZED AND CORRODED. THE PILOT RECOMMENDS THAT A HARD APPLICATION OF THE BRAKES BE PERFORMED PRIOR TO FLIGHT TO HELP ASSESS THE CONDITION OF THE BRAKES.

Brief of Accident (Continued)

File No. - 556

6/19/89

SHESHALIK,AK

A/C Reg. No. N7735K

Time (Lcl) - 1330 ADT

---

Occurrence #1

NOSE OVER

Phase of Operation

LANDING - ROLL

Finding(s)

1. LANDING GEAR,NORMAL BRAKE SYSTEM - SEIZED
  2. AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT-IN-COMMAND'S FAILURE TO PERFORM AN ADEQUATE PREFLIGHT INSPECTION OF THE AIRPLANE'S BRAKES.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 494      6/19/89      TYONEK, AK      A/C Reg. No. N9926B      Time (Lcl) - 2330 ADT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL		Fatal	0	0	0
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 182A	Eng Make/Model - CONTINENTAL O-470	ELT Installed/Activated - YES/YES
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2600	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	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- CALM	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 60.0 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 - DUSK		

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

Pilot-In-Command	Age - 46	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 319
SE LAND	Months Since - 1	Make/Model- 52
	Aircraft Type - C-182	Instrument- 12
		Last 24 Hrs - 2
		Last 30 Days- 28
		Last 90 Days- 60

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT ATTEMPTED A TAKEOFF FROM A SAND BAR AFTER HE & THE PASSENGER HAD LANDED THERE TO GO FISHING. HE RPRTD THAT DRG THE TAKEOFF ROLL, HE LOST DIRECTIONAL CONTROL OF THE ACFT ON SOFT SAND. SUBSEQUENTLY, THE RIGHT MAIN GEAR STRUCK AN OBJECT (TREE LIMB IMBEDDED IN THE SAND) & COLLAPSED. THE PLT BELIEVED THE ACDNT COULD HAVE BEEN AVOIDED BY ABORTING SOONER OR BY NOT USING THE SAND BAR FOR LANDING & TAKEOFF. THIS ACFT HAD BEEN MODIFIED WITH CONVENTIONAL LANDING GEAR.



Brief of Accident (Continued)

File No. - 494

6/19/89

TYONEK, AK

A/C Reg. No. N9926B

Time (Lc1) - 2330 ADT

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

Finding(s)

1. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
  2. TERRAIN CONDITION - LOOSE GRAVEL/SANDY
  3. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
  4. GROUND LOOP/SWERVE - UNCONTROLLED -
- 

Occurrence #2            ON GROUND COLLISION WITH OBJECT  
Phase of Operation      TAKEOFF - ABORTED

Finding(s)

5. ABORTED TAKEOFF - DELAYED - PILOT IN COMMAND
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
SELECTION OF UNSUITABLE TERRAIN BY THE PILOT. PROBABLE CONTRIBUTING FACTORS WERE THE SOFT SAND AND THE PILOT'S DELAY  
IN ABORTING THE TAKEOFF.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 408      6/23/89      TUNTUTULIAK,AK      A/C Reg. No. N15306      Time (Lcl) - 1340 ADT

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

Type Operating Certificate	COMMUTER	Aircraft Damage						
Name of Carrier	-SEAGULL AIR SERVICE	SUBSTANTIAL		Fatal		Serious	Minor	None
Type of Operation	-NON SCHED,DOMESTIC,PASSENGER	Fire	Crew	0	0	0	0	1
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	0	4
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	- 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	BETHEL,AK			
Completeness	- N/A	Destination		Airport Data	
Basic Weather	- VMC	SAME AS ACC/INC			
Wind Dir/Speed	- 290/014 KTS	ATC/Airspace		Runway Ident	- N/A
Visibility	- 20.0 SM	Type of Flight Plan	- COMPANY (VFR)	Runway Lth/Wid	- N/A
Lowest Sky/Clouds	- N/A	Type of Clearance	- NONE	Runway Surface	- N/A
Lowest Ceiling	- 1500 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 - 27	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL,CFI	Current - YES	Total - 1635	Last 24 Hrs - 8
SE LAND,ME LAND	Months Since - 8	Make/Model- 710	Last 30 Days- 128
	Aircraft Type - PA-32	Instrument- 106	Last 90 Days- 270
		Multi-Eng - 26	

Instrument Rating(s) - AIRPLANE

-----Narrative-----

BEFORE REACHING THE DESTN, THE ENG BEGAN RUNNING ROUGH, THEN LOST POWER. SUBSEQUENTLY, THE ACFT HIT A MUD BANK & WAS DAMAGED AS THE PLT WAS LANDING ON TUNDRA ABOUT 1 MI FROM THE ARPT. AN EXAM OF THE ENG REVEALED THE CRANKSHAFT HAD FAILED.

Brief of Accident (Continued)

File No. - 408

6/23/89

TUNTUTULIAK, AK

A/C Reg. No. N15306

Time (Lcl) - 1340 ADT

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

Finding(s)

1. ENGINE ASSEMBLY, CRANKSHAFT - FAILURE, TOTAL
- 

Occurrence #2        FORCED LANDING  
Phase of Operation    DESCENT - EMERGENCY

-----

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

Finding(s)

2. TERRAIN CONDITION - DIRT BANK
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE ENGINE CRANKSHAFT. A CONTRIBUTING FACTOR TO AIRCRAFT DAMAGE WAS A MUD (DIRT) BANK WHICH THE AIRCRAFT HIT  
DURING THE EMERGENCY LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 555	6/24/89	ILIAMNA, AK	A/C Reg. No. N5595M	Time (Lcl) - 1430 ADT
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----Basic Information----

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

---

----Aircraft Information----

Make/Model - DE HAVILLAND DHC-2	Eng Make/Model - P & W R-985	ELT Installed/Activated - YES/YES
Landing Gear - FLOAT	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 5090	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 6	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	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	Runway Ident - N/A
Wind Dir/Speed- 270/010 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 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 - 3000 FT BROKEN	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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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)
COMMERCIAL	Current - YES	Total - 10000
SE LAND, ME LAND, SE SEA, ME SEA	Months Since - 3	Make/Model- 1000
	Aircraft Type - M-7	Instrument- 115
		Multi-Eng - 3000

Last 24 Hrs - 1

Last 30 Days- 6

Last 90 Days- 6

Instrument Rating(s) - AIRPLANE

---

----Narrative----

ON FINAL APPROACH THE ENGINE QUIT, AND THE AIRPLANE CRASHED INTO A WOODED AREA. THE AIRPLANE WAS SUBSTANTIALLY DAMAGED AND THE PILOT AND PASSENGER WERE SERIOUSLY INJURED. AN EXAMINATION OF THE ENGINE REVEALED A MALFUNCTION OF THE MAGNETO. A THICK CRUST COATED BOTH POLES OF THE MAGNETO, WHICH CAUSED IT TO BIND INTERNALLY.

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Brief of Accident (Continued)

File No. - 555

6/24/89

ILIAMNA,AK

A/C Reg. No. N5595M

Time (Lcl) - 1430 ADT

-----  
Occurrence #1            LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation      APPROACH - VFR PATTERN - BASE LEG/BASE TO FINAL

Finding(s)

1. IGNITION SYSTEM,MAGNETO - FAILURE,TOTAL
  2. MAINTENANCE,ANNUAL INSPECTION - INADEQUATE - OTHER MAINTENANCE PSNL
- 

Occurrence #2            FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

-----  
Occurrence #3            IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      APPROACH

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE ANNUAL INSPECTION BY MAINTENANCE PERSONNEL.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 552      6/25/89      NAKNEK, AK      A/C Reg. No. N2435F      Time (Lcl) - 2000 ADT

-----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 180H  
Landing Gear      - TAILWHEEL-ALL FIXED  
Max Gross Wt      - 2800  
No. of Seats      - 6

Eng Make/Model      - CONTINENTAL O-470  
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      - NO RECORD OF BRIEFING  
Method      - N/A  
Completeness      - N/A

Basic Weather      - VMC

Wind Dir/Speed- 150/010 KTS  
Visibility      - 20.0 SM  
Lowest Sky/Clouds      - 2500 FT SCATTERED  
Lowest Ceiling      - NONE  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point  
DILLINGHAM, AK  
Destination  
SAME AS ACC/INC

ATC/Airspace

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

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident      - 15  
Runway Lth/Wid      - 2500/ 50  
Runway Surface      - DIRT  
Runway Status      - DRY

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

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL  
SE LAND, SE SEA

Age - UNK/NR

Biennial Flight Review

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

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total	- 6500	Last 24 Hrs	- 1
Make/Model-	3000	Last 30 Days-	20
Instrument-	UNK/NR	Last 90 Days-	50
Multi-Eng	- UNK/NR	Rotorcraft	- UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING THE LANDING ROLL ON A BEACH, THE PILOT ALLOWED THE AIRPLANE'S TAIL WHEEL TO DROP TOO LOW, AND CATCH ON A FISHING NET ANCHOR LINE WHICH WAS ABOUT 5-6 INCHES OFF THE GROUND. BEFORE BREAKING, THE LINE PULLED THE AIRPLANE SIDEWAYS, CAUSING A MAIN LANDING GEAR TO COLLAPSE, AND THE LEFT WING TO CONTACT THE GROUND. THE PILOT STATED THAT HE HAD LANDED OVER THIS LINE 15-20 TIMES PREVIOUSLY WITH NO PROBLEMS.

Brief of Accident (Continued)

File No. - 552

6/25/89

NAKNEK, AK

A/C Reg. No. N2435F

Time (Lcl) - 2000 ADT

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

Finding(s)

1. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND  
-----

Occurrence #2        MAIN GEAR COLLAPSED  
Phase of Operation    LANDING - ROLL  
2. 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 SELECTION OF AN UNSUITABLE LANDING AREA.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 550

6/27/89

ILIAMNA, AK

A/C Reg. No. N37209

Time (Lcl) - 1500 ADT

-----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 - INTERSTATE S-1A  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 1450  
No. of Seats - 2

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 - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A  
Basic Weather - VMC  
Wind Dir/Speed- 160/010 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  
ON AIRSTRIP

Airport Data

ILIASKA  
Runway Ident - 18  
Runway Lth/Wid - 700/ 75  
Runway Surface - DIRT  
Runway Status - DRY

ATC/Airspace

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

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

Pilot-In-Command

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

Age - 43

Biennial Flight Review

Current - UNK/NR  
Months Since - UNK/NR  
Aircraft Type - DHC-2

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total	-	2521	Last 24 Hrs -	1
Make/Model-	24		Last 30 Days-	46
Instrument-	24		Last 90 Days-	46

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT STATED THAT HE HIT A BUMP IN THE RUNWAY, CAUSING THE AIRPLANE TO BOUNCE DURING LANDING. HE THEN ATTEMPTED TO MAKE A GO-AROUND. THE RIGHT WING HIT SOME SCRUB BRUSH ALONG THE SIDE OF THE RUNWAY, CAUSING THE PILOT TO LOSE CONTROL OF THE AIRPLANE AND NOSE OVER.



Brief of Accident (Continued)

File No. - 550

6/27/89

ILIAMNA, AK

A/C Reg. No. N37209

Time (Lc1) - 1500 ADT

-----  
Occurrence #1      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - ABORTED

Finding(s)

1. TERRAIN CONDITION - ROUGH/UNEVEN
- 

Occurrence #2      LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      LANDING - ABORTED

Finding(s)

2. TERRAIN CONDITION - HIGH VEGETATION
  3. RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND
- 

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING - ABORTED

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT FAILED TO MAINTAIN DIRECTIONAL CONTROL DURING THE ATTEMPTED GO-AROUND. FACTORS IN THE ACCIDENT WERE THE  
ROUGH/UNEVEN TERRAIN AND THE BRUSH BESIDE THE RUNWAY.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 490      6/27/89      KING SALMON, AK      A/C Reg. No. N4104D      Time (Lc1) - 1800 ADT

-----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 - HELIO H800	Eng Make/Model - LYCOMING IO-720	ELT Installed/Activated - YES/YES
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 4000	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 2	Rated Power - 400 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	OFF AIRPORT/STRIP
Method - UNK/NR	ANCHORAGE, AK	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	Runway Ident - N/A
Wind Dir/Speed- 010/015 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 60.0 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 - FULL STOP	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 33	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 1270
SE LAND, ME LAND	Months Since - 3	Last 24 Hrs - 8
HELICOPTER	Aircraft Type - C-172	Make/Model- 70
		Last 30 Days- 25
		Instrument- 0
		Last 90 Days- 70
		Multi-Eng - 270
		Rotorcraft - 600

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT REPORTED THAT HE ELECTED TO LAND ON FLAT TERRAIN THAT APPEARED TO BE SOLID ENOUGH TO SUPPORT THE AIRCRAFT. HOWEVER, DURING THE LANDING ROLL, THE WHEELS SANK IN MUD AND THE AIRCRAFT NOSED OVER.

Brief of Accident (Continued)

File No. - 490

6/27/89

KING SALMON, AK

A/C Reg. No. N4104D

Time (Lcl) - 1800 ADT

---

Occurrence #1 NOSE OVER

Phase of Operation LANDING - ROLL

Finding(s)

1. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
  2. TERRAIN CONDITION - SOFT
  3. TERRAIN CONDITION - WET
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT SELECTED UNSUITABLE TERRAIN FOR THE LANDING. SOFT/WET (MUDDY) TERRAIN CONDITIONS WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 491      6/30/89      DILLINGHAM, AK      A/C Reg. No. N6305E      Time (Lcl) - 1805 ADT

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

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

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

Type of Operation -PERSONAL

Flight Conducted Under -14 CFR 91

Fire  
NONE

Crew  
Pass

Accident Occurred During -MANEUVERING

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

Make/Model - CESSNA 185F

Eng Make/Model - CONTINENTAL IO-520-D

ELT Installed/Activated - YES/YES

Landing Gear - FLOAT

Number Engines - 1

Stall Warning System - YES

Max Gross Wt - 3362

Engine Type - RECIP-FUEL INJECTED

No. of Seats - 4

Rated Power - 300 HP

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

Weather Data

Wx Briefing - NO RECORD OF BRIEFING

Method - N/A

Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 300/015 KTS

Visibility - 60.0 SM

Lowest Sky/Clouds - 5000 FT SCATTERED

Lowest Ceiling - NONE

Obstructions to Vision- NONE

Precipitation - NONE

Condition of Light - DAYLIGHT

Itinerary

Last Departure Point

SAME AS ACC/INC

Destination

DILLINGHAM, 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 - NONE

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

Pilot-In-Command

Age - 50

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Certificate(s)/Rating(s)

Biennial Flight Review

Flight Time (Hours)

COMMERCIAL

Current - YES

Total - 4500

Last 24 Hrs - 6

SE LAND, SE SEA

Months Since - 1

Make/Model- 4200

Last 30 Days- 130

Aircraft Type - C-185

Instrument- 48

Last 90 Days- 220

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT OF A FLOAT PLANE RPRTD THAT HE MADE A LOW PASS OVER A BEACH AT 100' AGL TO CHECK FOR A FUTURE WHEEL LANDING AREA. REPORTEDLY, THE ACFT ENCOUNTERED A DOWNDRAFT DRG THE LOW PASS THAT EXCEEDED ITS CLIMB CAPABILITY. SUBSEQUENTLY, IT IMPACTED ON THE BEACH AT AN AIRSPEED OF ABOUT 90 KTS & NOSED OVER. THE FRONT SEAT OCCUPANTS OF THE ACFT BELIEVED THAT USE OF THE SHOULDER HARNESSSES PROBABLY SAVED THEIR LIVES.

Brief of Accident (Continued)

File No. - 491

6/30/89

DILLINGHAM, AK

A/C Reg. No. N6305E

Time (Lc1) - 1805 ADT

-----  
Occurrence #1      ALTITUDE DEVIATION, UNCONTROLLED  
Phase of Operation      MANEUVERING

Finding(s)

1. LOW PASS - PERFORMED - PILOT IN COMMAND
  2. WEATHER CONDITION - DOWNDRAFT
  3. IN-FLIGHT PLANNING/DECISION - IMPROPER - 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:  
IMPROPER PLANNING/DECISION BY THE PILOT & A STRONG DOWNDRAFT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 492      7/13/89      NAKNEK, AK      A/C Reg. No. N5745W      Time (Lcl) - 1900 ADT

-----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	0	1
Pass	0	0	0	0

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

Make/Model      - PIPER PA-28	Eng Make/Model      - LYCOMING O-320-B2B	ELT Installed/Activated      - YES/NO
Landing Gear      - TRICYCLE-FIXED	Number Engines      - 1	Stall Warning System      - YES
Max Gross Wt      - 2200	Engine Type      - RECIPROCATING-CARBURETOR	
No. of Seats      - 4	Rated Power      - 160 HP	

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

Weather Data

Wx Briefing      - NO RECORD OF BRIEFING  
Method      - N/A  
Completeness      - N/A  
Basic Weather      - VMC  
Wind Dir/Speed- 120/010 KTS  
Visibility      - 10.0      SM  
Lowest Sky/Clouds      - 2500 FT SCATTERED  
Lowest Ceiling      - 8000 FT OVERCAST  
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

NAKNEK  
Runway Ident      - 26  
Runway Lth/Wid      - 2000/      60  
Runway Surface      - GRAVEL  
Runway Status      - DRY

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

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

Age      - 30  
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      - 516      Last 24 Hrs      - 1  
Make/Model- 490      Last 30 Days- 20  
Instrument- 0      Last 90 Days- 40  
Multi-Eng      - 0

Instrument Rating(s)      - NONE

-----Narrative-----

THE STUDENT PILOT REPORTED THAT DURING TAKEOFF, THE AIRPLANE CLIMBED TO ABOUT 100 FT AGL, THEN STALLED. SUBSEQUENTLY, IT CRASHED IN A LAKE NEAR THE DEPARTURE END OF THE RUNWAY. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE AIRPLANE WAS REPORTED.

Brief of Accident (Continued)

File No. - 492

7/13/89

NAKNEK, AK

A/C Reg. No. N5745W

Time (Lc1) - 1900 ADT

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

Finding(s)

1. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
  2. STALL - INADVERTENT - PILOT IN COMMAND
- 

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

Finding(s)

3. TERRAIN CONDITION - WATER
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT FAILED TO MAINTAIN AIRSPEED AND INADVERTENTLY ALLOWED THE AIRPLANE TO STALL.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 488      7/13/89      KING SALMON, AK      A/C Reg. No. N9541S      Time (Lcl) - 1826 ADT

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

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

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

Make/Model - CHAMPION 7ECA	Eng Make/Model - LYCOMING O-235-C1	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1600	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 115 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	KING SALMON
Wind Dir/Speed- 120/020 KTS	ATC/Airspace	Runway Ident - 11
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 8500/ 150
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 2000 FT OVERCAST	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 20	Medical Certificate - EXPIRED
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 105
SE LAND	Months Since - UNK/NR	Make/Model- 105
	Aircraft Type - UNK/NR	Instrument- 0
		Multi-Eng - 0
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT REPORTED THAT DURING A LANDING AT THE KING SALMON AIRPORT, THE AIRCRAFT TOUCHED DOWN AT ABOUT MIDFIELD. SUBSEQUENTLY, IT DEPARTED THE DEPARTURE END OF THE RUNWAY, HIT A SEAWALL, THEN NOSED OVER AND SANK IN ABOUT 30 TO 40 FEET OF WATER. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE AIRCRAFT WAS REPORTED. THE PILOT'S MEDICAL CERTIFICATE WAS DATED 6/9/86.



Brief of Accident (Continued)

File No. - 488

7/13/89

KING SALMON, AK

A/C Reg. No. N9541S

Time (Lc1) - 1826 ADT

-----  
Occurrence #1            OVERRUN  
Phase of Operation      LANDING - ROLL

Finding(s)

1. PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
  2. AIRSPEED - EXCESSIVE - PILOT IN COMMAND
  3. DISTANCE - MISJUDGED - PILOT IN COMMAND
- 

Occurrence #2            ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING - ROLL

-----  
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 LANDED BEYOND THE PROPER TOUCHDOWN POINT WITH EXCESSIVE AIRSPEED AND MISJUDGED THE DISTANCE OF RUNWAY  
REMAINING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 489      7/13/89      PARKER LAKE, AK      A/C Reg. No. N27024      Time (Lcl) - 1500 ADT

-----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	0

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

Make/Model	- PIPER J-3	Eng Make/Model	- CONTINENTAL C-90-12F	ELT Installed/Activated	- YES/NO
Landing Gear	- FLOAT	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 1300	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 2	Rated Power	- 95 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	- CALM	ATC/Airspace		Runway Lth/Wid	- N/A
Visibility	- 25.0 SM	Type of Flight Plan	- NONE	Runway Surface	- N/A
Lowest Sky/Clouds	- 5000 FT SCATTERED	Type of Clearance	- NONE	Runway Status	- N/A
Lowest Ceiling	- NONE	Type Apch/Lndg	- NONE		
Obstructions to Vision	- NONE				
Precipitation	- RAIN				
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)	
PRIVATE	Current - YES	Total - 1200	Last 24 Hrs - 1
SE LAND, SE SEA	Months Since - 1	Make/Model - 800	Last 30 Days - 5
	Aircraft Type - J-3	Instrument - UNK/NR	Last 90 Days - 5
		Multi-Eng - 0	Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT DRG TAKEOFF FROM A LAKE, THE ACFT FLEW APRX 200 FT, THEN SETTLED IN A SWAMP. IN A STATEMENT AFTER THE ACDNT, HE NOTED HE HAD "EXCESSIVE BACK PRESSURE" ON THE CONTROL STICK & STATED THAT MORE SPEED AT LIFT-OFF WOULD HAVE BEEN HELPFUL. ALSO, HE RPRTD THERE WERE CALM WIND CONDITIONS & RAIN SHOWERS IN THE AREA. THERE WAS ANOTHER PART ON THE LAKE THAT WOULD HAVE PROVIDED A LONGER TAKEOFF AREA.

Brief of Accident (Continued)

File No. - 489

7/13/89

PARKER LAKE, AK

A/C Reg. No. N27024

Time (Lcl) - 1500 ADT

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

Finding(s)

1. PREFLIGHT PLANNING/PREPARATION - IMPROPER - PILOT IN COMMAND
  2. AIRSPEED - NOT ATTAINED - PILOT IN COMMAND
  3. STALL/MUSH - INADVERTENT - PILOT IN COMMAND
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER PREFLIGHT PLANNING BY THE PILOT AND HIS FAILURE TO ATTAIN AND/OR MAINTAIN ADEQUATE SPEED, WHICH RESULTED IN A  
STALL/MUSH AFTER LIFT-OFF.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 549      7/13/89      KODIAK, AK      A/C Reg. No. N5354G      Time (Lcl) - 1415 ADT

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

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage					
Name of Carrier	-OBERG, DAVID	SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation	-NON SCHED, DOMESTIC, PASSENGER	Fire	Crew	0	1	0	0
Flight Conducted Under	-14 CFR 135	ON GROUND	Pass	0	1	4	0
Accident Occurred During	-MANEUVERING						

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

Make/Model	- DE HAVILLAND DHC-2	Eng Make/Model	- P & W R-985	ELT Installed/Activated	- YES/YES
Landing Gear	- FLOAT	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 5090	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 6	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    - IMC</p> <p>Wind Dir/Speed - 120/015 KTS</p> <p>Visibility        - 1.000 SM</p> <p>Lowest Sky/Clouds - CLEAR</p> <p>Lowest Ceiling    - 200 FT OBSCURED</p> <p>Obstructions to Vision - FOG</p> <p>Precipitation     - RAIN</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point</p> <p style="padding-left: 20px;">AKHIOK, AK</p> <p>Destination</p> <p style="padding-left: 20px;">KODIAK, AK</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - COMPANY (VFR)</p> <p>Type of Clearance    - NONE</p> <p>Type Apch/Lndg       - NONE</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-----

<p>Pilot-In-Command</p> <p>Certificate(s)/Rating(s)</p> <p style="padding-left: 20px;">COMMERCIAL</p> <p style="padding-left: 20px;">SE LAND, ME LAND, SE SEA</p> <p style="padding-left: 20px;">HELICOPTER</p>	<p>Age - 38</p> <p>Biennial Flight Review</p> <p style="padding-left: 20px;">Current            - YES</p> <p style="padding-left: 20px;">Months Since      - 3</p> <p style="padding-left: 20px;">Aircraft Type     - DHC-2</p>	<p>Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <table border="0" style="width: 100%;"> <tr> <td>Total</td> <td>- 9862</td> <td>Last 24 Hrs</td> <td>- 5</td> </tr> <tr> <td>Make/Model</td> <td>- 949</td> <td>Last 30 Days</td> <td>- 142</td> </tr> <tr> <td>Instrument</td> <td>- 105</td> <td>Last 90 Days</td> <td>- 420</td> </tr> <tr> <td>Multi-Eng</td> <td>- 1588</td> <td>Rotorcraft</td> <td>- 523</td> </tr> </table>	Total	- 9862	Last 24 Hrs	- 5	Make/Model	- 949	Last 30 Days	- 142	Instrument	- 105	Last 90 Days	- 420	Multi-Eng	- 1588	Rotorcraft	- 523
Total	- 9862	Last 24 Hrs	- 5															
Make/Model	- 949	Last 30 Days	- 142															
Instrument	- 105	Last 90 Days	- 420															
Multi-Eng	- 1588	Rotorcraft	- 523															

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE AIRPLANE CRASHED AT THE 1800 FOOT LEVEL OF A MOUNTAIN PASS, NEAR KODIAK, ALASKA. THE AIRPLANE WAS SUBSTANTIALLY DAMAGED AND THE PILOT AND ONE PASSENGER WERE SERIOUSLY INJURED AND FOUR PASSENGERS RECEIVED MINOR INJURIES. AT THE TIME OF THE ACCIDENT THE PASS WAS REPORTED CLOSED DUE TO IFR WEATHER CONDITIONS.

Brief of Accident (Continued)

File No. - 549

7/13/89

KODIAK, AK

A/C Reg. No. N5354G

Time (Lc1) - 1415 ADT

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

Finding(s)

1. WEATHER CONDITION - FOG
2. VFR FLIGHT INTO IMC - INTENTIONAL - PILOT IN COMMAND
3. WEATHER CONDITION - LOW CEILING
4. WEATHER EVALUATION - NOT UNDERSTOOD - PILOT IN COMMAND
5. WEATHER CONDITION - TURBULENCE

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT-IN-COMMAND'S CONTINUED VFR FLIGHT INTO KNOWN IFR FLT CONDITIONS, RESULTING IN A COLLISION WITH RISING TERRAIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 474      7/15/89      QUINHAGAK, AK      A/C Reg. No. N32062      Time (Lcl) - 1742 ADT

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

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage						
Name of Carrier	-KUSKO AVIATION	DESTROYED		Fatal	Serious	Minor	None	
Type of Operation	-NON SCHED, DOMESTIC, PASSENGER	Fire	Crew	0	0	0	1	
Flight Conducted Under	-14 CFR 135	ON GROUND	Pass	0	0	0	6	
Accident Occurred During	-LANDING							

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

Make/Model	- PIPER PA-32-300	Eng Make/Model	- LYCOMING IO-540	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	OFF AIRPORT/STRIP
Method - N/A	BETHEL, AK	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	QUINHAGAK, AK	Runway Ident - N/A
Wind Dir/Speed- CALM	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 60.0 SM	Type of Flight Plan - COMPANY (VFR)	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 - DAYLIGHT		

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

Pilot-In-Command	Age - 48	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL	Current - YES	Total - 14776	Last 24 Hrs - 3
SE LAND, ME LAND, SE SEA	Months Since - 7	Make/Model - 272	Last 30 Days - 30
	Aircraft Type - PA-32	Instrument - 150	Last 90 Days - 109
		Multi-Eng - 619	

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT STATED THAT WHILE THE AIRPLANE WAS IN A CRUISE CONFIGURATION, HE HEARD A "SHARP REPORT" WHICH WAS IMMEDIATELY FOLLOWED BY A SEVERE VIBRATION OF THE ENGINE. HE SAID HE REDUCED THE POWER TO IDLE & PREPARED FOR AN EMERGENCY LANDING. AS HE MANEUVERED ONTO A FINAL APPROACH FOR A FORCED LANDING, SMOKE BEGAN TO COME FROM THE ENGINE COWLING & INTO THE CABIN. THE PILOT TRIED TO APPLY POWER JUST BEFORE LANDING, BUT THE RESPONSE WAS INEFFECTIVE, ALTHOUGH THE ENGINE WAS STILL RUNNING. THE AIRCRAFT TOUCHED DOWN ON TUNDRA & CAME TO AN ABRUPT STOP. BLACK SMOKE CONTINUED TO COME FROM THE ENGINE. THE PILOT SAID HE TRIED TO EXTINGUISH THE FIRE, BUT WAS UNABLE. SUBSEQUENTLY, THE AIRPLANE WAS CONSUMED BY THE FIRE. ABOUT 10 INCHES OF ONE PROPELLER BLADE HAD SEPARATED DURING THE OCCURRENCE; HOWEVER, THE INVESTIGATION DID NOT DETERMINE WHETHER IT HAD FAILED BEFORE OR AFTER IMPACT.

Brief of Accident (Continued)

File No. - 474

7/15/89

QUINHAGAK, AK

A/C Reg. No. N32062

Time (Lcl) - 1742 ADT

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

Finding(s)

1. POWERPLANT - UNDETERMINED
  2. POWERPLANT - VIBRATION
  3. FLUID,OIL - LEAK
- 

Occurrence #2      FIRE  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

4. ENGINE COMPARTMENT - FIRE
- 

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 - TUNDRA
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
POWERPLANT FAILURE FOR AN UNKNOWN REASON, WHICH RESULTED IN AN ENGINE VIBRATION, OIL LEAK AND A FIRE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 478      7/23/89      ALEXANDER CREEK, AK      A/C Reg. No. N6366N      Time (Lcl) - 1730 ADT

-----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 - CHAMPION 7GCBC	Eng Make/Model - LYCOMING O-320-A2B	ELT Installed/Activated - YES/YES
Landing Gear - FLOAT	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1800	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	Runway Ident - N/A
Wind Dir/Speed- 330/007 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 35.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 2500 FT SCATTERED	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - TRAFFIC PATTERN	
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)
COMMERCIAL	Current - YES	Total - 1195
SE LAND, SE SEA	Months Since - 9	Last 24 Hrs - 0
	Aircraft Type - 7GCAA	Make/Model- 940
		Last 30 Days- 11
		Instrument- 50
		Last 90 Days- 46

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD THAT AS HE FLARED TO LAND, THE FLOATPLANE ENCOUNTERED TURBULENCE & TOUCHED DOWN ON THE THE RIGHT FLOAT. THE ACFT THEN WENT FORWARD & THE RIGHT FLOAT TIP WENT INTO THE WATER. THIS CAUSED THE STRUTS ON THE RIGHT FLOAT TO BEND. THE PROP THEN CUT INTO THE RIGHT FLOAT & PIECES OF METAL PIERCED THE LEFT FLOAT. SUBSEQUENTLY, THE FLOATS SANK & ALLOWED THE ENG TO BECOME SUBMERGED IN THE WATER.



Brief of Accident (Continued)

File No. - 478

7/23/89

ALEXANDER CREEK, AK

A/C Reg. No. N6366N

Time (Lcl) - 1730 ADT

-----  
Occurrence #1        NOSE DOWN  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

1. WEATHER CONDITION - TURBULENCE
2. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT FAILED TO MAINTAIN CONTROL OF THE AIRCRAFT DURING THE LANDING FLARE/TOUCHDOWN. TURBULENCE WAS A CONTRIBUTING FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 553      7/23/89      CHITINA,AK      A/C Reg. No. N7400K      Time (Lcl) - 1545 ADT

-----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 -LANDING

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

Make/Model - PIPER PA-20  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 1950  
No. of Seats - 3

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

Itinerary

Last Departure Point  
GULKANA,AK  
Destination  
LOCAL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Wind Dir/Speed- 150/005 KTS  
Visibility - 20.0 SM

ATC/Airspace

Lowest Sky/Clouds - 500 FT SCATTERED  
Lowest Ceiling - 3000 FT BROKEN  
Obstructions to Vision- NONE  
Precipitation - DRIZZLE  
Condition of Light - DAYLIGHT

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

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

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

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

Age - 29  
Biennial Flight Review  
Current - YES  
Months Since - 1  
Aircraft Type - C-172

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)

Total	-	487	Last 24 Hrs -	4
Make/Model-	181		Last 30 Days-	59
Instrument-	48		Last 90 Days-	97
Multi-Eng -	5			

Instrument Rating(s) - AIRPLANE

-----Narrative-----

NEAR THE END OF THE LANDING ROLL DURING AN OFF-AIRPORT LANDING, THE AIRPLANE'S MAIN WHEELS WENT INTO A SHALLOW DEPRESSION THAT CROSSED THE LANDING AREA, CAUSING THE AIRPLANE TO NOSE OVER ONTO ITS BACK. THE PILOT STATED THAT HE SHOULD HAVE APPLIED BRAKES EARLIER DURING THE LANDING ROLL.

Brief of Accident (Continued)

File No. - 553

7/23/89

CHITINA, AK

A/C Reg. No. N7400K

Time (Lcl) - 1545 ADT

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

Finding(s)

1. TERRAIN CONDITION - ROUGH/UNEVEN
  2.    UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
  3. TAXISPEED - EXCESSIVE - PILOT IN COMMAND
  4. REMEDIAL ACTION - DELAYED - 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 SELECTION OF AN UNSUITABLE LANDING AREA AND DELAY IN SLOWING THE AIRPLANE AFTER LANDING. A FACTOR IN  
THE ACCIDENT WAS THE ROUGH/UNEVEN TERRAIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 483      7/26/89      ILIAMNA, AK      A/C Reg. No. N6588Z      Time (Lcl) - 1700 ADT

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

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage	Injuries			
		SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation	-BUSINESS	Fire	Crew	0	0	1
Flight Conducted Under	-14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During	-TAKEOFF					2

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

Make/Model	- CESSNA 206G	Eng Make/Model	- CONTINENTAL IO-520	ELT Installed/Activated	- YES/NO
Landing Gear	- FLOAT	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 3600	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	SAME AS ACC/INC	
Completeness	- N/A	Destination	Airport Data
Basic Weather	- VMC	LOCAL	Runway Ident
Wind Dir/Speed	- CALM	ATC/Airspace	- N/A
Visibility	- 50.0 SM	Type of Flight Plan	- N/A
Lowest Sky/Clouds	- 10000 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 - 41	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
ATP	Current - YES	Total	- 8000
SE LAND, ME LAND, SE SEA	Months Since - 1	Make/Model	- 1500
	Aircraft Type - C-206	Instrument	- 900
		Multi-Eng	- 4000
		Last 24 Hrs	- 6
		Last 30 Days	- UNK/NR
		Last 90 Days	- 265

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE FLOATPLANE PLT HAD LANDED ON A LAKE TO "PICKUP" TWO FISHERMEN. HE STATED THAT DRG A SUBSEQUENT TAKEOFF, THE TAKEOFF RUN WAS NORMAL ONTO THE STEP. AT THE DECISION POINT, HE BELIEVED THE ACFT WOULD FLY, SO HE CONTD THE TAKEOFF RUN; HOWEVER, THE ACFT DID NOT LIFT-OFF. SUBSEQUENTLY, IT STRUCK A BANK & NOSED OVER.

Brief of Accident (Continued)

File No. - 483

7/26/89

ILIAMNA,AK

A/C Reg. No. N6588Z

Time (Lcl) - 1700 ADT

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

Finding(s)

1. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
  2. AIRSPEED - NOT ATTAINED - PILOT IN COMMAND
  3. TERRAIN CONDITION - DIRT BANK
- 

Occurrence #2            NOSE OVER  
Phase of Operation       TAKEOFF

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER PLANNING/DECISION BY THE PILOT & HIS FAILURE TO ATTAIN ADEQUATE SPEED TO FLY. THE TERRAIN (BANK) WAS A  
CONTRIBUTING FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 548      8/09/89      SPARREVOHN, AK      A/C Reg. No. N1118D      Time (Lcl) - 1915 ADT

-----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 - CESSNA 140  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 1500  
No. of Seats - 2

Eng Make/Model - CONTINENTAL C-90-14F  
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 - VMC  
Wind Dir/Speed- 180/004 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  
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 - FULL STOP

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

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

Age - 39  
Biennial Flight Review  
Current - YES  
Months Since - 19  
Aircraft Type - C-150

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 587  
Make/Model- 251  
Instrument- 7  
Multi-Eng - 0  
Last 24 Hrs - 4  
Last 30 Days- 51  
Last 90 Days- 81  
Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT STATED THAT DURING THE TAKEOFF GROUND RUN HE LOST DIRECTIONAL CONTROL OF THE AIRPLANE. THE AIRPLANE NOSED OVER ON TO ITS BACK ON THE GRAVEL BAR.

Brief of Accident (Continued)

File No. - 548

8/09/89

SPARREVOHN,AK

A/C Reg. No. N1118D

Time (Lc1) - 1915 ADT

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

Finding(s)

1. TERRAIN CONDITION - LOOSE GRAVEL/SANDY
2. AIRCRAFT HANDLING - NOT MAINTAINED - PILOT IN COMMAND
3. TERRAIN CONDITION - ROUGH/UNEVEN
4. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
5. UNSUITABLE TERRAIN - MISJUDGED - 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:  
PILOT-IN-COMMAND'S FAILURE TO MAINTAINED DIRECTIONAL CONTROL OF THE AIRPLANE DURING TAKEOFF. THE MISJUDGED TERRAIN  
WAS A CONTRIBUTING FACTOR IN THE EVENTUAL OUTCOME.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 547      8/11/89      TANANA,AK      A/C Reg. No. N6370H      Time (Lc1) - 1130 ADT

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

Type Operating Certificate	COMMUTER	Aircraft Damage						
Name of Carrier	-WARBELOW, CHARLES	SUBSTANTIAL						
Type of Operation	-NON SCHED,DOMESTIC,PASSENGER	Fire	Crew	Fatal	0	1	0	0
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	1	0
Accident Occurred During	-MANEUVERING							

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

Make/Model	- CESSNA 207-A	Eng Make/Model	- CONTINENTAL IO-520-F	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 3800	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	FAIRBANKS,AK	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	HUSLIA,AK	
Wind Dir/Speed- 270/030 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 2.000 SM	Type of Flight Plan - COMPANY (VFR)	Runway Lth/Wid - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - 500 FT OBSCURED	Type Apch/Lndg - NONE	Runway Status - N/A
Obstructions to Vision- FOG		
Precipitation - RAIN		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 25	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 2000
SE LAND,ME LAND	Months Since - 1	Make/Model- 4
	Aircraft Type - C-207	Instrument- 90
		Multi-Eng - 550
		Last 24 Hrs - 5
		Last 30 Days- 50
		Last 90 Days- 150

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE AIRPLANE COLLIDED WITH A MOUNTAIN AT THE 2936 FOOT LEVEL. AT THE TIME OF THE ACCIDENT THE WEATHER WAS 500 OBSCURED, VISIBILITY TWO MILES, WITH FOG. THE AIRPLANE WAS ON A COMPANY VFR FLIGHT PLAN. THE AIRPLANE WAS SUBSTANTIALLY DAMAGED. THE PILOT WAS SERIOUSLY INJURED, AND THE PASSENGER RECEIVED MINOR INJURIES.



Brief of Accident (Continued)

File No. - 547

8/11/89

TANANA,AK

A/C Reg. No. N6370H

Time (Lcl) - 1130 ADT

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

Finding(s)

1. WEATHER CONDITION - FOG
2. FLIGHT INTO KNOWN ADVERSE WEATHER - INTENTIONAL - PILOT IN COMMAND
3. PSYCHOLOGICAL CONDITION - PILOT IN COMMAND
4. WEATHER CONDITION - RAIN
5. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
6. OVER CONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND
7. WEATHER CONDITION - TURBULENCE

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT-IN-COMMAND'S IMPROPER INFLIGHT PLANNING AND DECISIONS. HE FLEW INTO WEATHER THAT WAS KNOWN TO BE ADVERSE, AND  
THE ENVIRONMENTAL CONDITIONS ADVERSELY AFFECTED HIS ABILITY TO SAFELY COMPLETE THE FLIGHT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 557      8/14/89      RAINY PASS,AK      A/C Reg. No. N3669N      Time (Lcl) - 1830 ADT

-----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	Serious	Minor	None
Crew	0	0	0	1
Pass	0	0	0	1

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

Make/Model - PIPER PA-12  
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 - 160 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  
SAME AS ACC/INC  
Destination  
LOCAL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Wind Dir/Speed- 160/005 KTS  
Visibility - 25.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - 8000 FT OVERCAST  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

ATC/Airspace

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

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

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

Pilot-In-Command

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

Age - 44

Biennial Flight Review

Current - YES  
Months Since - 14  
Aircraft Type - C-172

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total	- 3757	Last 24 Hrs	- 6
Make/Model-	250	Last 30 Days-	100
Instrument-	52	Last 90 Days-	300
Multi-Eng	- UNK/NR	Rotorcraft	- UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING TOUCHDOWN THE AIRPLANE STALLED AND CRASHED SHORT OF THE LANDING AREA BECAUSE THE PLT MISJUDGED HIS AIRSPEED & DISTANCE FROM THE LANDING AREA.

Brief of Accident (Continued)

File No. - 557

8/14/89

RAINY PASS, AK

A/C Reg. No. N3669N

Time (Lcl) - 1830 ADT

---

Occurrence #1        LOSS OF CONTROL - IN FLIGHT  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

1. AIRCRAFT CONTROL - INADEQUATE - PILOT IN COMMAND
  2. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
  3. DISTANCE - MISJUDGED - PILOT IN COMMAND
- 

Occurrence #2        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:  
PILOT-IN-COMMAND'S FAILURE TO MAINTAIN CONTROL OF THE AIRPLANE DURING LANDING, DUE TO MISJUDGEMENT OF AIRSPEED AND  
DISTANCE TO THE LANDING TOUCH-DOWN POINT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 554      8/22/89      MCGRATH, AK      A/C Reg. No. N202T      Time (Lcl) - 1151 ADT

-----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	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- UNK/NR  
Visibility - 30.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - 10000 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 - 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)  
STUDENT

Age - 47  
Biennial Flight Review  
Current - N/A  
Months Since - N/A  
Aircraft Type - N/A

Medical Certificate - EXPIRED  
Flight Time (Hours)  
Total - 450  
Make/Model- 450  
Instrument- 0  
Multi-Eng - 0

Last 24 Hrs - 4  
Last 30 Days- 25  
Last 90 Days- 100  
Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE AIRPLANE RAN OUT OF FUEL. THE STUDENT PILOT THEN ATTEMPTED AN EMERGENCY LANDING ON A ROAD. AFTER THE LANDING ROLL-OUT THE AIRPLANE STRUCK A ROW OF TREES. THE STUDENT PILOT WAS OPERATING THE AIRPLANE WITH BOTH AN EXPIRED STUDENT AND MEDICAL CERTIFICATE. THE PLT DID NOT FILE AN ACC REPORT.

Brief of Accident (Continued)

File No. - 554

8/22/89

MCGRATH, AK

A/C Reg. No. N202T

Time (Lcl) - 1151 ADT

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

Finding(s)

1. FLUID, FUEL - EXHAUSTION
2. FUEL CONSUMPTION CALCULATIONS - NOT UNDERSTOOD - PILOT IN COMMAND
3. QUALIFICATION - PILOT IN COMMAND
4. IN-FLIGHT PLANNING/DECISION - NOT PERFORMED - PILOT IN COMMAND
5. IMPROPER INITIAL TRAINING - PILOT IN COMMAND

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      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:  
PILOT-IN-COMMAND'S IMPROPER FUEL CONSUMPTION CALCULATIONS, IMPROPER INFLIGHT PLANNING, AND DECISIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 472      2/11/89      ONEONTA, AL      A/C Reg. No. N34306      Time (Lcl) - 0930 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  
DESTROYED

Fire  
NONE

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

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

Make/Model      - CESSNA 177B  
Landing Gear      - TRICYCLE-FIXED  
Max Gross Wt      - 2500  
No. of Seats      - 4

Eng Make/Model      - LYCOMING O-360  
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      - 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  
ALBERTVILLE, AL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

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      - 6  
Aircraft Type      - C-172

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)	
Total	- 262
Make/Model-	10
Instrument-	UNK/NR
Multi-Eng	- UNK/NR
Last 24 Hrs	- 3
Last 30 Days-	6
Last 90 Days-	17
Rotorcraft	- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE AIRPLANE WAS LAST "TOPPED OFF" WITH FUEL ON 1/28/89, THEN WAS FLOWN ON 4 FLTS FOR A TOTAL OF 5.5 HRS. DRG THAT TIME, AN ADDITIONAL 20 GAL OF FUEL WAS ADDED. BEFORE THE ACDNT FLT, THE PLT NOTED THE FUEL LEVEL WAS LOW, SO HE ELECTED TO FLY TO A NEARBY ARPT TO REFUEL. SHORTLY AFTER STARTING THE FLIGHT, THE ENGINE LOST POWER & THE PLT WAS FORCED TO LAND IN TREES. ONLY ABOUT 1 PINT OF FUEL WAS FOUND IN THE ACFT AFTER THE ACDNT.

Brief of Accident (Continued)

File No. - 472

2/11/89

ONEONTA,AL

A/C Reg. No. N34306

Time (Lcl) - 0930 CST

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

Finding(s)

1. FLUID,FUEL - EXHAUSTION
  2. AIRCRAFT PREFLIGHT - INADEQUATE - 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)

3. OBJECT - TREE(S)
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE PREFLIGHT BY THE PILOT AND FUEL EXHAUSTION. TREES CONTRIBUTED TO THE AIRCRAFT DAMAGE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 598      2/25/89      JACKSONVILLE, AR      A/C Reg. No. N7580D      Time (Lcl) - 1515 CST

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

Type Operating Certificate-AGRICULTURAL AIRCRAFT

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

Aircraft Damage  
DESTROYED

Fire  
NONE

	Fatal	Serious	Minor	None
Crew	1	0	0	0
Pass	1	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 - UNK/NR  
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- 220/012 KTS  
Visibility - 10.0 SM  
Lowest Sky/Clouds - 2500 FT SCATTERED  
Lowest Ceiling - 4500 FT BROKEN  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
PERRY, AR  
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, ME LAND

Age - 40

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	- 15000	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) - AIRPLANE

-----Narrative-----

TWO WITNESSES HEARD A LOUD NOISE FROM THE ACFT AS IT WAS IN FLT. THEY LOOKED UP & NOTED THE LEFT WING OF THE ACFT HAD FAILED. SUBSEQUENTLY, THE ACFT SPUN TO THE GND & CRASHED IN A WOODED AREA. AN EXAM OF THE WRECKAGE REVEALED THE LEFT FORWARD LIFT STRUT HAD FAILED, APRX 6 INCHES FROM WHERE IT WAS ATTACHED TO THE FUSELAGE. A METALLURGICAL EXAM REVEALED THE INSIDE OF THE STRUT HAD BECOME CORRODED & THE STRUT HAD FAILED IN AN AREA WHERE ITS WALL HAD CORRODED TO A KNIFE EDGE (LESS THAN 0.001 INCH). THE THICKNESS OF THE NON-CORRODED PORTION OF THE WALL WAS 0.38 INCH. A CHEMICAL TEST OF THE INSIDE SURFACE SHOWED THE PRESENCE OF A CORROSION INHIBITOR (VAL-OIL) IN THE NON-CORRODED AREAS. HOWEVER, NO INHIBITOR COULD BE FND WHERE SEVERE CORROSION HAD OCCURRED. TWO FAINT LINES RESEMBLING WATER MARKS WERE FND IN THE STRUT. LOG BOOK ENTRIES SHOWED THAT AD 77-03-08 & PIPER SVC BULLETIN #528B HAD BEEN COMPLIED WITH. A TOXICOLOGY CHECK OF THE PLT'S BLOOD WAS POSITIVE FOR ALCOHOL (0.04%), BUT THERE WAS NO INDCN THAT THIS WAS RELATED TO THE STRUT FAILURE.



Brief of Accident (Continued)

File No. - 598

2/25/89

JACKSONVILLE, AR

A/C Reg. No. N7580D

Time (Lcl) - 1515 CST

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

Finding(s)

1. MAINTENANCE, SERVICE BULLETINS - INADEQUATE - MANUFACTURER
  2. WING, BRACING STRUT - CORRODED
  3. WING - SEPARATION
- 

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:  
SEVERE CORROSION OF THE LEFT FORWARD WING LIFT STRUT WHICH RESULTED IN THE IN-FLIGHT SEPARATION OF THE LEFT WING.  
A CONTRIBUTING FACTOR WAS INADEQUACY OF THE APPLICABLE SERVICE BULLETIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 519      3/17/89      HETH,AR

A/C Reg. No. N4968X

Time (Lc1) - 0945 CDT

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

Type Operating Certificate-AGRICULTURAL AIRCRAFT

Aircraft Damage  
SUBSTANTIAL

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

Type of Operation      -AERIAL APPLICATION

Flight Conducted Under      -14 CFR 137

Fire  
ON GROUND

Accident Occurred During      -LANDING

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

Make/Model - ROCKWELL INTERNATIONAL S2R T34 Eng Make/Model - P&W PT-6  
Landing Gear - TAILWHEEL-ALL FIXED      Number Engines - 1  
Max Gross Wt - 6000      Engine Type - TURBOPROP  
No. of Seats - 1      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

Itinerary

Last Departure Point  
HETH,AR  
Destination  
LOCAL

Airport Proximity  
ON AIRSTRIP

Basic Weather - VMC

Wind Dir/Speed- 190/018 KTS

Visibility - 9.0 SM

Lowest Sky/Clouds - 3000 FT SCATTERED

Lowest Ceiling - 25000 FT OVERCAST

Obstructions to Vision- NONE

Precipitation - NONE

Condition of Light - DAYLIGHT

ATC/Airspace

Type of Flight Plan - NONE

Type of Clearance - NONE

Type Apch/Lndg - FULL STOP

Airport Data

Runway Ident - UNK/NR

Runway Lth/Wid - UNK/NR

Runway Surface - GRASS/TURF

Runway Status - DRY

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

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL

SE LAND

Age - 47

Biennial Flight Review

Current - YES

Months Since - 15

Aircraft Type - UNK/NR

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total - 11000

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) - UNK/NR

-----Narrative-----

WHILE PERFORMING AN AERIAL APPLICATION OPERATION, THE PLT SAID THAT WHILE ATTEMPTING TO LAND WITH A 15 TO 25 KNOT TAILWIND, THE AIRCRAFT NOSED DOWN. THE PROPELLER STRUCK THE RUNWAY, WHICH CAUSED EXTENSIVE DAMAGE TO THE PROPELLER AND TURBINE ENGINE. THE ACFT SUBSEQUENTLY CAUGHT FIRE AND BURNED BACK TO THE COCKPIT AREA. THE PLT DID NOT FILE AN ACC REPORT.

Brief of Accident (Continued)

File No. - 519

3/17/89

HETH,AR

A/C Reg. No. N4968X

Time (Lc1) - 0945 CDT

Occurrence #1      ON GROUND ENCOUNTER WITH WEATHER  
Phase of Operation      LANDING - ROLL

Finding(s)

1. WEATHER CONDITION - GUSTS
2. WEATHER CONDITION - TAILWIND
3. AIRCRAFT HANDLING - MISJUDGED - PILOT IN COMMAND
4. JUDGEMENT - POOR - PILOT IN COMMAND
5. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2      NOSE DOWN  
Phase of Operation      LANDING - ROLL

Occurrence #3      FIRE  
Phase of Operation      LANDING - ROLL

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
AIRCRAFT CONTROL NOT MAINTAINED BY THE PILOT IN COMMAND DUE TO LANDING IN A TAILWIND OF EXCESSIVE VELOCITY WHICH  
THE PILOT MISJUDGED OR FAILED TO RECOGNIZE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 514      4/22/89      HOT SPRINGS, AR      A/C Reg. No. N7739R      Time (Lcl) - 1300 CDT

-----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	ON GROUND	Pass	0	0	0	1
Accident Occurred During -LANDING			0	0	0	1

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

Make/Model - BEECH BE-55	Eng Make/Model - CONTINENTAL IO-520-E	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 5100	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	LANCASTER, TX	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	HOT SPRINGS, AR	HOT SPRINGS
Wind Dir/Speed- 180/009 KTS	ATC/Airspace	Runway Ident - 23
Visibility - 15.0 SM	Type of Flight Plan - IFR	Runway Lth/Wid - 6595/ 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 - DAYLIGHT		

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

Pilot-In-Command	Age - 63	Medical Certificate - NON-VALID MEDICAL
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - NO	Total - 2500
SE LAND, ME LAND	Months Since - 30	Make/Model- 700
	Aircraft Type - UNK/NR	Instrument- 175
		Multi-Eng - 700
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

UPON REACHING HIS DESTINATION APT, THE PLT SAID THAT HE MADE A GO-AROUND MANEUVER AS ANOTHER ACFT WAS ON THE ACTIVE RUNWAY. WHEN HE RETURNED FOR LDG, HE SAID HE FAILED TO EXTEND THE LANDING GEAR, AND A GEAR UP LDG WAS MADE. A SMALL FIRE ERUPTED NEAR THE FUEL QUICK DRAIN. BUT IT WAS QUICKLY EXTINGUISHED. NO MECHANICAL MALFUNCTION WAS REVEALED ON POST ACCIDENT INVESTIGATION.

Brief of Accident (Continued)

File No. - 514

4/22/89

HOT SPRINGS, AR

A/C Reg. No. N7739R

Time (Lc1) - 1300 CDT

Occurrence #1      GEAR NOT EXTENDED  
Phase of Operation      LANDING

Finding(s)

1. WHEELS UP LANDING - INADVERTENT - PILOT IN COMMAND
2.      DIVERTED ATTENTION - PILOT IN COMMAND
3. CHECKLIST - NOT FOLLOWED - PILOT IN COMMAND
4.      HABIT INTERFERENCE - PILOT IN COMMAND

Occurrence #2      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Occurrence #3      FIRE  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

5. FUEL SYSTEM, DRAIN - FIRE

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
A WHEELS UP LANDING WAS PERFORMED BY THE PILOT IN COMMAND, DUE TO THE INTERRUPTED LANDING AND GO-AROUND. A  
PSYCHOLOGICAL TRAFFIC PATTERN HABIT INTERFERENCE MIND SET INTERFERED WITH THE PILOTS ABILITY TO PERFORM THE NORMAL  
FUNCTIONS REQUIRED BY THE LANDING CHECK LIST.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 520      5/08/89      MONTROSE, AR      A/C Reg. No. N4607C      Time (Lcl) - 0900 CDT

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

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

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

Make/Model	- WEATHERLY 620TP	Eng Make/Model	- P&W PT6A-11AG	ELT Installed/Activated	- NO -N/A
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 4000	Engine Type	- TURBOPROP		
No. of Seats	- 1	Rated Power	- 500 HP		

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point
Method	- N/A	MONTROSE, AR
Completeness	- N/A	Destination
Basic Weather	- VMC	LOCAL
Wind Dir/Speed	- 130/009 KTS	ATC/Airspace
Visibility	- 20.0 SM	Type of Flight Plan
Lowest Sky/Clouds	- 10000 FT SCATTERED	- NONE
Lowest Ceiling	- NONE	Type of Clearance
Obstructions to Vision	- NONE	- NONE
Precipitation	- NONE	Type Apch/Lndg
Condition of Light	- DAYLIGHT	- FULL STOP

Runway Ident	- UNK/NR
Runway Lth/Wid	- UNK/NR
Runway Surface	- GRASS/TURF
Runway Status	- DRY

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

Pilot-In-Command	Age - 52	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL	Current	- UNK/NR	Total
SE LAND, ME LAND	Months Since	- UNK/NR	- 9800
	Aircraft Type	- UNK/NR	Make/Model
			- UNK/NR
			Instrument
			- UNK/NR
			Multi-Eng
			- UNK/NR
			Rotorcraft
			- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT SAID THAT WHILE ATTEMPTING TO LAND DOWN WIND, DURING AN AERIAL APPLICATION OPERATION, HE LOST DIRECTIONAL CONTROL. HE OVERRAN THE AIRSTRIP AND COLLIDED WITH A DITCH CAUSING SUBSTANTIAL DAMAGE TO THE ACFT. POST ACCIDENT INVESTIGATION FAILED TO REVEAL ANY MALFUNCTION OR BRAKE FAILURE THAT MIGHT HAVE CONTRIBUTED TO THE ACCIDENT. THE PLT DID NOT FILE AN ACC REPORT.

Brief of Accident (Continued)

File No. - 520

5/08/89

MONTROSE, AR

A/C Reg. No. N4607C

Time (Lc1) - 0900 CDT

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

Finding(s)

1. WEATHER CONDITION - TAILWIND
  2. PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
  3. WRONG RUNWAY - SELECTED - PILOT IN COMMAND
  4. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
- 

Occurrence #2      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 IN COMMAND TO MAINTAIN CONTROL OF THE AIRCRAFT DURING LANDING ADVERSELY AFFECTED BY THE  
EXISTANCE OF A TAILWIND OF AVERAGE PROPORTIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 521      5/27/89      STRONG,AR      A/C Reg. No. N18307      Time (Lcl) - 1230 CDT

-----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 - BEECH V35  
Landing Gear - TRICYCLE-RETRACTABLE  
Max Gross Wt - 3000  
No. of Seats - 6

Eng Make/Model - CONTINENTAL IO-520-BA  
Number Engines - 1  
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 - FSS  
Method - ACFT RADIO  
Completeness - FULL  
Basic Weather - VMC  
Wind Dir/Speed- 020/004 KTS  
Visibility - 4.000 SM  
Lowest Sky/Clouds - N/A  
Lowest Ceiling - 1200 FT BROKEN  
Obstructions to Vision- HAZE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
NASHVILLE,TN  
Destination  
EL DORADO,AR

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

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

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)  
PRIVATE  
SE LAND

Age - 48  
Biennial Flight Review  
Current - YES  
Months Since - 14  
Aircraft Type - BE-35

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 512  
Make/Model- 344  
Instrument- 132  
Multi-Eng - UNK/NR  
Last 24 Hrs - 5  
Last 30 Days- 14  
Last 90 Days- 29  
Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

ABOUT 25 MILES FROM DESTINATION APT, THE PLT SAID THE ENGINE QUIT. HE SWITCHED FROM EMPTY LEFT TANK TO THE RIGHT TANK, WHICH STILL INDICATED 1/2 TO 3/4 FULL. HE WAS UNABLE TO RESTART THE ENGINE, AND DUE TO HIS ALTITUDE OF 1500 AGL, ELECTED TO MAKE AN EMERGENCY LDG. DURING THE LANDING ON A RURAL GRAVEL ROAD, THE ACFT SUSTAINED SUBSTANTIAL DAMAGE. THE PLT SAID THAT THE LEFT FUEL CELL BLADDER HAD BEEN REPLACED 3 DAYS PRIOR TO THE ACCIDENT, DUE TO PREVIOUS LEAKS, BUT DOCUMENTATION OF THE REPLACEMENT WAS NOT FOUND BY THE INVESTIGATIVE AUTHORITIES.



Brief of Accident (Continued)

File No. - 521

5/27/89

STRONG, AR

A/C Reg. No. N18307

Time (Lc1) - 1230 CDT

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

Finding(s)

1. FLUID, FUEL - STARVATION
2. FUEL CONSUMPTION CALCULATIONS - MISJUDGED - PILOT IN COMMAND
3. FUEL SYSTEM, TANK - LEAK
4. DOCUMENTATION - CONFLICTING - PILOT IN COMMAND

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

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

Finding(s)

5. TERRAIN CONDITION - NONE SUITABLE

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
ENGINE FAILURE DUE TO FUEL STARVATION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 473      6/06/89      PINE BLUFF, AR      A/C Reg. No. N63535      Time (Lcl) - 2315 CDT

-----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 Crew  
NONE Pass

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

Make/Model - CESSNA 172  
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/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 - 25000 FT SCATTERED  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - NIGHT(DARK)

Itinerary

Last Departure Point  
ADDISON, TX  
Destination  
SAME AS ACC/INC

ATC/Airspace

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

Airport Proximity  
ON AIRPORT

Airport Data

GRIDER FIELD  
Runway Ident - 17  
Runway Lth/Wid - 5998/ 150  
Runway Surface - ASPHALT  
Runway Status - DRY

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

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

Age - 25  
Biennial Flight Review  
Current - YES  
Months Since - 22  
Aircraft Type - UNK/NR

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 161  
Make/Model- 39  
Instrument- 53  
Multi-Eng - 0  
Last 24 Hrs - 3  
Last 30 Days- 25  
Last 90 Days- 44  
Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT SAID THAT DURING AN ILS RWY 17 ARRIVAL AT NIGHT, HE WAS UNABLE TO ACTIVATE THE RUNWAY LIGHTS BY KEYING HIS RADIO. ALSO, HE NOTED THAT THE ROTATING BEACON WAS NOT OPERATING. HE STATED THAT HIS INSTRUMENTS SHOWED THE ACFT WAS ON THE CENTERLINE OF THE LOCALIZER, SO HE CONTINUED THE ILS APCH. HOWEVER, THE LANDING OCCURRED ABOUT 50 TO 75 FT LEFT OF THE RUNWAY ON SOFT TERRAIN WHICH RESULTED IN A NOSE OVER. THE ARPT WAS IN VFR CONDITIONS. ABOUT 1 HR AFTER THE ACCIDENT, THE ARPT MANAGER CHECKED THE RADIO ACTIVATED RUNWAY LIGHTS AND FOUND THEM TO WORK PROPERLY.

Brief of Accident (Continued)

File No. - 473

6/06/89

PINE BLUFF, AR

A/C Reg. No. N63535

Time (Lcl) - 2315 CDT

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

Finding(s)

1. LIGHT CONDITION - DARK NIGHT
2. AIRPORT FACILITIES, ROTATING BEACON - NOT OPERATING
3. AIRPORT FACILITIES, RUNWAY EDGE LIGHTS - NOT OPERATING
4. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
5. FLIGHT TO ALTERNATE DESTINATION - NOT PERFORMED - PILOT IN COMMAND
6. TERRAIN CONDITION - SOFT
7. PROPER ALIGNMENT - NOT ATTAINED - PILOT IN COMMAND

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:  
IMPROPER IN-FLIGHT PLANNING/DECISION BY THE PILOT BY CONTINUING THE APPROACH WHEN THE RUNWAY LIGHTS DID NOT ACTIVATE.  
CONTRIBUTING FACTORS WERE: DARK NIGHT AND SOFT TERRAIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 469      6/07/89      WYNNE,AR      A/C Reg. No. N8063K      Time (Lcl) - 0930 CDT

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

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

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

Make/Model	- GULFSTREAM-SCHWEIZER 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	- 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	- NO RECORD OF BRIEFING	ON AIRSTRIP	
Method	- N/A		
Completeness	- N/A		
Basic Weather	- VMC	Airport Data	
Wind Dir/Speed	- 190/006 KTS	Runway Ident	- 27
Visibility	- 6.0 SM	Runway Lth/Wid	- 2800/ 50
Lowest Sky/Clouds	- 12000 FT SCATTERED	Runway Surface	- GRASS/TURF
Lowest Ceiling	- 18000 FT OVERCAST	Runway Status	- DRY
Obstructions to Vision	- NONE		
Precipitation	- NONE		
Condition of Light	- DAYLIGHT		

-----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	Current - YES	Total	- 2500
SE LAND,ME LAND	Months Since - 6	Make/Model	- 175
	Aircraft Type - B-76	Instrument	- 75
		Multi-Eng	- 200
		Last 24 Hrs	- 8
		Last 30 Days	- 175
		Last 90 Days	- 200

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE AIRCRAFT WAS BEING USED ON AN AERIAL APPLICATION OPERATION. THE PILOT STATED THAT AFTER RETURNING TO THE STRIP TO RELOAD, THE LEFT MAIN WHEEL STRUCK A ROUGH PLACE ON THE RUNWAY, WHICH CAUSED THE PLANE TO NOSE DOWN. SUBSEQUENTLY, THE PROPELLER STRUCK THE GROUND & THE AIRCRAFT NOSED OVER.

Brief of Accident (Continued)

File No. - 469

6/07/89

WYNNE, AR

A/C Reg. No. N8063K

Time (Lcl) - 0930 CDT

---

Occurrence #1

NOSE OVER

Phase of Operation

LANDING - ROLL

Finding(s)

1. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - ROUGH/UNEVEN
  2. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
UNSUITABLE TERRAIN SELECTED BY THE PILOT. A CONTRIBUTING FACTOR WAS THE ROUGH/UNEVEN LANDING AREA.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 565      6/28/89      LONOKE, AR      A/C Reg. No. N3653M      Time (Lcl) - 1415 CDT

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

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

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

Make/Model      - AIR TRACTOR 301	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      - 5000	Engine Type      - RECIPROCATING-CARBURETOR	
No. of Seats      - 1	Rated Power      - 600 HP	

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

<b>Weather Data</b>	<b>Itinerary</b>	<b>Airport Proximity</b>
Wx Briefing      - NO RECORD OF BRIEFING	Last Departure Point LONOKE, AR	OFF AIRPORT/STRIP
Method      - N/A	Destination LOCAL	
Completeness      - N/A		<b>Airport Data</b>
Basic Weather      - VMC		Runway Ident      - N/A
Wind Dir/Speed-      UNK/NR	<b>ATC/Airspace</b>	Runway Lth/Wid      - N/A
Visibility      - 10.0      SM	Type of Flight Plan      - NONE	Runway Surface      - DIRT
Lowest Sky/Clouds      - UNK/NR	Type of Clearance      - NONE	Runway Status      - WET
Lowest Ceiling      -	Type Apch/Lndg      - FORCED LANDING	
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      - 10000
SE LAND	Months Since      - 5	Make/Model-      4000
	Aircraft Type      - C-150	Instrument-      UNK/NR
		Multi-Eng      - UNK/NR
		Last 24 Hrs      - 5
		Last 30 Days-      100
		Last 90 Days-      300
		Rotorcraft      - UNK/NR

Instrument Rating(s)      - NONE

-----Narrative-----

SHORTLY AFTER TAKEOFF, DURING AN AERIAL APPLICATION OPERATION, THE PILOT SAID THAT THE ENGINE LOST SUBSTANTIAL POWER. HE SAID THAT HE BEGAN TO DUMP HIS LOAD, BUT THE AIRCRAFT WAS NOT DEVELOPING ENOUGH POWER TO STAY AIRBORNE, SO HE ATTEMPTED TO MAKE AN EMERGENCY LANDING IN A FARM PASTURE. DURING THE LDG ATTEMPT, A COW WAS STRUCK AND KILLED, THEN THE ACFT SLID TO A STOP ON THE EDGE OF A RICE FIELD. POST ACCIDENT INVESTIGATION FAILED TO REVEAL THE CAUSE OF THE ENGINE FAILURE.

Brief of Accident (Continued)

File No. - 565

6/28/89

LONOKE, AR

A/C Reg. No. N3653M

Time (Lcl) - 1415 CDT

-----  
Occurrence #1            LOSS OF ENGINE POWER  
Phase of Operation      TAKEOFF - INITIAL CLIMB

Finding(s)

1. UNDETERMINED
  2. LOAD JETTISON - ATTEMPTED - PILOT IN COMMAND
- 

Occurrence #2            FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

-----

Occurrence #3            ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING

Finding(s)

3. OBJECT - ANIMAL(S)
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PARTIAL FAILURE OF THE POWER-PLANT FOR UNDETERMINED REASONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 558      7/28/89      PORTLAND,AR      A/C Reg. No. N8116K      Time (Lcl) - 0730 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	0	1
Flight Conducted Under -14 CFR 137	NONE	Pass 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 - YES
Max Gross Wt - 5600	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	PORTLAND,AR	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	REED, PVT
Wind Dir/Speed- 010/006 KTS	ATC/Airspace	Runway Ident - 18
Visibility - 7.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2200/ 30
Lowest Sky/Clouds - 20000 FT THIN BKN	Type of Clearance - NONE	Runway Surface - DIRT
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	Runway Status - WET
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 - 19400
SE LAND	Months Since - 7	Make/Model- 10000
	Aircraft Type - C-182	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 4
		Last 30 Days- 75
		Last 90 Days- 200
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

WHILE CONDUCTING AN AERIAL APPLICATION OPERATION, THE PLT SAID THAT HE EXPERIENCED A GRADUAL LOSS OF POWER. HE DUMPED HIS CHEMICAL LOAD AND ATTEMPTED TO RETURN TO HIS BASE AIRFIELD. ENROUTE, THE ENGINE QUIT COMPLETELY, AND AN EMERGENCY LDG WAS ATTEMPTED IN A SOFT FARM FIELD, THAT RESULTED IN A NOSE OVER. POST ACCIDENT INVESTIGATION REVEALED #1 CYLINDER HAD FAILED CAUSING THE POWER FAILURE.



Brief of Accident (Continued)

File No. - 558

7/28/89

PORTLAND, AR

A/C Reg. No. N8116K

Time (Lc1) - 0730 CDT

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

Finding(s)

1. ENGINE ASSEMBLY, CYLINDER - CRACKED
  2. LOAD JETTISON - PERFORMED - PILOT IN COMMAND
  3. ENGINE ASSEMBLY, CYLINDER - FAILURE, TOTAL
  4. EMERGENCY PROCEDURE - INITIATED - PILOT IN COMMAND
- 

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:  
ENGINE FAILURE DUE TO FAILURE OF AN ENGINE CYLINDER.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 415      2/08/89      FLAGSTAFF, AZ      A/C Reg. No. N9007S      Time (Lcl) - 1514 MST

-----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      Crew      Fatal  
NONE      Pass      0

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

Make/Model      - PIPER PA-18  
Landing Gear      - TAILWHEEL-ALL FIXED  
Max Gross Wt      - 1625  
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 - 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  
PRESCOTT, AZ

Destination  
SAME AS ACC/INC

Airport Proximity  
ON AIRPORT

Airport Data

PULLIAM  
Runway Ident      - 03  
Runway Lth/Wid      - 7000/ 150  
Runway Surface      - ASPHALT  
Runway Status      - DRY

Wind Dir/Speed- 050/005 KTS

Visibility      - 30.0 SM

Lowest Sky/Clouds      - 5000 FT SCATTERED

Lowest Ceiling      - 22000 FT BROKEN

Obstructions to Vision- NONE

Precipitation      - NONE

Condition of Light      - DAYLIGHT

ATC/Airspace

Type of Flight Plan      - NONE

Type of Clearance      - NONE

Type Apch/Lndg      - FULL STOP

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

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL  
SE LAND, SE SEA  
GLIDER

Age - 20

Biennial Flight Review

Current      - YES

Months Since      - 2

Aircraft Type      - 17-30A

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total      - 364

Make/Model- 12

Instrument- 12

Multi-Eng - 1

Last 24 Hrs - 0

Last 30 Days- 25

Last 90 Days- 82

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT WHEN HE WAS ON FINAL APCH TO LAND, THERE WAS A LEARJET BEHIND HIM ON A 5 MILE FINAL APCH. HE STATED THAT HE MADE A NORMAL LANDING, THEN STEERED LEFT TOWARD THE "TAXIWAY SIDE" OF THE RWY TO EXPEDITE OFF THE RWY. HOWEVER, AFTER REACHING THE LEFT SIDE, HE WAS UNABLE TO ALIGN THE ACFT BACK ON THE RWY HEADING & ELECTED TO CONTINUE OFF THE RWY, RATHER THAN RISK GROUND LOOPING THE ACFT. AFTER DEPARTING THE RWY, THE ACFT ENTERED SNOW & NOSED OVER. NO MECH MALFUNCTION OR FAILURE WAS RPRTD.

Brief of Accident (Continued)

File No. - 415

2/08/89

FLAGSTAFF, AZ

A/C Reg. No. N9007S

Time (Lc1) - 1514 MST

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

Finding(s)

1. TERRAIN CONDITION - SNOW COVERED
  2. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND
  3. LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
  4. SELF-INDUCED PRESSURE - PILOT IN COMMAND
- 

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:  
THE PILOT'S FAILURE TO MAINTAIN PROPER RUNWAY ALIGNMENT WHILE EXPEDITING TO EXIT THE RUNWAY. HIS LACK OF EXPERIENCE  
IN THIS TYPE OF AIRCRAFT, SELF-INDUCED PRESSURE & THE SNOW COVERED TERRAIN WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 532      2/19/89      TUCSON,AZ      A/C Reg. No. N767AA      Time (Lcl) - 0840 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  
NONE  
Fire  
NONE

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

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

Make/Model      - AEROSTAR RAVEN 560  
Landing Gear      - N/A  
Max Gross Wt      - 2400  
No. of Seats      - UNK/NR

Eng Make/Model      - N/A  
Number Engines      - N/A  
Engine Type      - N/A  
Rated Power      - N/A

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- 190/006 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      - DIRT  
Runway Status      - DRY

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

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

Age - 54  
Biennial Flight Review  
Current      - YES  
Months Since      - 2  
Aircraft Type      - B-767

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)	
Total      - 10000	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)      - AIRPLANE

-----Narrative-----

THE PILOT OF A AEROSTAR RAVEN 560 (BALLOON), DURING THE DESCENT FOR LANDING ENCOUNTERED A DOWN DRAFT WHICH RESULTED IN A HARD LANDING NEAR TUCSON, ARIZONA. THE BALLOON COLLIDED WITH THE TERRAIN SEVERAL TIMES BEFORE FINALLY COMING TO REST. THE PILOT SAID THAT, "I WAS PREPARING FOR LANDING AND AT APPROXIMATELY 40 FEET ABOVE GROUND LEVEL WHEN I ENCOUNTERED A SEVERE DOWN DRAFT OF APPROXIMATELY 1000 FEET PER MINUTE. I INSTRUCTED THE PASSENGERS TO PREPARE FOR A FIRM LANDING. AFTER HITTING THE GROUND, DRAGGING APPROXIMATELY 10 YARDS AND GOING AIRBORNE, WE RETURNED AND STRUCK THE GROUND AGAIN"...ONE ELEVEN YEAR OLD PASSENGER JUMPED OUT OF THE BALLOON WHILE WE WERE DRAGGING ACROSS THE DESERT"...SHE [THIS PASSENGER] SUFFERED A BROKEN ARM UPON HITTING THE GROUND..." THE PILOT REPORTED THAT THERE WERE NO MECHANICAL FAILURES OR MALFUNCTIONS WITH THE BALLOON PRIOR TO THE ACCIDENT.

Brief of Accident (Continued)

File No. - 532

2/19/89

TUCSON, AZ

A/C Reg. No. N767AA

Time (Lcl) - 0840 MST

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

Finding(s)

1. WEATHER CONDITION - DOWNDRAFT
2. IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND

Occurrence #2 HARD LANDING  
Phase of Operation DESCENT - UNCONTROLLED

Finding(s)

3. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
4. RECOVERY FROM BOUNCED LANDING - DELAYED -

Occurrence #3 MISCELLANEOUS/OTHER  
Phase of Operation LANDING - ROLL

Finding(s)

5. BALLOON EQUIPMENT, BASKET - CHAFED
6. EVACUATION - PREMATURE - PASSENGER
7. ANXIETY/APPREHENSION - PASSENGER

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
BALLOON ENTERED INTO A SEVERE DOWN DRAFT WHICH RESULTED IN A HARD LANDING DUE TO INADEQUATE PREPARATION AND  
COMPENSATION FOR THE CONDITIONS BY THE BALLOON PILOT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 530      4/01/89      TUCSON, AZ      A/C Reg. No. N23972      Time (Lcl) - 0837 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

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

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

Make/Model      - BEECH C24R  
Landing Gear      - TRICYCLE-RETRACTABLE  
Max Gross Wt      - 2600  
No. of Seats      - 4

Eng Make/Model      - LYCOMING IO-360-A1B6  
Number Engines      - 1  
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- 100/004 KTS  
Visibility      - 40.0 SM  
Lowest Sky/Clouds      - 25000 FT THIN BKN  
Lowest Ceiling      - 25000 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      - TOUCH AND GO

Airport Proximity  
ON AIRPORT

Airport Data

RYAN FLD.  
Runway Ident      - 06  
Runway Lth/Wid      - 5500/ 75  
Runway Surface      - ASPHALT  
Runway Status      - DRY

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

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

Age - 48  
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	- UNK/NR
Make/Model-	40	Last 30 Days-	UNK/NR
Instrument-	UNK/NR	Last 90 Days-	UNK/NR
Multi-Eng	- 0	Rotorcraft	- 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT OF A BEECH C24R LANDED HARD ON RUNWAY 06 AT RYN, TUCSON, AZ. THE NOSE AND MAIN LANDING GEAR COLLAPSED AND THE AIRPLANE SLID OFF OF THE RUNWAY. DURING A TELEPHONE INTERVIEW, THE STUDENT PILOT STATED THAT HE WAS PRACTICING TOUCH AND GO LANDINGS ON RUNWAY 06. HE WAS ON ABOUT HIS EIGHTH LANDING WHEN THE ACCIDENT OCCURRED. HE BEGAN HIS FLARE FOR LANDING TOO HIGH, ABOUT TEN FEET ABOVE THE RUNWAY, AND THE AIRPLANE DROPPED IN HARD ON THE MAIN LANDING GEAR. THE NOSE GEAR COLLAPSED FIRST, THEN THE RIGHT AND LEFT MAIN LANDING GEAR. THE AIRPLANE DEPARTED THE RUNWAY, ON ITS BELLY, INTO THE DIRT. THERE WERE NO MECHANICAL MALFUNCTIONS OR FAILURES WITH THE AIRPLANE PRIOR TO THE ACCIDENT.

Brief of Accident (Continued)

File No. - 530

4/01/89

TUCSON, AZ

A/C Reg. No. N23972

Time (Lc1) - 0837 MST

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

Finding(s)

1. FLARE - MISJUDGED - PILOT IN COMMAND
  2.        LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
- 

Occurrence #2        COMPLETE GEAR COLLAPSED  
Phase of Operation    LANDING - ROLL

-----

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

Finding(s)

3. TERRAIN CONDITION - RUNWAY
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT MISJUDGED THE LANDING. THE PILOT BEGAN HIS FLARE TOO HIGH ABOVE THE RUNWAY RESULTING IN A HARD LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 485      4/05/89      PRESCOTT,AZ      A/C Reg. No. N248ER      Time (Lcl) - 1725 MST

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

Type Operating Certificate-NONE (GENERAL AVIATION)

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

Aircraft Damage  
SUBSTANTIAL

Fire  
NONE

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

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

Make/Model      - CESSNA 172N  
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      - 180 HP

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

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

Weather Data

Wx Briefing      - FSS  
Method      - UNK/NR  
Completeness      - UNK/NR  
Basic Weather      - VMC

Wind Dir/Speed- 330/005 KTS  
Visibility      - 65.0 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

E.A. LOVE FIELD  
Runway Ident      - 03  
Runway Lth/Wid      - 7200/ 150  
Runway Surface      - ASPHALT  
Runway Status      - DRY

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

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

Age - 19  
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	- 29	Last 24 Hrs	- 2
Make/Model-	29	Last 30 Days-	7
Instrument-	UNK/NR	Last 90 Days-	13
Multi-Eng	- 0	Rotorcraft	- 0

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PLT WAS ON HIS 1ST UNSUPERVISED SOLO FLT & WAS MAKING TOUCH-&-GO LANDINGS IN THE LOCAL PATTERN. AFTER THE 2ND LANDING, HE RETRACTED THE FLAPS, APPLIED FULL POWER & MOVED THE CARBURETOR HEAT TO OFF. HE RPRTD THAT AFTER BECOMING AIRBORNE, HE ENCOUNTERED "HARSH BACK PRESSURE" & TRIED TO TRIM, BUT THE TRIM DID NOT HELP. SUBSEQUENTLY, THE ACFT NOSED DOWN, CONTACTED THE RUNWAY & BEGAN PORPOISING. THE PLT "PULLED" THE POWER & STOPPED THE ACFT, BUT THE PROP, NOSE GEAR & FIREWALL WERE DAMAGED DRG THE OCCURRENCE. DRG AN INVESTIGATION, THE ELEVATOR TRIM WAS FOUND IN A "NOSE DOWN" POSITION & THE TRIM TAB WAS FOUND DISPLACED 1.5 INCHES FROM NEUTRAL. NO MECHANICAL MALFUNCTION OR FAILURE WAS REPORTED.



Brief of Accident (Continued)

File No. - 485

4/05/89

PRESCOTT,AZ

A/C Reg. No. N248ER

Time (Lc1) - 1725 MST

---

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

Finding(s)

1. TOUCH-AND-GO - PERFORMED -
  2. ELEVATOR TRIM - IMPROPER USE OF - PILOT IN COMMAND
  3. PROPER CLIMB RATE - NOT MAINTAINED - PILOT IN COMMAND
  4.     LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
- 

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

Finding(s)

5. TERRAIN CONDITION - RUNWAY
  6.     PORPOISE - INADVERTENT - PILOT IN COMMAND
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER USE OF THE ELEVATOR FLIGHT CONTROL BY THE PILOT AND HIS FAILURE TO MAINTAIN A PROPER RATE OF CLIMB AFTER  
LIFT-OFF. CONTRIBUTING FACTORS WERE: IMPROPER USE OF ELEVATOR TRIM BY THE PILOT, HIS LACK OF TOTAL EXPERIENCE, AND  
AN INADVERTENT PORPOISE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 586      5/03/89      COTTONWOOD,AZ      A/C Reg. No. N9924N      Time (Lcl) - 1830 MST

-----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	2
Accident Occurred During -LANDING					

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

Make/Model - CESSNA 180	Eng Make/Model - CONTINENTAL O-470-S	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2800	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	DURANGO,CO	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	COTTONWOOD
Wind Dir/Speed- 230/020 KTS	ATC/Airspace	Runway Ident - 14
Visibility - 50.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4250/ 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 - 28	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - NO	Total - 112
SE LAND	Months Since - 6	Last 24 Hrs - 6
	Aircraft Type - C-172	Make/Model- 61
		Instrument- 0
		Last 30 Days- 6
		Last 90 Days- 30

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT SAID HE WAS ON DOWNWIND FOR THE AIRPORT WHEN HE NOTICED A DIRECT CROSSWIND FROM APPROXIMATELY 230 DEGREES. HE SAID HE HAD THE AIRPLANE DOWN ON ALL WHEELS ON RUNWAY 14 WHEN A GUST OF WIND CAUGHT THE PLANE AND SPUN IT TO THE RIGHT. THE LEFT WING AND LEFT STABILIZER IMPACTED THE GROUND.

Brief of Accident (Continued)

File No. - 586

5/03/89

COTTONWOOD, AZ

A/C Reg. No. N9924N

Time (Lcl) - 1830 MST

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

Finding(s)

1. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
  2. WEATHER CONDITION - CROSSWIND
  3.    COMPENSATION FOR WIND CONDITIONS - NOT MAINTAINED - PILOT IN COMMAND
- 

Occurrence #2        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    LANDING - ROLL

Finding(s)

4. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER FLIGHT PLANNING/DECISION BY THE PIC WHEN HE DECIDED TO LAND WITH SUCH A CROSSWIND, AND NOT MAINTAINING  
COMPENSATION FOR THE CROSSWIND AFTER HE DECIDED TO ATTEMPT THE LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 590      6/17/89      BAGDAD, AZ      A/C Reg. No. N9729V      Time (Lcl) - 1230 MST

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

Type Operating Certificate-NONE (GENERAL AVIATION)		Aircraft Damage		Injuries			
Type of Operation	-PERSONAL	DESTROYED		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	1

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

Make/Model	- CESSNA 175K	Eng Make/Model	- CONTINENTAL IO-360-K	ELT Installed/Activated	- YES/NO
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	- 195 HP		

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

Weather Data		Itinerary	Airport Proximity
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method	- N/A	KINGMAN, AZ	
Completeness	- N/A	Destination	Airport Data
Basic Weather	- VMC	GLEDALE, AZ	
Wind Dir/Speed	- UNK/NR	ATC/Airspace	Runway Ident
Visibility	- 70.0 SM	Type of Flight Plan	- N/A
Lowest Sky/Clouds	- CLEAR	Type of Clearance	- N/A
Lowest Ceiling	- NONE	Type Apch/Lndg	- FORCED LANDING
Obstructions to Vision	- NONE		Runway Status
Precipitation	- NONE		- ROUGH
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)	
PRIVATE	Current - YES	Total	- 151
SE LAND	Months Since - 8	Make/Model	- 133
	Aircraft Type - C-175K	Instrument	- 1
		Multi-Eng	- 0
		Last 24 Hrs	- 2
		Last 30 Days	- 5
		Last 90 Days	- 11
		Rotorcraft	- 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT SAID THE AIRPLANE WAS 1,000 TO 1,200 FEET AGL WHEN THE ENGINE LOST ALL POWER. HE SAID HE MADE A FORCED LANDING ONTO WHAT APPEARED TO BE A FLAT MESA. AT TOUCHDOWN HE FOUND IT WAS COVERED WITH ROCKS AND BOULDERS. AFTER THE ACCIDENT, IT WAS NOT POSSIBLE TO RUN THE ENGINE DUE TO IMPACT DAMAGE. AN FAA AVIATION SAFETY INSPECTOR EXAMINED THE ENGINE AND ASSOCIATED FUEL SYSTEM AND WAS UNABLE TO DETERMINE WHY THE ENGINE HAD SUFFERED A LOSS OF POWER.

Brief of Accident (Continued)

File No. - 590

6/17/89

BAGDAD, AZ

A/C Reg. No. N9729V

Time (Lcl) - 1230 MST

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

Finding(s)

1. POWERPLANT - UNDETERMINED  
-----

Occurrence #2        FORCED LANDING  
Phase of Operation    DESCENT - EMERGENCY  
-----

Occurrence #3        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    TAXI - PUSHBACK/TOW

Finding(s)

2. TERRAIN CONDITION - ROUGH/UNEVEN  
-----

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
TOTAL LOSS OF ENGINE POWER DUE TO UNDETERMINED REASONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 589      6/17/89      PICACHO,AZ      A/C Reg. No. N421S      Time (Lcl) - 1500 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  
DESTROYED

Fire  
ON GROUND

Crew  
Pass

Fatal  
0  
0

Injuries  
Serious  
0

Minor  
1  
3

None  
0  
0

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

Make/Model - CESSNA 421  
Landing Gear - TRICYCLE-RETRACTABLE  
Max Gross Wt - 6900  
No. of Seats - 6

Eng Make/Model - CONTINENTAL GTS10-520  
Number Engines - 2  
Engine Type - RECIP-FUEL INJECTED  
Rated Power - 375 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- 270/005 KTS  
Visibility - 30.0 SM  
Lowest Sky/Clouds - UNK/NR  
Lowest Ceiling -  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
SAME AS ACC/INC  
Destination  
SEDONA,AZ

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 - DIRT  
Runway Status - HIGH VEGETATION

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

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

Age - 50  
Biennial Flight Review  
Current - YES  
Months Since - 3  
Aircraft Type - C-172

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)  
Total - 25169  
Make/Model- 700  
Instrument- 600  
Multi-Eng - 5000  
Last 24 Hrs - 0  
Last 30 Days- 52  
Last 90 Days- 157  
Rotorcraft - 451

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE LEFT ENGINE LOST POWER JUST AFTER TAKEOFF. WITH THE GEAR AND FLAPS RETRACTED AND THE LEFT PROPELLER FEATHERED, THE AIRPLANE WOULD CLIMB SLIGHTLY. AS IT PASSED OVER GREEN FIELDS, THE AIRPLANE STARTED A DESCENT. THE AIRPLANE TOUCHED DOWN IN A COTTON FIELD AND THE LEFT TIP TANK BURST INTO FLAMES AS IT TOUCHED THE GROUND. THE AIRPLANE WAS CONSUMED BY FIRE. ENGINE TEARDOWN REVEALED THE NUMBER THREE EXHAUST VALVE FAILED. ELEVATION OF THE ACCIDENT WAS 1,600 FEET MST, OAT WAS 114 DEGREES F. DENSITY ALTITUDE WAS APPROXIMATELY 5,600 FEET.

Brief of Accident (Continued)

File No. - 589

6/17/89

PICACHO,AZ

A/C Reg. No. N421S

Time (Lcl) - 1500 MST

Occurrence #1      LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation      TAKEOFF - INITIAL CLIMB

Finding(s)

1. ENGINE ASSEMBLY, VALVE, EXHAUST - FAILURE, TOTAL
2. 1 ENGINE -
3. PROPELLER FEATHERING - PERFORMED - PILOT IN COMMAND

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

4. WEATHER CONDITION - HIGH DENSITY ALTITUDE

Occurrence #3      FIRE  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE NUMBER THREE EXHAUST VALVE ON THE LEFT ENGINE. A MAJOR FACTOR WAS THE HIGH DENSITY ALTITUDE WHERE THE  
AIRPLANE WOULD NOT OPERATE ON SINGLE ENGINE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 588      7/17/89      CHANDLER, AZ      A/C Reg. No. N761JA      Time (Lc1) - 1500 MST

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

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

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

Make/Model	- CESSNA T210	Eng Make/Model	- CONTINENTAL IO-520	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	- 6	Rated Power	- 285 HP		

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

Weather Data		Itinerary	Airport Proximity
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method	- N/A	BULLHEAD CITY, AZ	
Completeness	- N/A	Destination	Airport Data
Basic Weather	- VMC	CHANDLER, AZ	MUNICIPAL
Wind Dir/Speed-	UNK/NR	ATC/Airspace	Runway Ident
Visibility	- 20.0 SM	Type of Flight Plan	- 22
Lowest Sky/Clouds	- CLEAR	Type of Clearance	- 4395/ 30
Lowest Ceiling	- NONE	Type Apch/Lndg	- ASPHALT
Obstructions to Vision-	NONE		Runway Status
Precipitation	- NONE		- DRY
Condition of Light	- DAYLIGHT		

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

Pilot-In-Command	Age - UNK/NR	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 1230
SE LAND, ME LAND	Months Since - 11	Make/Model- UNK/NR
	Aircraft Type - C-172	Instrument- 37
		Multi-Eng - 139
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE AIRPLANE WAS ON A FERRY PERMIT DUE TO THE COMPLETE LOSS OF ELECTRICAL SYSTEM ON A PREVIOUS FLIGHT WHEN THE RIGHT LANDING GEAR DID NOT EXTEND AND THE AIRPLANE LANDED ON ITS NOSE AND LEFT GEAR. AFTER TEMPORARY REPAIRS, 20 GALLONS OF FUEL WERE PUT IN THE LEFT TANK FOR A TOTAL OF 35 GALLONS FOR THE FERRY FLIGHT. THE RIGHT TANK WAS EMPTY. THE FERRY FLIGHT WAS BEING MADE WITH THE GEAR DOWN AND WITHOUT ELECTRICAL POWER. WHEN THE AIRPLANE WAS VERY CLOSE TO THE DESTINATION AIRPORT, THE ENGINE CEASED TO PRODUCE POWER AND DURING THE FORCED LANDING IN A FIELD, THE AIRPLANE IMPACTED HARD. POST ACCIDENT INSPECTION REVEALED NO FUEL IN THE TANKS.



Brief of Accident (Continued)

File No. - 588

7/17/89

CHANDLER,AZ

A/C Reg. No. N761JA

Time (Lc1) - 1500 MST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      APPROACH - VFR PATTERN - BASE LEG/BASE TO FINAL

Finding(s)

1. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
2. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
3. FLUID,FUEL - EXHAUSTION
4. FUEL CONSUMPTION CALCULATIONS - IMPROPER - PILOT IN COMMAND

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      HARD LANDING  
Phase of Operation      LANDING - FLARE/TOUCHDOWN  
5. TERRAIN CONDITION - ROUGH/UNEVEN

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUAT PREFLIGHT PLANNING/PREPARATION AND THE IMPROPER FLIGHT PLANNING/DECISIONS, IE. IMPROPER FUEL CONSUMPTION  
CALCULATIONS, BY THE PIC.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 420      1/14/89      WESTLAKE, CA      A/C Reg. No. N7174L      Time (Lcl) - 1613 PST

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

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

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

Make/Model - GRUMMAN AMERICAN AA-1B	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 - 1560	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 108 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	FALLBROOK, CA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	CAMARILLO, CA	Runway Ident - N/A
Wind Dir/Speed- 260/008 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 15.0 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 - FORCED LANDING	
Obstructions to Vision- HAZE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 35	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, CFI	Current - YES	Total - 1212
SE LAND, ME LAND	Months Since - 10	Make/Model- UNK/NR
	Aircraft Type - C-152	Instrument- UNK/NR
		Multi-Eng - 208
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

BEFORE REACHING THE DESTINATION ARPT, THE ENG LOST POWER. THE PLT ATTEMPTED TO RESTART THE ENG, BUT WAS UNABLE. SHE MANEUVERED TO LAND ON A ROADWAY & REMAINED OVER THE MEDIAN AS LONG AS POSSIBLE TO AVOID VEHICLES. DRG THE LANDING, THE RIGHT WING HIT A UTILITY POLE NEXT TO THE CURB OF THE ROADWAY & THE WING WAS TORN OFF THE ACFT. THE ACFT THEN WENT DOWN AN EMBANKMENT & CAME TO REST INVERTED. AFTER THE ACDNT, THE PLT RPRTD THE ACFT HAD RUN OUT OF FUEL, WHILE THE GAUGE OF THE FULLEST TANK WAS INDICATING 1/4 FULL.

Brief of Accident (Continued)

File No. - 420

1/14/89

WESTLAKE, CA

A/C Reg. No. N7174L

Time (Lcl) - 1613 PST

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

Finding(s)

1. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
2. ENGINE INSTRUMENTS, FUEL QUANTITY GAGE - FALSE INDICATION
3. FLUID, FUEL - EXHAUSTION

Occurrence #2 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

4. OBJECT - UTILITY POLE

Occurrence #4 NOSE OVER  
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:  
IMPROPER PLANNING AND DECISION BY THE PILOT WHICH RESULTED IN FUEL EXHAUSTION. CONTRIBUTING FACTORS WERE: FAULTY FUEL  
INDICATION, UTILITY POLE & UNEVEN TERRAIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 428      1/27/89      GUALALA, CA      A/C Reg. No. N4235R      Time (Lcl) - 1000 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	2
Accident Occurred During -LANDING					

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

Make/Model - PIPER PA-32-300	Eng Make/Model - LYCOMING IO-540	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 - 6	Rated Power - 300 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 AIRSTRIP
Method - N/A	UKIAH, CA	
Completeness - N/A	Destination	<b>Airport Data</b>
Basic Weather - VMC	SAME AS ACC/INC	GUALALA
Wind Dir/Speed- UNK/NR	ATC/Airspace	Runway Ident - 31
Visibility - UNK/NR	Type of Flight Plan - NONE	Runway Lth/Wid - 2500/ 100
Lowest Sky/Clouds - 5000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 15000 FT BROKEN	Type Apch/Lndg - FULL STOP	Runway Status - DRY
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 - 660
SE LAND	Months Since - 18	Last 24 Hrs - 2
	Aircraft Type - PA-28	Make/Model- 268
		Last 30 Days- 7
		Instrument- 70
		Last 90 Days- 21

Instrument Rating(s) - NONE

-----Narrative-----

DURING A LANDING, THE AIRCRAFT COLLIDED WITH TERRAIN SHORT OF THE RUNWAY. IT THEN BOUNCED ONTO THE RUNWAY, WENT OFF THE LEFT SIDE & CAME TO REST IN THE DIRT. THE ACFT WAS DAMAGED DURING THE OCCURRENCE, BUT NO PREIMPACT PART FAILURE OR MALFUNCTION WAS FOUND.

Brief of Accident (Continued)

File No. - 428

1/27/89

GUALALA,CA

A/C Reg. No. N4235R

Time (Lcl) - 1000 PST

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
3. PROPER TOUCHDOWN POINT - NOT ATTAINED -

Occurrence #2       IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation   LANDING

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT MISJUDGED THE ALTITUDE AND DISTANCE TO THE RUNWAY AND SUBSEQUENTLY DID NOT ATTAIN THE PROPER TOUCHDOWN POINT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 424      1/27/89      PARLIER,CA      A/C Reg. No. N8403N      Time (Lcl) - 1755 PST

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage DESTROYED	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 - BEECH E33	Eng Make/Model - CONTINENTAL IO-470-K	ELT Installed/Activated - UNK/NR
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3060	Engine Type - RECIP-FUEL INJECTED	
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	SAN DIEGO,CA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	FRESNO,CA	Runway Ident - N/A
Wind Dir/Speed- 360/003 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 4.000 SM	Type of Flight Plan - IFR	Runway Surface - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - IFR	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- HAZE		
Precipitation - NONE		
Condition of Light - DUSK		

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

Pilot-In-Command	Age - 55	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 300
SE LAND,ME LAND	Months Since - 3	Make/Model- 44
	Aircraft Type - C-172	Instrument- 63
		Multi-Eng - 24
		Last 24 Hrs - 2
		Last 30 Days- 16
		Last 90 Days- 43
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

BEFORE DEPG ON A FLT FROM SAN DIEGO TO FRESNO, THE PLT VISUALLY INSPECTED THE FUEL TANKS & BOTH WERE FULL. HE TOOK OFF AT ABOUT 1515 PST USING THE LEFT TANK. HE RPRTD THAT OVER THE SEAL BEACH AREA, HE SELECTED THE RIGHT TANK. APRX 2 MIN LATER, THE ENG BEGAN RUNNING ROUGH & HE NOTED A DROP IN FUEL PRESSURE. HE THEN RESELECTED THE LEFT TANK & THE ENG RETURNED TO NORMAL OPN. OVER THE LAKE HUGHES AREA, HE MOMENTARILY SELECTED THE RIGHT TANK AGAIN & EXPERIENCED THE SAME PROBLEM. AT THAT TIME, HE BELIEVED THERE WOULD BE SUFFICIENT FUEL IN THE LEFT TANK TO CONTINUE TO FRESNO. HOWEVER, WHEN THE ACFT WAS ON ARRIVAL AT THE ALTTA INTXN (IAF FOR THE ILS RWY 29R APCH), THE ENG LOST POWER. THE PLT SELECTED THE RIGHT TANK, BUT WAS UNABLE TO RESTART THE ENG. HE MADE AN EMERGENCY LNDG IN AN OPEN AREA, BUT AFTER ROLLING APRX 100 TO 150 FT, THE ACFT HIT A DITCH & WAS EXTENSIVELY DAMAGED. AN EXAM REVEALED THE LEFT TANK WAS EMPTY & THE RIGHT TANK WAS FULL. A FURTHER EXAM REVEALED THE RIGHT FUEL TANK VENT TUBE WAS OBSTRUCTED WITH INSECTS & DEBRIS.

Brief of Accident (Continued)

File No. - 424

1/27/89

PARLIER,CA

A/C Reg. No. N8403N

Time (Lcl) - 1755 PST

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

Finding(s)

1. FUEL SYSTEM,VENT - BLOCKED(TOTAL)
  2. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
  3. FLIGHT TO ALTERNATE DESTINATION - NOT PERFORMED -
  4. FLUID,FUEL - STARVATION
- 

Occurrence #2            FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

-----

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

Finding(s)

5. TERRAIN CONDITION - DITCH
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S IMPROPER IN-FLIGHT PLANNING/DECISION TO CONTINUE TO THE DESTINATION AIRPORT AFTER ENCOUNTERING A RESTRICTION  
OF FUEL FLOW FROM THE RIGHT TANK AND SUBSEQUENT FUEL STARVATION WHEN THE LEFT TANK EMPTIED. CONTRIBUTING FACTORS WERE  
THE BLOCKED FUEL VENT AND A DITCH.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 411      2/12/89      SACRAMENTO, CA      A/C Reg. No. N73309      Time (Lcl) - 1810 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	1
Accident Occurred During	-LANDING						

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

Make/Model	- CESSNA 172M	Eng Make/Model	- LYCOMING O-320-E2D	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	- 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- 180/006 KTS</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 - DUSK</p>	<p>Itinerary</p> <p>Last Departure Point</p> <p>COLUSA, CA</p> <p>Destination</p> <p>SAME AS ACC/INC</p> <p>ATC/Airspace</p> <p>Type of Flight Plan - VFR</p> <p>Type of Clearance - NONE</p> <p>Type Apch/Lndg - FULL STOP</p> <p>GO AROUND</p>	<p>Airport Proximity</p> <p>ON AIRPORT</p> <p>Airport Data</p> <p>NATOMAS FIELD</p> <p>Runway Ident - 34</p> <p>Runway Lth/Wid - 2700/ 30</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - DRY</p>
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-----Personnel Information-----

Pilot-In-Command	Age - 41	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 59
SE LAND	Months Since - UNK/NR	Make/Model- 8
	Aircraft Type - UNK/NR	Instrument- 0
		Multi-Eng - 0
		Last 24 Hrs - UNK/NR
		Last 30 Days- 8
		Last 90 Days- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT WHILE LANDING ON RWY 34 AT DUSK, THE ACFT TOUCHED DOWN ON THE LAST 1/3 OF THE RWY. THE PLT APPLIED BRAKES TO STOP, THEN DECIDED TO GO AROUND. DRG CLIMB-OUT, THE LANDING GEAR HIT A LIGHT POLE. SUBSEQUENTLY, THE ACFT CONTACTED WET/MUDDY TERRAIN ABOUT 1/4 MI FROM THE DEPARTURE END OF THE RWY & WAS EXTENSIVELY DAMAGED. AN INVESTIGATION REVEALED THE PLT HAD MADE 3 ATTEMPTS TO LAND ON THE RWY & WAS ON HIS 3RD GO-AROUND. THE ACFT WAS IN A FULL FLAP CONFIGURATION WHEN THE ACDNT OCCURRED. THE WIND WAS RPRTD TO BE FROM 180 DEG AT 6 KTS.



Brief of Accident (Continued)

File No. - 411

2/12/89

SACRAMENTO, CA

A/C Reg. No. N73309

Time (Lc1) - 1810 PST

Occurrence #1      IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      LANDING - ABORTED

Finding(s)

1. LIGHT CONDITION - DUSK
2. WEATHER CONDITION - TAILWIND
3. WRONG RUNWAY - SELECTED - PILOT IN COMMAND
4. GO-AROUND - DELAYED - PILOT IN COMMAND
5. OBJECT - UTILITY POLE
6. LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
7. RAISING OF FLAPS - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - ABORTED

Finding(s)

8. TERRAIN CONDITION - SOFT
9. TERRAIN CONDITION - WET

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S SELECTION OF THE WRONG RUNWAY FOR LANDING AND HIS DELAY IN INITIATING A GO-AROUND AFTER LANDING LONG.  
CONTRIBUTING FACTORS WERE: LIGHT CONDITIONS AS DUSK AND A TAILWIND.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 416      2/13/89      SAN MARTIN, CA      A/C Reg. No. N5726M      Time (Lcl) - 1705 PDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries 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 - MOONEY M20J	Eng Make/Model - LYCOMING IO-360-A3B6D	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2740	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 200 HP	

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

Weather Data	Itinerary	Airport Proximity ON AIRPORT
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point HOLLISTER, CA	
Method - N/A	Destination	Airport Data
Completeness - N/A	SAME AS ACC/INC	SAN MARTIN
Basic Weather - VMC	ATC/Airspace	Runway Ident - 32
Wind Dir/Speed- UNK/NR	Type of Flight Plan - NONE	Runway Lth/Wid - 3100/ 75
Visibility - 30.0 SM	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Sky/Clouds - CLEAR	Type Apch/Lndg - FULL STOP	Runway Status - DRY
Lowest Ceiling - NONE		
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 52	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, CFI	Current - YES	Total - 8022
SE LAND, ME LAND	Months Since - 19	Last 24 Hrs - 1
	Aircraft Type - PA-28	Make/Model- 300
		Last 30 Days- 3
		Instrument- 451
		Last 90 Days- 5
		Multi-Eng - 413

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE INSTRUCTOR (CFI) RPRTD THE STUDENT MADE A NORMAL APCH & HIS LANDING WAS GOOD, EXCEPT THE NOSE OF THE ACFT WAS A LITTLE HIGH. HE SAID HE TOLD THE STUDENT "TO PULL THE THROTTLE BACK" & THAT IT WAS A GOOD LANDING, BUT THE STUDENT ADDED POWER. THE CFI TOLD THE STUDENT TO THROTTLE BACK 2 MORE TIMES. RPRTDLY, THE STUDENT THROTTLED BACK ONCE, THEN ELECTED TO GO AROUND. THE STUDENT SAID THAT DRG THE LANDING, THE ACFT BOUNCED TWICE BEFORE HE TOLD THE CFI HE WAS GOING TO MAKE A GO-AROUND. THE CFI SAID THAT DRG THE GO-AROUND, THE NOSE CAME UP & THE ACFT BEGAN A TURN TO THE LEFT DUE TO THE NOSE HI ATTITUDE & FULL POWER. THE STALL WARNING HORN SOUNDED & THE CFI TOLD THE STUDENT TO REDUCE DRAG BY RETRACTING THE GEAR & FLAPS. DRG THE OCCURRENCE, THE CFI TOOK CONTROL OF THE ACFT & TRIED TO RECOVER, BUT THE ACFT MUSHED TO THE GROUND ON THE LEFT SIDE OF THE RWY WITH THE GEAR RETRACTED. THERE WERE NO RPRTD MECHANICAL PROBLEMS WITH THE ACFT AT THE TIME OF THE ACNT.

Brief of Accident (Continued)

File No. - 416

2/13/89

SAN MARTIN,CA

A/C Reg. No. N5726M

Time (Lc1) - 1705 PDT

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

Finding(s)

1. RECOVERY FROM BOUNCED LANDING - INITIATED - DUAL STUDENT
  2. INSTRUCTIONS, WRITTEN/VERBAL - NOT FOLLOWED - DUAL STUDENT
  3. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
  4. GO-AROUND - INITIATED -
  5. RAISING OF FLAPS - PERFORMED -
  6. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND(CFI)
  7. STALL/MUSH - UNCONTROLLED -
- 

Occurrence #2        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    LANDING - ABORTED

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----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE STUDENT TO FOLLOW INSTRUCTIONS AND INADEQUATE SUPERVISION OF THE FLIGHT BY THE CFI WHICH RESULTED  
IN ADEQUATE AIRSPEED NOT BEING MAINTAINED BY THE CFI. DURING AN ATTEMPTED GO-AROUND.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 499      2/26/89      YUBA CITY,CA      A/C Reg. No. N2377Y      Time (Lcl) - 1330 PST

-----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 -APPROACH			0	0	0	2
				0	0	0

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

Make/Model - CESSNA 177	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 - 2275	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	OFF AIRPORT/STRIP
Method - N/A	MARYSVILLE,CA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	VANDERFORD RANCH
Wind Dir/Speed- 300/010 KTS	ATC/Airspace	Runway Ident - 36
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - SIMULATED FORCED LANDING	Runway Status - DRY
Obstructions to Vision- NONE	GO AROUND	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 64	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 3000
SE LAND	Months Since - 8	Make/Model- 7
	Aircraft Type - C-150	Instrument- UNK/NR
		Multi-Eng - 5
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DRG A DUAL INSTRUCTIONAL FLT, THE INSTRUCTOR (CFI) SIMULATED A FORCED LANDING BY REDUCING THE POWER. THE STUDENT MNVRD THE ACFT TO MAKE AN APCH TO A NEARBY AIRSTRIP. IN A STATEMENT AFTER THE ACDNT, THE CFI SAID THAT "AS THE TURN TO BASE WAS STARTED, THE STUDENT ASKED IF HE WAS GOING TO "MAKE" IT, AND I RESPONDED IN THE AFFIRMATIVE. AT THAT POINT, HE (THE STUDENT) ADDED A SMALL AMOUNT OF POWER AND I TOLD HIM HE DID NOT HAVE POWER, AS I RETARDED THE THROTTLE AND AGAIN LOOKED OVER HIS SHOULDER TO VIEW THE RUNWAY. WITHIN SECONDS, I COULD FEEL AN ACCELERATED SINK RATE, AND OBSERVED THE RUNWAY DISAPPEARING AT THE TOP OF THE SIDE WINDOW . . ." THE CFI INITIATED A GO-AROUND; HOWEVER, BEFORE THE DSCNT WAS ARRESTED, THE ACFT CONTACTED THE GROUND. SUBSEQUENTLY, THE HORIZONTAL STABILIZERS, NOSE GEAR, PROP & WING TIPS WERE DAMAGED. THERE WERE NO RPRTD MECHANICAL MALFUNCTIONS OR FAILURES WITH THE ACFT BEFORE THE ACDNT.

Brief of Accident (Continued)

File No. - 499

2/26/89

YUBA CITY, CA

A/C Reg. No. N2377Y

Time (Lcl) - 1330 PST

-----  
Occurrence #1            IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation       GO-AROUND (VFR)

Finding(s)

1. EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND(CFI)
2. PLANNED APPROACH - POOR - DUAL STUDENT
3. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
4. GO-AROUND - DELAYED - PILOT IN COMMAND(CFI)
5. AIRSPEED - INADEQUATE -
6. STALL/MUSH

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE SUPERVISION BY THE INSTRUCTOR (CFI) WHICH RESULTED IN A DELAYED GO-AROUND, INADEQUATE AIRSPEED, AND A  
STALL/MUSH INTO THE GROUND. A POOR APPROACH BY THE STUDENT PILOT WAS A CONTRIBUTING FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 504      3/04/89      UPLAND, CA      A/C Reg. No. N42859      Time (Lcl) - 1550 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 -LANDING			0	0	0	1
				0	0	0

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

Make/Model - CESSNA 182L	Eng Make/Model - CONTINENTAL O-470-R	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2800	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	SHAFTER, CA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	CABLE
Wind Dir/Speed- 290		Runway Ident - 24
Visibility - 20.0 SM	ATC/Airspace	Runway Lth/Wid - 3785/ 75
Lowest Sky/Clouds - 15000 FT SCATTERED	Type of Flight Plan - VFR	Runway Surface - ASPHALT
Lowest Ceiling - 25000 FT BROKEN	Type of Clearance - NONE	Runway Status - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - FULL STOP	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - UNK/NR	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 1360
SE LAND	Months Since - 10	Make/Model- 69
	Aircraft Type - C-182L	Instrument- 2
		Multi-Eng - 0
		Last 24 Hrs - 1
		Last 30 Days- 2
		Last 90 Days- 3
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT OF A CESSNA 182, LOST DIRECTIONAL CONTROL AFTER LANDING AND COLLIDED WITH AN OBSTACLE AT CCB. THE PILOT STATED THAT HE LANDED THE AIRPLANE IN A CRABBED ATTITUDE, LOST DIRECTIONAL CONTROL, DEPARTED THE LEFT SIDE OF THE RUNWAY AND COLLIDED WITH A BUSH. HE STATED THAT HE WAS PERFORMING A SLIP ON FINAL APPROACH AND COULD NOT ALIGN THE AIRPLANE LOGITUDINALLY WITH THE RUNWAY CENTERLINE BEFORE TOUCHDOWN. DURING THE TELEPHONE INTERVIEW, THE PILOT REPORTED NO MECHANICAL FAILURES OR MALFUNCTIONS WITH THE AIRPLANE PRIOR TO THE ACCIDENT.

Brief of Accident (Continued)

File No. - 504

3/04/89

UPLAND, CA

A/C Reg. No. N42859

Time (Lcl) - 1550 PST

-----  
Occurrence #1            LOSS OF CONTROL - ON GROUND  
Phase of Operation       LANDING - FLARE/TOUCHDOWN

Finding(s)

1. PROPER ALIGNMENT - NOT ATTAINED - PILOT IN COMMAND
  2. REMEDIAL ACTION - NOT PERFORMED - PILOT IN COMMAND
  3. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
- 

Occurrence #2            ON GROUND COLLISION WITH OBJECT  
Phase of Operation       LANDING - ROLL

Finding(s)

4. OBJECT - OTHER
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT FAILED TO CORRECT THE ATTITUDE OF THE AIRCRAFT AND ACHIEVE PROPER ALIGNMENT WITH THE RUNWAY PRIOR TO  
LANDING TOUCHDOWN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 505      3/09/89      LONG BEACH, CA      A/C Reg. No. N4899B      Time (Lcl) - 2120 PST

-----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	- CESSNA 310	Eng Make/Model	- CONTINENTAL IO-470B	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 2	Stall Warning System	- YES
Max Gross Wt	- 4600	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 5	Rated Power	- 240 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		SAME AS ACC/INC	LONG BEACH
Wind Dir/Speed- CALM		ATC/Airspace	Runway Ident - 25R
Visibility - 18.0 SM		Type of Flight Plan - NONE	Runway Lth/Wid - 6192/ 200
Lowest Sky/Clouds - CLEAR		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 - NIGHT(BRIGHT)			

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

Pilot-In-Command	Age - 32	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 1560
SE LAND,ME LAND	Months Since - 8	Make/Model- 20
	Aircraft Type - C-177RG	Instrument- 130
		Multi-Eng - 200
		Last 24 Hrs - 5
		Last 30 Days- 70
		Last 90 Days- 140

Instrument Rating(s) - AIRPLANE

-----Narrative-----

A CESSNA 310 RIGHT MAIN GEAR COLLAPSED WHILE TAXIING OFF THE RUNWAY AT THE LGB. THE PILOT REPORTED THAT HE FELT A VIBRATION DURING THE INITIAL TAKEOFF ROLL AND OPTED TO ABORT THE TAKEOFF. AS THE PILOT EXITED THE RUNWAY THE RIGHT MAIN GEAR COLLAPSED. INVESTIGATION REVEALED THAT THE AIRPLANE HAD BEEN RETURNED TO SERVICE FOLLOWING AN ANNUAL INSPECTION AND LANDING GEAR MAINTENACE ON MARCH 03, 1989. AIRCRAFTSMAN, A FIXED BASE OPERATOR AT THE LONG BEACH AIRPORT HAD REPLACED ALL BUSHINGS AND SPACERS IN THE MAIN GEAR TORQUE LINKS. IT WAS FOUND THAT THE TORQUE LINK CENTER ATTACH BOLT WASHER WAS UNDER SIZE, ALLOWING THE UPPER TORQUE LINK TO PULL FREE FROM THE LOWER TORQUE LINK.



Brief of Accident (Continued)

File No. - 505

3/09/89

LONG BEACH, CA

A/C Reg. No. N4899B

Time (Lcl) - 2120 PST

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Occurrence #1        GEAR COLLAPSED  
Phase of Operation   TAKEOFF - ABORTED

Finding(s)

1. LANDING GEAR, MAIN GEAR STRUT SCISSORS - SEPARATION
  2. MAINTENANCE, INSTALLATION - IMPROPER - OTHER MAINTENANCE PSNL
  3. LANDING GEAR, MAIN GEAR STRUT SCISSORS - COLLAPSED
  4. 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:  
THE FAILURE OF THE LANDING GEAR STRUT ON THE RIGHT MAIN GEAR DUE TO IMPROPER MAINTENANCE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 503      3/15/89      RIO VISTA, CA      A/C Reg. No. N51313      Time (Lcl) - 1840 PST

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

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

Injuries			
Fatal	Serious	Minor	None
0	0	1	0
0	0	2	0

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

Fire  
NONE

Crew  
Pass

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

Make/Model - CESSNA 172  
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- 300/005 KTS  
Visibility - 30.0 SM  
Lowest Sky/Clouds - UNK/NR  
Lowest Ceiling -  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DUSK

Itinerary

Last Departure Point  
CONCORD, CA  
Destination  
LOCAL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - GRASS/TURF  
Runway Status - WET

ATC/Airspace

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

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

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE  
SE LAND

Age - 24  
Biennial Flight Review  
Current - YES  
Months Since - 5  
Aircraft Type - C-150

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)

Total	- 113	Last 24 Hrs -	0
Make/Model-	6	Last 30 Days-	2
Instrument-	0	Last 90 Days-	4
Multi-Eng -	0		

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT OF A C172 FLEW INTO A TELEPHONE WIRE, LOST CONTROL OF THE AIRPLANE AND COLLIDED WITH THE TERRAIN WHILE EXECUTING A SIMULATED FORCED LANDING APPROACH TO A FIELD ABOUT 8 MILES WEST OF RIO VISTA, CA. THE PILOT STATED THAT HE WAS SHOWING HIS PASSENGERS SIMULATED FORCED LANDING APPROACH TO AN OPEN FIELD. WHILE IN A DESCENT, BOTH OF THE PILOTS AND THE PASSENGER SAW A TELEPHONE WIRE IN THEIR FLIGHT PATH (AT ABOUT 75 FEET ABOVE GROUND LEVEL). THE PRIVATE PILOT WAS UNABLE TO AVOID THE WIRE. THE AIRPLANE'S MAIN LANDING GEAR CLEARED THE WIRE BUT, THE RIGHT SIDE OF THE HORIZONTAL STABILIZER CAUGHT THE WIRE. THE PRIVATE PILOT LOST CONTROL OF THE AIRPLANE AND COLLIDED WITH THE TERRAIN. THERE WAS NO REPORTED MECHANICAL MALFUNCTION OR FAILURE TO THE AIRPLANE, PRIOR TO THE ACCIDENT.

Brief of Accident (Continued)

File No. - 503

3/15/89

RIO VISTA, CA

A/C Reg. No. N51313

Time (Lc1) - 1840 PST

Occurrence #1        LOSS OF ENGINE POWER  
Phase of Operation    DESCENT - NORMAL

Finding(s)

1. LIGHT CONDITION - DUSK
2. EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND

Occurrence #2        FORCED LANDING  
Phase of Operation    DESCENT - EMERGENCY

Finding(s)

3. OBJECT - WIRE, TRANSMISSION
4. MANEUVER - SIMULATED - PILOT IN COMMAND
5. IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND
6. VISUAL/AURAL PERCEPTION - PILOT IN COMMAND
7. VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND

Occurrence #3        IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation    DESCENT - EMERGENCY

Finding(s)

8. OBJECT - WIRE, TRANSMISSION

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 IMPROPER PLANNING AND EXECUTION OF AN EMERGENCY (SIMULATED) MANEUVER BY THE PILOT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 498      3/19/89      SAN JOSE, CA      A/C Reg. No. N49925      Time (Lcl) - 2158 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  
DESTROYED

Fire  
NONE

Crew  
Pass

Fatal  
0  
0

Injuries  
Serious      Minor  
0      1  
0      1

None  
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-      300/010 KTS  
Visibility      - 10.0 SM  
Lowest Sky/Clouds      - CLEAR  
Lowest Ceiling      - NONE  
Obstructions to Vision-      NONE  
Precipitation      - NONE  
Condition of Light      - NIGHT(DARK)

Itinerary

Last Departure Point  
VAN NUYS, CA  
Destination  
OAKLAND, CA

ATC/Airspace

Type of Flight Plan - VFR  
Type of Clearance      - VFR  
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, ME LAND

Age - 23  
Biennial Flight Review  
Current      - YES  
Months Since      - 8  
Aircraft Type      - C-172

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)

Total      - 193      Last 24 Hrs - 0  
Make/Model- 100      Last 30 Days- 12  
Instrument- 24      Last 90 Days- 47  
Multi-Eng - 14      Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

AT 1830 PST, THE PLT TOOK OFF FROM VAN NUYS, CA, ON A FLT TO OAKLAND, CA, WITH A PLANNED PASSENGER STOP AT HAYWARD, CA. HE STATED THAT AT ABOUT 2150 PST, BEFORE REACHING HAYWARD, THE ENG LOST POWER. HE TURNED TOWARD THE NEAREST ARPT, WHICH WAS AT SAN JOSE, CA, BUT WAS UNABLE TO REACH IT. DRG AN EMERG LANDING AT NIGHT, THE ACFT COLLIDED WITH TREES & A BLDG, THEN CAME TO REST IN A PARKING LOT. DRG A POST-ACDNT EXAM OF THE ACFT, ONLY ABOUT 1-1/4 GAL OF FUEL WAS FOUND REMAINING. ACCORDING TO THE CESSNA OPERATING MANUAL, 1-1/2 GAL OF FUEL WAS CONSIDERED TO BE UNUSABLE. THERE WAS NO INDICATION OF FUEL LEAKAGE FROM THE ACFT AFTER THE ACDNT & NO MECHANICAL FAILURE OR MALFUNCTION WAS REPORTED.

Brief of Accident (Continued)

File No. - 498

3/19/89

SAN JOSE,CA

A/C Reg. No. N49925

Time (Lcl) - 2158 PST

-----  
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. LIGHT CONDITION - DARK NIGHT
  4. OBJECT - TREE(S)
  5. OBJECT - HIGH TERRAIN
- 

-----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 SUBSEQUENT FUEL EXHAUSTION. CONTRIBUTING FACTORS WERE: DARK NIGHT,  
TREES, AND THE BUILDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 531      3/24/89      LAKE ELSINORE, CA      A/C Reg. No. N4374T      Time (Lcl) - 1203 PST

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

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

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

Make/Model - PIPER PA-34-200	Eng Make/Model - LYCOMING IO-360-C-1E6	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 4200	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	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	CONCORD, CA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	SKYLARK
Wind Dir/Speed-		Runway Ident - 11
Visibility - 50.0 SM	ATC/Airspace	Runway Lth/Wid - 2575/ 80
Lowest Sky/Clouds - CLEAR	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 - SIMULATED FORCED LANDING	
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)
ATP, CFI	Current - YES	Total - 3760
SE LAND, ME LAND	Months Since - 11	Make/Model - 130
	Aircraft Type - PA-44	Instrument - 255
		Multi-Eng - 1815
		Last 24 Hrs - 2
		Last 30 Days - 65
		Last 90 Days - 200
		Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT OF A PA-34-200 ATTEMPTED TO MAKE A SINGLE ENGINE GO-AROUND AND COLLIDED WITH THE TERRAIN NEAR LAKE ELSINORE, CA. THE CFI STATED THAT HE HAD SHUTDOWN THE LEFT ENGINE AND FEATHERED THE PROPELLER TO DEMONSTRATE, TO THE STUDENT, SINGLE- ENGINE PROCEDURES AND PERFORMANCE. THE CFI THEN TOLD HIS STUDENT TO PERFORM A SINGLE-ENGINE LANDING. THE STUDENT WAS HIGH AND FAST ON FINAL. THE STUDENT ATTEMPTED A GO-AROUND BUT, THE ACFT DID NOT RESPOND WITH A POSITIVE RATE OF CLIMB. THE CFI TOOK CONTROL OF THE ACFT BUT, WAS ALSO UNSUCCESSFUL IN GAINING A POSITIVE RATE OF CLIMB. THE ACFT WOULD NOT CLEAR POWER LINES THAT WERE LOCATED AT THE END OF THE RUNWAY. THE CFI DESCENDED THE ACFT AND FLEW UNDER THEM. THE ACFT THEN ENTERED INTO A POSITIVE RATE OF CLIMB BUT NOT ENOUGH TO CLEAR HOUSES IN THEIR FLIGHT PATH. THE CFI ELECTED TO LAND STRAIGHT AHEAD. THERE WERE NO REPORTED MECHANICAL FAILURES OR MALFUNCTIONS WITH THE ACFT PRIOR TO THE ACCIDENT.

Brief of Accident (Continued)

File No. - 531

3/24/89

LAKE ELSINORE, CA

A/C Reg. No. N4374T

Time (Lcl) - 1203 PST

Occurrence #1      LOSS OF ENGINE POWER  
Phase of Operation      APPROACH

Finding(s)

1. 1 ENGINE -
2. EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND(CFI)
3. OVER CONFIDENCE IN AIRCRAFT'S ABILITY - PILOT IN COMMAND(CFI)
4. IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND(CFI)
5. PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND(CFI)

Occurrence #2      LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      GO-AROUND (VFR)

Finding(s)

6. GO-AROUND - DELAYED - DUAL STUDENT
7. CLIMB - NOT ATTAINED - DUAL STUDENT
8. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)

Occurrence #3      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      GO-AROUND (VFR)

Finding(s)

9. OBJECT - BUILDING(NONRESIDENTIAL)

Occurrence #4      IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      GO-AROUND (VFR)

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
CFI DISPLAYED POOR JUDGEMENT IN HIS DEMONSTRATION OF SINGLE ENGINE OPERATION OF A TWIN ENGINE ACFT. HIS LACK OF  
SUPERVISION OF AN IMPROPER, DETERIORATING SITUATION ASSURED AN UNSUCCESSFUL CONCLUSION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 486      4/01/89      LANCASTER, CA      A/C Reg. No. N3508Z      Time (Lcl) - 1239 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	0

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

Fire  
NONE

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

Make/Model      - PIPER PA-22  
Landing Gear      - TRICYCLE-FIXED  
Max Gross Wt      - 2000  
No. of Seats      - 4

Eng Make/Model      - LYCOMING O-320  
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- 290/025 KTS

Visibility      - 40.0 SM

Lowest Sky/Clouds      - 2000 FT SCATTERED

Lowest Ceiling      - NONE

Obstructions to Vision- NONE

Precipitation      - NONE

Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point

COTTONWOOD, AZ

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

WILLIAM J FOX AIRFIELD

Runway Ident      - 24

Runway Lth/Wid      - 5001/ 150

Runway Surface      - ASPHALT

Runway Status      - DRY

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

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE

SE LAND, ME LAND

Age - 46

Biennial Flight Review

Current      - UNK/NR

Months Since      - UNK/NR

Aircraft Type      - UNK/NR

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total      - 300

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-----

AFTER LANDING ON RWY 24, THE PLT ELECTED TO EXIT AT THE MIDFIELD INTERSECTION. AS HE WAS TAXIING OFF THE RWY, A STRONG GUST OF WIND OCCURRED WHICH BLEW THE ACFT OVER ON ITS TOP.



Brief of Accident (Continued)

File No. - 486

4/01/89

LANCASTER,CA

A/C Reg. No. N3508Z

Time (Lc1) - 1239 PST

-----  
Occurrence #1        NOSE OVER  
Phase of Operation   TAXI - FROM LANDING

Finding(s)

1. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
2. WEATHER CONDITION - HIGH WIND
3. WEATHER CONDITION - GUSTS

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER PLANNING/DECISION BY THE PILOT. STRONG/GUSTY WINDS CONTRIBUTED TO THE ACCIDENT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 484      4/08/89      LIVERMORE, CA      A/C Reg. No. N6662M      Time (Lcl) - 1022 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 - STINSON 108-3	Eng Make/Model - FRANKLIN 6A4	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 2200	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 165 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	SAN JOSE, CA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	LIVERMORE
Wind Dir/Speed- VARIABLE/013 KTS	ATC/Airspace	Runway Ident - 07
Visibility - 25.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4005/ 100
Lowest Sky/Clouds - CLEAR	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 - 58	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 854
SE LAND	Months Since - 22	Make/Model- 297
	Aircraft Type - 108-3	Instrument- UNK/NR
		Multi-Eng - 0
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- 3
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

ACCORDING TO THE PLT, THE WIND SOCK INDICATED THERE WAS LITTLE WIND BEFORE HE LANDED. HE RPRTD THAT AFTER LANDING ON RWY 7, THE WIND SHIFTED & A GUST BLEW THE ACFT TO THE RIGHT. SUBSEQUENTLY, THE ACFT WENT OFF THE RIGHT SIDE OF THE RWY & NOSED OVER. WITNESSES RPRTD THE WIND WAS VARIABLE & GUSTY AT THE TIME OF THE ACDNT.

Brief of Accident (Continued)

File No. - 484

4/08/89

LIVERMORE, CA

A/C Reg. No. N6662M

Time (Lc1) - 1022 PDT

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

Finding(s)

1. WEATHER CONDITION - UNFAVORABLE WIND
  2. WEATHER CONDITION - HIGH WIND
  3. WEATHER CONDITION - GUSTS
  4. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
  5. GROUND LOOP/SWERVE - UNCONTROLLED -
- 

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:  
DIRECTIONAL CONTROL NOT MAINTAINED BY THE PILOT. UNFAVORABLE WIND, HIGH WIND, AND GUSTS WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 583      5/11/89      MOJAVE, CA      A/C Reg. No. N7002E      Time (Lcl) - 1640 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 -TAXI			0	0	0	0

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

Make/Model - CESSNA 175A	Eng Make/Model - CONTINENTAL GO-300	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2350	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 175 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	INYOKERN, CA	MOJAVE
Wind Dir/Speed- 290/030 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 30.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - UNK/NR	Type of Clearance - UNK/NR	Runway Surface - N/A
Lowest Ceiling -	Type Apch/Lndg - NONE	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 48	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 3950
SE LAND, SE SEA	Months Since - 11	Make/Model- 210
	Aircraft Type - C-175	Instrument- 0
		Last 24 Hrs - 1
		Last 30 Days- 22
		Last 90 Days- 58
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT WAS TAXIING FOR TAKEOFF WHEN THE WIND LIFTED THE LEFT MAIN WHEEL OFF THE GROUND, TURNED THE AIRPLANE AROUND, AND LIFTED THE TAIL HIGH ENOUGH TO FLIP THE AIRPLANE FORWARD TO THE INVERTED POSITION. THE PILOT SAID THE WINDS HE RECEIVED WERE GREATER THAN THE TOWER REPORTED. THE PILOT DID NOT SAY WHAT HEADING HE WAS ON WHEN THE INITIAL PROBLEM STARTED. TOWER REPORTED WINDS WERE FROM 300 DEGREES AT 30 KNOTS, GUSTING TO 45 KNOTS.

Brief of Accident (Continued)

File No. - 583

5/11/89

MOJAVE, CA

A/C Reg. No. N7002E

Time (Lcl) - 1640 PDT

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

Finding(s)

1. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
  2. WEATHER CONDITION - HIGH WIND
  3. WEATHER CONDITION - CROSSWIND
  4. WEATHER CONDITION - GUSTS
- 

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:  
INADEQUATE PREFLIGHT PLANNING/PREPARATION, AND THE PILOT'S DISREGARD OF THE WIND INFORMATION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 596      5/12/89      UPLAND, CA      A/C Reg. No. N5368V      Time (Lcl) - 1340 PDT

-----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	1	0
Accident Occurred During -LANDING			0	0	0
					None
					1

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

Make/Model - CESSNA T210L	Eng Make/Model - CONTINENTAL TS10-520-H4	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 - 5	Rated Power - 285 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	CABLE
Wind Dir/Speed- 320/012 KTS	ATC/Airspace	Runway Ident - 24
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3785/ 75
Lowest Sky/Clouds - 1500 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 2500 FT BROKEN	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Obstructions to Vision- NONE	FORCED LANDING	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 39	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 502
SE LAND	Months Since - 0	Make/Model- 20
	Aircraft Type - UNK/NR	Instrument- 69
		Multi-Eng - 0
		Last 24 Hrs - 0
		Last 30 Days- 120
		Last 90 Days- 165
		Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

ACCORDING TO THE INSTRUCTOR PILOT, THE DUAL STUDENT WAS A PRIVATE PILOT WITH SINGLE AND MULTIENGINE AND INSTRUMENT RATINGS. THIS WAS TO BE A STANDARD CHECKOUT IN THE CESSNA 210 AIRPLANE. AFTER ALMOST AN HOUR OF AIRWORK, INCLUDING THREE LANDINGS TO FULL STOP AT ANOTHER AIRPORT, THE AIRPLANE WAS IN THE HOME TRAFFIC PATTERN WHEN THE ENGINE QUIT. THE PRIVATE DUAL STUDENT DID NOT REACT AND APPROXIMATELY 300 FEET WERE LOST BEFORE THE INSTRUCTOR TOOK CONTROL OF THE AIRPLANE. AT THAT POINT THE ALTITUDE AND DISTANCE TO THE RUNWAY WAS CRITICAL BUT THE INSTRUCTOR MADE THE AIRPORT BUT IMPACTED IN A NOSE-DOWN, LEFT WING LOW ATTITUDE. THE NOSE WHEEL COLLAPSED REARWARD AND WAS IMBEDDED WITHIN THE BOTTOM OF THE FUSELAGE. THE FUEL SELECTOR VALVE WAS FOUND TO BE TURNED TO THE LEFT FUEL TANK AND THAT TANK WAS EMPTY. THE RIGHT FUEL TANK CONTAINED APPROXIMATELY 20 GALLONS. DURING THE IMPACT SEQUENCE, A BEECH 19, N6553R, THAT WAS TIED DOWN AND WAS UNOCCUPIED, WAS STRUCK BY THE ACCIDENT AIRPLANE.

Brief of Accident (Continued)

File No. - 596

5/12/89

UPLAND, CA

A/C Reg. No. N5368V

Time (Lcl) - 1340 PDT

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

Finding(s)

1. FLUID, FUEL - STARVATION
  2. IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND(CFI)
  3. FUEL TANK SELECTOR POSITION - IMPROPER - DUAL STUDENT
  4. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
- 

Occurrence #2        FORCED LANDING  
Phase of Operation    DESCENT - EMERGENCY

-----

Occurrence #3        HARD LANDING  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

5. LANDING GEAR, NOSE GEAR - COLLAPSED
- 

Occurrence #4        ON GROUND COLLISION WITH OBJECT  
Phase of Operation    LANDING - ROLL

Finding(s)

6. OBJECT - AIRCRAFT PARKED
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE IN-FLIGHT PLANNING/DECISION BY THE PILOT IN COMMAND, THE INSTRUCTOR PILOT. FACTORS WERE THE PRIVATE  
PILOT DID NOT SWITCH THE FUEL TANKS AND THE INSTRUCTOR DID NOT CATCH IT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 597      5/19/89      PLACERVILLE,CA      A/C Reg. No. N76675      Time (Lc1) - 1400 PDT

-----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	0

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

Fire  
NONE

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

Make/Model      - CESSNA 140  
Landing Gear      - TAILWHEEL-ALL FIXED  
Max Gross Wt      - 1500  
No. of Seats      - 2

Eng Make/Model      - CONTINENTAL C-85  
Number Engines      - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 85 HP

ELT Installed/Activated - UNK/NR  
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- 200/007 KTS  
Visibility      - 20.0 SM  
Lowest Sky/Clouds      - UNK/NR  
Lowest Ceiling      -  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point  
SAME AS ACC/INC

Destination  
RED BLUFF,CA

ATC/Airspace

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

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

PLACERVILLE  
Runway Ident      - 23  
Runway Lth/Wid      - 4200/ 75  
Runway Surface      - ASPHALT  
Runway Status      - DRY

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

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

Age - 36  
Biennial Flight Review  
Current      - YES  
Months Since      - 1  
Aircraft Type      - 7KCAB

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total      - 347  
Make/Model- 11  
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-----

JUST AT LIFTOFF, THE RIGHT TIRE BLEW AND DIRECTIONAL CONTROL WAS LOST. RATHER THAN GOING TOTALLY OFF THE SIDES  
AND GOING DOWN A HILL, THE PILOT INTENTIONALLY NOSED THE AIRPLANE OVER TO THE INVERTED POSITION.



Brief of Accident (Continued)

File No. - 597

5/19/89

PLACERVILLE, CA

A/C Reg. No. N76675

Time (Lcl) - 1400 PDT

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation TAKEOFF - GROUND RUN

Finding(s)

1. LANDING GEAR, TIRE - FAILURE, PARTIAL

Occurrence #2 LOSS OF CONTROL - ON GROUND  
Phase of Operation TAKEOFF - GROUND RUN

Finding(s)

2. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Occurrence #3 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:  
TOTAL FAILURE OF THE LANDING GEAR TIRE. A MAJOR FACTOR WAS THE UNSUITABILITY OF THE TERRAIN AT THE SIDE OF THE RUNWAY.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 592

5/26/89

CONCORD, CA

A/C Reg. No. N24521

Time (Lcl) - 1700 PDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

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

Type of Operation - INSTRUCTIONAL

Flight Conducted Under -14 CFR 91

Accident Occurred During -DESCENT

Fire  
NONE

-----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 - 115 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- 260/009 KTS

Visibility - 10.0 SM

Lowest Sky/Clouds - UNK/NR

Lowest Ceiling -

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

BUCHANAN FIELD

Runway Ident - 32R

Runway Lth/Wid - 4601/ 150

Runway Surface - ASPHALT

Runway Status - DRY

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

Pilot-In-Command

Certificate(s)/Rating(s)

STUDENT

Age - 19

Biennial Flight Review

Current - N/A

Months Since - N/A

Aircraft Type - N/A

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total - 20

Make/Model- UNK/NR

Instrument- 0

Last 24 Hrs - UNK/NR

Last 30 Days- UNK/NR

Last 90 Days- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PILOT WAS ON HIS THIRD SOLO FLIGHT. AFTER ROTATION AND DURING INITIAL CLIMB, THE AIRPLANE VEERED OVER THE LEFT SIDE OF THE RUNWAY AND STRUCK A RUNWAY LOCATOR SIGN. THE AIRPLANE WENT BACK TO THE GROUND AND THE NOSE GEAR COLLAPSED, THE RIGHT WHEEL BROKE OFF AND THE RIGHT WING STRUCK THE GROUND.

Brief of Accident (Continued)

File No. - 592

5/26/89

CONCORD, CA

A/C Reg. No. N24521

Time (Lcl) - 1700 PDT

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

Finding(s)

1. WEATHER CONDITION - CROSSWIND
  2.    COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
  3. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
- 

Occurrence #2        IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation    TAKEOFF - INITIAL CLIMB

Finding(s)

4. OBJECT - SIGN
- 

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:  
STUDENT PILOT HAD NOT ATTAINED COMPENSATION FOR THE CROSSWIND, AND LOST CONTROL OF THE AIRPLANE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 591      6/17/89      BANNING, CA      A/C Reg. No. N29339      Time (Lcl) - 1445 PDT

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

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

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

Make/Model - CESSNA 177	Eng Make/Model - LYCOMING O-320-E2D	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2350	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	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	MUNICIPAL
Wind Dir/Speed- 250/015 KTS	ATC/Airspace	Runway Ident - 26
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 5200/ 150
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - UNK/NR	Type Apch/Lndg - PRECAUTIONARY LANDING	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 65	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 3705
SE LAND	Months Since - 17	Make/Model- 48
	Aircraft Type - C-177	Instrument- 265
		Last 24 Hrs - 1
		Last 30 Days- 5
		Last 90 Days- 11

Instrument Rating(s) - NONE

-----Narrative-----

THE TEMPERATURE WAS AT LEAST 100 DEGREES F, THE AIRPORT ELEVATION WAS 2,219 FEET MSL, AND THE DENSITY ALTITUDE WAS APPROXIMATELY 5,400 FEET. THE PILOT WAS MAKING A TOUCH AND GO LANDING AND AFTER TAKEOFF, THE AIRPLANE WOULD NOT CLIMB. THE PILOT SAID THE ENGINE SOUNDED NORMAL BUT THE AIRPLANE FELT AS IF IT WERE MUSHING. HE DECIDED TO ABORT THE TAKEOFF AND LAND ON THE RUNWAY OVERRUN. AFTER TOUCHDOWN, THE NOSEWHEEL HIT A SIX INCH HIGH RIDGE OF SAND AND THE NOSE GEAR COLLAPSED.

Brief of Accident (Continued)

File No. - 591

6/17/89

BANNING, CA

A/C Reg. No. N29339

Time (Lcl) - 1445 PDT

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Occurrence #1            IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      TAKEOFF - ABORTED

Finding(s)

1. WEATHER CONDITION - TEMPERATURE EXTREMES
  2. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
  3. WEATHER CONDITION - HIGH DENSITY ALTITUDE
  4. AIRSPEED - INADEQUATE - PILOT IN COMMAND
  5. TERRAIN CONDITION - DIRT BANK
  6. ABORTED TAKEOFF - INADEQUATE - PILOT IN COMMAND
  7. DISTANCE - INADEQUATE - PILOT IN COMMAND
  8. LANDING GEAR, NOSE GEAR - COLLAPSED
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE PREFLIGHT PLANNING/PREPARATION BY THE PILOT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 595      6/17/89      FALLBROOK, CA      A/C Reg. No. N6084P      Time (Lc1) - 0810 PDT

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

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

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

Make/Model - CESSNA 182P	Eng Make/Model - CONTINENTAL O-470-R	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2950	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	PARKER, AZ	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	COMMUNITY AIRPARK
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - 18
Visibility - 5.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2160/ 70
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	GO AROUND	
Precipitation - NONE	FULL STOP	
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 - UNK/NR	Total - 170
SE LAND	Months Since - UNK/NR	Make/Model- 170
	Aircraft Type - UNK/NR	Instrument- 0
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT SAID HE WAS HIGH ON THE BASE LEG DUE TO A STUDENT PILOT THAT WAS DOING TOUCH AND GO LANDINGS. HE SAID THAT AS HE TURNED DOWN THE RUNWAY, IT APPEARED TO BE A SHORT RUNWAY. HE APPLIED POWER FOR A GO-AROUND, BUT THE ENGINE DID NOT RESPOND FAST ENOUGH. HE CONTINUED OFF THE END OF THE RUNWAY, WENT DOWN A SMALL HILL, INTO A STRAWBERRY FIELD. THE AIRPLANE NOSED OVER TO THE INVERTED POSITION.

Brief of Accident (Continued)

File No. - 595

6/17/89

FALLBROOK, CA

A/C Reg. No. N6084P

Time (Lcl) - 0810 PDT

-----  
Occurrence #1      LOSS OF ENGINE POWER(PARTIAL) - NON-MECHANICAL  
Phase of Operation      LANDING - ABORTED

Finding(s)

1. GO-AROUND - ATTEMPTED - PILOT IN COMMAND
  2. THROTTLE/POWER CONTROL - IMPROPER USE OF - PILOT IN COMMAND
- 

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

-----  
Occurrence #3      NOSE OVER  
Phase of Operation      LANDING - ABORTED

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT DID NOT FOLLOW PROCEDURES/DIRECTIVES IN AS MUCH AS HE PUSHED THE THROTTLE FORWARD TOO FAST AND THE ENGINE WAS  
NOT ABLE TO RESPOND.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 594      7/01/89      KELSEYVILLE, CA      A/C Reg. No. N5712E      Time (Lcl) - 2050 PDT

-----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 Crew  
NONE Pass

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

Make/Model - CESSNA 150  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 1500  
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/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- CALM  
Visibility - 25.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DUSK

Itinerary

Last Departure Point  
LAKEPORT, CA  
Destination  
LOCAL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A  
Runway Lth/Wid - N/A  
Runway Surface - GRASS/TURF  
Runway Status - DRY

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, CFI  
SE LAND, ME LAND

Age - 30  
Biennial Flight Review  
Current - YES  
Months Since - 4  
Aircraft Type - UNK/NR

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)

Total	-	412	Last 24 Hrs	-	0
Make/Model	-	178	Last 30 Days	-	22
Instrument	-	0	Last 90 Days	-	22
Multi-Eng	-	21	Rotorcraft	-	0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT SAID HE CHECKED THE FUEL TANKS BY DIPPING THEM AND VISUALLY LOOKING IN THEM. HE DETERMINED HE HAD 6 TO 7 GALLONS, THAT HE THOUGHT WOULD BE GOOD FOR APPROXIMATELY AN HOUR OR MORE. THE AIRPLANE DEPARTED ON THE FLIGHT AT 2008 PDT AND CRASHED AT 2050 PDT. THE PILOT SAID THE ENGINE STARTED TO SPUTTER AND HE WAS UNABLE TO CORRECT THE ENGINE PROBLEM SO HE MADE A FORCED LANDING IN A PASTURE. DURING THE ROLLOUT, THE LEFT WING IMPACTED A FENCE POST. POST ACCIDENT INSPECTION INDICATED NO FUEL IN THE RIGHT FUEL TANK AND APPROXIMATELY 2 GALLONS OF FUEL IN THE LEFT FUEL TANK. A CONSERVATION FUEL CONSUMPTION FIGURE FOR THIS TYPE FLIGHT IS FIVE GPH ACCORDING TO THE FLIGHT MANUAL. THE FLIGHT MANUAL ALSO LISTS THE LAST 3 TO 3.5 GALLONS OF FUEL AS UNUSABLE.



Brief of Accident (Continued)

File No. - 594

7/01/89

KELSEYVILLE,CA

A/C Reg. No. N5712E

Time (Lc1) - 2050 PDT

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

Finding(s)

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

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 - POLE
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE PREFLIGHT PLANNING/PREPARATIONS AND THE IMPROPER FUEL CONSUMPTION CALCULATIONS BY THE PILOT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 512

7/04/89

WILLOWS,CA

A/C Reg. No. N3627G

Time (Lcl) - 0900 PST

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

Type Operating Certificate-AGRICULTURAL AIRCRAFT

Aircraft Damage

Injuries

Type of Operation -AERIAL APPLICATION

SUBSTANTIAL

Fatal

Serious

Minor

None

Flight Conducted Under -14 CFR 137

Fire

Crew

0

0

0

1

Accident Occurred During -MANEUVERING

NONE

Pass

0

0

0

0

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

Make/Model - SCHWEIZER G-164B

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 - 5200

Engine Type - RECIPROCATING-CARBURETOR

No. of Seats - 1

Rated Power - 600 HP

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

Weather Data

Wx Briefing - NO RECORD OF BRIEFING

Method - N/A

Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 360/002 KTS

Visibility - 75.0 SM

Lowest Sky/Clouds - CLEAR

Lowest Ceiling - NONE

Obstructions to Vision- NONE

Precipitation - NONE

Condition of Light - DAYLIGHT

Itinerary

Last Departure Point

WILLOWS,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

WILLOWS AIRPORT

Runway Ident - N/A

Runway Lth/Wid - N/A

Runway Surface - GRASS/TURF

Runway Status - DRY

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

Pilot-In-Command

Age - 32

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Certificate(s)/Rating(s)

Biennial Flight Review

Flight Time (Hours)

COMMERCIAL

Current - YES

Total - 9099

Last 24 Hrs - 3

SE LAND

Months Since - 11

Make/Model- UNK/NR

Last 30 Days- 70

Aircraft Type - C-172

Instrument- UNK/NR

Last 90 Days- 450

Multi-Eng - UNK/NR

Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE ENGINE CONNECTING ROD (P/N 10992) TO THE NUMBER ONE CYLINDER BROKE AT THE CRANKSHAFT RESULTING IN A LOSS OF ENGINE POWER WHILE 200 FEET AGL. DURING THE FORCED LANDING, THE AIRCRAFT NOSED OVER.

Brief of Accident (Continued)

File No. - 512

7/04/89

WILLOWS, CA

A/C Reg. No. N3627G

Time (Lcl) - 0900 PST

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

Finding(s)

1. ENGINE ASSEMBLY, CYLINDER - FAILURE, PARTIAL
- 

Occurrence #2 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:  
FAILURE OF THE CONNECTING ROD ON #1 CYLINDER OF THE AIRCRAFT POWERPLANT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 593      7/09/89      HOLLISTER, CA      A/C Reg. No. N23916      Time (Lcl) - 1430 PDT

-----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	2
			0	0	0	0

-----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 - 110 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SAN CARLOS, CA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	HOLLISTER, CA	FRAZIER LAKE AIRPARK
Wind Dir/Speed- 340/005 KTS	ATC/Airspace	Runway Ident - 25
Visibility - 25.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2500
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - NONE	Type Apch/Lndg - SIMULATED FORCED LANDING	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 63	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 9100
SE LAND, ME LAND, SE SEA	Months Since - 1	Make/Model- 10
	Aircraft Type - UNK/NR	Instrument- 550
		Multi-Eng - 50
		Last 24 Hrs - 2
		Last 30 Days- 6
		Last 90 Days- 12

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE FLIGHT INSTRUCTOR INITIATED A SIMULATED ENGINE FAILURE AT 3500 FEET ABOVE MEAN SEA LEVEL. THE STUDENT PERFORMED THE EMERGENCY PROCEDURES BUT WHEN HE TURNED FINAL HE WAS TOO HIGH TO LAND ON THE RUNWAY. THE FLIGHT INSTRUCTOR TOOK CONTROL OF THE AIRPLANE AND INTENDED TO MAKE ANOTHER 360 DEGREE PRIOR TO LANDING. AS SOON AS THE AIRPLANE ENTERED THE BANK, IT STALLED. THE FLIGHT INSTRUCTOR ATTEMPTED TO RECOVER BY APPLYING FULL POWER BUT THE AIRPLANE DID NOT RETURN TO LEVEL FLIGHT PRIOR TO STRIKING THE GROUND.

Brief of Accident (Continued)

File No. - 593

7/09/89

HOLLISTER, CA

A/C Reg. No. N23916

Time (Lcl) - 1430 PDT

-----  
Occurrence #1        FORCED LANDING  
Phase of Operation    DESCENT - EMERGENCY

Finding(s)

1. EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND(CFI)
  2. PLANNED APPROACH - POOR - DUAL STUDENT
- 

Occurrence #2        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

3. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
  4. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND(CFI)
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FLIGHT INSTRUCTOR'S FAILURE TO TAKE CORRECTIVE ACTION IN SUFFICIENT TIME TO PREVENT THE AIRPLANE FROM STRIKING THE  
GROUND.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 587      7/27/89      LOWER LAKE, CA      A/C Reg. No. N18789      Time (Lcl) - 1800 PDT

-----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	2
Accident Occurred During -APPROACH			0	0	0	0

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

Make/Model - BEECHCRAFT C24R	Eng Make/Model - LYCOMING IO-360-A1B6	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2750	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 200 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- 270/010 KTS</p> <p>Visibility - 30.0 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 GO AROUND</p>	<p>Airport Proximity OFF AIRPORT/STRIP</p> <p>Airport Data</p> <p>PEARCE FIELD</p> <p>Runway Ident - 30</p> <p>Runway Lth/Wid - 2485/ 50</p> <p>Runway Surface - MACADAM</p> <p>Runway Status - DRY</p>
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-----Personnel Information-----

<p>Pilot-In-Command</p> <p>Certificate(s)/Rating(s)</p> <p>PRIVATE</p> <p>SE LAND</p>	<p>Age - 68</p> <p>Biennial Flight Review</p> <p>Current - YES</p> <p>Months Since - 8</p> <p>Aircraft Type - B=24R</p>	<p>Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <p>Total - 711</p> <p>Make/Model- 15</p> <p>Instrument- 0</p> <p>Last 24 Hrs - 1</p> <p>Last 30 Days- 1</p> <p>Last 90 Days- 1</p>
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Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT-IN-COMMAND AND THE SAFETY PILOT BOTH STATED THEY WERE MAKING AN APPROACH TO RUNWAY 30 WHEN THE SINK RATE OF THE AIRPLANE INCREASED. THEY APPLIED POWER BUT THE AIRPLANE STRUCK THE GROUND SHORT OF THE RUNWAY. BOTH PILOTS STATED IT WAS A DOWNDRAFT/WINDSHEAR.

Brief of Accident (Continued)

File No. - 587

7/27/89

LOWER LAKE, CA

A/C Reg. No. N18789

Time (Lc1) - 1800 PDT

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Occurrence #1           UNDERSHOOT

Phase of Operation      APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. WEATHER CONDITION - WINDSHEAR
  2. GO-AROUND - ATTEMPTED - PILOT IN COMMAND
  3. STALL/MUSH - UNCONTROLLED - PILOT IN COMMAND
  4. THROTTLE/POWER CONTROL - DELAYED - PILOT IN COMMAND
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT-IN-COMMAND'S FAILURE TO IDENTIFY THE SINK RATE SOON ENOUGH TO TAKE CORRECTIVE ACTION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 584      7/31/89      RIALTO, CA      A/C Reg. No. N10857      Time (Lcl) - 1335 PDT

-----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	2
Accident Occurred During	-LANDING		Pass 0	0	0	0

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

Make/Model	- BELL HELICOPTER 206B	Eng Make/Model	- ALLISON 250-C20-B	ELT Installed/Activated	- NO -N/A
Landing Gear	- 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-----

<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- 240/005 KTS</p> <p>Visibility - 5.0 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 SIMULATED FORCED LANDING</p>	<p>Airport Proximity ON AIRPORT</p> <p>Airport Data RIALTO MUNIC. ARPT</p> <p>Runway Ident - UNK/NR</p> <p>Runway Lth/Wid - UNK/NR</p> <p>Runway Surface - DIRT</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>HELICOPTER</p>	<p>Age - 41</p> <p>Biennial Flight Review</p> <p>Current - YES</p> <p>Months Since - 4</p> <p>Aircraft Type - BH-206B</p>	<p>Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <table border="0" style="width: 100%;"> <tr> <td>Total</td> <td>- 5600</td> <td>Last 24 Hrs</td> <td>- 2</td> </tr> <tr> <td>Make/Model-</td> <td>1400</td> <td>Last 30 Days-</td> <td>22</td> </tr> <tr> <td>Instrument-</td> <td>0</td> <td>Last 90 Days-</td> <td>80</td> </tr> <tr> <td>Multi-Eng -</td> <td>65</td> <td>Rotorcraft -</td> <td>4300</td> </tr> </table>	Total	- 5600	Last 24 Hrs	- 2	Make/Model-	1400	Last 30 Days-	22	Instrument-	0	Last 90 Days-	80	Multi-Eng -	65	Rotorcraft -	4300
Total	- 5600	Last 24 Hrs	- 2															
Make/Model-	1400	Last 30 Days-	22															
Instrument-	0	Last 90 Days-	80															
Multi-Eng -	65	Rotorcraft -	4300															

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING A PRACTICE AUTOROTATION WITH A POWER RECOVERY, THE FLIGHT INSTRUCTOR HEARD A NOISE FROM THE REAR OF THE HELICOPTER. WHEN THE POWER RECOVERY WAS ATTEMPTED, THE ENGINE RESPONDED TO THE THROTTLE APPLICATION BUT THE LOW RPM WARNING HORN ACTIVATED AND THE HELICOPTER STRUCK THE GROUND IN A LEVEL ATTITUDE WHICH CAUSED THE MAIN ROTOR BLADES TO SEVER THE TAILBOOM. EXAMINATION OF THE HIGH SPEED OUTPUT DRIVESHAFT COUPLING, TRANSMISSION END, SHOWED THAT THE FOUR BOLTS WERE INSTALLED BUT THE FOUR NUTS AND FOUR WASHERS COULD NOT BE FOUND IN THE ASSEMBLY. TWO NUTS WERE FOUND IN THE SCUPPER DRAIN OF THE TRANSMISSION DECK.



Brief of Accident (Continued)

File No. - 584

7/31/89

RIALTO, CA

A/C Reg. No. N10857

Time (Lc1) - 1335 PDT

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

Finding(s)

1. ROTOR DRIVE SYSTEM, ENGINE TO TRANSMISSION DRIVE - SEPARATION
  2. POWER ON LANDING - NOT POSSIBLE - PILOT IN COMMAND
  3. MAINTENANCE, INSTALLATION - IMPROPER - COMPANY MAINTENANCE PSNL
  4. MISC ROTORCRAFT, TAIL BOOM - SHEARED
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE TO INSTALL TWO OF THE FOUR REQUIRED NUTS WHICH RETAIN THE HIGH SPEED COUPLING INPUT DRIVE SHAFT TO THE  
TRANSMISSION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 585      8/06/89      DANA POINT, CA      A/C Reg. No. N2667L      Time (Lcl) - 1110 PDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)

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

Aircraft Damage  
DESTROYED

Fire  
NONE

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

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

Make/Model - CESSNA 172H  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 2150  
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 - 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- 250/008 KTS  
Visibility - 15.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
EL CAJON, CA  
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)  
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	- 1500	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-----

WITNESSES OBSERVED THE AIRPLANE MAKING SLOW CIRCLES, COUNTER CLOCKWISE, WHEN THE NOSE OF THE AIRPLANE DROPPED AND THE ENGINE SOUND INCREASED. THE NOSE OF THE AIRPLANE THEN ROSE TO A NEAR VERTICAL CLIMB AND THE AIRPLANE "SLOWLY LOOPED" OVER ONTO ITS BACK AND THEN DOVE NEAR VERTICALLY WHILE SLOWLY ROTATING 180 DEGREES AND STRIKING THE PACIFIC OCEAN NOSE FIRST. WITNESSES STATED THE ENGINE CONTINUED MAKING NOISE UNTIL THE AIRPLANE STRUCK THE WATER. THE ACFT WAS AT APRX 500 FT AGL WHILE CIRCLING AND CLIMBED TO ABOUT 800 FT AGL BEFORE STALLING.

Brief of Accident (Continued)

File No. - 585

8/06/89

DANA POINT, CA

A/C Reg. No. N2667L

Time (Lcl) - 1110 PDT

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

Finding(s)

1. STALL - INADVERTENT - PILOT IN COMMAND
  2. FLIGHT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND
- 

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

Finding(s)

3. AIRCRAFT CONTROL - NOT ATTAINED - PILOT IN COMMAND
  4. TERRAIN CONDITION - WATER
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT-IN-COMMANDS FAILURE TO MAINTAIN CONTROL OF THE AIRPLANE WHILE IN MANEUVERING FLIGHT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 417      3/09/89      GOLDEN,CO      A/C Reg. No. N7411N      Time (Lcl) - 1455 MST

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

Type Operating Certificate-ON-DEMAND AIR TAXI

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    - HILLER UH-12E  
Landing Gear   - SKID  
Max Gross Wt   - 2750  
No. of Seats   - 3

Eng Make/Model - LYCOMING VO-540-C2A  
Number Engines - 1  
Engine Type    - RECIPROCATING-CARBURETOR  
Rated Power    - 305 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- 140/010 KTS

Visibility      - 60.0 SM

Lowest Sky/Clouds - 12000 FT SCATTERED

Lowest Ceiling   - 20000 FT BROKEN

Obstructions to Vision- NONE

Precipitation    - NONE

Condition of Light - DAYLIGHT

Itinerary

Last Departure Point

BROOMFIELD,CO

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)

COMMERCIAL,CFI

SE LAND

HELICOPTER

Age - 42

Biennial Flight Review

Current          - YES

Months Since    - 7

Aircraft Type   - UH-12E

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total            - 1897      Last 24 Hrs - 1

Make/Model-      350      Last 30 Days- UNK/NR

Instrument-      111      Last 90 Days- 35

Rotorcraft       - 1797

Instrument Rating(s) - NONE

-----Narrative-----

THE INSTRUCTOR (CFI) & DUAL STUDENT WERE PRACTICING PINNACLE APCHS. THE CFI WAS FLYING THE HELICOPETER AS AN APCH WAS MADE TO A 6318' PINNACLE FROM THE SOUTHEAST. ACCORDING TO THE STUDENT, THE WIND WAS FROM THE EAST AT 8 TO 10 KTS. AS THE CFI FLEW TO A 4' HOVER, THERE WAS A LOSS OF TAIL ROTOR CONTROL & THE HELICOPTER BEGAN AN UNCOMMANDED RIGHT TURN. THE CFI MADE A HOVERING AUTOROTATION, BUT THE HELICOPTER TOUCHED DOWN ON AN OUTCROPPING OF ROCK & ROCKED BACKWARD. SUBSEQUENTLY, THE TAIL STINGER & TAIL ROTOR BLADES STRUCK THE TERRAIN & THE HELICOPTER WAS DAMAGED. LATER, THE CFI SAID HE BELIEVED THE TAIL ROTOR CONTROL CABLES HAD UNSPOOLED FROM THE DRUM & RESULTED IN THE LOSS OF CONTROL. HOWEVER, A POST-ACDNT EXAM FAILED TO REVEAL EVIDENCE OF A PRE-ACDNT FAILURE OR MALFUNCTION. DENSITY ALT WAS APRX 8600'. APRX 7 MI EAST AT JEFFCO ARPT, THE WIND WAS FROM 140 DEG AT 10 KTS.

Brief of Accident (Continued)

File No. - 417

3/09/89

GOLDEN, CO

A/C Reg. No. N7411N

Time (Lc1) - 1455 MST

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

Finding(s)

1. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND(CFI)
  2. WEATHER CONDITION - TAILWIND
  3. WEATHER CONDITION - HIGH DENSITY ALTITUDE
  4. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND(CFI)
- 

Occurrence #2        FORCED LANDING  
Phase of Operation    DESCENT - EMERGENCY

Finding(s)

5. AUTOROTATION - ATTEMPTED -
- 

Occurrence #3        IN FLIGHT 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:  
IMPROPER IN-FLIGHT PLANNING/DECISION BY THE CFI WHICH RESULTED IN LOSS OF TAIL ROTOR EFFECTIVENESS AND LOSS OF  
DIRECTIONAL CONTROL. CONTRIBUTING FACTORS WERE HIGH DENSITY ALTITUDE, TAILWIND, AND ROUGH/UNEVEN TERRAIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 433      3/18/89      ERIE, CO

A/C Reg. No. N51RM

Time (Lcl) - 1745 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	1	0
Pass		0	0	0	0

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

Make/Model    - MILLER S.A.L. 2/3 MUSTANG  
Landing Gear   - TAILWHEEL-ALL RETRACTABLE  
Max Gross Wt   - 2500  
No. of Seats    - 1

Eng Make/Model - FAIRCHILD 6-440-C5  
Number Engines - 1  
Engine Type    - RECIPROCATING-CARBURETOR  
Rated Power    - 200 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- CALM  
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      - FORCED LANDING

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

TRI-COUNTY  
Runway Ident        - 33  
Runway Lth/Wid     - 5280/    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       - 13  
Aircraft Type      - KACHINA

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total	- 6641	Last 24 Hrs	- 1
Make/Model-	10	Last 30 Days-	4
Instrument-	6	Last 90 Days-	8

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT WAS ON A LOCAL FLT IN HIS HOMEBUILT 2/3 SCALE P-51 MUSTANG. DURING THE INITIAL CLIMB FROM RWY 33, THE ENG SPUTTERED & QUIT. THE PLT SAID HE SWITCHED FUEL TANKS & TRIED A RESTART, BUT TO NO AVAIL. THE PLANE WAS LANDED IN A PLOWED FIELD WITH THE GEAR EXTENDED. AT TOUCHDOWN, THE LEFT WING STRUCK THE TERRAIN, THE PLANE CARTWHEELED & BOTH WINGS FOLDED OVER THE CANOPY. A POST ACCIDENT ENG INSPN BY THE OWNER & THE BUILDER FAILED TO REVEAL ANY EVIDENCE TO EXPLAIN THE RPRTD ENG FAILURE.

Brief of Accident (Continued)

File No. - 433

3/18/89

ERIE,CO

A/C Reg. No. N51RM

Time (Lcl) - 1745 MST

-----  
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. TERRAIN CONDITION - ROUGH/UNEVEN  
3. TERRAIN CONDITION - SOFT

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
LOSS OF ENGINE POWER FOR AN UNKNOWN REASON. SOFT UNEVEN TERRAIN WAS A CONTRIBUTING FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 442      3/23/89      LEADVILLE, CO      A/C Reg. No. N5008Q      Time (Lcl) - 1130 MST

-----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      -FLIGHT TEST  
Flight Conducted Under      -14 CFR 91  
Accident Occurred During      -MANEUVERING

Fire  
NONE

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

Make/Model      - BELL 222  
Landing Gear      - TRICYCLE-RETRACTABLE  
Max Gross Wt      - 7850  
No. of Seats      - 3

Eng Make/Model      - ALLISON 250-C30G  
Number Engines      - 2  
Engine Type      - TURBOSHAFT  
Rated Power      - 650 HP

ELT Installed/Activated - NG -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- 260/012 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  
LOCAL

ATC/Airspace

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

Airport Proximity  
ON AIRPORT

Airport Data

LEADVILLE  
Runway Ident      - 16  
Runway Lth/Wid      - 5300/ 75  
Runway Surface      - ASPHALT  
Runway Status      - DRY

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

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL  
SE LAND  
HELICOPTER

Age - 36

Biennial Flight Review

Current      - YES  
Months Since      - 15  
Aircraft Type      - 206L-1

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total	- 1490	Last 24 Hrs	- 2
Make/Model-	102	Last 30 Days-	61
Instrument-	53	Last 90 Days-	77
Multi-Eng	- 28	Rotorcraft	- 643

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT & A TECHNICIAN WERE PERFORMING REARWARD FLT TO TEST AN EXPERIMENTAL ENG INSTLN. THE MANEUVER USED WAS A REARWARD HOVER TO 20 KTS, FOLLOWED BY A RIGHT PEDAL TURN TO REVERSE COURSE & FLY AWAY. THE PLT WAS USING RWY 16 & THE WIND WAS FROM 260 DEG AT 12 KTS. THE PLT RPRTD THAT DRG THE RIGHT TURN, THE HELICOPTER ENTERED AN UNCOMMANDED RIGHT SPIN. THE PLT WAS UNABLE TO MAINTAIN ANTI-TORQUE CONTROL & LOWERED THE COLLECTIVE TO LAND. HOWEVER, THE HELICOPTER TOUCHED DOWN WITH SIDEWARD MOVEMENT, COLLAPSING THE NOSE & LEFT MAIN GEAR. THE TAIL ROTOR BLADES CONTACTED THE RWY DRG THE GEAR FAILURE & THE TAIL ROTOR GEARBOX WAS TORN FROM THE TAIL SECTION. THE PLT ORIGINALLY SUSPECTED A HYDRAULIC PROBLEM, BUT AN INSPN FAILED TO REVEAL EVIDENCE OF ANY PRE-ACDNT FAILURE OR MALFUNCTION. ELEVATION & TEMPERATURE WERE 9927 FT & 65 DEG, RESPECTIVELY.



Brief of Accident (Continued)

File No. - 442

3/23/89

LEADVILLE, CO

A/C Reg. No. N5008Q

Time (Lcl) - 1130 MST

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

Finding(s)

1. WEATHER CONDITION - HIGH DENSITY ALTITUDE
  2. WEATHER CONDITION - UNFAVORABLE WIND
  3. COMPENSATION FOR WIND CONDITIONS - MISJUDGED - PILOT IN COMMAND
  4. TAIL ROTOR PEDALS - IMPROPER USE OF - 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:  
FAILURE OF THE PILOT TO COMPENSATE ADEQUATELY FOR WIND CONDITIONS WITH RUDDER PEDALS WHILE MANEUVERING IN UNFAVORABLE  
WIND AND HIGH DENSITY ALTITUDE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 434      3/27/89      LAMAR,CO      A/C Reg. No. N3042Z      Time (Lcl) - 1120 MST

-----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 - BEECH F33A	Eng Make/Model - CONTINENTAL IO-520-BB	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3022	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 5	Rated Power - 285 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	DENVER,CO	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	DODGE CITY,KS	Runway Ident - N/A
Wind Dir/Speed- UNK/NR	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 15.0 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 - PRECAUTIONARY LANDING	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 61	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 1317
SE LAND	Months Since - 12	Make/Model- 20
	Aircraft Type - PA-28R	Instrument- UNK/NR
		Multi-Eng - 0
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

DRG A X-COUNTRY FLT THE ALTERNATOR OUT LIGHT ILLUMINATED & THE PLT DIVERTED TO THE CLOSEST ARPT WHICH WAS AT LAMAR, CO. THE ACFT ARRIVED AT LAMAR WITH THE ELECTRICAL SYSTEM DEPLETED. THE PLT WAS UNABLE TO EXTEND THE LANDING GEAR WITH THE NORMAL (ELECTRICAL) SYSTEM, SO SHE EXTENDED THE GEAR MANUALLY TO WHAT SHE THOUGHT WAS THE FULLY EXTENDED POSITION. SHE SAID THE ENG OIL PRESSURE GAUGE WAS INDICATING LOW, SO SHE ELECTED TO LAND ON A ROAD. DURING THE LANDING ALL THREE GEAR COLLAPSED. BEFORE STOPPING, THE ACFT WENT OFF THE SIDE OF THE ROAD & WAS FURTHER DAMAGED. A POST-ACDNT INSPN OF THE ACFT REVEALED AN ALTERNATOR BEARING HAD FAILED. NO REASON FOR THE RPRTD DROP IN OIL PRESSURE WAS FND.

Brief of Accident (Continued)

File No. - 434

3/27/89

LAMAR, CO

A/C Reg. No. N3042Z

Time (Lc1) - 1120 MST

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation CRUISE - NORMAL

Finding(s)

1. ELECTRICAL SYSTEM, ALTERNATOR - FAILURE, TOTAL
2. ELECTRICAL SYSTEM - INOPERATIVE

Occurrence #2 COMPLETE GEAR COLLAPSED  
Phase of Operation LANDING - ROLL

Finding(s)

3. PRECAUTIONARY LANDING - INITIATED - PILOT IN COMMAND
4. GEAR EXTENSION - IMPROPER - PILOT IN COMMAND
5. GEAR DOWN AND LOCKED - NOT ATTAINED - PILOT IN COMMAND
6. LACK OF FAMILIARITY WITH AIRCRAFT - PILOT IN COMMAND
7. TERRAIN CONDITION - ROADWAY/HIGHWAY

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF AN ALTERNATOR BEARING WHICH RESULTED IN TOTAL LOSS OF ELECTRICAL POWER AFTER THE BATTERY BECAME DISCHARGED,  
AND FAILURE OF THE PILOT TO INSURE THE GEAR WAS FULLY EXTENDED DURING A PRECAUTIONARY LANDING. THE PILOT'S LACK OF  
FAMILIARITY WITH THE GEAR EXTENSION SYSTEM WAS A CONTRIBUTING FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 439      3/28/89      BOULDER, CO      A/C Reg. No. N4756B      Time (Lcl) - 1020 MST

-----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	2
Accident Occurred During	-TAKEOFF					

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

Make/Model	- CESSNA 180	Eng Make/Model	- CONTINENTAL O-470	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 AIRPORT	
Method	- N/A	SAME AS ACC/INC		
Completeness	- N/A	Destination	Airport Data	
Basic Weather	- VMC	LOCAL	BOULDER	
Wind Dir/Speed	- VARIABLE/010 KTS		Runway Ident	- 08
Visibility	- 30.0 SM	ATC/Airspace	Runway Lth/Wid	- 4100/ 75
Lowest Sky/Clouds	- 10000 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 - 52	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL, ATP, CFI	Current - YES	Total - 9903	Last 24 Hrs - 0
SE LAND, ME LAND, SE SEA	Months Since - 11	Make/Model - 650	Last 30 Days - 72
	Aircraft Type - 737	Instrument - 1350	Last 90 Days - 194
		Multi-Eng - 5949	

Instrument Rating(s) - AIRPLANE

-----Narrative-----

BEFORE TAKEOFF, THE PLT NOTICED THE WIND WAS VARIABLE AT 10 KTS. HE RPRTD THAT DRG THE TAKEOFF ROLL, THE ACFT BEGAN TO TURN LEFT. HE ATTEMPTED TO CORRECT WITH RUDDER AND BRAKE, BUT TO NO AVAIL. HE REDUCED POWER & ABORTED THE TAKEOFF. HOWEVER, THE ACFT DEPARTED THE RWY TO THE LEFT & THE RIGHT MAIN GEAR FAILED. THE PLT RPRTD THAT AFTER THE ACDNT, THE WIND WAS FROM THE NORTH WITH GUSTS TO 15 KTS.

Brief of Accident (Continued)

File No. - 439

3/28/89

BOULDER, CO

A/C Reg. No. N4756B

Time (Lcl) - 1020 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. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
4. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
5. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Occurrence #2      MAIN GEAR COLLAPSED  
Phase of Operation      TAKEOFF - ABORTED

Finding(s)

6. 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 INADEQUATE COMPENSATION FOR WIND CONDITIONS, FAILING TO MAINTAIN DIRECTIONAL CONTROL, AND INADVERTENT  
GROUND SWERVE. GUSTY CROSSWINDS CONTRIBUTED TO THE ACCIDENT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 482	4/08/89	CRESTED BUTTE, CO	A/C Reg. No. N8562X	Time (Lc1) - 1300 MDT
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-----Basic Information-----

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

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

Make/Model - CESSNA P172D	Eng Make/Model - LYCOMING O-360-A4N	ELT Installed/Activated - YES/YES
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	

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-----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- UNK/NR</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 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 - NONE</p>	<p>Airport Proximity ON AIRPORT</p> <p>Airport Data</p> <p>CRESTED BUTTE</p> <p>Runway Ident - 11</p> <p>Runway Lth/Wid - 4500/ 50</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - SNOW - 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</p>	<p>Age - 42</p> <p>Biennial Flight Review</p> <p>Current - YES</p> <p>Months Since - 2</p> <p>Aircraft Type - C-182D</p>	<p>Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <p>Total - 190</p> <p>Make/Model- 130</p> <p>Instrument- 9</p> <p>Last 24 Hrs - 1</p> <p>Last 30 Days- 1</p> <p>Last 90 Days- 24</p>
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Instrument Rating(s) - NONE

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-----Narrative-----

THE PLT & A FRIEND FLEW TO ANOTHER ARPT IN THE LOCAL AREA. AFTER ARRIVING AT THAT ARPT, THE PLT CHECKED THE WIND SOCK & ELECTED TO LAND ON RWY 11. DRG THE LANDING, THE ACFT ENCTR'D SNOW ON THE RWY THAT WAS DEEPER THAN EXPECTED. DUE TO THE SLOPE OF THE RWY, THE PLT ELECTED TO TAKE OFF IN THE OPPOSITE DIRECTION (DOWNHILL) WITH A SLIGHT TAILWIND. THE ACFT BECAME AIRBORNE, BUT WOULD ONLY CLIMB ABOUT 5 FT. SUBSEQUENTLY, IT HIT A 6 FT SNOW BANK & NOSED OVER. THE PLT STATED THAT HE THOUGHT THE ACDNT OCCURRED DUE TO WIND GUSTS FROM BEHIND & THE ACFT HITTING DRIFTS THAT SLOWED IT DOWN.

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Brief of Accident (Continued)

File No. - 482

4/08/89

CRESTED BUTTE, CO

A/C Reg. No. N8562X

Time (Lc1) - 1300 MDT

Occurrence #1 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation TAKEOFF - INITIAL CLIMB

Finding(s)

1. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
2. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - SNOW COVERED
3. WEATHER CONDITION - UNFAVORABLE WIND
4. TERRAIN CONDITION - SNOWBANK

Occurrence #2 NOSE OVER  
Phase of Operation TAKEOFF

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT SELECTED A RUNWAY WITH UNSUITABLE CONDITIONS FOR TAKING OFF. THE UNFAVORABLE WIND AND TERRAIN  
CONDITIONS WERE RELATED FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 506      6/20/89      BROOMFIELD, CO      A/C Reg. No. N8419W      Time (Lcl) - 0102 MDT

-----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	1	0
Accident Occurred During -APPROACH			0	0	0	0

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

Make/Model - PIPER PA28-180	Eng Make/Model - LYCOMING O-360-A3A	ELT Installed/Activated - YES/YES
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-----

<b>Weather Data</b> Wx Briefing - NO RECORD OF BRIEFING Method - N/A Completeness - N/A Basic Weather - VMC Wind Dir/Speed- CALM Visibility - 15.0 SM Lowest Sky/Clouds - CLEAR Lowest Ceiling - NONE Obstructions to Vision- NONE Precipitation - NONE Condition of Light - NIGHT(DARK)	<b>Itinerary</b> Last Departure Point BROOMFIELD, CO Destination LOCAL  <b>ATC/Airspace</b> Type of Flight Plan - NONE Type of Clearance - NONE Type Apch/Lndg - TRAFFIC PATTERN	<b>Airport Proximity</b> OFF AIRPORT/STRIP  <b>Airport Data</b> JEFFERSON COUNTY AIRPORT Runway Ident - 29R Runway Lth/Wid - 9000/ 100 Runway Surface - ASPHALT Runway Status - DRY
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-----Personnel Information-----

Pilot-In-Command Certificate(s)/Rating(s) STUDENT	Age - 20 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 - 30 Make/Model- 4 Instrument- 0 Multi-Eng - 0  Last 24 Hrs - 1 Last 30 Days- 4 Last 90 Days- 18 Rotorcraft - 0
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Instrument Rating(s) - NONE

-----Narrative-----

THIS STUDENT PLT DEPARTED THE BROOMFIELD, CO AIRPORT LATE AT NIGHT, WITH 18 GALS OF FUEL ABOARD HIS ACFT, IN ORDER TO OBTAIN SOME NIGHT TIME FLT EXPERIENCE. AFTER FLYING ALMOST TWO HRS, AND WHILE ON APPROACH FOR LANDING, THE ACFT ENGINE SUDDENLY STOPPED. AFTER TRYING TO RESTART THE ENGINE WITHOUT SUCCESS, THE PLT MADE AN EMERGENCY FORCED LANDING.



Brief of Accident (Continued)

File No. - 506

6/20/89

BROOMFIELD, CO

A/C Reg. No. N8419W

Time (Lc1) - 0102 MDT

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      APPROACH - VFR PATTERN - BASE TURN

Finding(s)

1. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
2. FLUID, FUEL - EXHAUSTION
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      DESCENT - EMERGENCY

Finding(s)

4. LIGHT CONDITION - NIGHT

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE OF THE STUDENT TO PROPERLY PLAN THE FLT RESULTING IN FUEL EXHAUSTION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 462      7/01/89      TELLURIDE, CO      A/C Reg. No. N7385Y      Time (Lcl) - 1130 MDT

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

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

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

Make/Model - CESSNA R182	Eng Make/Model - LYCOMING O-540-J3C5D	ELT Installed/Activated - YES-UNK/NR
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 - FSS	Last Departure Point	ON AIRPORT
Method - TELEPHONE	TUCSON, AZ	
Completeness - PARTIAL, LMTD BY PILOT	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	TELLURIDE REGIONAL
Wind Dir/Speed- 240/007 KTS	ATC/Airspace	Runway Ident - 09
Visibility - 50.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 6900/ 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	FULL STOP	
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)
PRIVATE	Current - YES	Total - 200
SE LAND	Months Since - 0	Make/Model- 5
	Aircraft Type - C-R182	Instrument- UNK/NR
		Multi-Eng - 3
		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 RPRTD THAT AS HE WAS LANDING, THE AIRPLANE ENCOUNTERED A STRONG GUST OF WIND WHICH BLEW IT TO THE LEFT SIDE OF THE RWY. DENSITY ALTITUDE AT THE ARPT WAS 11,600 FT. THE PLT ATTEMPTED A GO-AROUND, BUT WAS UNABLE TO GET THE ACFT TO CLEAR OVER TREES. THE ACFT THEN CRASHED TO THE GROUND & CAME TO REST INVERTED WITH ITS TAIL & LEFT WING TORN OFF. THE FIXED BASE OPERATOR AT THE ARPT ESTIMATED THE WIND WAS FROM 240 DEG AT 7 KTS. THE ARPT DIRECTORY RECOMMENDED THAT LANDINGS BE MADE ON RWY 9 & TAKEOFFS BE MADE ON RWY 27 FOR NOISE ABATEMENT REASONS. LOCAL PILOTS RPRTD THAT SUDDEN STRONG GUSTS ARE OFTEN ENCOUNTERED DRG LANDINGS AT THIS ARPT. A PLT, WHO LANDED JUST AFTER THE ACDNT, ALSO ENCOUNTERED UNFAVORABLE WIND NEAR THE APCH END OF RWY 9.

Brief of Accident (Continued)

File No. - 462

7/01/89

TELLURIDE, CO

A/C Reg. No. N7385Y

Time (Lcl) - 1130 MDT

Occurrence #1        IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

1. WEATHER CONDITION - UNFAVORABLE WIND
2. WEATHER CONDITION - TAILWIND
3. WEATHER CONDITION - CROSSWIND
4. WEATHER CONDITION - GUSTS

Occurrence #2        IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation    LANDING - ABORTED

Finding(s)

5. GO-AROUND - INITIATED -
6. WEATHER CONDITION - HIGH DENSITY ALTITUDE
7. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
8. OBJECT - TREE(S)
9. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND

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:  
INADEQUATE COMPENSATION FOR WIND CONDITIONS BY THE PILOT AND HIS FAILURE TO MAINTAIN RUNWAY ALIGNMENT. CONTRIBUTING  
FACTORS WERE WIND CONDITIONS, HIGH DENSITY ALTITUDE, AND TREES.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 481      7/20/89      WESTON,CO      A/C Reg. No. N9038T      Time (Lcl) - 0830 MDT

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

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

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

Make/Model - CESSNA 182C	Eng Make/Model - CONTINENTAL O-470-L	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-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 AIRSTRIP
Method - N/A	TRINIDAD,CO	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	PARSONS RANCH
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - 27
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3400/ 55
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - GRASS/TURF
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 - 53	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - NO	Total - 300
SE LAND	Months Since - UNK/NR	Make/Model- 100
	Aircraft Type - UNK/NR	Instrument- 0
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- 6

Instrument Rating(s) - NONE

-----Narrative-----

THE PLTS WERE MOVING THE ACFT TO THE OWNER'S RANCH STRIP. ONE OF THE PLTS RPRTD THAT ON FINAL APCH TO LAND, THE ENG LOST POWER. SUBSEQUENTLY, AN EMERGENCY LANDING WAS MADE NEAR THE STRIP. HOWEVER, DURING THE LANDING ROLL, THE ACFT ENCOUNTERED A DITCH & NOSED OVER. THE OWNER RPRTD THAT WATER WAS FOUND IN THE FUEL SYSTEM DURING A POST ACDNT INSPN.

Brief of Accident (Continued)

File No. - 481

7/20/89

WESTON, CO

A/C Reg. No. N9038T

Time (Lcl) - 0830 MDT

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

Finding(s)

1. FLUID, FUEL - WATER
2. AIRCRAFT PREFLIGHT - INADEQUATE - 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)

3. TERRAIN CONDITION - DITCH

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:  
WATER IN THE FUEL AND INADEQUATE PREFLIGHT BY THE PILOT. A CONTRIBUTING FACTOR WAS THE DITCH.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 435      5/14/89      WOODSTOCK,CT      A/C Reg. No. N11789      Time (Lcl) - 1220 EDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries 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 -LANDING					

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

Make/Model - CESSNA 150	Eng Make/Model - CONTINENTAL O-200-A	ELT Installed/Activated - 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	ON AIRPORT
Method - N/A	DANIELSON,CT	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	WOODSTOCK
Wind Dir/Speed- 270/005 KTS	ATC/Airspace	Runway Ident - 19
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2200/ 75
Lowest Sky/Clouds - 5000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - UNK/NR
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 62	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 32
	Months Since - N/A	Last 24 Hrs - 1
	Aircraft Type - N/A	Make/Model- 32
		Last 30 Days- 2
		Instrument- UNK/NR
		Last 90 Days- 8
		Multi-Eng - 0
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT AS HE WAS LANDING, THE ACFT BALLOONED & THE WIND BLEW IT TO THE LEFT. SUBSEQUENTLY, THE ACFT TOUCHED DOWN ON SOFT, WET TERRAIN ON THE LEFT SIDE OF THE RWY & NOSED OVER. THE PLT RPRTD THE WIND WAS GUSTING TO 15 KTS.

Brief of Accident (Continued)

File No. - 435

5/14/89

WOODSTOCK,CT

A/C Reg. No. N11789

Time (Lc1) - 1220 EDT

-----  
Occurrence #1        NOSE OVER  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

1. WEATHER CONDITION - CROSSWIND
2.    COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
3. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND
4. TERRAIN CONDITION - SOFT
5. TERRAIN CONDITION - WET

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE COMPENSATION FOR WIND CONDITIONS BY THE PILOT WHICH RESULTED IN NOT MAINTAINING PROPER ALIGNMENT WITH THE  
RUNWAY. THE CROSSWIND AND SOFT/WET TERRAIN WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 422      3/07/89      OCALA, FL      A/C Reg. No. N8350V      Time (Lcl) - 1345 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	1
Flight Conducted Under - 14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During - LANDING		Other	0	0	1
					0

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

Make/Model - CHAMPION 7ECA	Eng Make/Model - LYCOMING O-235-C1	ELT Installed/Activated - NO	-N/A
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 - 115 HP		

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	DUNNELLON, FL	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	GREY STONE
Wind Dir/Speed- 300/005 KTS	ATC/Airspace	Runway Ident - 27
Visibility - 6.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3660/ 80
Lowest Sky/Clouds - 1500 FT SCATTERED	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - 3000 FT BROKEN	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 - 46	Medical Certificate - EXPIRED
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 134
SE LAND	Months Since - 15	Make/Model - 16
	Aircraft Type - PA-38	Instrument - UNK/NR
		Multi-Eng - 0
		Last 24 Hrs - 0
		Last 30 Days - 1
		Last 90 Days - 17
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT ENTERED THE TRAFFIC PATTERN TO LAND ON RWY 27 (GRASS RWY), WHICH INTERSECTED RWY 36 (PAVED RWY). RWY 27 EXTENDED WEST OF RWY 36 & INTERSECTED IT AT THE PAVED RWY'S MIDFIELD AREA. WHILE FLARING OVER THE INTXN TO LAND, THE ACFT'S LEFT MAIN GEAR HIT A VEHICLE, WHICH WAS TRAVELING NORTH ON THE LEFT EDGE OF RWY 36 & WAS ALSO CROSSING AT THE INTXN. DRG IMPACT, THE LEFT MAIN GEAR SEPARATED, BUT THE PLT CONTD THE LANDING. AFTER TOUCHDOWN, THE ACFT VEERED OFF THE SIDE OF RWY 27 BEFORE COMING TO REST. THE PLT'S MED CERT WAS DATED 12/3/86.



Brief of Accident (Continued)

File No. - 422

3/07/89

OCALA, FL

A/C Reg. No. N8350V

Time (Lcl) - 1345 EST

-----  
Occurrence #1        IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

1. VISUAL LOOKOUT - INADEQUATE - DRIVER OF VEHICLE
  2. OBJECT - VEHICLE
  3. CLEARANCE - NOT MAINTAINED - DRIVER OF VEHICLE
  4. VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND
- 

Occurrence #2        AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation    LANDING

Finding(s)

5. LANDING GEAR, MAIN GEAR - OVERLOAD
- 

Occurrence #3        LOSS OF CONTROL - ON GROUND  
Phase of Operation    LANDING

Finding(s)

6. GROUND LOOP/SWERVE - UNCONTROLLED -
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE VEHICLE DRIVER TO SEE AND YIELD TO THE ACFT THAT WAS LANDING ON RWY 27. CONTRIBUTING FACTORS WERE:  
VEHICLE ON THE RUNWAY AND INADEQUATE VISUAL LOOKOUT BY THE PILOT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 466      3/09/89      DAYTONA BEACH, FL      A/C Reg. No. N6852Q      Time (Lcl) - 1337 EST

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

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

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

Make/Model - BEECH S35	Eng Make/Model - CONTINENTAL IO-520-BA	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3300	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 5	Rated Power - 285 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	ATHENS, GA	
Completeness - FULL	Destination	Airport Data
Basic Weather - IMC	DAYTONA BEACH, FL	DAYTONA BEACH REGIONAL
Wind Dir/Speed- 310/012 KTS	ATC/Airspace	Runway Ident - 07
Visibility - 2.000 SM	Type of Flight Plan - IFR	Runway Lth/Wid - 7500/ 150
Lowest Sky/Clouds - N/A	Type of Clearance - IFR	Runway Surface - ASPHALT
Lowest Ceiling - 300 FT OVERCAST	Type Apch/Lndg - ILS-COMPLETE	Runway Status - WET
Obstructions to Vision- FOG		
Precipitation - DRIZZLE		
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 - 510
SE LAND	Months Since - 4	Last 24 Hrs - 5
	Aircraft Type - S35	Make/Model- 10
		Instrument- UNK/NR
		Multi-Eng - 0
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DRG ARR, APCH CTL PROVIDED VECTORS & CLRD THE PLT FOR AN ILS RWY 7L APCH. AS THE ACFT CONTD, THE CTLR NOTED IT WAS APRX 1 MI "SOUTH OF FINAL" & ASKED THE PLT IF HE WAS RCVG THE LOCALIZER. THE PLT SAID NO. THE CTLR THEN BGN GIVING INSTRNS FOR A SURVEILLANCE APCH & TOLD THE PLT THE MIN DSCNT ALT (MDA) WAS 420', BUT DID NOT CLR HIM TO DSCND. SOON THEREAFTER, THE CTLR NOTED THE MODE C READ-OUT (WHICH HAD BEEN INTERMITTENT) WAS INDCG 400'. THE CTLR IMMEDIATELY TOLD THE PLT TO TURN LEFT TO 360 DEG & CLIMB TO 1600' & THE PLT ACKNOWLEDGED. THE CTLR THEN ADZD THE PLT THERE WAS AN ANTENNA AT HIS ONE O'CLOCK PSN, BUT THERE WAS NO RESPONSE & CONTACT WITH THE ACFT WAS LOST. LATER, THE ACFT WAS FND IN THAT VCNTY WHERE IT HAD HIT TREES & CRASHED ON A HDG OF 160 DEG (1.6 MI WSW OF THE OUTER MARKER, TERRAIN ELEV APRX 35'). THE UNDMGD #1 NAV WAS FND TO BE SET AT 109.75 MHZ. THE ILS FREQ WAS 109.7 MHZ. THE PLT'S ESTD FLT TIME IN THE BEECH S35 WAS 10 HRS; HIS CFI BELIEVED HE WAS NOT CURRENT FOR INST FLT. THE 1342 EST WX AT THE ARPT WAS 300 FT OVC, 2 MI VIS WITH FOG & DRIZZLE.

Brief of Accident (Continued)

File No. - 466

3/09/89

DAYTONA BEACH, FL

A/C Reg. No. N6852Q

Time (Lc1) - 1337 EST

Occurrence #1 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation APPROACH - MISSED APPROACH (IFR)

Finding(s)

1. WEATHER CONDITION - LOW CEILING
2. WEATHER CONDITION - FOG
3. NAVIGATION RECEIVER - IMPROPER USE OF - PILOT IN COMMAND
4. IFR PROCEDURE - IMPROPER - PILOT IN COMMAND
5. MISSED APPROACH - DELAYED - PILOT IN COMMAND
6. OBJECT - TREE(S)
7. PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
8. LACK OF RECENT INSTRUMENT TIME - PILOT IN COMMAND
9. 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 PILOT'S IMPROPER IFR PROCEDURE AND HIS FAILURE TO MAINTAIN PROPER ALTITUDE. CONTRIBUTING FACTORS WERE: HIS  
IMPROPER USE OF THE NAVIGATION RECEIVER, HIS DELAY IN MAKING A MISSED APCH, HIS LACK OF EXPERIENCE IN THE TYPE OF  
AIRCRAFT, HIS LACK OF RECENT INSTRUMENT EXPERIENCE, WEATHER CONDITIONS AND TREES.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 419      3/10/89      TITUSVILLE, FL      A/C Reg. No. N775CH      Time (Lcl) - 1350 EST

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

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

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

Make/Model - NORTH AMERICAN T-28C	Eng Make/Model - WRIGHT R-1820	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 8600	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 1425 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	TITUSVILLE
Wind Dir/Speed- 340/018 KTS	ATC/Airspace	Runway Ident - UNK/NR
Visibility - 6.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - UNK/NR
Lowest Sky/Clouds - CLEAR	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 - 48	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 10500
SE LAND,ME LAND	Months Since - 2	Last 24 Hrs - UNK/NR
HELICOPTER	Aircraft Type - T-28C	Make/Model- UNK/NR
		Last 30 Days- UNK/NR
		Instrument- UNK/NR
		Last 90 Days- UNK/NR
		Multi-Eng - UNK/NR
		Rotorcraft - 3900

Instrument Rating(s) - AIRPLANE,HELICOPTER

-----Narrative-----

THE AEROBATIC QUALIFIED PILOT WAS PRACTICING A CUBAN 8 TYPE OF MANEUVER. ACCORDING TO A WITNESS, THE MANEUVER WAS PERFORMED IN A REVERSE MANNER. WHEN THE PILOT PREVIOUSLY PERFORMED THE MANEUVER, HE ALLOWED THE AIRCRAFT TO CLIMB (SUFFICIENTLY) BEFORE MAKING A 180 DEG ROLL & GOING DOWN THE BACK SIDE OF THE MANEUVER. HOWEVER, JUST BEFORE THE ACFT, AFTER COMPLETING THE FRONT SIDE OF THE MANEUVER, THE ACFT WAS IMMEDIATELY ROLLED 180 DEG WITHOUT CLIMBING (SUFFICIENTLY). SUBSEQUENTLY, DURING RECOVERY FROM THE DESCENT ON THE BACK SIDE OF THE MANEUVER, THE ACFT MUSHED INTO THE GROUND & CRASHED IN A WINGS LEVEL ATTITUDE.

Brief of Accident (Continued)

File No. - 419

3/10/89

TITUSVILLE, FL

A/C Reg. No. N775CH

Time (Lcl) - 1350 EST

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

Finding(s)

1. AEROBATICS - IMPROPER - PILOT IN COMMAND
2. PROPER ALTITUDE - NOT OBTAINED - PILOT IN COMMAND
3. STALL/MUSH

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S IMPROPER EXECUTION OF AN AEROBATIC MANEUVER RESULTING IN INADEQUATE AIRSPEED AND LOSS OF CONTROL.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 413      3/13/89      MIAMI, FL      A/C Reg. No. N2882F      Time (Lcl) - 1240 EST

-----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 402A	Eng Make/Model - CONTINENTAL TS10-520-E	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 6300	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 2	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	LOCAL	TAMiami
Wind Dir/Speed- 180/009 KTS	ATC/Airspace	Runway Ident - 27R
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 5002/ 150
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	FULL STOP	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 60	Medical Certificate - EXPIRED
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 5000
SE LAND	Months Since - UNK/NR	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- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DRG THE LANDING ROLL, ABOUT 4000 FT DOWN THE 5002 FT RWY, THE LEFT MAIN LANDING GEAR COLLAPSED & THE ACFT VEERED OFF THE RWY. AN EXAM REVEALED THE BELLCRANK FOR THE LEFT MAIN GEAR RETRACTION LINKAGE ASSEMBLY HAD FAILED FROM OVERLOAD, WHICH ALLOWED THE GEAR TO COLLAPSE. THE REASON FOR OVERLOAD WAS NOT DETERMINED. THE PLT'S LAST MED CERT WAS DATED 6/6/83.

Brief of Accident (Continued)

File No. - 413

3/13/89

MIAMI, FL

A/C Reg. No. N2882F

Time (Lc1) - 1240 EST

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

Finding(s)

1. LANDING GEAR, NORMAL RETRACTION/EXTENSION ASSEMBLY - OVERLOAD

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE OVERLOAD FAILURE OF THE BELLCRANK FOR THE LEFT MAIN GEAR RETRACTION LINKAGE ASSEMBLY FOR AN UNKNOWN REASON.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 404      3/13/89      HOLLEY, FL      A/C Reg. No. N5572W      Time (Lcl) - 2324 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  
ON GROUND

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

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

Make/Model - PIPER PA-28-160  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 2200  
No. of Seats - 4

Eng Make/Model - LYCOMING O-320-B2B  
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 - ACFT RADIO  
Completeness - UNK/NR  
Basic Weather - UNK/NR  
Wind Dir/Speed- 230/001 KTS  
Visibility - UNK/NR  
Lowest Sky/Clouds - UNK/NR  
Lowest Ceiling - UNK/NR  
Obstructions to Vision- FOG  
Precipitation - NONE  
Condition of Light - NIGHT(DARK)

Itinerary

Last Departure Point  
TALLAHASSEE, FL  
Destination  
PENSACOLA, FL

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 - 45  
Biennial Flight Review  
Current - NO  
Months Since - 31  
Aircraft Type - PA-28

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)

Total	- 530	Last 24 Hrs	- 5
Make/Model	- 300	Last 30 Days	- 20
Instrument	- UNK/NR	Last 90 Days	- 75
Multi-Eng	- 75	Rotorcraft	- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DRG A NGT X-COUNTRY FLT, THE PLT WAS RCVG VFR FLT FLWG FM EGLIN AFB APCH CTL. WHILE CRUISING AT 4500 FT, HE OBTAINED WX FOR THE AREA. HE WAS ADZD THAT ACCORDING TO 1 HR OLD OBSNS, WX AT EGLIN WAS 1700' SCT, & AT CRESTVIEW, THERE WAS A 3000' BKN CEILING. THE PLT ELECTED TO DSCND THRU "THIS THIN LAYER" TO 1500' & WAS ADZD TO REMAIN VFR. SUBSEQUENTLY, HE RPRTD AT 1500', THEN WAS ADZD TO CTC PENSACOLA APCH CTL, SINCE HE WAS LEAVING EGLIN'S AIRSPACE. THE PLT ACKNOWLEDGED, BUT THERE WAS NO FURTHER RADIO CTC WITH THE ACFT. A SEARCH WAS INITIATED & THE ACFT WAS FND 5 DAYS LTR WHERE IT HAD CRASHED IN A REMOTE/UNLIGHTED AREA ON A BOMBING RANGE. AN EXAM OF THE ACFT REVEALED IT HAD CRASHED IN A STEEP, NOSE DOWN, RGT WING LOW ATTITUDE. NO PREIMPACT MECHANICAL PRBLM OF THE ACFT WAS FND, BUT IT WAS BADLY DMGD BY IMPACT & FIRE. ABT 22 MI WEST AT PENSACOLA, THE WX WAS 800' BKN, 1700' BKN, VIS 7 MI; ABT 17 MI EAST AT EGLIN, THE WX WAS PTLY OBSCD, 400' THIN SCT, 1500' THIN SCT, VIS 3 MI WITH FOG. NO RECORD WAS FND OF A PREFLT WX BRIEFING FOR THE NON-INSTRUMENT RATED PLT.



Brief of Accident (Continued)

File No. - 404

3/13/89

HOLLEY, FL

A/C Reg. No. N5572W

Time (Lcl) - 2324 CST

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

Finding(s)

1. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
2. WEATHER CONDITION - CLOUDS
3. WEATHER CONDITION - LOW CEILING
4. WEATHER CONDITION - FOG
5. FLIGHT INTO KNOWN ADVERSE WEATHER - CONTINUED - PILOT IN COMMAND
6. LIGHT CONDITION - DARK NIGHT
7. VISUAL/AURAL PERCEPTION - PILOT IN COMMAND

Occurrence #2 LOSS OF CONTROL - IN FLIGHT  
Phase of Operation CRUISE

Finding(s)

8. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
9. SPATIAL DISORIENTATION - PILOT IN COMMAND

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:  
CONTINUED FLIGHT BY THE PLT INTO ADVERSE WX, FOLLOWED BY SPATIAL DISORIENTATION AND LOSS OF AIRCRAFT CONTROL. LACK  
OF A PREFLIGHT WEATHER BRIEFING, WEATHER CONDITIONS, AND LACK OF VISUAL CUES AT NIGHT WERE CONSIDERED CONTRIBUTING  
FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 410      3/19/89      MOORE HAVEN, FL      A/C Reg. No. N4395N      Time (Lcl) - 1400 EST

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL					
Type of Operation -SKYDIVING	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 195	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 - 3350	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - UNK/NR	Rated Power - 450 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	AIRGLADES
Wind Dir/Speed- 340/005 KTS	ATC/Airspace	Runway Ident - 04
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3000/ 100
Lowest Sky/Clouds - N/A	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - 3800 FT BROKEN	Type Apch/Lndg - FORCED LANDING	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 40	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE,COMMERCIAL	Current - UNK/NR	Total - 597
SE LAND	Months Since - UNK/NR	Last 24 Hrs - UNK/NR
GLIDER	Aircraft Type - 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) - AIRPLANE

-----Narrative-----

AS THE ACFT WAS CLIMBING THRU 9,000 FT FOR 13,000 FT WITH SKYDIVERS ABOARD, THE ENG LOST POWER FROM FUEL EXHAUSTION. THE SKYDIVERS BAILED OUT OVER THE DROP ZONE, THEN THE PLT ATTEMPTED TO RETURN TO THE ARPT FROM ABOUT 7000 FT. AN EMERGENCY LANDING WAS MADE BEFORE REACHING THE RWY. THE PLT SAW A FENCE AHEAD & APPLIED HEAVY BRAKING TO AVOID HITTING THE FENCE. HOWEVER, THE ACFT ENCOUNTERED A DITCH AS THE PLT WAS APPLYING BRAKES & THE ACFT NOSED OVER.

Brief of Accident (Continued)

File No. - 410

3/19/89

MOORE HAVEN, FL

A/C Reg. No. N4395N

Time (Lc1) - 1400 EST

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

Finding(s)

1. AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
  2. FLUID, FUEL - EXHAUSTION
  3. FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
- 

Occurrence #2        FORCED LANDING  
Phase of Operation    DESCENT - EMERGENCY

-----

Occurrence #3        NOSE OVER  
Phase of Operation    LANDING - ROLL

Finding(s)

4. OBJECT - FENCE
  5. BRAKES(NORMAL) - EXCESSIVE -
  6. TERRAIN CONDITION - DITCH
- 

----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 DUE TO INADEQUATE FUEL SUPPLY. A CONTRIBUTING  
FACTOR WAS A DITCH WHICH THE AIRCRAFT HIT AS THE PILOT WAS APPLYING BRAKES TO AVOID A FENCE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 465      3/21/89      MELBOURNE, FL      A/C Reg. No. N1480F      Time (Lcl) - 1731 EST

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

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

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

Make/Model - CESSNA 172H	Eng Make/Model - CONTINENTAL O-300-D	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 - 145 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- 130/018 KTS</p> <p>Visibility - 15.0 SM</p> <p>Lowest Sky/Clouds - 3000 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;">MELBOURNE, FL</p> <p>Destination</p> <p style="padding-left: 20px;">MERRITT ISLAND, FL</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</p> <p style="padding-left: 20px;">ON AIRPORT</p> <p>Airport Data</p> <p style="padding-left: 20px;">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 style="padding-left: 20px;">PRIVATE</p> <p style="padding-left: 20px;">SE LAND</p>	<p>Age - 23</p> <p>Biennial Flight Review</p> <p style="padding-left: 20px;">Current - UNK/NR</p> <p style="padding-left: 20px;">Months Since - UNK/NR</p> <p style="padding-left: 20px;">Aircraft Type - UNK/NR</p>	<p>Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <table border="0" style="width: 100%;"> <tr> <td>Total - 166</td> <td>Last 24 Hrs - 2</td> </tr> <tr> <td>Make/Model- 20</td> <td>Last 30 Days- 6</td> </tr> <tr> <td>Instrument- 1</td> <td>Last 90 Days- UNK/NR</td> </tr> </table>	Total - 166	Last 24 Hrs - 2	Make/Model- 20	Last 30 Days- 6	Instrument- 1	Last 90 Days- UNK/NR
Total - 166	Last 24 Hrs - 2							
Make/Model- 20	Last 30 Days- 6							
Instrument- 1	Last 90 Days- UNK/NR							

Instrument Rating(s) - NONE

-----Narrative-----

THE PRIVATE PILOT ATTEMPTED A TAKEOFF ON A RUNWAY WITH A 90 DEGREE 18 KNOT CROSSWIND AND LOST CONTROL OF THE AIRCRAFT AFTER IT BECAME AIRBORNE. ANOTHER RUNWAY, LONGER & MORE CLOSELY ALIGNED WITH THE WIND, WAS AVAILABLE BUT NOT REQUESTED. WITNESSES SAID THAT AFTER TAKEOFF, THE AIRPLANE CLIMBED 75 TO 100 FT AGL, THEN ROLLED LEFT. ABOUT 90 DEGREES OF HEADING CHANGE WAS OBSERVED BEFORE THE AIRPLANE DOVE TO THE GROUND. WITNESSES SAID THE ENGINE SOUNDED LIKE IT WAS OPERATING AT HIGH RPM. NO EVIDENCE OF FLIGHT CONTROL MALFUNCTION WAS FOUND.

Brief of Accident (Continued)

File No. - 465

3/21/89

MELBOURNE, FL

A/C Reg. No. N1480F

Time (Lcl) - 1731 EST

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

Finding(s)

1. WRONG RUNWAY - SELECTED - PILOT IN COMMAND
  2. WEATHER CONDITION - CROSSWIND
  3.    COMPENSATION FOR WIND CONDITIONS - 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 AN INAPPROPRIATE RUNWAY FOR TAKEOFF AND HIS INADEQUATE COMPENSATION FOR CROSSWIND CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 412      3/21/89      MARATHON, FL      A/C Reg. No. N39752      Time (Lcl) - 1430 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

Crew      0  
Pass      0

Fatal      0  
0

Injuries  
Serious      0  
Minor      0  
None      1

1  
1

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

Make/Model      - WACO UPF-7  
Landing Gear      - TAILWHEEL-ALL FIXED  
Max Gross Wt      - 2650  
No. of Seats      - 2

Eng Make/Model      - CONTINENTAL W-670-K  
Number Engines      - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 225 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- 140/013 KTS  
Visibility      - 10.0 SM  
Lowest Sky/Clouds      - 1500 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      - TRAFFIC PATTERN  
FULL STOP

Airport Proximity  
ON AIRSTRIP

Airport Data

MARATHON  
Runway Ident      - 07  
Runway Lth/Wid      - 5000/ 100  
Runway Surface      - ASPHALT  
Runway Status      - DRY

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

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

Age - 34  
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      - 2500  
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) - AIRPLANE

-----Narrative-----

WHILE LANDING ON RWY 7, THE PLT LOST DIRECTIONAL CONTROL OF THE ACFT. SUBSEQUENTLY, IT GROUND LOOPED TO THE RIGHT & THE LEFT MAIN GEAR COLLAPSED. ABOUT 40 MI WSW AT KEY WEST, FL, THE WIND WAS FROM 140 DEG AT 13 KTS.

Brief of Accident (Continued)

File No. - 412

3/21/89

MARATHON, FL

A/C Reg. No. N39752

Time (Lcl) - 1430 EST

-----  
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. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
- 

Occurrence #2      MAIN GEAR COLLAPSED  
Phase of Operation      LANDING - ROLL

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:  
THE PILOT FAILED TO MAINTAIN DIRECTIONAL CONTROL OF THE AIRCRAFT AND INADVERTENTLY ALLOWED IT TO GROUND LOOP.  
CROSSWIND WAS A CONTRIBUTING FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 459      3/22/89      JACKSONVILLE, FL      A/C Reg. No. N77BR      Time (Lcl) - 2244 EST

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

Type Operating Certificate	ON-DEMAND AIR TAXI	Aircraft Damage						
Name of Carrier	-TOP FLIGHT AIR SERVICE	DESTROYED						
Type of Operation	-NON SCHED, DOMESTIC, CARGO	Fire	Crew	Fatal	Injuries			
Flight Conducted Under	-14 CFR 135	NONE	Pass	1	Serious	Minor	None	
Accident Occurred During	-APPROACH			0	0	0	0	

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

Make/Model	- PIPER AEROSTAR 600	Eng Make/Model	- LYCOMING IO-540-K1F5	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	- 2	Rated Power	- 285 HP		

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

Weather Data	Itinerary	Airport Proximity	
Wx Briefing	- FSS	ON AIRPORT	
Method	- TELEPHONE		
Completeness	- FULL		
Basic Weather	- IMC	Airport Data	
Wind Dir/Speed	- 040/013 KTS	JACKSONVILLE INTL	
Visibility	- 1.500 SM	Runway Ident	- 07
Lowest Sky/Clouds	- N/A	Runway Lth/Wid	- 8000/ 150
Lowest Ceiling	- 400 FT OVERCAST	Runway Surface	- ASPHALT
Obstructions to Vision	- FOG	Runway Status	- WET
Precipitation	- DRIZZLE		
Condition of Light	- NIGHT(DARK)		

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

Pilot-In-Command	Age - 45	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL	Current - YES	Total - 2575	Last 24 Hrs - 4
SE LAND, ME LAND	Months Since - UNK/NR	Make/Model - 1250	Last 30 Days - 93
	Aircraft Type - PA-31	Instrument - 500	Last 90 Days - 260
		Multi-Eng - 1260	

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DRG ARRIVAL, THE PLT WAS CLRD FOR AN ILS RWY 7 APCH. ALSO, HE WAS ADZD OF A DC-9 THAT WAS 4 MI AHEAD & WAS TOLD TO USE CAUTION FOR WAKE TURBULENCE. AS THE ACFT WAS ON FINAL APCH, IT DESCENDED BELOW THE ILS GLIDE SLOPE & SUBSEQUENTLY HIT TREES & CRASHED ABOUT 1.8 MI SHORT OF THE RWY. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE ACFT OR ENGS WAS FOUND THAT WOULD HAVE RESULTED IN AN ACDNT. ALSO, THERE WERE NO REPORTED PROBLEMS WITH THE ILS SYSTEM & IT TESTED NORMAL AFTER THE ACDNT. THE PLT HELD A COMMERCIAL PLT CERTIFICATE WHICH WAS GOOD FOR SINGLE ENGINE LAND ACFT; HIS MULTI-ENGINE PRIVILEGES WERE AUTHORIZED AS A PRIVATE PLT, ONLY. AN NTSB PERFORMANCE STUDY SHOWED THE ACFT WAS 2 MIN & 57 SEC BEHIND THE DC-9. RADAR DATA INDCD THE ACFT DID NOT EXCEED A BANK ANGLE OF 32 DEG & NO EXCESSIVE G-VALUES WERE EVIDENT DRG THE APCH.



Brief of Accident (Continued)

File No. - 459

3/22/89

JACKSONVILLE, FL

A/C Reg. No. N77BR

Time (Lc1) - 2244 EST

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

Finding(s)

1. LIGHT CONDITION - DARK NIGHT
  2. IFR PROCEDURE - IMPROPER - PILOT IN COMMAND
  3. PROPER GLIDEPATH - NOT MAINTAINED - PILOT IN COMMAND
  4. DECISION HEIGHT - NOT IDENTIFIED - PILOT IN COMMAND
  5. OBJECT - TREE(S)
- 

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:  
IMPROPER USE OF THE IFR PROCEDURE BY THE PILOT, HIS FAILURE TO MAINTAIN A PROPER GLIDE PATH, AND HIS FAILURE TO  
IDENTIFY THE DECISION HEIGHT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 517      3/29/89      PONTE VEDRA BCH, FL      A/C Reg. No. N81VA      Time (Lcl) - 1600 EST

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

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -FLIGHT TEST  
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      - LEE, DAVID VELOCITY  
Landing Gear      - TRICYCLE-FIXED  
Max Gross Wt      - 2250  
No. of Seats      - 4

Eng Make/Model      - LYCOMING IO-360  
Number Engines      - 2  
Engine Type      - RECIP-FUEL INJECTED  
Rated Power      - 200 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  
ST. AUGUSTINE, FL  
Destination  
LOCAL

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

Wind Dir/Speed- 140/012 KTS  
Visibility      - 10.0 SM  
Lowest Sky/Clouds      - 3500 FT SCATTERED  
Lowest Ceiling      - 25000 FT BROKEN  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

ATC/Airspace

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

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  
SE LAND, ME LAND, SE SEA  
GLIDER

Age - 35  
Biennial Flight Review  
Current      - YES  
Months Since      - 1  
Aircraft Type      - MD-9

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total      - 12000      Last 24 Hrs - 5  
Make/Model- 20      Last 30 Days- 50  
Instrument- 2150      Last 90 Days- 150  
Multi-Eng - 4500

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE EXPERIMENTAL AMATEUR-BUILT ACFT WAS ON A TEST FLT AT 10,000 FT TO PERFORM SOME MANEUVERS WITH THE CG AT THE MOST REARWARD LIMITS. THE ACFT WAS PLACED INTO AN "AGGRAVATED STALL" DURING WHICH THE ACFT ENTERED A "DEEP STALL". ALL CONVENTIONAL & UNCONVENTIONAL MEANS OF REGAINING CONTROL OF THE ACFT, INCLUDING THE PLT CLIMBING OUT OF THE COCKPIT & LEANING AS FAR FWD AS POSSIBLE, FAILED TO RECOVER CONTROL OF THE ACFT. AT ONE POINT, THE PLT CONSIDERED BAILING OUT, BUT CHANGED HIS MIND DUE TO THE ZERO BANK, ZERO FWD SPEED, ZERO YAW & SLOW DESCENT TOWARD THE OCEAN. AFTER THE HARD VERTICAL IMPACT, THE PLT RELEASED HIS HARNESS & STEPPED INTO THE WATER. THE ACFT WAS RECOVERED & AN EXAM REVEALED THAT THE CANARD GAP SEALS WHICH HAD BEEN INSTALLED TO ENHANCE PITCH AUTHORITY OF THE CANARD ON THE PREV FLT, WERE STILL IN PLACE DUE TO AN OVERSIGHT. WITH THE GAP SEALS INSTALLED, THE CANARD PITCH AUTHORITY EXCEEDED THE AUTHORITY OF THE WING.

Brief of Accident (Continued)

File No. - 517

3/29/89

PONTE VEDRA BCH, FL

A/C Reg. No. N81VA

Time (Lc1) - 1600 EST

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

Finding(s)

1. FLIGHT CONTROL SURFACES/ATTACHMENTS - IMPROPER
  2. AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
  3. LACK OF FAMILIARITY WITH 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:  
FAILURE THROUGH AN OVERSIGHT TO REMOVE THE CANARD GAP SEALS PRIOR TO AGGRAVATED STALL TESTING WHICH RESULTED IN THE  
AIRCRAFT ENTERING AN UNCONTROLLABLE FLIGHT REGIME.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 516      4/08/89      REDDINGTON BCH.,FL      A/C Reg. No. N599WB      Time (Lcl) - 1620 EDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries		
Type of Operation - INSTRUCTIONAL	Fire	Crew 0	Serious 0	Minor 0	None 2
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	0	0
Accident Occurred During -LANDING					

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

Make/Model - BEECH F-33A	Eng Make/Model - CONTINENTAL IO-520-BB	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3412	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 285 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	TAMPA,FL	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 210/014 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Surface - WATER
Lowest Sky/Clouds - 2000 FT SCATTERED	Type of Clearance - NONE	Runway Status - WET
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 40	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 279
SE LAND	Months Since - 11	Make/Model- 100
	Aircraft Type - UNK/NR	Instrument- 18
		Last 24 Hrs - 3
		Last 30 Days- 10
		Last 90 Days- 36

Instrument Rating(s) - NONE

-----Narrative-----

THE INSTRUCTOR PILOT AND THE RATED PILOT/OWNER WERE CLIMBING DURING A DUAL INSTRUMENT TRAINING FLIGHT WHEN THE ENGINE FAILED. THEY BOTH ATTEMPTED MULTIPLE ENGINE RE-STARTS TO NO AVAIL. THEY DITCHED THE AIRPLANE, IT SANK AND THEY WERE RESCUED. AFTER THE AIRPLANE WAS RECOVERED, THE ENGINE WAS RINSED AND RESERVICED WITH OIL. THE ENGINE STARTED AND PERFORMED NORMALLY.

Brief of Accident (Continued)

File No. - 516

4/08/89

REDDINGTON BCH., FL

A/C Reg. No. N599WB

Time (Lc1) - 1620 EDT

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

Finding(s)

1. POWERPLANT - UNDETERMINED  
-----

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY  
-----

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

Finding(s)

2. TERRAIN CONDITION - WATER,ROUGH  
-----

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
LOSS OF ENGINE POWER FOR UNDETERMINED REASONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 523      4/09/89      WEST PALM BEACH, FL      A/C Reg. No. N80440      Time (Lcl) - 1710 EDT

-----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 -TAXI			0	0	0	2	

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

Make/Model - CESSNA 172M	Eng Make/Model - LYCOMING O-320-E2D	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 - 160 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - TELEPHONE	FREEPORT	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	PALM BEACH INT'L
Wind Dir/Speed- 140/013 KTS	ATC/Airspace	Runway Ident - UNK/NR
Visibility - 10.0 SM	Type of Flight Plan - IFR	Runway Lth/Wid - UNK/NR
Lowest Sky/Clouds - CLEAR	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 - 38	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 350
SE LAND	Months Since - 15	Last 24 Hrs - 4
	Aircraft Type - PA-28	Make/Model- 35
		Last 30 Days- 4
		Instrument- 94
		Last 90 Days- 65

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE TAXIING ON THE EMPTY RAMP, THE LT WING OF THE ACFT COLLIDED WITH A FENCE. PRIOR TO THIS ACCIDENT ARPT OPERATIONS PERSONNEL PLACED REFLECTORS ON THE FENCE TO INCREASE VISIBILITY OF IT. AS A RESULT OF THIS ACCIDENT, OPERATIONS PERSONNEL PAINTED YELLOW REFLECTIVE DIAGONAL LINES ON THE GROUND ABOUT 5 FEET AWAY FROM THE CURB.

Brief of Accident (Continued)

File No. - 523

4/09/89

WEST PALM BEACH, FL

A/C Reg. No. N80440

Time (Lcl) - 1710 EDT

Occurrence #1 ON GROUND COLLISION WITH OBJECT  
Phase of Operation TAXI - FROM LANDING

Finding(s)

1. OBJECT - FENCE
2. DISTANCE - MISJUDGED - PILOT IN COMMAND
3. VISUAL LOOKOUT - POOR - PILOT IN COMMAND
4. PLANNING-DECISION - POOR - 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 INSURE ADEQUATE WINGTIP CLEARANCE WHILE TAXIING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 525      4/15/89      TAVERNIER, FL      A/C Reg. No. N7298N      Time (Lcl) - 1510 EDT

-----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	-DESCENT	NONE	Pass 0	0	0	1

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

Make/Model	- CESSNA 182P	Eng Make/Model	- CONTINENTAL O-470-R	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 2950	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
Method	- N/A	MIAMI, FL
Completeness	- N/A	Destination
Basic Weather	- VMC	SAME AS ACC/INC
Wind Dir/Speed	- 170/010 KTS	ATC/Airspace
Visibility	- 10.0 SM	Type of Flight Plan
Lowest Sky/Clouds	- 2000 FT SCATTERED	- NONE
Lowest Ceiling	- 12000 FT BROKEN	Type of Clearance
Obstructions to Vision	- NONE	- NONE
Precipitation	- NONE	Type Apch/Lndg
Condition of Light	- DAYLIGHT	- TRAFFIC PATTERN
		FULL STOP

-----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 - 351	Last 24 Hrs - UNK/NR
SE LAND	Months Since - 2	Make/Model - 168	Last 30 Days - UNK/NR
	Aircraft Type - UNK/NR	Instrument - 16	Last 90 Days - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

WHILE LANDING ON THE 1,800 FT GRASS/CORAL RUNWAY WITH A 60 DEGREE CROSSWIND AT 15 KTS, THE ACFT TOUCHED DOWN WITH FULL FLAPS 1/3 DOWN THE RWY. REALIZING HE WOULD BE UNABLE TO STOP THE ACFT ON THE REMAINING RWY, THE PLT ATTEMPTED TO GO-AROUND WITH FULL FLAPS. THE ACFT DRIFTED OFF THE LEFT SIDE OF THE RWY, COLLIDED WITH TREES, THEN CAME TO REST IN A CREEK.



Brief of Accident (Continued)

File No. - 525

4/15/89

TAVERNIER,FL

A/C Reg. No. N7298N

Time (Lcl) - 1510 EDT

Occurrence #1 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation LANDING - ABORTED

Finding(s)

1. OBJECT - TREE(S)
2. RAISING OF FLAPS - NOT PERFORMED - PILOT IN COMMAND
3. COMPENSATION FOR WIND CONDITIONS - DISREGARDED - PILOT IN COMMAND
4. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND

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

Finding(s)

5. TERRAIN CONDITION - WATER

----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 AND RETRACT THE FLAPS TO THE RECOMMENDED SETTING DURING THE GO-AROUND.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 423      5/02/89      SUMMERLAND KEY, FL      A/C Reg. No. N28889      Time (Lc1) - 2030 EDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage DESTROYED	Fatal	Injuries Serious	Minor	None
Type of Operation -PUBLIC USE	Fire	Crew 2	0	0	0
Flight Conducted Under -PUBLIC USE	NONE	Pass 0	0	0	0
Accident Occurred During -MANEUVERING					

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

Make/Model - DOUGLAS C-47	Eng Make/Model - P&W R-1830	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-RETRACTABLE MAINS	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 26200	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 1200 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	MARATHON, FL	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	
Wind Dir/Speed- 010 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 1500 FT SCATTERED	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 - UNK/NR		

-----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 - 8165
SE LAND, ME LAND, SE SEA, ME SEA	Months Since - 2	Make/Model - 1702
	Aircraft Type - DC-3	Instrument - 333
		Multi-Eng - 2011
		Last 24 Hrs - 3
		Last 30 Days - UNK/NR
		Last 90 Days - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE FLT (A MONROE COUNTY MOSQUITO CONTROL OPN) BEGAN AT ABOUT 1740 EDT TO CONDUCT LOW ALT SPRAYING. WHEN IT DID NOT RETURN, A SEARCH WAS INITIATED. AT ABOUT 0245, THE ACFT WAS FOUND IN A REMOTE AREA ON WATER KEY NEAR THE TOWN OF SUMMERLAND KEY, FL. EVIDENCE AT THE ACDNT SCENE SUGGESTED THE ACFT STRUCK 40 FT HIGH MANGROVE TREES WITH THE LEFT WING AS THE PLTS WERE MAKING A PROCEDURE TURN TO START ANOTHER SPRAY RUN. NO PREIMPACT FAILURE OR MALFUNCTION OF THE ACFT OR ENGS WAS FOUND. THERE WERE NO KNOWN WITNESSES, BUT THE ACDNT WAS ESTD TO HAVE OCCURRED AT ABOUT 2030 EDT. SUNSET WAS AT 1952 EDT. ABOUT 22 MI SW AT KEY WEST, THE 1750 WX WAS IN PART: 1500' SCAT, 10 MI VIS, WIND FROM 330 DEG AT 10 KTS. APRX 85 MI NNE, THE WIND WAS FROM 100 DEG AT 11 KTS.

Brief of Accident (Continued)

File No. - 423

5/02/89

SUMMERLAND KEY, FL

A/C Reg. No. N28889

Time (Lc1) - 2030 EDT

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

Finding(s)

1. LIGHT CONDITION - DUSK
2. PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
3. OBJECT - TREE(S)
4. 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:  
THE FAILURE OF THE PILOT-IN-COMMAND TO ASSURE PROPER ALTITUDE AND CLEARANCE WAS MAINTAINED ABOVE THE TERRAIN AND TREES. THE TREES AND LIGHT CONDITION AT DUSK WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 451      6/20/89      FRANKLIN,GA      A/C Reg. No. N1434Y      Time (Lcl) - 1330 EDT

-----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	1	0

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

Make/Model - CESSNA 172  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 2250  
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 - NO RECORD OF BRIEFING  
Method - N/A  
Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 170/012 KTS

Visibility - 7.0 SM

Lowest Sky/Clouds - 400 FT THIN OVC

Lowest Ceiling - 28000 FT BROKEN

Obstructions to Vision- NONE

Precipitation - RAIN

Condition of Light - DAYLIGHT

Itinerary

Last Departure Point

THOMASTON,GA

Destination

TALLADEGA,AL

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

Age - 46  
Biennial Flight Review  
Current - YES  
Months Since - 3  
Aircraft Type - C-172

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 207      Last 24 Hrs - 2  
Make/Model- 125      Last 30 Days- 4  
Instrument- 10      Last 90 Days- 8  
Multi-Eng - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT ENCOUNTERED BAD WX DURING FLT & MADE AN EMERGENCY LANDING IN AN OPEN FIELD THAT WAS SHORT, ROUGH & WET.  
WHEN HE TRIED TO TAKEOFF FROM THE FIELD A SHORT TIME LATER, THE AIRPLANE DID NOT ATTAIN ENOUGH AIRSPEED TO FLY.  
THE PILOT ABORTED THE TAKEOFF, BUT BEFORE STOPPING, THE AIRPLANE HIT A FENCE & NOSED OVER.

Brief of Accident (Continued)

File No. - 451

6/20/89

FRANKLIN,GA

A/C Reg. No. N1434Y

Time (Lcl) - 1330 EDT

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

Finding(s)

1. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
2. UNSUITABLE TERRAIN
3. TERRAIN CONDITION - ROUGH/UNEVEN
4. TERRAIN CONDITION - SOFT
5. TERRAIN CONDITION - WET
6. OBJECT - FENCE
7. ABORTED TAKEOFF - DELAYED - PILOT IN COMMAND

Occurrence #2 NOSE OVER  
Phase of Operation TAKEOFF - ABORTED

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER PLANNING/DECISION BY THE PILOT BY ATTEMPTING TO TAKEOFF FROM AN UNSUITABLE FIELD AND HIS DELAY IN ABORTING  
THE TAKEOFF. THE TERRAIN CONDITIONS AND FENCE WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 467      6/04/89      CEDAR RAPIDS, IA      A/C Reg. No. N373TC      Time (Lcl) - 1700 CDT

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

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

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

Make/Model	- OLSON BD-4	Eng Make/Model	- LYCOMING O-360-B1A	ELT Installed/Activated	- YES/NO
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 2300	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 4	Rated Power	- 180 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- 160/008 KTS</p> <p>Visibility - 15.0 SM</p> <p>Lowest Sky/Clouds - 4500 FT SCATTERED</p> <p>Lowest Ceiling - 25000 FT OVERCAST</p> <p>Obstructions to Vision- NONE</p> <p>Precipitation - NONE</p> <p>Condition of Light - DAYLIGHT</p>	<p>Itinerary</p> <p>Last Departure Point CEDAR RAPIDS, IA</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 - FULL STOP</p>	<p>Airport Proximity ON AIRPORT</p> <p>Airport Data CEDAR RAPIDS</p> <p>Runway Ident - 27</p> <p>Runway Lth/Wid - 7000/ 150</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - DRY</p>
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-----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 - 86
SE LAND	Months Since - 1	Make/Model- 2
	Aircraft Type - C-152	Instrument- 3
		Multi-Eng - 0
		Last 24 Hrs - 2
		Last 30 Days- 6
		Last 90 Days- 6
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

AFTER MAKING TWO PRACTICE VFR APPROACHES WITHOUT TOUCHDOWN, THE PILOT REQUESTED A FULL STOP LANDING. HE SAID THE AIRCRAFT BOUNCED AND HE LOST RUNWAY ALIGNMENT, SO HE ELECTED TO GO-AROUND. ALSO, HE SAID THAT AT ABOUT 20 FT AGL, HE LOST CONTROL OF THE ACFT, IT STALLED, THEN IT ROLLED INVERTED AND COLLIDED WITH THE TERRAIN. THE PILOT SUFFERED A BROKEN ARM. HE HAD ACCUMULATED A TOTAL FLIGHT TIME OF 86 HRS, OF WHICH, TWO HRS WERE IN THIS TAILWHEEL CONFIGURED, HOME-BUILT AIRCRAFT. THIS WAS A FLIGHT TO ESTABLISH THE FLIGHT CHARACTERISTICS OF THE AIRCRAFT. THE PILOT HAD TWO HRS FLIGHT TIME IN THIS MAKE AND MODEL OF AIRCRAFT.

Brief of Accident (Continued)

File No. - 467

6/04/89

CEDAR RAPIDS, IA

A/C Reg. No. N373TC

Time (Lcl) - 1700 CDT

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

1. RECOVERY FROM BOUNCED LANDING - PERFORMED - PILOT IN COMMAND
2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
3. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
4. ABORTED LANDING - INITIATED - PILOT IN COMMAND

Occurrence #2      LOSS OF CONTROL - IN FLIGHT  
Phase of Operation      LANDING - ABORTED

Finding(s)

5. LIFT-OFF - PREMATURE - PILOT IN COMMAND
6. STALL - INADVERTENT - PILOT IN COMMAND

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

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PREMATURE LIFT-OFF AND INADVERTENT STALL BY THE PILOT. A LOSS OF DIRECTIONAL CONTROL AND AN INADVERTENT GROUND SWERVE  
BY THE PILOT WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 563      7/10/89      PERRY, IA

A/C Reg. No. N1066

Time (Lcl) - 1030 CDT

-----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  
1  
0

None  
0  
0

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

Make/Model      - BRISTOW KR-2  
Landing Gear      - TAILWHEEL-RETRACTABLE MAINS  
Max Gross Wt      - 1000  
No. of Seats      - 2

Eng Make/Model      - REVMaster 3201  
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      - 260/006 KTS  
Visibility      - 15.0 SM  
Lowest Sky/Clouds      - UNK/NR  
Lowest Ceiling      - UNK/NR  
Obstructions to Vision      - NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point  
PERRY, IA  
Destination  
LOCAL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

Runway Ident      - N/A  
Runway Lth/Wid      - N/A  
Runway Surface      - DIRT  
Runway Status      - DRY  
HIGH VEGETATION

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      - 59  
Biennial Flight Review  
Current      - YES  
Months Since      - 13  
Aircraft Type      - A-7AC

Medical Certificate      - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)  
Total      - 385  
Last 24 Hrs      - UNK/NR  
Make/Model      - UNK/NR  
Last 30 Days      - UNK/NR  
Instrument      - 20  
Last 90 Days      - UNK/NR

Instrument Rating(s)      - NONE

-----Narrative-----

WHILE FLYING HIS NEWLY BUILT HOMEBUILT AIRCRAFT, THE PLT SAID HE EXPERIENCED A PROGRESSIVE POWER FAILURE. AN EMERGENCY DESCENT WAS MADE INTO A BEAN FIELD RESULTING IN SUBSTANTIAL DAMAGE TO THE ACFT AND MINOR INJURIES TO THE PLT. POST ACCIDENT INVESTIGATION REVEALED SOME FIBERGLASS CONTAMINANTS IN THE FUEL LINE WHICH WOULD CAUSE FUEL STARVATION.



Brief of Accident (Continued)

File No. - 563

7/10/89

PERRY,IA

A/C Reg. No. N1066

Time (Lc1) - 1030 CDT

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Occurrence #1        LOSS OF ENGINE POWER  
Phase of Operation    MANEUVERING

Finding(s)

1. FLUID,FUEL - CONTAMINATION
  2. FLUID,FUEL - STARVATION
- 

Occurrence #2        FORCED LANDING  
Phase of Operation    DESCENT - EMERGENCY

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Occurrence #3        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    LANDING - FLARE/TOUCHDOWN  
3. TERRAIN CONDITION - CROP

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----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FUEL STARVATION CAUSED BY FUEL CONTAMINATION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 518      7/18/89      DES MOINES,IA      A/C Reg. No. N701AS      Time (Lcl) - 0230 CDT

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

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage						
Name of Carrier	-NEW CREATIONS, INC.	SUBSTANTIAL						
Type of Operation	-NON SCHED, DOMESTIC, CARGO	Fire	Crew	Fatal	Serious	Minor	None	
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	2	
Accident Occurred During	-LANDING			0	0	1	0	

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

Make/Model	- GATES LEARJET 35	Eng Make/Model	- GARRETT TFE-731-2-2B	ELT Installed/Activated	- NO	-N/A
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 2	Stall Warning System	- YES	
Max Gross Wt	- 18300	Engine Type	- TURBOFAN			
No. of Seats	- 3	Rated Power	- 3500 LBS THRUST			

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

Weather Data		Itinerary		Airport Proximity	
Wx Briefing	- FSS	Last Departure Point		ON AIRPORT	
Method	- ACFT RADIO	DENVER, CO			
Completeness	- FULL	Destination		Airport Data	
Basic Weather	- IMC	SAME AS ACC/INC		DES MOINES INTL	
Wind Dir/Speed	- 200/009 KTS			Runway Ident	- 30R
Visibility	- 1.000 SM	ATC/Airspace		Runway Lth/Wid	- 9001/ 150
Lowest Sky/Clouds	- N/A	Type of Flight Plan	- IFR	Runway Surface	- ASPHALT
Lowest Ceiling	- 1400 FT BROKEN	Type of Clearance	- IFR	Runway Status	- WET
Obstructions to Vision	- FOG	Type Apch/Lndg	- ILS-COMPLETE		
Precipitation	- RAIN		FULL STOP		
Condition of Light	- NIGHT(DARK)				

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

Pilot-In-Command	Age - 30	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL, ATP, CFI	Current - YES	Total - 6554	Last 24 Hrs - 3
SE LAND, ME LAND	Months Since - 5	Make/Model - 2334	Last 30 Days - 89
	Aircraft Type - 35	Instrument - 695	Last 90 Days - 270
		Multi-Eng - 4425	Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PIC RPRTD THAT DURING AN IFR ARRIVAL TO THE DES MOINES INTL ARPT, HE DETECTED WHAT SEEMED TO BE MICROBURSTS & ELECTED TO MAKE A MISSED APCH. DURING A 2ND APCH (ILS RWY 30R APCH), WX CONDITIONS WERE BETTER & TOWER PSNL RPRTD ONLY LIGHT RAIN & WINDS, SO HE CONTINUED FOR A LANDING. THE APCH & TOUCHDOWN WERE NORMAL & REVERSE THRUST WAS NOT USED. HOWEVER, THE PLT RPRTD THAT WHEN HE APPLIED BRAKES, HE REALIZED THE ACFT WAS HYDROPLANING. SOON THEREAFTER, IT ANGLED OFF THE RIGHT SIDE OF THE RWY, THOUGH IT WAS BEING STEERED TO THE LEFT. THE ACFT THEN ENCTRD SOFT MUD, HIT 2 LANDING LIGHT ABUTMENTS & WAS DAMAGED. THE RWY WAS RPRTD TO SLOPE DOWNWARD TOWARD THE MIDPOINT. THE PLT STATED THAT A FEW HRS LATER, WATER WAS STILL STANDING IN LOW POINTS ON THE RWY, THOUGH RAIN HAD STOPPED FALLING. ALSO, HE STATED THE LOCAL CONTROLLER HAD NOT WARNED HIM OF POSSIBLE HYDROPLANING THOUGH AT LEAST 2 INCHES OF RAIN HAD FALLEN IN A SHORT PERIOD BEFORE THE PLANE HAD LANDED. THE 0244 CDT WIND WAS RPRTD TO BE FROM 200 DEG AT 9 KTS.

Brief of Accident (Continued)

File No. - 518

7/18/89

DES MOINES, IA

A/C Reg. No. N701AS

Time (Lc1) - 0230 CDT

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

Finding(s)

1. WEATHER CONDITION - RAIN
2. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - WET
3. COMMUNICATIONS/INFORMATION/ATC - INFORMATION INSUFFICIENT - ATC PSNL(LCL/GND/CLNC)
4. REVERSERS - NOT USED - PILOT IN COMMAND
5. AIRCRAFT PERFORMANCE, HYDROPLANING CONDITION -
6. WEATHER CONDITION - CROSSWIND
7. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
8. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING - ROLL

Finding(s)

9. TERRAIN CONDITION - SOFT
10. OBJECT - RUNWAY LIGHT

-----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 AND RUNWAY ALIGNMENT DURING THE LANDING. FACTORS  
RELATED TO THE ACCIDENT WERE: ADVERSE WEATHER/RUNWAY/TERRAIN CONDITIONS, FAILURE OF THE LOCAL CONTROLLER  
TO WARN THE PILOT OF POSSIBLE HYDROPLANING CONDITIONS, THE PILOT'S DECISION NOT TO USE REVERSE THRUST, AND  
RUNWAY LIGHT ABUTMENTS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 426      5/09/89      STAR, ID      A/C Reg. No. N5531N      Time (Lcl) - 1045 MDT

-----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	1	0
Accident Occurred During - LANDING			0	0	0

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

Make/Model - DAVIS STARSHIP ALPHA	Eng Make/Model - KAWASAKI TA440F-204	ELT Installed/Activated - NO -N/A
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 950	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 1	Rated Power - 40 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	NAMPA, ID	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	JUMP WEST
Wind Dir/Speed- 170/015 KTS	ATC/Airspace	Runway Ident - 05
Visibility - 30.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4200/ 50
Lowest Sky/Clouds - 7000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 12000 FT BROKEN	Type Apch/Lndg - FORCED LANDING	Runway Status - DRY
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 - UNK/NR	Total - 309
SE LAND	Months Since - UNK/NR	Make/Model- 170
	Aircraft Type - UNK/NR	Instrument- 0
		Multi-Eng - 0
		Last 24 Hrs - 1
		Last 30 Days- 14
		Last 90 Days- 20
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT MADE A LOW PASS OVER THE AIRPORT TO CHECK THE RWY, THEN DECIDED NOT TO LAND. WHEN HE APPLIED POWER TO INITIATE A GO-AROUND, TEETH STRIPPED OFF OF THE PROP DRIVE BELT. THIS RESULTED IN AN INTERRUPTION OF POWER TO THE PROP. THE PLT MANEUVERED THE ACFT BACK TOWARD THE ARPT IN STRONG GUSTY WINDS, BUT WAS UNABLE TO LAND ON THE RWY. SUBSEQUENTLY, THE ACFT WAS EXTENSIVELY DAMAGED WHEN IT IMPACTED ON A SMALL HILL ABOUT 100' NORTH OF THE RWY. THE PLT RPRTD THE WIND WAS FROM THE SOUTH AT 15 GUSTING 20 KTS.

Brief of Accident (Continued)

File No. - 426

5/09/89

STAR, ID

A/C Reg. No. N5531N

Time (Lc1) - 1045 MDT

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation GO-AROUND (VFR)

Finding(s)

1. PROPELLER SYSTEM/ACCESSORIES - FAILURE, TOTAL

Occurrence #2 FORCED LANDING

Phase of Operation MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Occurrence #3 IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

2. WEATHER CONDITION - GUSTS
3. TERRAIN CONDITION - MOUNTAINOUS/HILLY

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PROPELLER DRIVE BELT (STRIPPED TEETH). CONTRIBUTING FACTORS WERE: STRONG/GUSTY WINDS AND THE HILLY  
TERRAIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 528      5/30/89      LEWISTON, ID      A/C Reg. No. N2756Y      Time (Lcl) - 1130 PDT

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

Type Operating Certificate	ON-DEMAND AIR TAXI	Aircraft Damage						
Name of Carrier	-JERRY WILSON	SUBSTANTIAL						
Type of Operation	-NON SCHED, DOMESTIC, PASSENGER	Fire	Crew	Fatal	0	0	0	1
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	0	2
Accident Occurred During	-LANDING							

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

Make/Model	- BELL 206B III	Eng Make/Model	- ALLISON 250-C20B	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	- 5	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	LEWISTON, ID	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	MCCALL, ID	
Wind Dir/Speed - 360/008 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 40.0 SM	Type of Flight Plan - COMPANY (VFR)	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 6500 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 - NIGHT (BRIGHT)		

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

Pilot-In-Command	Age - 41	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
ATP	Current - UNK/NR	Total - 5336	Last 24 Hrs - UNK/NR
SE LAND	Months Since - UNK/NR	Make/Model - 2957	Last 30 Days - UNK/NR
HELICOPTER	Aircraft Type - UNK/NR	Instrument - 488	Last 90 Days - UNK/NR
			Rotorcraft - 5287

Instrument Rating(s) - HELICOPTER

-----Narrative-----

DURING CRUISE FLIGHT, THE PILOT REPORTED THAT THE ENGINE LOST POWER. A FORCED LANDING WAS INITIATED ON SLOPING TERRAIN. THE HELICOPTER COLLIDED WITH THE TERRAIN AND ROLLED OVER. THE WRECKAGE WAS REMOVED FOR INSPECTION. AN ENGINE TEST RUN WAS PERFORMED WITH NO MECHANICAL FAILURES OR MALFUNCTIONS REPORTED.

Brief of Accident (Continued)

File No. - 528

5/30/89

LEWISTON, ID

A/C Reg. No. N2756Y

Time (Lcl) - 1130 PDT

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

Finding(s)  
1. UNDETERMINED

-----  
Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)  
2. TERRAIN CONDITION - NONE SUITABLE

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

Finding(s)  
3. TERRAIN CONDITION - MOUNTAINOUS/HILLY

-----  
Occurrence #4      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:  
A LOSS OF ENGINE POWER FOR UNDETERMINED REASONS. A FACTOR IN 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. - 599      3/15/89      WEST LAFAYETTE, IN      A/C Reg. No. N128MP      Time (Lcl) - 0726 EST

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

Type Operating Certificate	AIR CARRIER - FLAG/DOMESTIC	Aircraft Damage					
Name of Carrier	-MID PACIFIC AIRLINES	DESTROYED					
Type of Operation	-NON SCHED, DOMESTIC, CARGO	Fire	Crew	Fatal	Serious	Minor	None
Flight Conducted Under	-14 CFR 121	ON GROUND	Pass	2	0	0	0
Accident Occurred During	-APPROACH			0	0	0	0

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

Make/Model	- NIHON YS-11A-600	Eng Make/Model	- ROLLS-ROYCE DART 542-10J	ELT Installed/Activated	- YES-UNK/NR
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 2	Stall Warning System	- YES
Max Gross Wt	- 55110	Engine Type	- TURBOPROP		
No. of Seats	- 3	Rated Power	- 2680 HP		

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - COMPANY	Last Departure Point	OFF AIRPORT/STRIP
Method - IN PERSON	TERRE HAUTE, IN	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	WEST LAFAYETTE, IN	PURDUE UNIVERSITY AIRPORT
Wind Dir/Speed - 280/016 KTS	ATC/Airspace	Runway Ident - 28
Visibility - 8.0 SM	Type of Flight Plan - IFR	Runway Lth/Wid - 6600/ 150
Lowest Sky/Clouds - N/A	Type of Clearance - IFR	Runway Surface - ASPHALT
Lowest Ceiling - 2200 FT OVERCAST	Type Apch/Lndg - VISUAL	Runway Status - DRY
Obstructions to Vision - NONE	TRAFFIC PATTERN	
Precipitation - NONE		
Condition of Light - DAWN		

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

Pilot-In-Command	Age - 36	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
ATP	Current - YES	Total - 7294
SE LAND, ME LAND	Months Since - 8	Last 24 Hrs - 3
	Aircraft Type - YS-11	Make/Model - 2097
		Last 30 Days - 21
		Instrument - UNK/NR
		Last 90 Days - 61
		Multi-Eng - 3794
		Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

AN IFR FLIGHT WAS TERMINATED WITH A VISUAL APPROACH. CONDITIONS WERE CONDUCIVE TO AIRFRAME ICING. THE AIRCRAFT WAS BEING POSITIONED EMPTY, WITH A CG AT 22.1% MAC. ON SHORT FINAL, AT APPROXIMATELY 400 FT AGL, 35 DEGREES OF LANDING FLAP WAS SELECTED. THE AIRCRAFT WAS OBSERVED TO PITCH DOWNWARD TO AN UNUSUAL ATTITUDE AND TO ENTER A STEEP DESCENT. A PARTIAL RECOVERY WAS OBSERVED BEFORE THE AIRCRAFT IMPACTED A DIRT HILL 500 FT SHORT OF RWY 28. EXAMINATION OF THE AIRFRAME AFTER THE ACCIDENT REVEALED 1/2 TO 3/4 INCH OF RIME ICE ADHERING TO THE LEADING EDGE OF THE HORIZONTAL STABILIZER. NO ICE WAS FOUND ON ANY OTHER PORTION OF THE AIRFRAME. EVIDENCE IN THE COCKPIT INDICATED THAT ENGINE, PITOT, AND WINDSHIELD ANTI-ICE SYSTEMS WERE ON, BUT WING/EMPENNAGE DEICE WAS OFF. NO EVIDENCE OF A POWERPLANT OR SYSTEMS MALFUNCTION WAS FOUND.



Brief of Accident (Continued)

File No. - 599

3/15/89

WEST LAFAYETTE, IN

A/C Reg. No. N128MP

Time (Lcl) - 0726 EST

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

Finding(s)

1. WEATHER CONDITION - ICING CONDITIONS
2. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
3. HORIZONTAL STABILIZER SURFACE - ICE
4. ANTI-ICE/DE-ICE SYSTEM - NOT USED - COPILOT/SECOND PILOT
5. LOWERING OF FLAPS - EXCESSIVE -

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

Finding(s)

6. TERRAIN CONDITION - DIRT BANK

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
A LOSS OF CONTROL DUE TO THE IMPROPER INFLIGHT DECISIONS BY THE CREW AND THE UNDETECTED ACCUMULATION OF ICE ON THE  
LEADING EDGE OF THE HORIZONTAL STABILIZER, DURING FLIGHT IN A FORWARD CENTER OF GRAVITY CONDITION AND EXACERBATED  
BY THE EXTENSION OF FULL LANDING FLAPS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 571      5/12/89      TERRE HAUTE, IN      A/C Reg. No. N77201      Time (Lcl) - 1345 CDT

-----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	1

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

Make/Model - CESSNA 140	Eng Make/Model - CONTINENTAL C-85-12	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	ON AIRPORT
Method - N/A	TERRE HAUTE, IN	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	NEW DOUGLAS, IL	HULMAN REG.
Wind Dir/Speed- 310/011 KTS	ATC/Airspace	Runway Ident - 05
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 9020/ 150
Lowest Sky/Clouds - N/A	Type of Clearance - VFR	Runway Surface - ASPHALT
Lowest Ceiling - 10000 FT BROKEN	Type Apch/Lndg - NONE	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 60	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 344
SE LAND	Months Since - 23	Last 24 Hrs - 3
	Aircraft Type - C-140	Make/Model- 185
		Instrument- 0
		Last 30 Days- 4
		Last 90 Days- 6

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT EXPERIENCED A LOSS OF DIRECTIONAL CONTROL WHILE ON THE TAKEOFF ROLL ON RUNWAY 5; THE AIRCRAFT VEERED LEFT AND GROUND- LOOPED, STRIKING THE RIGHT WING AND COMING TO A REST NOSE DOWN. POST-ACCIDENT EXAMINATION OF THE AIRCRAFT REVEALED A FLAT RIGHT MAIN TIRE. THE PILOT REPORTED THAT WINDS WERE OUT OF 310 DEGREES AT 11 KNOTS AT THE TIME OF THE ACCIDENT.

Brief of Accident (Continued)

File No. - 571

5/12/89

TERRE HAUTE, IN

A/C Reg. No. N77201

Time (Lc1) - 1345 CDT

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

Finding(s)

1. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
  2. WEATHER CONDITION - CROSSWIND
  3. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
  4. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
- 

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

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT'S INABILITY TO MAINTAIN DIRECTIONAL CONTROL DURING THE TAKEOFF ROLL. A FACTOR IN THE ACCIDENT WAS THE CROSSWIND.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 446      6/17/89      SHELBYVILLE, IN      A/C Reg. No. N43YP      Time (Lcl) - 1642 EDT

-----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	-APPROACH					

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

Make/Model	- BOEING E75	Eng Make/Model	- LYCOMING R-680	ELT Installed/Activated	- YES/NO
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 2800	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 2	Rated Power	- 225 HP		

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing	Last Departure Point	ON AIRPORT
Method	SAME AS ACC/INC	
Completeness	Destination	Airport Data
- WEATHER NOT PERTINENT	LOCAL	SHELBYVILLE
Basic Weather	ATC/Airspace	Runway Ident
- VMC		- 27
Wind Dir/Speed	Type of Flight Plan	Runway Lth/Wid
- 210/014 KTS	- NONE	- 2670/ 190
Visibility	Type of Clearance	Runway Surface
- 20.0 SM	- NONE	- GRASS/TURF
Lowest Sky/Clouds	Type Apch/Lndg	Runway Status
- 6500 FT SCATTERED	- TRAFFIC PATTERN	- DRY
Lowest Ceiling		
- NONE		
Obstructions to Vision		
- NONE		
Precipitation		
- NONE		
Condition of Light		
- DAYLIGHT		

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

Pilot-In-Command	Age - 51	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 385
SE LAND	Months Since - 12	Make/Model - 210
	Aircraft Type - E75	Instrument - 5
		Last 24 Hrs - 2
		Last 30 Days - 3
		Last 90 Days - 8

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPTD THAT WHILE ON FINAL APCH TO A SOD RWY AT AN UNCONTROLLED ARPT, HIS ATTENTION WAS FOCUSED ON CONFLICTING TRAFFIC & HE INADVERTENTLY ALLOWED THE ACFT TO DESCEND TOO LOW. HE STATED THAT THERE WERE POWER LINES SHORT OF THE RWY WHICH BLENDED WITH THE BACKGROUND. SUBSEQUENTLY, THE ACFT'S LANDING GEAR HIT THE POWER LINES & DRAGGED WIRES & DEBRIS FROM THE UTILITY POLES. BEFORE COMING TO REST, THE ACNT ACFT STRUCK 3 PARKED ACFT & THE WIRES & DEBRIS DAMAGED ANOTHER ACFT & 5 VEHICLES. ON THE DAY OF THE ACNT, THE ARPT WAS CONGESTED DUE TO AN ANTIQUE ACFT FLY-IN.

Brief of Accident (Continued)

File No. - 446

6/17/89

SHELBYVILLE, IN

A/C Reg. No. N43YP

Time (Lcl) - 1642 EDT

Occurrence #1           UNDERSHOOT  
Phase of Operation      APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - CONGESTED
2. DISTANCE - MISJUDGED - PILOT IN COMMAND
3. ALTITUDE - MISJUDGED - PILOT IN COMMAND
4.     DIVERTED ATTENTION - PILOT IN COMMAND

Occurrence #2           IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

5. OBJECT - WIRE, TRANSMISSION
6.     CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3           ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING

Finding(s)

7. OBJECT - AIRCRAFT PARKED

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT ALLOWED HIS ATTENTION TO BE DEVAITED, MISJUDGED ALTITUDE AND DISTANCE TO THE RUNWAY WHILE ON FINAL  
APPROACH, AND FAILED TO MAINTAIN CLEARANCE ABOVE THE POWER LINES. CONTRIBUTING FACTORS WERE: THE POWER LINES AND  
PARKED AIRCRAFT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 460      5/31/89      SCANDIA,KS      A/C Reg. No. N7450Z      Time (Lcl) - 1500 CDT

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

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

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

Make/Model - PIPER PA-25-235	Eng Make/Model - LYCOMING O-540-B2C5	ELT Installed/Activated - YES/YES
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
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	BELLEVILLE,KS	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	
Wind Dir/Speed- 340/013 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 7.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - N/A	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - 2500 FT OVERCAST	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 - 28	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 938
SE LAND	Months Since - 7	Make/Model- 603
	Aircraft Type - 17-30A	Instrument- 11
		Last 24 Hrs - 2
		Last 30 Days- 47
		Last 90 Days- 252

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT SAID THAT HE HAD COMPLETED AERIAL APPLICATION AND BECAME LOST WHILE EN ROUTE BACK TO HIS BASE OF OPERATION. SUBSEQUENTLY, THE ENGINE LOST POWER FROM FUEL EXHAUSTION. DURING AN EMERGENCY LANDING, THE AIRCRAFT STRUCK SMALL TREES AND THEN THE TERRAIN, AND WAS DAMAGED.

Brief of Accident (Continued)

File No. - 460

5/31/89

SCANDIA,KS

A/C Reg. No. N7450Z

Time (Lcl) - 1500 CDT

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

Finding(s)

1. BECAME LOST/DISORIENTED - INADVERTENT - PILOT IN COMMAND
2. IN-FLIGHT PLANNING/DECISION - 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      LANDING

Finding(s)

4. OBJECT - TREE(S)

Occurrence #4      IN FLIGHT COLLISION WITH TERRAIN/WATER  
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 AND FUEL EXHAUSTION. CONTRIBUTING FACTORS WERE THE PILOT BECOMING  
LOST/DISORIENTED AND SMALL TREES.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 453      1/07/89      PADUCAH, KY      A/C Reg. No. N784K      Time (Lcl) - 1935 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	1	0
Flight Conducted Under	-14 CFR 91	NONE	Pass 0	1	1	0
Accident Occurred During -APPROACH						

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

Make/Model	- BEECH B-90	Eng Make/Model	- P&W PT6A-20	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 2	Stall Warning System	- YES
Max Gross Wt	- 9650	Engine Type	- TURBOPROP		
No. of Seats	- 8	Rated Power	- 550 HP		

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

Weather Data		Itinerary	Airport Proximity
Wx Briefing	- FSS	Last Departure Point	OFF AIRPORT/STRIP
Method	- TELEPHONE	SHELANDOAH, IA	
Completeness	- UNK/NR	Destination	Airport Data
Basic Weather	- VMC	DECATUR, AL	BARKLEY REGIONAL
Wind Dir/Speed	- 220/022 KTS	ATC/Airspace	Runway Ident
Visibility	- 8.0 SM	Type of Flight Plan	- 22
Lowest Sky/Clouds	- 2100 FT SCATTERED	- IFR	Runway Lth/Wid
Lowest Ceiling	- 7000 FT BROKEN	- IFR	- 6500/ 150
Obstructions to Vision	- NONE	Type Apch/Lndg	Runway Surface
Precipitation	- NONE	- VISUAL	- N/A
Condition of Light	- NIGHT(DARK)	PRECAUTIONARY LANDING	Runway Status
			- N/A

-----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 - 1061	Last 24 Hrs - 2
SE LAND, ME LAND	Months Since - 1	Make/Model - 115	Last 30 Days - 10
	Aircraft Type - KINGAIR	Instrument - 173	Last 90 Days - 13
		Multi-Eng - 680	

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DRG A RTRN FLT AT NGT TO DECATUR, AL, THE PLT NOTED HIS WX RADAR WAS INOP. HE VISUALLY AVOIDED THUNDERSTORMS (TSTMS), WHICH HAD BEEN FORECASTED. WHILE AVOIDING TSTMS, HE NOTED A REDUCTION IN ENG POWER, A SLIGHT YAW, INDCNS OF FUEL FLOW IRREGULARITY & THAT THE LEFT & RGT BOOST PUMPS WERE INOP. THESE OCCURRED AT ABOUT THE TIME, HE SAW A WHITE ARC WHICH HE SAID HAD JUMPED FROM THE PROP, SPINNER OR NACELLE AREA TO THE ACFT'S NOSE. DUE TO THE WX, HE ELECTED TO DIVERT TO PADUCAH. AFTER THE ARPT WAS IN SIGHT, HE NEEDED TO LOSE ALT BEFORE LANDING & WAS CLEARED TO MAKE A 360 DEG TURN. WHILE TURNING, HE LOST SIGHT OF THE ARPT, THEN ROLLED OUT ON THE WRONG HEADING & STARTED FLYING TOWARD A STROBE LIGHT AT AN INDUSTRIAL COMPLEX. WHEN HE REALIZED HIS ERROR & SAW THE ARPT, HE TURNED TOWARD THE RWY; BUT AS HE WAS MANEUVERING, THE ACFT LOST ALT, HIT TREES & CRASHED. AN EXAM OF THE ENGS & FUEL PUMPS REVEALED NO INDCN OF A PREIMPACT FAILURE. NO PHYSICAL EVIDENCE OF A LIGHTNING STRIKE WAS FOUND, BUT THE NOSE & ENGS WERE BADLY DAMAGED FROM IMPACT.



Brief of Accident (Continued)

File No. - 453

1/07/89

PADUCAH,KY

A/C Reg. No. N784K

Time (Lcl) - 1935 CST

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

Finding(s)

1. FLIGHT/NAV INSTRUMENTS, WEATHER RADAR SYSTEM - INOPERATIVE
2. WEATHER CONDITION - THUNDERSTORM
3. WEATHER CONDITION - LIGHTNING
4. ELECTRICAL SYSTEM - UNDETERMINED
5. FUEL SYSTEM, ELECTRIC BOOST PUMP - INOPERATIVE

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

Finding(s)

6. LIGHT CONDITION - DARK NIGHT
7. PLANNED APPROACH - IMPROPER - PILOT IN COMMAND
8. VISUAL/AURAL PERCEPTION - PILOT IN COMMAND
9. MANEUVER - INITIATED -
10. OBJECT - TREE(S)
11. PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND

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:  
PILOT FAILED TO MAINTAIN PROPER ALTITUDE WHILE MANEUVERING TO LAND. PROBABLE CONTRIBUTING FACTORS WERE INOPERATIVE WEATHER RADAR, THUNDERSTORMS, LIGHTNING, AN UNDETERMINED ELECTRICAL PROBLEM, DARK NIGHT, THE PILOT'S IMPROPERLY PLANNED APPROACH AND VISUAL PERCEPTION, AND THE TREES.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 533      1/14/89      TURNERS FALLS, MA      A/C Reg. No. N1057X      Time (Lc1) - 1210 EST

-----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	Crew 0	0	0	1
Accident Occurred During -LANDING		Pass 0	0	0	2

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

Make/Model - PIPER PA-28-180	Eng Make/Model - LYCOMING O-360-A4A	ELT Installed/Activated - YES/YES
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 - UNK/NR	Last Departure Point	ON AIRPORT
Method - UNK/NR	FARMINGDALE, NY	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	RUTLAND, VT	
Wind Dir/Speed- 220/015 KTS	ATC/Airspace	Runway Ident - 19
Visibility - 20.0 SM	Type of Flight Plan - VFR	Runway Lth/Wid - 2650/ 75
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - CONCRETE
Lowest Ceiling -	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - ICE COVERED
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 35	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 763
SE LAND	Months Since - 1	Make/Model- 245
	Aircraft Type - PA-28	Instrument- 82
		Multi-Eng - 2
		Last 24 Hrs - 3
		Last 30 Days- 24
		Last 90 Days- 73

Instrument Rating(s) - NONE

-----Narrative-----

DURING LANDING AT MT. SNOW, VERMONT, THE AIRPLANE SLID ON RUNWAY ICE AND THE PILOT INITIATED A GO AROUND. DURING THE GO AROUND THE AIRPLANE STRUCK A SNOW BANK AND SHEARED OFF THE LEFT MAIN GEAR. WHEN AIRBORNE THE PILOT DECLARED AN EMERGENCY AND WAS VECTORED TO ANOTHER AIRPORT WHERE HE MADE AN EMERGENCY LANDING AND DAMAGED THE LEFT WING.

Brief of Accident (Continued)

File No. - 533

1/14/89

TURNERS FALLS, MA

A/C Reg. No. N1057X

Time (Lcl) - 1210 EST

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

Finding(s)

1. TERRAIN CONDITION - ICY
  2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
- 

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

Finding(s)

3. TERRAIN CONDITION - SNOWBANK
- 

Occurrence #3        GEAR COLLAPSED  
Phase of Operation    LANDING - ABORTED

Finding(s)

4. LANDING GEAR, MAIN GEAR - SEPARATION
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
LOSS OF CONTROL DURING LANDING ROLL DUE TO ICE ON THE RUNWAY, AND COLLISION WITH A SNOW BANK OFF THE RUNWAY WHICH  
SHEARED THE LEFT MAIN LANDING GEAR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 429      2/04/89      HYANNIS,MA      A/C Reg. No. N49PB      Time (Lcl) - 1240 EST

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

Type Operating Certificate	ON-DEMAND AIR TAXI	Aircraft Damage						
Name of Carrier	-SPECTRUM AIRLINES	SUBSTANTIAL						
Type of Operation	-NON SCHED,DOMESTIC,PAX/CARGO	Fire	Crew	Fatal	Injuries			
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	Serious	Minor	None	
Accident Occurred During	-STANDING			0	0	0	1	9

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

Make/Model	- CESSNA 402B	Eng Make/Model	- CONTINENTAL TSIO-520-E	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 - UNK/NR	Last Departure Point	ON AIRPORT
Method - UNK/NR	SAME AS ACC/INC	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	NANTUCKET,MA	BARNSTABLE MUNI
Wind Dir/Speed- 350/010 KTS	ATC/Airspace	Runway Ident - UNK/NR
Visibility - 10.0 SM	Type of Flight Plan - COMPANY (VFR)	Runway Lth/wid - UNK/NR
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - UNK/NR
Lowest Ceiling - NONE	Type Apch/Lndg - PRECAUTIONARY LANDING	Runway Status - UNK/NR
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 49	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,ATP	Current - YES	Total - 9978
SE LAND,ME LAND	Months Since - 2	Last 24 Hrs - UNK/NR
	Aircraft Type - C-402B	Make/Model- 525
		Last 30 Days- UNK/NR
		Instrument- 1400
		Last 90 Days- UNK/NR
		Multi-Eng - 6000

Instrument Rating(s) - AIRPLANE

-----Narrative-----

NINE MEMBERS OF A VARSITY BASKETBALL TEAM BOARDED THE ACFT W/O THE PLT GETTING ACCURATE PASSENGER WEIGHTS & THE BAGGAGE WAS PLACED IN THE AFT BAGGAGE COMPARTMENT. AS THE PLT ENTERED THE CABIN & WAS CLOSING THE DOOR, THE TAIL OF THE ACFT FELL HARD TO THE RAMP. THE PLT RAISED THE TAIL & ELECTED TO CONT THE FLT. AFTER REBOARDING, HE TAXIED TO THE RUNWAY & BEGAN THE TAKEOFF. AS THE ACFT WAS CLIMBING THRU APRX 200 TO 400 FT AGL, THE PLT ANNOUNCED THERE WAS A PROBLEM & ASKED THE PASSENGERS TO MOVE FORWARD. AT THAT TIME, THE NOSE OF THE ACFT WAS HIGHER THAN NORMAL & THE STALL WARNING HORN SOUNDED. THE PASSENGERS MOVED AS FAR FORWARD AS FEASIBLE & STAYED THERE UNTIL AFTER THE ACFT WAS LANDED. A POST-FLT EXAM OF THE ACFT REVEALED A STRINGER, REAR BULKHEAD, ELEVATOR CONTROL TUBE & THE HOUSING FOR THE TAIL NAVIGATION LIGHT WERE DAMAGED. NO BALLAST WAS INSTALLED IN THE FORWARD BAGGAGE COMPARTMENT. A RECALCULATION OF THE AIRCRAFT'S WEIGHT & BALANCE, USING THE ACTUAL WEIGHTS OF THE PASSENGERS, REVEALED THE CENTER-OF-GRAVITY (CG) WAS BEHIND THE AFT LIMIT.

Brief of Accident (Continued)

File No. - 429

2/04/89

HYANNIS,MA

A/C Reg. No. N49PB

Time (Lcl) - 1240 EST

-----  
Occurrence #1 MISCELLANEOUS/OTHER  
Phase of Operation STANDING

Finding(s)

1. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
  2. AIRCRAFT WEIGHT AND BALANCE - IMPROPER - PILOT IN COMMAND
  3. FUSELAGE,BULKHEAD - FAILURE,PARTIAL
  4. FLT CONTROL SYST, ELEVATOR CONTROL CABLE/ROD - FAILURE,PARTIAL
- 

Occurrence #2 ALTITUDE DEVIATION,UNCONTROLLED  
Phase of Operation TAKEOFF - INITIAL CLIMB

-----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 IMPROPER WEIGHT AND BALANCE (AFT CG).  
THE AFT CG ALSO CONTRIBUTED TO THE UNCOMMANDED ALTITUDE DEVIATION AFTER TAKEOFF.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 436      4/10/89      BEDFORD,MA      A/C Reg. No. N94822      Time (Lcl) - 1145 EDT

-----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	Pass 0	0	0	0
Accident Occurred During -APPROACH					

-----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 - UNK/NR	Last Departure Point	ON AIRPORT
Method - UNK/NR	SAME AS ACC/INC	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LOCAL	BEDFORD
Wind Dir/Speed- UNK/NR	ATC/Airspace	Runway Ident - 29
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 7001/ 150
Lowest Sky/Clouds - 3500 FT SCATTERED	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 - 22	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 559
SE LAND,ME LAND	Months Since - 5	Last 24 Hrs - 0
	Aircraft Type - UNK/NR	Make/Model- 94
		Instrument- 68
		Last 30 Days- UNK/NR
		Last 90 Days- 265
		Multi-Eng - 60

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE STUDENT PLT & INSTRUCTOR (CFI) ELECTED TO FLY IN A CLOSED TRAFFIC PATTERN. THEY MADE A LOW APCH ON THE 1ST PATTERN WITH 30 DEG OF FLAPS. AS THE ACFT WAS ON THE LOW APCH OVER THE RWY, THE STUDENT WAS INSTRUCTED TO ADD POWER FOR A GO-AROUND. HOWEVER, INSTEAD OF ADDING POWER, THE STUDENT RAISED THE ACFT'S NOSE, THEN THE RGT WING DROPPED. SUBSEQUENTLY, THE ACFT CONTACTED THE RWY WITH THE RGT MAIN GEAR & RGT WING. IT THEN VEERED TO THE RGT & ONE WHEEL WENT OFF THE RWY & ONTO THE GRASS. DRG THE OCCURRENCE, THE RGT MAIN STRUT & RGT WINGTIP WERE DAMAGED. THE CFI HAD A TOTAL FLT TIME OF 559 HRS.

Brief of Accident (Continued)

File No. - 436

4/10/89

BEDFORD,MA

A/C Reg. No. N94822

Time (Lc1) - 1145 EDT

Occurrence #1 LOSS OF CONTROL - IN FLIGHT

Phase of Operation GO-AROUND (VFR)

1. THROTTLE/POWER CONTROL - IMPROPER USE OF - DUAL STUDENT
2. FLIGHT CONTROLS - IMPROPER USE OF - DUAL STUDENT
3. STALL - INADVERTENT - DUAL STUDENT
4. LACK OF TOTAL EXPERIENCE - DUAL STUDENT
5. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
6. LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND(CFI)

Occurrence #2 IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation GO-AROUND (VFR)

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER USE OF THROTTLE AND FLIGHT CONTROLS BY THE STUDENT AND INADEQUATE SUPERVISION BY THE CFI WHICH RESULTED  
IN A STALL. THE STUDENT'S LACK OF TOTAL FLYING EXPERIENCE AND THE INSTRUCTOR'S LACK OF EXPERIENCE IN THE TYPE OF  
OPERATION (INSTRUCTING) WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 544      6/03/89      UXBRIDGE,MA      A/C Reg. No. N9965D      Time (Lcl) - 1350 EDT

-----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  
ON GROUND

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

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

Make/Model      - PIPER PA22-150  
Landing Gear      - TAILWHEEL-ALL FIXED  
Max Gross Wt      - 2000  
No. of Seats      - 4

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

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

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

Weather Data

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

Basic Weather      - VMC

Wind Dir/Speed- 290/005 KTS  
Visibility      - 10.0      SM  
Lowest Sky/Clouds      - UNK/NR  
Lowest Ceiling      -  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point  
UXBRIDGE,MA  
Destination  
LINCOLN,RI

ATC/Airspace

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

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

Runway Ident      - 27  
Runway Lth/Wid      - 1200/      80  
Runway Surface      - GRASS/TURF  
Runway Status      - DRY

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

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE  
SE LAND

Age - 51

Biennial Flight Review

Current      - YES  
Months Since      - 23  
Aircraft Type      - PA-22

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total	- 580	Last 24 Hrs	- UNK/NR
Make/Model-	430	Last 30 Days-	UNK/NR
Instrument-	0	Last 90 Days-	UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DURING A LEFT TURN AFTER TAKEOFF FROM A PRIVATE GRASS STRIP THE PILOT SAID HE ENCOUNTERED WIND SHEAR AND DID NOT HAVE SUFFICIENT ALTITUDE TO RECOVER. THE AIRCRAFT HIT THE TOPS OF TREES THEN FELL TO THE GROUND UPSIDE DOWN. THE PILOT AND HIS PASSENGER RECEIVED MINOR INJURIES BUT THE AIRCRAFT WAS DESTROYED BY THE POST CRASH FIRE.



Brief of Accident (Continued)

File No. - 544

6/03/89

UXBRIDGE, MA

A/C Reg. No. N9965D

Time (Lcl) - 1350 EDT

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

Finding(s)

1. WEATHER CONDITION - WINDSHEAR
2.    COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
3. MANEUVER - IMPROPER - PILOT IN COMMAND
4. GO-AROUND - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2      IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      TAKEOFF - INITIAL CLIMB

Finding(s)

5. WEATHER CONDITION - 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:  
IMPROPER MANEUVERING SHORTLY AFTER TAKEOFF FROM A PRIVATE GRASS STRIP OF MARGINAL LENGTH FOR THE CALIBER OF ACFT  
BEING OPERATED. A WIND CHANGE ADDED TO THE ALREADY EXACTING CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 539      7/09/89      BEVERLY, MA      A/C Reg. No. N2752M      Time (Lcl) - 1404 EDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage DESTROYED	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	0	2
Accident Occurred During - LANDING					

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

Make/Model - PIPER PA-28-161	Eng Make/Model - LYCOMING O-320-D3	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 - 160 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	OFF AIRPORT/STRIP
Method - UNK/NR	BEVERLY, MA	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LOCAL	BEVERLY
Wind Dir/Speed- 008 KTS	ATC/Airspace	Runway Ident - 27
Visibility - 5.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 5001/ 150
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - UNK/NR	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 51	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 118
SE LAND	Months Since - 5	Make/Model- 4
	Aircraft Type - PA-28	Instrument- 0
		Last 24 Hrs - UNK/NR
		Last 30 Days- 3
		Last 90 Days- 4

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT ATTEMPTED TO MAKE A GO-AROUND ON RWY 27 AFTER LANDING LONG. THE PILOT SAID HE WAS AFRAID TO USE THE BRAKES AND ADDED POWER BUT RAN OFF THE RUNWAY INTO TREES.

Brief of Accident (Continued)

File No. - 539

7/09/89

BEVERLY, MA

A/C Reg. No. N2752M

Time (Lcl) - 1404 EDT

-----  
Occurrence #1        OVERRUN  
Phase of Operation    LANDING - ABORTED

Finding(s)

1. WEATHER CONDITION - GUSTS
  2. GO-AROUND - DELAYED - PILOT IN COMMAND
  3. DISTANCE - INADEQUATE -
- 

Occurrence #2        ON GROUND COLLISION WITH OBJECT  
Phase of Operation    LANDING - ABORTED

Finding(s)

4. OBJECT - TREE(S)
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
COLLISION WITH TREES DURING AN ABORTED LANDING AND ATTEMPTED GO-AROUND WITH INSUFFICIENT REMAINING RUNWAY.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 572      4/23/89      LANSING, MI      A/C Reg. No. N455RT      Time (Lc1) - 1230 CDT

-----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 - WACO YMF	Eng Make/Model - JACOBS 755-B	ELT Installed/Activated - UNK/NR
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2770	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 275 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	EAST LANSING, MI	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LANSING, MI	LANSING-CAPITAL CITY
Wind Dir/Speed- 070/005 KTS	ATC/Airspace	Runway Ident - 10R
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 7251/ 150
Lowest Sky/Clouds - 25000 FT SCATTERED	Type of Clearance - VFR	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 - 50	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 1444
SE LAND	Months Since - 1	Make/Model - 4
	Aircraft Type - PA-31	Instrument - 408
		Multi-Eng - 343
		Last 24 Hrs - 4
		Last 30 Days - 15
		Last 90 Days - 61

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE ON AN AIRCRAFT FAMILIARIZATION FLIGHT, DURING THE LANDING ROLL, THE PILOT-IN-COMMAND ALLOWED THE AIRCRAFT TO DRIFT TO THE LEFT AND DEPART THE LEFT SIDE OF THE RUNWAY. AS THE AIRCRAFT DEPARTED THE RUNWAY, THE PILOT APPLIED BOTH BRAKES "HARD", AND THE AIRCRAFT NOSED OVER IN THE GRASS. THE CHECK PILOT IN THE FRONT SEAT HAD NO ACCESS TO BRAKE PEDALS.

Brief of Accident (Continued)

File No. - 572

4/23/89

LANSING, MI

A/C Reg. No. N455RT

Time (Lcl) - 1230 CDT

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

Finding(s)

1. AIRCRAFT HANDLING - IMPROPER - PILOT IN COMMAND
2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
3.      LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
4. SUPERVISION - INADEQUATE - CHECK PILOT

Occurrence #2      NOSE OVER  
Phase of Operation      LANDING - ROLL

Finding(s)

5. TERRAIN CONDITION - GRASS
6.      BRAKES(NORMAL) - EXCESSIVE - PILOT IN COMMAND

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL DURING THE LANDING ROLL, AND HIS EXCESSIVE BRAKE APPLICATION AS THE  
AIRCRAFT DEPARTED THE RUNWAY, WHICH RESULTED IN THE AIRCRAFT NOSING OVER. THE PILOT'S INEXPERIENCE IN TAILDRAGGER  
AIRCRAFT, AND THE INADEQUATE SUPERVISION ON THE PART OF THE CHECK PILOT WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 573      4/25/89      DETROIT,MI      A/C Reg. No. N444EA      Time (Lcl) - 1635 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	1

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

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

Make/Model - CESSNA 411  
Landing Gear - TRICYCLE-RETRACTABLE  
Max Gross Wt - 6500  
No. of Seats - 2

Eng Make/Model - CONTINENTAL GTS10-520-C      ELT Installed/Activated - YES/NO  
Number Engines - 2      Stall Warning System - YES  
Engine Type - RECIP-FUEL INJECTED  
Rated Power - 340 HP

-----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 - 20000 FT THIN BKN  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
DETROIT,MI  
Destination  
DETROIT,MI

Airport Proximity  
ON AIRPORT

Airport Data

DETROIT CITY  
Runway Ident - 33  
Runway Lth/Wid - 5090/ 100  
Runway Surface - ASPHALT  
Runway Status - DRY

ATC/Airspace

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

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

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

Age - 21  
Biennial Flight Review  
Current - YES  
Months Since - 7  
Aircraft Type - C-310R

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 1530      Last 24 Hrs - UNK/NR  
Make/Model- 2      Last 30 Days- 25  
Instrument- 130      Last 90 Days- 83  
Multi-Eng - 337

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING THE LANDING ROLL, AS THE AIRCRAFT DECELERATED TO A "REASONABLE SPEED", THE PILOT ATTEMPTED TO MAKE A RIGHT TURN ONTO A TAXIWAY TO DEPART THE RUNWAY, THE PILOT REPORTED THAT AS HE STARTED THE TURN HE HEARD A "LOUD BANG" FOLLOWED BY THE LEFT WING TANK STRIKING THE GROUND. INVESTIGATION REVEALED THAT A BOLT, P/N NAS464P4-26, IN THE LEFT MAIN LANDING GEAR ASSEMBLY HAD FAILED. TOTAL TIME ON THIS PART COULD NOT BE DETERMINED; TOTAL TIME ON THE AIRCRAFT WAS 10,134 HOURS, WITH THE MOST RECENT ANNUAL INSPECTION ACCOMPLISHED ON JULY 27, 1988, AT A TOTAL TIME OF 10,127 HOURS.

Brief of Accident (Continued)

File No. - 573

4/25/89

DETROIT,MI

A/C Reg. No. N444EA

Time (Lcl) - 1635 CDT

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

Finding(s)

1. LANDING GEAR,MAIN GEAR ATTACHMENT - FAILURE,TOTAL
- 

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:  
FAILURE OF A BOLT IN THE LEFT MAIN LANDING GEAR ASSEMBLY.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 567      5/11/89      TECUMSEH,MI      A/C Reg. No. N32340      Time (Lcl) - 0905 EDT

-----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 - PORTERFIELD CP-55	Eng Make/Model - CONTINENTAL A65-8	ELT Installed/Activated - YES/YES
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1200	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 65 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	ADRIAN,MI	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	TECUMSEH,MI	
Wind Dir/Speed- 360/012 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 5000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - DIRT
Lowest Ceiling - NONE	Type Apch/Lndg - FULL STOP	Runway Status - DRY
Obstructions to Vision- NONE	FORCED LANDING	SOFT
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)
PRIVATE	Current - YES	Total - 170
SE LAND	Months Since - 20	Last 24 Hrs - 2
	Aircraft Type - PA-28	Make/Model- 8
		Last 30 Days- 13
		Instrument- 10
		Last 90 Days- 15

Instrument Rating(s) - NONE

-----Narrative-----

WHILE IN NORMAL CRUISE FLIGHT AT ABOUT 800 FEET AGL, THE ENGINE STARTED TO LOSE POWER AND RUN ROUGH. THE PILOT WAS UNABLE TO MAINTAIN ALTITUDE, AND SELECTED A NEWLY PLOWED FIELD FOR A FORCED LANDING SITE. THE AIRCRAFT'S MAIN LANDING GEAR SANK INTO THE SOFT SOIL DURING THE LANDING ROLL AND THE AIRCRAFT NOSED OVER. POST-ACCIDENT INSPECTION REVEALED WATER CONTAMINATION IN THE FUEL SYSTEM.



Brief of Accident (Continued)

File No. - 567

5/11/89

TECUMSEH,MI

A/C Reg. No. N32340

Time (Lcl) - 0905 EDT

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

Finding(s)

1. FLUID,FUEL - CONTAMINATION
  2. AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
- 

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

3. TERRAIN CONDITION - OPEN FIELD
  4. TERRAIN CONDITION - SOFT
  5. UNSUITABLE TERRAIN - ENCOUNTERED - PILOT IN COMMAND
- 

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING - ROLL

Finding(s)

6. TERRAIN CONDITION - SOFT
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT'S INADEQUATE PREFLIGHT OPERATINS, WHICH FAILED TO DETECT THE PRESENCE OF WATER CONTAMINATION IN THE FUEL SYSTEM,  
AND RESULTED IN THE SUBSTANTIAL LOSS OF POWER AND SUBSEQUENT FORCED LANDING. THE AIRCRAFT ENCOUNTERED SOFT, LOOSE  
SOIL DURING THE FORCED LANDING AND FLIPPED OVER.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 570      5/16/89      EUREKA,MI      A/C Reg. No. N7531G      Time (Lcl) - 1115 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
Flight Conducted Under	-14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During	-TAKEOFF					

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

Make/Model	- CESSNA 150 L	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	- NO RECORD OF BRIEFING	Last Departure Point	ON AIRSTRIP
Method	- N/A	EUREKA,MI	
Completeness	- N/A	Destination	Airport Data
Basic Weather	- VMC	LANSING,MI	RANDOLPH
Wind Dir/Speed	- 330/006 KTS	ATC/Airspace	Runway Ident
Visibility	- 10.0 SM	Type of Flight Plan	- 23
Lowest Sky/Clouds	- CLEAR	Type of Clearance	- 1700/ 100
Lowest Ceiling	- NONE	Type Apch/Lndg	- GRASS/TURF
Obstructions to Vision	- NONE		Runway Status
Precipitation	- NONE		- DRY
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)	
ATP,CFI	Current - YES	Total - 7000	Last 24 Hrs - UNK/NR
SE LAND,ME LAND	Months Since - 15	Make/Model- 200	Last 30 Days- UNK/NR
HELICOPTER	Aircraft Type - J-3	Instrument- 40	Last 90 Days- UNK/NR
			Rotorcraft - 50

Instrument Rating(s) - AIRPLANE,HELICOPTER

-----Narrative-----

DURING A PRE-CHECKRIDE REVIEW FLIGHT, THE STUDENT PILOT WAS INSTRUCTED TO DEMONSTRATE A SHORT FIELD TAKEOFF ON A 1,640' X 100' SOD AIRSTRIP. THE STUDENT PILOT STARTED TO ROTATE WHEN THE AIRCRAFT REACHED 55 MPH AND AN ESTIMATED 3/4 WAY DOWN THE RUNWAY, AND WAS ADVISED BY THE CFI TO WAIT UNTIL 60 MPH WAS ATTAINED BEFORE ROTATION. THE STUDENT PILOT RESPONDED BY ABORTING THE TAKEOFF, REDUCING POWER AND APPLYING BRAKES. THE CFI TOOK OVER THE CONTROLS AND APPLIED "HARD" BRAKES, HOWEVER NEITHER PILOT WAS ABLE TO STOP THE AIRCRAFT BEFORE IT RAN OFF THE DEPARTURE END OF THE RUNWAY. THE AIRCRAFT STRUCK A DITCH AND NOSED OVER.

Brief of Accident (Continued)

File No. - 570

5/16/89

EUREKA,MI

A/C Reg. No. N7531G

Time (Lcl) - 1115 EDT

Occurrence #1        OVERRUN  
Phase of Operation    TAKEOFF - ABORTED

Finding(s)

1. AIRCRAFT HANDLING - IMPROPER - DUAL STUDENT
2. ROTATION - PREMATURE - DUAL STUDENT
3. TERRAIN CONDITION - GRASS
4. ABORTED TAKEOFF - PERFORMED - DUAL STUDENT
5. DISTANCE - INADEQUATE -
6. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)

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

Finding(s)

7. TERRAIN CONDITION - DITCH

Occurrence #3        NOSE OVER  
Phase of Operation    TAKEOFF - ABORTED

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
STUDENT PILOT'S IMPROPER AIRCRAFT CONTROL DURING THE TAKEOFF ROLL, AND THE SUBSEQUENT ABORTED TAKEOFF WAS PERFORMED  
WITH INSUFFICIENT RUNWAY REMAINING TO SUCCESSFULLY STOP THE AIRCRAFT BEFORE THE DEPARTURE END OF THE RUNWAY.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 568      6/01/89      FLUSHING,MI      A/C Reg. No. N8535Q      Time (Lcl) - 1230 CDT

-----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 -TAKEOFF			0	0	0
					2
					0

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

Make/Model - CESSNA 206	Eng Make/Model - CONTINENTAL IO-520-F9	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 - 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	FLUSHING,MI	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	PANTIAAC,MI	DALTON
Wind Dir/Speed- 220/011 KTS	ATC/Airspace	Runway Ident - 18
Visibility - 10.0 SM	Type of Flight Plan - IFR	Runway Lth/Wid - 2515/ 150
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 2600 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 - 44	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 231
SE LAND	Months Since - 13	Make/Model- 111
	Aircraft Type - C-206	Instrument- 14
		Last 24 Hrs - UNK/NR
		Last 30 Days- 14
		Last 90 Days- 41

Instrument Rating(s) - NONE

-----Narrative-----

DURING THE TAKEOFF ROLL ON AN INSTRUMENT INSTRUCTIONAL FLIGHT, WHILE AT A POINT APPROXIMATELY HALFWAY DOWN THE RUNWAY, THE PRIVATE PILOT JUDGED THAT THE AIRCRAFT WAS NOT ACCELERATING SATISFACTORILY AND ELECTED TO ABORT THE TAKEOFF. THE PILOT APPLIED BRAKES BUT WAS UNABLE TO STOP THE AIRCRAFT BEFORE IT RAN OFF THE DEPARTURE END OF THE RUNWAY AND COLLIDED WITH TREES. BOTH THE PRIVATE PILOT AND THE INSTRUMENT INSTRUCTOR REPORTED THAT IT HAD BEEN RAINING IN THE AREA PRIOR TO THE FLIGHT, AND THE RUNWAY WAS WET, WITH STANDING WATER IN SPOTS. THE PILOT STATED THAT THE WATER "DAMPED THE BRAKING ACTION CONSIDERABLY."

Brief of Accident (Continued)

File No. - 568

6/01/89

FLUSHING,MI

A/C Reg. No. N8535Q

Time (Lcl) - 1230 CDT

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

Finding(s)

1. TERRAIN CONDITION - RUNWAY
  2. ABORTED TAKEOFF - DELAYED - PILOT IN COMMAND
  3. TERRAIN CONDITION - WET
  4. AIRCRAFT CONTROL - INADEQUATE - PILOT IN COMMAND
  5. PLANNING-DECISION - INADEQUATE - PILOT IN COMMAND
- 

Occurrence #2      OVERRUN  
Phase of Operation      TAKEOFF - ABORTED

Finding(s)

6. TERRAIN CONDITION - GRASS
- 

Occurrence #3      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      TAKEOFF - ABORTED

Finding(s)

7. OBJECT - TREE(S)
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT'S INADEQUATE AIRCRAFT CONTROL DURING THE ABORTED TAKEOFF ATTEMPT, AND THE AIRCRAFT'S RESULTANT COLLISION WITH TREES. THE WET RUNWAY WAS A FACTOR IN THE LACK OF NORMAL BRAKING ACTION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 582      6/10/89      CEDAR,MI      A/C Reg. No. N151C      Time (Lcl) - 2150 EDT

-----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 - STINSON 108-2	Eng Make/Model - FRANKLIN 6A4-165-B3	ELT Installed/Activated - UNK/NR
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 - 165 HP	

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

Weather Data	Itinerary	Airport Proximity ON AIRSTRIP
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point SAME AS ACC/INC	
Method - N/A	Destination LOCAL	Airport Data
Completeness - N/A		Runway Ident - UNK/NR
Basic Weather - VMC	ATC/Airspace	Runway Lth/Wid - 2100/ 60
Wind Dir/Speed- CALM	Type of Flight Plan - NONE	Runway Surface - GRASS/TURF
Visibility - 20.0 SM	Type of Clearance - NONE	Runway Status - DRY
Lowest Sky/Clouds - CLEAR	Type Apch/Lndg - GO AROUND	
Lowest Ceiling - NONE		
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DUSK		

-----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 - 113
SE LAND	Months Since - 5	Make/Model- 34
	Aircraft Type - UNK/NR	Instrument- 3
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DURING THE GO-AROUND ATTEMPT FOLLOWING A BALKED LANDING THE AIRPLANE FAILED TO CLEAR THE EMBANKMENT LOCATED ON THE DEPARTURE END OF THE 2,100 FOOT SOD RUNWAY. THE MAIN LANDING GEAR FAILED AS IT STRUCK THE EMBANKMENT AND THE AIRPLANE SKIPPED ACROSS A ROAD AND SKIDDED TO A STOP IN A FIELD.

Brief of Accident (Continued)

File No. - 582

6/10/89

CEDAR,MI

A/C Reg. No. N151C

Time (Lc1) - 2150 EDT

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

Finding(s)

1. ABORTED LANDING - ATTEMPTED - PILOT IN COMMAND
  2.        OVER CONFIDENCE IN AIRCRAFT'S ABILITY - PILOT IN COMMAND
  3. TERRAIN CONDITION - DIRT BANK
  4.    CLEARANCE - INADEQUATE - PILOT IN COMMAND
  5. LIGHT CONDITION - DUSK
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT IN COMMAND ATTEMPTING TO LAND WITH TOO HIGH AN AISPEED AND WITH INSUFFICIENT RUNWAY REMAINING TO ALLOW EITHER  
A GO AROUND OR THE ABILITY TO BRING THE AIRPLANE TO A STOP IN THE SPACE REMAINING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 543      2/22/89      PEMBERTON, MN      A/C Reg. No. N6010G      Time (Lcl) - 1050 CST

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

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

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

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

Fire      NONE  
Crew      0  
Pass      1

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

Make/Model      - CESSNA 150K  
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      - 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-      320/018 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  
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

Age      - 45  
Biennial Flight Review  
Current      - UNK/NR  
Months Since      - UNK/NR  
Aircraft Type      - UNK/NR

Medical Certificate      - EXPIRED  
Flight Time (Hours)

Total	-	280	Last 24 Hrs	-	1
Make/Model-	280		Last 30 Days-	15	
Instrument-	0		Last 90 Days-	UNK/NR	

Instrument Rating(s)      - NONE

-----Narrative-----

PILOT ATTEMPTED TO TAKE OFF ON A GRAVEL ROAD WITH 18 KNOT TAILWIND CONDITION. FOLLOWING LIFT OFF HE WAS UNABLE TO GAIN ALTITUDE AND COLLIDED WITH TREE IN HIS DEPARTURE PATH. THE AIRCRAFT IMPACTED THE TERRAIN AND WAS SUBSTANTIALLY DAMAGED. THE PRIVATE PILOT WAS SERIOUSLY INJURED. THE PASSENGER SUFFERED FATAL INJURIES. THE PILOT HAD NO CURRENT MEDICAL CERTIFICATE AND THE AIRCRAFT WAS OVER THREE YEARS OVERDUE AN ANNUAL INSPECTION. THE PILOT STATED THAT HE DID NOT EXPERIENCE ANY MECHANICAL PROBLEMS WITH THE AIRCRAFT PRIOR TO THE ACCIDENT.



Brief of Accident (Continued)

File No. - 543

2/22/89

PEMBERTON,MN

A/C Reg. No. N6010G

Time (Lcl) - 1050 CST

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

Finding(s)

1. OBJECT - TREE(S)
2. JUDGEMENT - POOR - PILOT IN COMMAND
3. WEATHER CONDITION - TAILWIND
4. WIND INFORMATION - DISREGARDED - PILOT IN COMMAND
5. DISTANCE - INADEQUATE - PILOT IN COMMAND
6. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
7. PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND

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

Finding(s)

8. TERRAIN CONDITION - SNOW COVERED

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
POOR JUDGEMENT ON THE PART OF THE PILOT IN THAT HE ATTEMPTED A DOWN WIND TAKE OFF WITHOUT ADEQUATE DISTANCE TO CLEAR  
OBSTACLES IN HIS FLIGHT PATH.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 468      6/04/89      BUFFALO, MN      A/C Reg. No. N38329      Time (Lcl) - 1315 CDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	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-38	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 - 118 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	BUFFALO
Wind Dir/Speed- 340/013 KTS	ATC/Airspace -	Runway Ident - 35
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2600/ 60
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - SIMULATED FORCED LANDING	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 22	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 369
SE LAND,ME LAND	Months Since - 3	Last 24 Hrs - 3
	Aircraft Type - C-172RG	Make/Model- 25
		Last 30 Days- 26
		Instrument- 63
		Last 90 Days- 64
		Multi-Eng - 12
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE INSTRUCTOR (CFI) STATED THAT WHILE THE STUDENT WAS PRACTICING A SIMULATED EMERGENCY LANDING, IT BECAME EVIDENT THE ACFT WOULD LAND SHORT OF THE RWY. THE CFI TOOK CONTROL OF THE ACFT & ADDED FULL POWER TO GO AROUND. HOWEVER, THE ACFT CONTINUED TO SETTLE & CONTACTED GRASS ON THE OVERRUN. THE PLT SAID THE GRASS "DRAGGED THE AIRPLANE DOWNWARD CAUSING THE MAIN GEAR TO CONTACT THE SURFACE." AT ABOUT THAT TIME, THE ACFT ENCOUNTERED A GUST WHICH CAUSED IT TO WEATHERVANE. THE ACFT THEN SWERVED TO THE LEFT, CONTACTED THE TERRAIN WITH THE LEFT WING, SPUN AROUND & HIT A DITCH. THE INSTRUCTOR HAD A TOTAL FLIGHT TIME OF 369 HRS.

Brief of Accident (Continued)

File No. - 468

6/04/89

BUFFALO, MN

A/C Reg. No. N38329

Time (Lc1) - 1315 CDT

Occurrence #1           UNDERSHOOT  
Phase of Operation      APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND(CFI)
2. WEATHER CONDITION - UNFAVORABLE WIND
3. DISTANCE - MISJUDGED - DUAL STUDENT
4. ALTITUDE - MISJUDGED - DUAL STUDENT
5. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
6.       LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND(CFI)

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

Finding(s)

7. TERRAIN CONDITION - HIGH VEGETATION
8. TERRAIN CONDITION - DITCH

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
MISJUDGEMENT OF ALTITUDE AND DISTANCE BY THE STUDENT AND INADEQUATE SUPERVISION OF FLIGHT BY THE INSTRUCTOR (CFI).  
CONTRIBUTING FACTORS WERE: UNFAVORABLE WIND CONDITIONS, HIGH VEGETATION (GRASS), AND A DITCH.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 461      6/11/89      STANTON,MN      A/C Reg. No. N83GB      Time (Lcl) - 1310 CDT

-----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  
NONE

Crew  
Pass

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

Make/Model - GLASER-DIRKS DG-101  
Landing Gear - SKID  
Max Gross Wt - 1000  
No. of Seats - 1

Eng Make/Model - N/A  
Number Engines - N/A  
Engine Type - N/A  
Rated Power - N/A

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

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

Weather Data

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

Basic Weather - VMC

Wind Dir/Speed- 130/010 KTS

Visibility - 15.0 SM

Lowest Sky/Clouds - 6000 FT SCATTERED

Lowest Ceiling - 7500 FT BROKEN

Obstructions to Vision- NONE

Precipitation - NONE

Condition of Light - DAYLIGHT

Itinerary

Last Departure Point

STANTON,MN

Destination

LOCAL

ATC/Airspace

Type of Flight Plan - NONE

Type of Clearance - NONE

Type Apch/Lndg - FORCED LANDING

Airport Proximity

ON AIRPORT

Airport Data

STANTON

Runway Ident - 18

Runway Lth/Wid - 2582/ 300

Runway Surface - GRASS/TURF

Runway Status - DRY

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

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE

SE LAND

GLIDER

Age - 33

Biennial Flight Review

Current - YES

Months Since - 2

Aircraft Type - C-172

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total - 225

Make/Model- 2

Instrument- 3

Last 24 Hrs - UNK/NR

Last 30 Days- 3

Last 90 Days- 6

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT SAID THAT AFTER A NORMAL LIFT-OFF, THE GLIDER BOUNCED, CAUSING IT TO RISE RAPIDLY TO ABOUT 50 FEET AGL. HE ELECTED TO RELEASE FROM THE TOW AIRCRAFT AND LAND STRAIGHT AHEAD. HOWEVER, THE RIGHT WING STRUCK THE GROUND AND THE GLIDER CAME TO REST INVERTED WITH SUBSTANTIAL DAMAGE. THE PILOT HAD A TOTAL OF 35 HOURS IN GLIDERS OF WHICH 2 HOURS WERE IN THIS MAKE AND MODEL OF GLIDER.

Brief of Accident (Continued)

File No. - 461

6/11/89

STANTON,MN

A/C Reg. No. N83GB

Time (Lcl) - 1310 CDT

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

Finding(s)

1. FLIGHT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND
2. ABORTED TAKEOFF - INITIATED - PILOT IN COMMAND
3. GLIDER TOW RELEASE - PERFORMED - PILOT IN COMMAND
4. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
5.        LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND

Occurrence #2        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    TAKEOFF - ABORTED

----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 GLIDER. CONTRIBUTING FACTORS WERE: IMPROPER USE OF FLIGHT CONTROLS  
BY THE PILOT AND HIS LACK OF TOTAL EXPERIENCE IN THE TYPE OF GLIDER.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 457      6/21/89      BEMIDJI,MN      A/C Reg. No. N6513Y      Time (Lcl) - 1628 CDT

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

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

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

Make/Model - PIPER PA-23-250	Eng Make/Model - LYCOMING IO-540-C4B5	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 5200	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 250 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	BEMIDJI
Wind Dir/Speed- 330/015 KTS	ATC/Airspace	Runway Ident - 31
Visibility - 5.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 6598/ 150
Lowest Sky/Clouds - 800 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 4000 FT OVERCAST	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - WET
Obstructions to Vision- FOG		
Precipitation - RAIN		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 51	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 6550
SE LAND,ME LAND,SE SEA	Months Since - 14	Last 24 Hrs - 1
	Aircraft Type - C-172	Make/Model- 90
		Last 30 Days- 14
		Instrument- 110
		Last 90 Days- 62
		Multi-Eng - 125

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT REPORTED THAT WHEN HE RETURNED TO THE AIRPORT TO LAND, A LINE OF DARK CLOUDS WAS NEXT TO THE DOWNWIND LEG FOR RUNWAY 31. DURING THE FINAL APPROACH SEGMENT, THE AIRCRAFT ENCOUNTERED HEAVY RAIN AND TURBULENCE. INITIALLY, THE PILOT ATTEMPTED A GO-AROUND, THEN DECIDED TO CONTINUE THE LANDING. DURING THE LANDING, STRONG/GUSTY WINDS WERE ENCOUNTERED AND THE AIRCRAFT TOUCHED DOWN ON THE ADJACENT GRASS AREA. SUBSEQUENTLY, THE AIRCRAFT WAS DAMAGED WHEN IT CROSSED A DITCH AND CAME TO REST ON A PUBLIC ROAD.

Brief of Accident (Continued)

File No. - 457

6/21/89

BEMIDJI, MN

A/C Reg. No. N6513Y

Time (Lcl) - 1628 CDT

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

Finding(s)

1. WEATHER CONDITION - RAIN
2. WEATHER CONDITION - GUSTS
3. WEATHER CONDITION - TURBULENCE (THUNDERSTORMS)
4. WEATHER CONDITION - UNFAVORABLE WIND
5. FLIGHT INTO KNOWN ADVERSE WEATHER - CONTINUED - PILOT IN COMMAND

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

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

Finding(s)

6. TERRAIN CONDITION - DITCH

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE CONTINUED APPROACH AND LANDING BY THE PILOT IN KNOWN ADVERSE WEATHER. CONTRIBUTING FACTORS WERE THE WEATHER  
CONDITIONS AND THE DITCH.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 463      6/22/89      SAUK RAPIDS,MN      A/C Reg. No. N3814S      Time (Lcl) - 1810 CDT

-----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 - CONTINENTAL O-300-D	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 - 145 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	GRAND FORKS,ND	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	ST CLOUD,MN	Runway Ident - N/A
Wind Dir/Speed- 310/008 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 4000 FT 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 - 19	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 204
SE LAND	Months Since - 9	Make/Model- 17
	Aircraft Type - BE-150	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 2
		Last 30 Days- 20
		Last 90 Days- 44
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT DURING A X-COUNTRY FLT, THE ENG BEGAN SHAKING & SMOKING. HE MADE AN EMERGENCY LANDING IN A CULTIVATED FIELD, BUT THE ACFT NOSED DOWN IN SOFT MUDDY TERRAIN & WAS DAMAGED. THE PLT RPRTD THAT BEFORE HE TOOK OFF, HE SERVICED THE ACFT WITH FUEL. HE ALSO STATED THAT HE ADDED ONE QUART OF OIL, CHECKED THE OIL LEVEL & REPLACED THE OIL CAP. HOWEVER, AN INVESTIGATION REVEALED THE OIL CAP WAS ABSENT & THE ENGINE WAS DAMAGED BY LACK OF LUBRICATION.



Brief of Accident (Continued)

File No. - 463

6/22/89

SAUK RAPIDS, MN

A/C Reg. No. N3814S

Time (Lcl) - 1810 CDT

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

Finding(s)

1. LUBRICATING SYSTEM, OIL FILLER CAP - NOT SECURED
  2. MAINTENANCE, SERVICE OF AIRCRAFT - IMPROPER - PILOT IN COMMAND
  3. FLUID, OIL - STARVATION
- 

Occurrence #2        FORCED LANDING  
Phase of Operation    DESCENT - EMERGENCY

-----

Occurrence #3        NOSE DOWN  
Phase of Operation    LANDING - ROLL

Finding(s)

4. TERRAIN CONDITION - SOFT
  5. TERRAIN CONDITION - WET
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT TO PROPERLY SECURE THE OIL CAP WHEN HE SERVICED THE AIRCRAFT AND OIL STARVATION. CONTRIBUTING  
FACTORS WERE THE TERRAIN CONDITIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 456      6/23/89      GRYGLA,MN      A/C Reg. No. N4724R      Time (Lcl) - 2030 CDT

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

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

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

Make/Model	- CESSNA 188B	Eng Make/Model	- CONTINENTAL IO-520-D	ELT Installed/Activated	- NO -N/A
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 4200	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 1	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	LOCAL		PRIVATE STRIP	
Wind Dir/Speed	- CALM			Runway Ident	- 36
Visibility	- 15.0 SM	ATC/Airspace		Runway Lth/Wid	- 2650/ 100
Lowest Sky/Clouds	- 5000 FT SCATTERED	Type of Flight Plan	- NONE	Runway Surface	- GRASS/TURF
Lowest Ceiling	- 8000 FT BROKEN	Type of Clearance	- NONE	Runway Status	- DRY
Obstructions to Vision	- NONE	Type Apch/Lndg	- 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)	
COMMERCIAL,CFI	Current - YES	Total - 3230	Last 24 Hrs - 8
SE LAND	Months Since - 13	Make/Model- 310	Last 30 Days- 100
	Aircraft Type - 7GCBC	Instrument- 101	Last 90 Days- 180

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE COMMERCIAL PILOT SAID HE HAD USED THIS PVT STRIP ON THREE PREVIOUS OCCASIONS, AND THAT ON THE DAY OF THE ACCIDENT, HE HAD ALREADY DISPENSED ABOUT 14 LOADS. ALSO, HE SAID THAT THE WIND HAD BECOME CALM, WHEREAS ON PREVIOUS TAKEOFFS, THERE WAS AN EXISTING WIND. SHORTLY AFTER TAKEOFF, THE ACFT CONTACTED TALL GRASS AT THE DEPARTURE END OF THE STRIP. A SPRAY BOOM CAUGHT THE TALL GRASS, THEN THE ACFT SPUN AROUND AND WAS DAMAGED. THE PLT BELIEVED THAT IF THE GRASS AT THE END OF THE STRIP HAD BEEN MOWED, THE ACCIDENT WOULD NOT HAVE HAPPENED.

Brief of Accident (Continued)

File No. - 456

6/23/89

GRYGLA,MN

A/C Reg. No. N4724R

Time (Lc1) - 2030 CDT

---

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

Finding(s)

1. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - 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:  
INADEQUATE PREFLIGHT PLANNING AND PREPARATION BY THE PILOT. TALL GRASS (HIGH VEGETATION) AT THE END OF THE STRIP  
WAS A CONTRIBUTING FACTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 513      7/09/89      CRYSTAL,MN      A/C Reg. No. N6938H      Time (Lcl) - 1525 CDT

-----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-320-E2D	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 - 150 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - TV WX	Last Departure Point	ON AIRPORT
Method - IN PERSON	ST. CLOUD,MN	
Completeness - PARTIAL,LMTD BY PILOT	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	CRYSTAL
Wind Dir/Speed- 140/016 KTS		Runway Ident - 19
Visibility - 5.0 SM	ATC/Airspace	Runway Lth/Wid - 3264/ 75
Lowest Sky/Clouds - 15000 FT SCATTERED	Type of Flight Plan - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type of Clearance - NONE	Runway Status - DRY
Obstructions to Vision- HAZE	Type Apch/Lndg - FULL STOP	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 37	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 188
SE LAND	Months Since - 4	Make/Model- 88
	Aircraft Type - C-172	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 1
		Last 30 Days- 1
		Last 90 Days- 8
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PVT PLT SAID THAT UPON ARRIVING AT HIS DESTINATION APT AFTER A PERSONAL CROSS COUNTRY FLT, HE BOUNCED SEVERAL TIMES BEFORE THE NOSE GEAR COLLAPSED. THE ACFT SLID TO A STOP ABOUT TWO THIRDS DOWN RUNWAY 13. THE LOCAL WINDS WERE FROM 140 DEGREES AT ABOUT 16 KNOTS GUSTING TO 26. THE PILOT SAID THAT HE FELT HIS FINAL APPROACH SPEED WAS TOO GREAT.

Brief of Accident (Continued)

File No. - 513

7/09/89

CRYSTAL, MN

A/C Reg. No. N6938H

Time (Lc1) - 1525 CDT

-----  
Occurrence #1        HARD LANDING  
Phase of Operation    LANDING

Finding(s)

1. WEATHER CONDITION - GUSTS
  2. AIRSPEED - EXCESSIVE - PILOT IN COMMAND
  3. FLARE - IMPROPER - PILOT IN COMMAND
  4. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
- 

Occurrence #2        NOSE GEAR COLLAPSED  
Phase of Operation    LANDING  
-----

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
AIRCRAFT CONTROL WAS NOT MAINTAINED BY THE PILOT IN COMMAND, DUE TO AN IMPROPER LANDING FLARE WHICH RESULTED IN  
SEVERAL BOUNCES. THE LANDING GEAR FAILED IN OVERLOAD DURING THE BOUNCED LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 562      7/23/89      DULUTH,MN      A/C Reg. No. N97984      Time (Lcl) - 1200 CDT

-----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-320-D2J	ELT Installed/Activated - YES/NO
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 - 160 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - ACFT RADIO	ANOKA,MN	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	SKY HARBOR
Wind Dir/Speed- 120/004 KTS	ATC/Airspace	Runway Ident - 14
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3051/ 75
Lowest Sky/Clouds - CLEAR	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 - 33	Medical Certificate - EXPIRED
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 119
SE LAND	Months Since - 7	Last 24 Hrs - UNK/NR
	Aircraft Type - UNK/NR	Make/Model- 11
		Last 30 Days- 3
		Instrument- 3
		Last 90 Days- 3

Instrument Rating(s) - NONE

-----Narrative-----

AFTER A PERSONAL CROSS COUNTRY FLIGHT, THE PLT ATTEMPTED TO LAND, WITH VARIABLE SURFACE WINDS OF 5 TO 10 KNOTS. THE PLT LOST DIRECTIONAL CONTROL OF THE ACFT AND VEEERED OFF THE RUNWAY, ON TO THE SANDY BORDER, THEN NOSED OVER.

Brief of Accident (Continued)

File No. - 562

7/23/89

DULUTH, MN

A/C Reg. No. N97984

Time (Lc1) - 1200 CDT

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

Finding(s)

1. WEATHER CONDITION - UNFAVORABLE WIND
2. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
3. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
4. GROUND LOOP/SWERVE
5. FLIGHT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND

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

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING - ROLL

Finding(s)

6. TERRAIN CONDITION - SOFT

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
AIRCRAFT CONTROL WAS NOT MAINTAINED BY THE PILOT IN COMMAND DUE TO IMPROPER USE OF THE AIRCRAFT FLIGHT CONTROLS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 470      6/03/89      BOLIVAR, MO      A/C Reg. No. N3952K      Time (Lcl) - 1430 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

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

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

Make/Model      - PIPER PA-28  
Landing Gear      - TRICYCLE-FIXED  
Max Gross Wt      - 2150  
No. of Seats      - 4

Eng Make/Model      - LYCOMING O-320-E2A  
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- 310/007 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  
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

BOLIVAR  
Runway Ident      - 19  
Runway Lth/Wid      - 2490/ 255  
Runway Surface      - GRASS/TURF  
Runway Status      - DRY

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

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

Age - 20  
Biennial Flight Review  
Current      - YES  
Months Since      - 2  
Aircraft Type - PA-28

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total      - 194  
Last 24 Hrs - UNK/NR  
Make/Model- 54  
Instrument- 5  
Last 30 Days- 11  
Last 90 Days- 20

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT REPORTED THAT HE BEGAN A SOFT/SHORT FIELD TAKEOFF, BUT THE AIRCRAFT WOULD NOT ACCELERATE DUE TO TALL GRASS AND FIELD CONDITIONS. HE ABORTED THE TAKEOFF WHEN HE BELIEVED THE AIRCRAFT WOULD NOT REACH FLYING SPEED. HE TRIED TO STOP THE AIRCRAFT BEFORE HITTING TREES NEAR THE END OF THE RUNWAY, BUT WAS UNABLE.



Brief of Accident (Continued)

File No. - 470

6/03/89

BOLIVAR, MO

A/C Reg. No. N3952K

Time (Lc1) - 1430 CDT

Occurrence #1      OVERRUN  
Phase of Operation      TAKEOFF - ABORTED

Finding(s)

1. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - HIGH VEGETATION
2. RUNWAY MAINTENANCE - INADEQUATE -
3. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
4. ABORTED TAKEOFF - DELAYED - PILOT IN COMMAND

Occurrence #2      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      TAKEOFF - ABORTED

Finding(s)

5. OBJECT - TREE(S)

-----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 DELAY IN ABORTING THE TAKEOFF. CONTRIBUTING FACTORS WERE THE TALL  
GRASS, INADEQUATE RUNWAY MAINTENANCE, AND TREES.



Brief of Accident (Continued)

File No. - 471

6/06/89

CREVE COEUR, MO

A/C Reg. No. N29309

Time (Lc1) - 1730 CDT

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

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      MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Finding(s)

4. TERRAIN CONDITION - HIGH OBSTRUCTION(S)
- 

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

Finding(s)

5. TERRAIN CONDITION - CROP
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER USE OF THE CARBURETOR HEAT BY THE PILOT AND CARBURETOR ICE. CONTRIBUTING FACTORS WERE: CARBURETOR ICING  
CONDITIONS, HIGH OBSTRUCTIONS AND TERRAIN CONDITIONS (CORN CROP).

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 564      6/25/89      KAISER,MO      A/C Reg. No. N9440T      Time (Lcl) - 1955 CDT

-----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	1	

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

Make/Model - CESSNA 210	Eng Make/Model - CONTINENTAL IO-470-E	ELT Installed/Activated - YES/NO
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 - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	OSAGE BEACH,MO	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	KAISER,MO	LEE C FINE
Wind Dir/Speed- LIGHT AND VARIABLE	ATC/Airspace	Runway Ident - 21
Visibility - 7.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 6497/ 100
Lowest Sky/Clouds - CLEAR	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 - 50	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - NO	Total - 811      Last 24 Hrs - 2
SE LAND	Months Since - 54	Make/Model- 240      Last 30 Days- 2
	Aircraft Type - UNK/NR	Instrument- 11      Last 90 Days- 2
		Multi-Eng - 350

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT SAID THAT DURING FINAL APPROACH, AND NEARING STALL SPEED, HE HEARD AN AUDIBLE HORN. HE INTERPRETED IT AS THE STALL WARNING HORN, AND CONTINUED HIS LANDING APPROACH, CONSEQUENTLY LANDING GEAR UP. THE ACFT SLID TO STOP ON THE RUNWAY SUSTAINING SUBSTANTIAL FUSELAGE AND PROPELLER DAMAGE. THE LANDING GEAR FUNCTIONED NORMALLY IN ALL PHASES DURING POST ACCIDENT INVESTIGATION. THE PILOT SAID HE INADVERTENTLY FORGOT TO LOWER THE LANDING GEAR.

Brief of Accident (Continued)

File No. - 564

6/25/89

KAISER,MO

A/C Reg. No. N9440T

Time (Lcl) - 1955 CDT

-----  
Occurrence #1        GEAR NOT EXTENDED  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

1. WHEELS UP LANDING - INADVERTENT - PILOT IN COMMAND
2. CHECKLIST - NOT USED - PILOT IN COMMAND
3. GEAR EXTENSION - NOT PERFORMED - 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 EXTEND THE LANDING GEAR. A FACTOR IN THE ACCIDENT WAS THE PILOT'S FAILURE TO USE THE CHECKLIST.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 560      7/03/89      ST. CHARLES, MO      A/C Reg. No. N49554      Time (Lcl) - 1515 CDT

-----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	0

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

Fire  
NONE

-----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- 360/012 KTS  
Visibility - 10.0 SM  
Lowest Sky/Clouds - 3000 FT SCATTERED  
Lowest Ceiling - 4000 FT OVERCAST  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
ST CHARLES, MO  
Destination  
LOCAL

ATC/Airspace

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

Airport Proximity  
ON AIRPORT

Airport Data

ST. CHARLES  
Runway Ident - 09  
Runway Lth/Wid - 3500/ 50  
Runway Surface - ASPHALT  
Runway Status - DRY

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

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

Age - 18  
Biennial Flight Review  
Current - YES  
Months Since - 9  
Aircraft Type - C-152

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 62  
Make/Model- 53  
Instrument- UNK/NR  
Multi-Eng - UNK/NR  
Last 24 Hrs - 0  
Last 30 Days- 0  
Last 90 Days- 0  
Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PRIVATE PILOT SAID THAT HE DEPARTED RUNWAY 9 IN ORDER TO PRACTICE SOME LOCAL CROSS-WIND TAKEOFFS AND LDGS. THE SURFACE WIND WAS ABOUT 10 TO 15 KNOTS AND ABOUT 70 TO 90 DEGREES FROM THE LEFT OF RUNWAY HEADING. THE ACFT BOUNCED HARD, BECAME AIRBORNE, DRIFTED TO THE RIGHT. THE PLT ELECTED TO CONTINUE WITH THE LDG AS OPPOSED TO MAKING A GO-AROUND, DUE TO PROXIMITY OF PARKED ACFT ON THE RAMP. HE ATTEMPTED TO BRAKE THE ACFT TO A HALT PRIOR TO ENTERING A BORDERING CORNFIELD, BUT THE RIGHT WING HIT THE CORN FIELD CAUSING THE ACFT TO SPIN AND STRIKE THE LEFT WING ON THE TERRAIN. THE NOSE WHEEL ENCOUNTERED A SMALL GULLEY AND THE ACFT FLIPPED INVERTED.

Brief of Accident (Continued)

File No. - 560

7/03/89

ST. CHARLES, MO

A/C Reg. No. N49554

Time (Lcl) - 1515 CDT

Occurrence #1            HARD LANDING  
Phase of Operation      LANDING

Finding(s)

1. WEATHER CONDITION - CROSSWIND
2. FLARE - IMPROPER - PILOT IN COMMAND
3. RECOVERY FROM BOUNCED LANDING - NOT ATTAINED - PILOT IN COMMAND
4. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
5. LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND
6. GO-AROUND - NOT PERFORMED - PILOT IN COMMAND
7. FLIGHT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND

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

Occurrence #3            ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - ROLL  
8. TERRAIN CONDITION - CROP  
9. TERRAIN CONDITION - DITCH

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:  
AIRCRAFT CONTROL WAS NOT MAINTAINED BY THE PILOT IN COMMAND DUE TO IMPROPER USE OF THE FLIGHT CONTROLS IN FLARING  
THE AIRCRAFT FOR LANDING AND COUNTERACTING THE EFFECTS OF THE CROSS-WIND ON THE DRIFTING AIRCRAFT.

ional Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 559      7/04/89      TUNAS,MO      A/C Reg. No. N757EJ      Time (Lcl) - 1300 CDT

-----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	Serious	Minor	None
Crew	0	0	1	0
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/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- 020/009 KTS  
Visibility      - 4.000 SM  
Lowest Sky/Clouds      - 4000 FT SCATTERED  
Lowest Ceiling      - NONE  
Obstructions to Vision- HAZE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point  
BUFFALO,MO

Destination  
CAMDENTON,MO

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      - GRASS/TURF  
Runway Status      - DRY  
HIGH VEGETATION

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

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

Age - 45  
Biennial Flight Review  
Current      - YES  
Months Since      - 2  
Aircraft Type - C-150

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total      - 515  
Make/Model- 221  
Instrument- UNK/NR  
Multi-Eng - 5  
Last 24 Hrs - 3  
Last 30 Days- 10  
Last 90 Days- 16  
Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE COMMERCIAL PILOT SAID THAT ABOUT TEN MINUTES AFTER TAKEOFF, THE ENGINE FAILED. AN EMERGENCY LANDING WAS ATTEMPTED WHICH RESULTED IN SUBSTANTIAL DAMAGE TO THE ACFT AND MINOR INJURIES TO THE PILOT. THE PILOT ESTIMATED SHE HAD ABOUT 5.5 GALLONS OF FUEL REMAINING IN THE TANKS PRIOR TO DEPARTURE. SHE SAID SHE WAS FLYING TO AN AIRPORT, THAT HAD FUEL FACILITIES, THAT WAS LOCATED ABOUT 25 MILES AWAY, TO REFUEL. POST ACCIDENT INVESTIGATION REVEALED THE FUEL TANKS TO BE EMPTY OF USABLE FUEL.



Brief of Accident (Continued)

File No. - 559

7/04/89

TUNAS,MO

A/C Reg. No. N757EJ

Time (Lc1) - 1300 CDT

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

Finding(s)

1. FLUID,FUEL - EXHAUSTION
  2. PREFLIGHT PLANNING/PREPARATION - POOR - PILOT IN COMMAND
  3. FUEL CONSUMPTION CALCULATIONS - INACCURATE - PILOT IN COMMAND
- 

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

-----

Occurrence #3      ON GROUND COLLISION WITH TERRAIN/WATER  
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:  
ENGINE FAILURE DUE TO FUEL EXHAUSTION BECAUSE OF IMPROPER FLIGHT PLANNING BY THE PILOT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 522      7/14/89      CAMDENTON,MO      A/C Reg. No. N2892A      Time (Lcl) - 1625 CDT

-----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	Crew 0	0	0	1
Accident Occurred During	-LANDING	Pass 0	0	0	5

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

Fire  
NONE

Crew 0  
Pass 0

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

Make/Model - PIPER PA-32-300  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 3400  
No. of Seats - 6

Eng Make/Model - LYCOMING IO-540-K165  
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- 090/010 KTS

Visibility - 20.0 SM

Lowest Sky/Clouds - 10000 FT SCATTERED

Lowest Ceiling - NONE

Obstructions to Vision- NONE

Precipitation - NONE

Condition of Light - DAYLIGHT

Itinerary

Last Departure Point

OLATHE,KS

Destination

CAMDENTON,MO

ATC/Airspace

Type of Flight Plan - IFR

Type of Clearance - IFR

Type Apch/Lndg - FULL STOP

Airport Proximity  
ON AIRPORT

Airport Data

MISTWOOD

Runway Ident - 25

Runway Lth/Wid - 2800/ 60

Runway Surface - ASPHALT

Runway Status - DRY

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

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE

SE LAND

Age - 29

Biennial Flight Review

Current - YES

Months Since - 1

Aircraft Type - PA-32

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total - 558

Make/Model- 448

Instrument- 78

Multi-Eng - 6

Last 24 Hrs - 1

Last 30 Days- 38

Last 90 Days- 97

Instrument Rating(s) - NONE

-----Narrative-----

WHILE ATTEMPTING HIS SECOND LDG, AFTER A PERSONAL CROSS COUNTRY FLIGHT, THE PILOT SAID THAT HE BOUNCED, THEN VEERED OFF THE RUNWAY SUBSTANTIALLY DAMAGING THE ACFT. THE PLT SAID THAT HE LANDED ON RUNWAY 25 WITH A 10 KNOT TAILWIND COMPONENT. HE SAID THAT HE NORMALLY LANDED TO THE WEST REGARDLESS OF THE WIND DIRECTION, AS THE LAST 100 YARDS OF THE RUNWAY WAS UPHILL. THE PILOT SAID HE THOUGHT A BRAKE MALFUNCTIONED, BUT POST ACCIDENT INVESTIGATION REVEALED NO MALFUNCTION OR PART FAILURE.

Brief of Accident (Continued)

File No. - 522

7/14/89

CAMDENTON, MO

A/C Reg. No. N2892A

Time (Lc1) - 1625 CDT

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

Finding(s)

1. WEATHER CONDITION - TAILWIND
2. IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND
3. PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
4. RECOVERY FROM BOUNCED LANDING - NOT PERFORMED - PILOT IN COMMAND
5. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

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

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

Finding(s)

6. TERRAIN CONDITION - ROUGH/UNEVEN

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
AIRCRAFT CONTROL WAS NOT MAINTAINED BY THE PILOT IN COMMAND.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 427      3/12/89      OLIVE BRANCH,MS      A/C Reg. No. N4948H      Time (Lcl) - 1100 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	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	- 1675	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 AIRPORT	
Method	- N/A	SAME AS ACC/INC			
Completeness	- N/A	Destination		Airport Data	
Basic Weather	- VMC	LOCAL		OLIVE BRANCH	
Wind Dir/Speed	- 070/011 KTS	ATC/Airspace		Runway Ident	- 36
Visibility	- 10.0 SM	Type of Flight Plan	- NONE	Runway Lth/Wid	- 5000/ 100
Lowest Sky/Clouds	- N/A	Type of Clearance	- NONE	Runway Surface	- ASPHALT
Lowest Ceiling	- 15000 FT BROKEN	Type Apch/Lndg	- TRAFFIC PATTERN	Runway Status	- DRY
Obstructions to Vision	- NONE				
Precipitation	- NONE				
Condition of Light	- DAYLIGHT				

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

Pilot-In-Command	Age - 21	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
STUDENT	Current - N/A	Total - 41	Last 24 Hrs - UNK/NR
	Months Since - N/A	Make/Model - 37	Last 30 Days - 12
	Aircraft Type - N/A	Instrument - UNK/NR	Last 90 Days - 19
		Multi-Eng - 0	Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

WHILE LANDING WITH A CROSSWIND, THE STUDENT PLT LOST CONTROL OF THE ACFT DURING THE ROLL-OUT. SUBSEQUENTLY, THE ACFT WENT OFF THE RWY, HIT A DITCH & NOSED OVER. NO PRE-ACDNT PART FAILURE OR MALFUNCTION WAS RPRTD.

Brief of Accident (Continued)

File No. - 427

3/12/89

OLIVE BRANCH, MS

A/C Reg. No. N4948H

Time (Lc1) - 1100 CST

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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. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
  4.      LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
- 

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

Finding(s)

5. TERRAIN CONDITION - DITCH
- 

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:  
THE PILOT'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL WHICH RESULTED IN AN INADVERTENT GROUND SWERVE. THE CROSSWIND AND  
DITCH WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 403      3/16/89      PASCAGOULA,MS      A/C Reg. No. N80542      Time (Lcl) - 2330 CST

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

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

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

Make/Model - CESSNA 172M	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 - 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	OFF AIRPORT/STRIP
Method - N/A	NEW ORLEANS,LA	
Completeness - N/A	Destination	<b>Airport Data</b>
Basic Weather - IMC	MOBILE,AL	JACKSON COUNTY
Wind Dir/Speed- 090/002 KTS		Runway Ident - 31
Visibility - .250 SM	<b>ATC/Airspace</b>	Runway Lth/Wid - 4500/ 150
Lowest Sky/Clouds - UNK/NR	Type of Flight Plan - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 200 FT OBSCURED	Type of Clearance - NONE	Runway Status - N/A
Obstructions to Vision- FOG	Type Apch/Lndg - UNK/NR	
Precipitation - NONE		
Condition of Light - NIGHT(DARK)		

-----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 - 65
SE LAND	Months Since - 17	Make/Model- 27
	Aircraft Type - C-152	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 ACFT WAS REPORTED MISSING WHEN IT DID NOT RETURN TO MOBILE AFTER A TRIP TO NEW ORLEANS ON 3/16/89. A SEARCH WAS INITIATED BY THE CIVIL AIR PATROL & THE ACFT WAS FOUND ON 3/19/89 WHERE IT CRASHED NEAR THE ARPT AT PASCAGOULA, MS. INITIAL IMPACT OCCURRED WITH TREES APRX 300 YARDS SHORT OF RWY 31. A WITNESS SAID HE HEARD AN ACFT FLY OVER THE ARPT AT APRX 2330 CST. AT THAT TIME, HE NOTED THE WX WAS EXTREMELY FOGGY. NO PREIMPACT PART FAILURE OR MALFUNCTION WAS FOUND DURING THE INVESTIGATION. THE NON-INSTRUMENT RATED PLT HAD LOGGED ONLY ABOUT 65 HRS FLT TIME.

Brief of Accident (Continued)

File No. - 403

3/16/89

PASCAGOULA, MS

A/C Reg. No. N80542

Time (Lc1) - 2330 CST

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

Finding(s)

1. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
2. LIGHT CONDITION - DARK NIGHT
3. WEATHER CONDITION - LOW CEILING
4. WEATHER CONDITION - FOG
5. WEATHER CONDITION - OBSCURATION
6. FLIGHT TO ALTERNATE DESTINATION - PERFORMED -
7. VFR FLIGHT INTO IMC - CONTINUED - PILOT IN COMMAND
8. LACK OF TOTAL INSTRUMENT TIME - PILOT IN COMMAND

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

Finding(s)

9. OBJECT - TREE(S)
10. VISUAL/AURAL PERCEPTION - PILOT IN COMMAND

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:  
CONTINUED FLIGHT BY THE PILOT INTO INSTRUMENT METEOROLOGICAL CONDITIONS (IMC). CONTRIBUTING FACTORS WERE: INADEQUATE  
PREFLIGHT PLANNING, WEATHER CONDITIONS, PILOT'S LACK OF INSTRUMENT FLIGHT TIME, LACK OF VISUAL CUES AT NIGHT, AND  
TREES AT THE CRASH SITE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 496      5/03/89      BOZEMAN,MT      A/C Reg. No. N9858D      Time (Lcl) - 1607 MDT

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

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

-----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 - 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 - FSS	Last Departure Point	ON AIRPORT
Method - IN PERSON	MISSOULA,MT	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	GALLATIN FIELD
Wind Dir/Speed- 210/010 KTS	ATC/Airspace	Runway Ident - 30
Visibility - 30.0 SM	Type of Flight Plan - VFR	Runway Lth/Wid - 9002/ 150
Lowest Sky/Clouds - CLEAR	Type of Clearance - VFR	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 - 53	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 1200
SE LAND,SE SEA	Months Since - 1	Make/Model- 1100
	Aircraft Type - PA-18A	Instrument- 0
		Multi-Eng - 0
		Last 24 Hrs - 6
		Last 30 Days- UNK/NR
		Last 90 Days- 8
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

ACCORDING TO THE PLT, WHEN HE ARRIVED IN THE AREA OF THE ARPT, HE CONTACTED THE FLT SVC STATION (FSS) & WAS ADVISED THAT RWY 30 (A 9002' ASPHALT RWY) WAS ACTIVE & THAT THE WIND WAS FROM 210 DEG AT 10, GUSTING 15 KTS. THE ARPT ALSO HAD A TURF RWY (RWY 3/21) WHICH WAS 3400' LONG. THE PLT STATED THAT DRG TOUCHED DOWN ON RWY 30, A GUST OF WIND LIFTED THE LEFT WING & THE ACFT VEERED OFF THE RIGHT SIDE OF THE RWY. HE APPLIED POWER, BUT THE RIGHT WING HIT THE GROUND & THE ACFT CARTWHEELED. SHORTLY AFTER COMING TO REST, IT BEGAN BURNING & WAS DESTROYED BY FIRE.



Brief of Accident (Continued)

File No. - 496

5/03/89

BOZEMAN,MT

A/C Reg. No. N9858D

Time (Lc1) - 1607 MDT

Occurrence #1      LOSS OF CONTROL - ON GROUND  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

1. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
2. WRONG RUNWAY - SELECTED - PILOT IN COMMAND
3. WEATHER CONDITION - CROSSWIND
4. WEATHER CONDITION - GUSTS
5. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
6. GROUND LOOP/SWERVE - UNCONTROLLED -

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

-----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 WHICH LED TO HIS FAILURE TO MAINTAIN DIRECTIONAL CONTROL DURING THE  
LANDING. CONTRIBUTING FACTORS WERE: USE OF AN UNFAVORABLE RUNWAY, CROSSWIND, AND GUSTS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 414      6/15/89      FORT BENTON, MT

A/C Reg. No. N4971Q

Time (Lcl) - 0945 MDT

-----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

Fire

Crew

Flight Conducted Under -14 CFR 137

NONE

Pass

Accident Occurred During -LANDING

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

Make/Model - CESSNA A188B  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 3300  
No. of Seats - 1

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

ATC/Airspace

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

Airport Proximity  
ON AIRSTRIP

Airport Data

PVT STRIP  
Runway Ident - 18  
Runway Lth/Wid - 1800/ 75  
Runway Surface - GRASS/TURF  
Runway Status - DRY

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

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

Age - 25  
Biennial Flight Review  
Current - YES  
Months Since - 5  
Aircraft Type - PA-30

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 2650  
Make/Model- 1300  
Instrument- 200  
Multi-Eng - 100  
Last 24 Hrs - 5  
Last 30 Days- 170  
Last 90 Days- 270

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD THAT WHILE LANDING, THERE WAS A FAILURE OF THE BOLTS THAT HELD THE TAILWHEEL ASSEMBLY TO THE FUSELAGE. THE TAILWHEEL THEN SWIVELED & THE ACFT GROUNDLOOPED. THE PLT NOTED THAT THE BOLTS HAD BEEN SUBJECTED TO HEAVY FORCES DURING OPERATIONS ON ROUGH, DIRT, AG OPERATING AREAS.

Brief of Accident (Continued)

File No. - 414

6/15/89

FORT BENTON, MT

A/C Reg. No. N4971Q

Time (Lcl) - 0945 MDT

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

Finding(s)

1. LANDING GEAR, TAILWHEEL ASSEMBLY - FAILURE, TOTAL
- 

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

Finding(s)

2. DIRECTIONAL CONTROL - NOT MAINTAINED -
  3. GROUND LOOP/SWERVE - UNCONTROLLED -
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE TAILWHEEL ASSEMBLY ATTACHING BOLTS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 500      7/07/89      FORT BENTON, MT      A/C Reg. No. N2802J      Time (Lcl) - 0455 MDT

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

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

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

Make/Model	- CESSNA T188C	Eng Make/Model	- CONTINENTAL TS10-520-T	ELT Installed/Activated	- NO -N/A
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 4200	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 1	Rated Power	- 310 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- 255/003 KTS</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 - DAWN</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 - NONE</p>	<p>Airport Proximity</p> <p>ON AIRSTRIP</p> <p>Airport Data</p> <p>Runway Ident - 27</p> <p>Runway Lth/Wid - 2400/ 75</p> <p>Runway Surface - DIRT</p> <p>Runway Status - DRY</p>
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-----Personnel Information-----

Pilot-In-Command	Age - 25	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
ATP,CFI	Current - YES	Total - 2600
SE LAND,ME LAND	Months Since - 6	Last 24 Hrs - 6
	Aircraft Type - PA-30	Make/Model- 1300
		Last 30 Days- 150
		Instrument- 220
		Last 90 Days- 270
		Multi-Eng - 100

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT SAID HE WAS TAKING OFF ON A DIRT STRIP WITH A LOAD OF CHEMICALS. AFTER THE ACFT ACCELERATED TO ABOUT 60 KTS, THE LEFT MAIN LANDING GEAR COLLAPSED. THE ACFT THEN SETTLED ONTO ITS LEFT WING & WAS DAMAGED. THE PLT SAID THE ATTACHING BOLTS ON THE GEAR HAD FAILED. AN EXAM REVEALED THE BOLTS WERE NECKED DOWN IN THE AREA OF THE FRACTURE (INDICATIVE OF OVERLOAD FAILURE).

Brief of Accident (Continued)

File No. - 500

7/07/89

FORT BENTON, MT

A/C Reg. No. N2802J

Time (Lcl) - 0455 MDT

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Occurrence #1      MAIN GEAR COLLAPSED  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

1. LANDING GEAR, MAIN GEAR ATTACHMENT - OVERLOAD
  2.     UNDETERMINED
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
OVERLOAD FAILURE OF THE LEFT MAIN LANDING GEAR ATTACHING BOLTS FOR AN UNKNOWN REASON.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 464      1/11/89      MADISON, NC      A/C Reg. No. N9330B      Time (Lcl) - 0728 EST

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

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage						
Name of Carrier	-ATLANTIC AERO, INC	DESTROYED						
Type of Operation	-NON SCHED, DOMESTIC, CARGO	Fire						
Flight Conducted Under	-14 CFR 135	ON GROUND	Crew	0	1	0	0	0
Accident Occurred During	-APPROACH		Pass	0	0	0	0	0

-----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	Last Departure Point		OFF AIRPORT/STRIP	
Method	- TELEPHONE	ROANOKE, VA			
Completeness	- FULL	Destination		Airport Data	
Basic Weather	- IMC	GREENSBORO, NC		ROCKINGHAM COUNTY/SHILOH	
Wind Dir/Speed	- 020/004 KTS			Runway Ident	- 31
Visibility	- .125 SM	ATC/Airspace		Runway Lth/Wid	- 5200/ 100
Lowest Sky/Clouds	- UNK/NR	Type of Flight Plan	- IFR	Runway Surface	- ASPHALT
Lowest Ceiling	- 100 FT OBSCURED	Type of Clearance	- IFR	Runway Status	- DRY
Obstructions to Vision	- FOG	Type Apch/Lndg	- SDF		
Precipitation	- NONE				
Condition of Light	- DAWN				

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

Pilot-In-Command	Age - 22	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL, CFI	Current - YES	Total - 2100	Last 24 Hrs - UNK/NR
SE LAND, ME LAND	Months Since - 0	Make/Model - 360	Last 30 Days - UNK/NR
	Aircraft Type - C-208B	Instrument - UNK/NR	Last 90 Days - UNK/NR
		Multi-Eng - 300	Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

AS THE PLT WAS EN ROUTE TO GREENSBORO (HIS DESTN), HE FLEW PAST SHILOH & NOTED THAT WX AT THE ARPT WAS CLEAR, BUT FROM ABOUT 10 SOUTH OF SHILOH, GROUND FOG EXTENDED TO THE SOUTH. AT 0634 EST, HE CONTACTED GREENSBORO TOWER & WAS ADZD THE RVR WAS 1600 FT. HIS MINIMUMS WERE 1800 FT. HE HELD FOR A PERIOD OF TIME, BUT THE WX CONTD TO DETERIORATE, SO HE DIVERTED TO THE ROCKINGHAM COUNTY/SHILOH ARPT, WHERE NO WX RPRTG FACILITIES WERE AVAILABLE. AFTER BEING VECTORED OVER THE ALTERNATE ARPT, HE WAS UNABLE TO GET ENOUGH VISUAL CUES FOR A VISUAL APCH, SO HE ELECTED TO MAKE AN SDF APCH. THE PLT STATED THAT WHEN HE REACHED THE MIN DSCNT ALT (MDA), HE SAW THE RWY & PROCEEDED TO MAKE A VISUAL APCH. AS HE CONTD, PATCHY FOG BEGAN TO OBSCURE THE RWY, SO HE MANEUVERED THE ACFT TO KEEP IT IN SITE, THEN ELECTED TO GO AROUND. HOWEVER, AS HE BEGAN THE GO-AROUND, THE ACFT HIT TREES & CRASHED. ELEVATION OF THE CRASH SITE WAS APRX 700 FT. MDA FOR THE APCH WAS 1120 FT MSL.

Brief of Accident (Continued)

File No. - 464

1/11/89

MADISON, NC

A/C Reg. No. N9330B

Time (Lcl) - 0728 EST

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

Finding(s)

1. FLIGHT TO ALTERNATE DESTINATION
  2. WEATHER CONDITION - LOW CEILING
  3. WEATHER CONDITION - FOG
  4. MISSED APPROACH - DELAYED - PILOT IN COMMAND
  5. IFR PROCEDURE - IMPROPER - PILOT IN COMMAND
  6. OBJECT - TREE(S)
  7. 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:  
IMPROPER IFR PROCEDURE BY THE PILOT AND HIS FAILURE TO MAINTAIN THE MINIMUM DESCENT ALTITUDE (MDA). CONTRIBUTING  
FACTORS WERE: LOW CEILING, FOG, DELAYED MISSED APPROACH BY THE PILOT, AND TREES.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 509      3/11/89      SANFORD, NC      A/C Reg. No. N13188      Time (Lcl) - 1730 EST

-----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	2
Accident Occurred During - APPROACH					

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

Make/Model - CESSNA 172M	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-----

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	SANFORD LEE COUNTY
Wind Dir/Speed- 220/006 KTS	ATC/Airspace	Runway Ident - 21
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4300/ 75
Lowest Sky/Clouds - 25000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Obstructions to Vision- NONE	FORCED LANDING	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 35	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 53
SE LAND	Months Since - 2	Last 24 Hrs - 1
	Aircraft Type - C-150	Make/Model- 4
		Instrument- 1
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PRIVATE PILOT HAD OBTAINED HIS PILOT CERTIFICATE ABOUT SIX WEEKS PRIOR TO THE ACCIDENT. HE HAD LOGGED ABOUT 53 PILOT HOURS AT THE TIME OF THE ACCIDENT. HE HAD ABOUT 4 HOURS IN THE C-172 AND HAD JUST CHECKED OUT IN IT. THE PLT HAD TAKEN HIS BROTHER AND A FRIEND FOR A RIDE IN THE LOCAL AREA FOR ABOUT AN HOUR. UPON RETURNING TO THE FIELD, HE MADE A TRAFFIC PATTERN AND DURING THE TURN FROM DOWN WIND TO BASE TRIED TO ADD POWER TO CORRECT FOR LOW ALTITUDE. THE ENGINE DID NOT RESPOND. HE LANDED IN A PLOWED GARDEN AND THE AIRPLANE NOSED OVER. SUBSEQUENTLY, THE ENGINE WAS INSPECTED AND A RUN PERFORMED. IT OPERATED SATISFACTORILY. ATMOSPHERIC CONDITIONS WERE FAVORABLE FOR THE FORMATION OF CARBURETOR ICE. THE CARBURETOR HEAT CONTROL WAS FOUND IN THE COLD POSITION.



Brief of Accident (Continued)

File No. - 509

3/11/89

SANFORD, NC

A/C Reg. No. N13188

Time (Lcl) - 1730 EST

Occurrence #1      LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation      APPROACH - VFR PATTERN - BASE TURN

Finding(s)

1. FUEL SYSTEM, CARBURETOR - ICE
2. WEATHER CONDITION - CARBURETOR ICING CONDITIONS
3.      INADEQUATE TRANSITION/UPGRADE TRAINING - PILOT IN COMMAND
4. CARBURETOR HEAT - IMPROPER USE OF - PILOT IN COMMAND

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
6. TERRAIN CONDITION - SOFT

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
CARBURETOR ICE DUE TO THE FAILURE OF THE PILOT TO PROPERLY USE THE CARBURETOR HEAT CONTROL DURING DESCENT AND FLIGHT  
IN THE TRAFFIC PATTERNS AT REDUCED POWER. UNDERLYING THIS IS INADEQUATE TRAINING IN THE PROPER UNDERSTANDING OF  
CARBURETOR ICING AND THE PROPER METHODOLOGY OF DEALING WITH THIS PHENOMENON.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 425      4/26/89      NEW BERN,NC      A/C Reg. No. N1595Q      Time (Lcl) - 1930 EDT

-----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 - CESSNA 150  
Landing Gear - TRICYCLE-FIXED  
Max Gross Wt - 1650  
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 - 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- UNK/NR  
Visibility - 15.0 SM  
Lowest Sky/Clouds - 4000 FT SCATTERED  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
NEW BERN,NC  
Destination  
LOCAL

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance - NONE  
Type Apch/Lndg - SIMULATED 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 - 23

Biennial Flight Review

Current - YES  
Months Since - 5  
Aircraft Type - C-150

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total	- 82	Last 24 Hrs	- UNK/NR
Make/Model	- 60	Last 30 Days	- 4
Instrument	- UNK/NR	Last 90 Days	- 10
Multi-Eng	- 0	Rotorcraft	- 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT WAS PRACTICING A FORCED LANDING WITH AN INTENDED POWER RECOVERY AT 100 FT AGL. HE STATED THAT AS POWER WAS APPLIED TO GO AROUND, THE AIRPLANE ENCOUNTERED TURBULENCE AT TREETOP LEVEL & THE RIGHT WING DROPPED. HE APPLIED CORRECTIVE ACTION, BUT THE AIRPLANE SETTLED TO A FEW FEET ABOVE THE GROUND. HE ELECTED TO LAND, BUT DURING THE LANDING ROLL-OUT ON WET TERRAIN, THE AIRPLANE COLLIDED WITH A DITCH & WAS DAMAGED.

Brief of Accident (Continued)

File No. - 425

4/26/89

NEW BERN, NC

A/C Reg. No. N1595Q

Time (Lcl) - 1930 EDT

---

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

Finding(s)

1. EMERGENCY PROCEDURE - SIMULATED -
  2. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
  3. GO-AROUND - DELAYED - PILOT IN COMMAND
  4. WEATHER CONDITION - TURBULENCE, CLEAR AIR
  5. PRECAUTIONARY LANDING - PERFORMED -
  6. TERRAIN CONDITION - WET
  7. TERRAIN CONDITION - DITCH
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S IMPROPER IN-FLIGHT PLANNING/DECISION AND A DELAYED GO-AROUND. TURBULENCE, WET TERRAIN, AND A DITCH WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 454	5/07/89	FUQUAY-VARINA, NC	A/C Reg. No. N7VC	Time (Lc1) - 1720 EDT
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-----Basic Information-----

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

---

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

Make/Model - SMITHGALL PITTS SPECIAL S-1C	Eng Make/Model - LYCOMING O-360	ELT Installed/Activated - NO -N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1150	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 1	Rated Power - 180 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	RALEIGH, NC	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	APEX, NC	Runway Ident - N/A
Wind Dir/Speed- 300/022 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 5000 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		

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

Pilot-In-Command	Age - 59	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 6865
SE LAND, ME LAND, SE SEA	Months Since - 8	Make/Model- 1310
	Aircraft Type - C-210	Instrument- 258
		Multi-Eng - 65
		Last 24 Hrs - 1
		Last 30 Days- 15
		Last 90 Days- 50

Instrument Rating(s) - AIRPLANE

---

-----Narrative-----

THE PILOT WAS PRACTICING AN AEROBATIC MANEUVER WHICH CULMINATED IN A SPIN. SUBSEQUENTLY, HE FOUND HIMSELF IN A POSITION FROM WHICH THERE WAS INSUFFICIENT ALTITUDE TO RECOVER. WHILE STILL DESCENDING, THE AIRCRAFT HIT TREES & CRASHED. THE PILOT WAS ABLE TO CRAWL AWAY FROM THE AIRCRAFT BEFORE IT BEGAN BURNING. SUBSEQUENTLY, THE AIRCRAFT WAS DEMOLISHED BY FIRE.

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Brief of Accident (Continued)

File No. - 454

5/07/89

FUQUAY-VARINA, NC

A/C Reg. No. N7VC

Time (Lc1) - 1720 EDT

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

Finding(s)

1. AEROBATICS - PERFORMED -
2. STALL/SPIN - INITIATED -
3. ALTITUDE - INADEQUATE - PILOT IN COMMAND

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT DID NOT MAINTAIN SUFFICIENT ALTITUDE TO INSURE RECOVERY FROM AN AEROBATIC MANEUVER AND SPIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 447      5/27/89      INDIAN TRAIL, NC      A/C Reg. No. N13630      Time (Lcl) - 1415 EDT

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

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

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

Make/Model - CESSNA 177	Eng Make/Model - LYCOMING O-360-A1F6D	ELT Installed/Activated - YES/YES
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	OFF AIRPORT/STRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	INDIAN TRAIL
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - 04
Visibility - 14.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2300/ 60
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 - UNK/NR	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 159
SE LAND	Months Since - 7	Last 24 Hrs - UNK/NR
	Aircraft Type - UNK/NR	Make/Model- 3
		Instrument- 2
		Last 30 Days- 4
		Last 90 Days- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

AFTER LANDING ON A 2300 FT RWY IN CALM WIND, THE ACFT BOUNCED 3 TIMES & THE PLT ELECTED TO ABORT THE LANDING. DURING THE ABORTED LANDING, THE ACFT STRUCK THE TOP WIRE OF MARKED UTILITY LINES & CRASHED TO THE GROUND. THE UTILITY LINES WERE LOCATED APRX 450 FT FROM THE DEPARTURE END OF THE RWY. NO PREIMPACT MECHANICAL PROBLEMS OF THE ACFT WERE RPRTD.

Brief of Accident (Continued)

File No. - 447

5/27/89

INDIAN TRAIL, NC

A/C Reg. No. N13630

Time (Lc1) - 1415 EDT

-----  
Occurrence #1            IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      LANDING - ABORTED

Finding(s)

1. FLARE - IMPROPER - PILOT IN COMMAND
  2. RECOVERY FROM BOUNCED LANDING
  3. OBJECT - WIRE, TRANSMISSION(MARKED)
  4. ABORTED LANDING - DELAYED - 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 DELAY IN ABORTING THE LANDING AFTER A BOUNCED LANDING. CONTRIBUTING FACTORS WERE: IMPROPER FLARE BY THE  
PILOT AND THE TRANSMISSIONS LINES.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 455      6/03/89      TOWNSVILLE, NC      A/C Reg. No. N1769      Time (Lcl) - 1756 EDT

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

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

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

Make/Model - BLOODWORTH PITTS SPECIAL S-1C	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 - 900	Engine Type - RECIPROCATING-CARBURETOR		
No. of Seats - 1	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	UNK/NR	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	UNK/NR	
Wind Dir/Speed- 220/008 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 7.0 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 - UNK/NR	Total - 1600
SE LAND, ME LAND	Months Since - UNK/NR	Last 24 Hrs - UNK/NR
	Aircraft Type - UNK/NR	Make/Model- UNK/NR
		Instrument- UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR
		Multi-Eng - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT WAS PERFORMING AEROBATICS FOR A GROUP OF FRIENDS THAT WERE HAVING A COOK-OUT. ACCORDING TO WITNESSES, HE PERFORMED OVERHEAD FOR 10 TO 15 MINUTES; DOING LOOPS, ROLLS & STALLS, AND FLEW CLOSE TO BOATS ON A LAKE. JUST BEFORE CRASHING IN A WOODED AREA, THE AIRCRAFT ENTERED A SPIN FROM WHICH IT DID NOT RECOVER. AFTER IMPACT, A FIRE ERUPTED & THE AIRCRAFT WAS DESTROYED.



Brief of Accident (Continued)

File No. - 455

6/03/89

TOWNSVILLE, NC

A/C Reg. No. N1769

Time (Lc1) - 1756 EDT

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

Finding(s)

1. AEROBATICS - PERFORMED -
  2. ALTITUDE - INADEQUATE - PILOT IN COMMAND
  3. STALL/SPIN - NOT CORRECTED - PILOT IN COMMAND
  4.        OSTENTATIOUS DISPLAY - 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:  
INADEQUATE ALTITUDE FOR THE PILOT TO RECOVER FROM A SPIN. A CONTRIBUTING FACTOR WAS HIS OSTENTATIOUS DISPLAY.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 445      3/31/89      GARRISON,ND      A/C Reg. No. N6071K      Time (Lcl) - 1300 CST

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries		
Type of Operation - INSTRUCTIONAL	Fire	0	Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	0	0	0	2
Accident Occurred During -LANDING	Crew	0	0	0	0
	Pass	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	ON AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	GARRISON
Wind Dir/Speed- 150/008 KTS	ATC/Airspace	Runway Ident - 13
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3050/ 60
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - SIMULATED FORCED LANDING	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 51	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 755
SE LAND	Months Since - 6	Make/Model- 396
	Aircraft Type - C-182	Instrument- 76
		Last 24 Hrs - 0
		Last 30 Days- 3
		Last 90 Days- 8

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE STUDENT PILOT & INSTRUCTOR (CFI) WERE PRACTICING A SIMULATED EMERGENCY LANDING ON RWY 13 WITH THE STUDENT OPERATING THE CONTROLS. THE CFI TOLD THE STUDENT TO EXTEND FULL FLAPS WHEN HE WAS SURE HE COULD LAND ON THE RWY. THE STUDENT COMPLIED, BUT THE ACFT TOUCHED DOWN HARD & BOUNCED BACK IN THE AIR. THE CFI TOOK THE CONTROLS & ATTEMPTED A GO-AROUND; HOWEVER, HE THOUGHT THE RUDDER CONTROL WAS INEFFECTIVE. SUBSEQUENTLY, THE LEFT WING CONTACTED THE RWY & THE ACFT WENT OFF THE LEFT SIDE OF THE RWY. A POST-ACDNT EXAM REVEALED NO EVIDENCE OF PREIMPACT DAMAGE OR MALFUNCTION. HOWEVER, THERE WAS EVIDENCE THAT THE HARD LANDING HAD DAMAGED THE NOSE GEAR WHICH EFFECTED THE NOSEWHEEL STEERING & RUDDER CONTROL SYSTEMS.

Brief of Accident (Continued)

File No. - 445

3/31/89

GARRISON,ND

A/C Reg. No. N6071K

Time (Lcl) - 1300 CST

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

Finding(s)

1. FLARE - IMPROPER - DUAL STUDENT
2. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
3. LANDING GEAR,NOSE GEAR - OVERLOAD

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

Finding(s)

4. DIRECTIONAL CONTROL - NOT MAINTAINED -
5. GROUND LOOP/SWERVE - UNCONTROLLED -

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER FLARE BY THE STUDENT AND INADEQUATE SUPERVISION OF THE FLIGHT BY THE CFI WHICH DAMAGED THE NOSE GEAR AND  
RESTRICTED MOVEMENT OF THE NOSEWHEEL STEERING AND RUDDER CONTROL.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 448      4/05/89      DEVILS LAKE,ND      A/C Reg. No. N7523K      Time (Lcl) - 1745 CDT

-----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 - PIPER PA-18	Eng Make/Model - LYCOMING O-235-E	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 - 115 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	DEVILS LAKE
Wind Dir/Speed- 030/008 KTS	ATC/Airspace	Runway Ident - 31
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 5509/ 150
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 - 35	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 496
SE LAND	Months Since - 2	Last 24 Hrs - 6
	Aircraft Type - C-182RG	Make/Model- 15
		Last 30 Days- 15
		Instrument- 89
		Last 90 Days- 49
		Multi-Eng - 0
		Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD THAT AS HE WAS LANDING ON RWY 31 WITH A WIND FROM 030 DEG AT 8 KTS, HE LOST DIRECTIONAL CONTROL & THE PLANE GROUND LOOPED TO THE RIGHT. DURING THE OCCURRENCE, THE LEFT WING STRUCK THE SURFACE & THE LEFT MAIN SPAR WAS BENT. THE PLT HAD 15 HRS OF FLT TIME IN THIS MAKE & MODEL OF ACFT.

Brief of Accident (Continued)

File No. - 448

4/05/89

DEVILS LAKE,ND

A/C Reg. No. N7523K

Time (Lcl) - 1745 CDT

-----  
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
  3. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
  4. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
  5. LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
- 

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:  
INADEQUATE COMPENSATION FOR WIND CONDITIONS BY THE PILOT, WHICH RESULTED IN LOSS OF DIRECTIONAL CONTROL AND AN  
INADVERTENT GROUND LOOP/SWERVE. CONTRIBUTING FACTORS WERE: THE CROSSWIND AND THE PILOT'S LACK OF FAMILIARITY WITH  
THE AIRCRAFT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 561      7/02/89      STOCKVILLE, NE      A/C Reg. No. N6629Q      Time (Lcl) - 1200 CDT

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

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

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

Make/Model - GRUMMAN G-164B	Eng Make/Model - P&W R-985-ANI	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	CURTIS, NE	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	
Wind Dir/Speed- 160/005 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - GRASS/TURF
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 - 58	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 5000
SE LAND	Months Since - 17	Make/Model- 4600
	Aircraft Type - UNK/NR	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 10
		Last 30 Days- 150
		Last 90 Days- 200
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT SAID THAT DURING AN AERIAL APPLICATION OPERATION, THE ENGINE SUSTAINED A TOTAL MECHANICAL FAILURE. AN EMERGENCY LDG WAS ATTEMPTED WHICH RESULTED IN SUBSTANTIAL DAMAGE TO THE ACFT AND NO INJURIES TO THE PLT. POST ACCIDENT INVESTIGATION REVEALED A BROKEN CYLINDER TO BE THE CAUSE OF THE ENGINE FAILURE.

Brief of Accident (Continued)

File No. - 561

7/02/89

STOCKVILLE,NE

A/C Reg. No. N6629Q

Time (Lcl) - 1200 CDT

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

Finding(s)

1. POWERPLANT - FAILURE,TOTAL
  2. ENGINE ASSEMBLY,CYLINDER - FAILURE,TOTAL
  3. EMERGENCY PROCEDURE - ATTEMPTED - PILOT IN COMMAND
- 

Occurrence #2            FORCED LANDING  
Phase of Operation       DESCENT - EMERGENCY

-----

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

Finding(s)

4. TERRAIN CONDITION - NONE SUITABLE
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
TOTAL FAILURE OF THE POWERPLANT CAUSED BY A BROKEN CYLINDER.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 409      3/08/89      LINCOLN PARK,NJ      A/C Reg. No. N94252      Time (Lcl) - 1145 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
Flight Conducted Under	-14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During	-TAKEOFF					

-----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	- 1675	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 2	Rated Power	- 108 HP		

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

<p>Weather Data</p> <p>Wx Briefing      - UNK/NR</p> <p>Method           - UNK/NR</p> <p>Completeness    - UNK/NR</p> <p>Basic Weather    - VMC</p> <p>Wind Dir/Speed- 040/010 KTS</p> <p>Visibility        - UNK/NR</p> <p>Lowest Sky/Clouds - 4000 FT THIN BKN</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      - NONE</p>	<p>Airport Proximity</p> <p style="padding-left: 20px;">ON AIRPORT</p> <p>Airport Data</p> <p style="padding-left: 20px;">LINCOLN PARK</p> <p>Runway Ident       - 01</p> <p>Runway Lth/Wid    - 2942/ 40</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;">STUDENT</p>	<p>Age - 27</p> <p>Biennial Flight Review</p> <p style="padding-left: 20px;">Current           - N/A</p> <p style="padding-left: 20px;">Months Since      - N/A</p> <p style="padding-left: 20px;">Aircraft Type      - N/A</p>	<p>Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <table border="0" style="width: 100%;"> <tr> <td>Total</td> <td>- 67</td> <td>Last 24 Hrs</td> <td>- 1</td> </tr> <tr> <td>Make/Model</td> <td>- 63</td> <td>Last 30 Days</td> <td>- 14</td> </tr> <tr> <td>Instrument</td> <td>- 2</td> <td>Last 90 Days</td> <td>- 29</td> </tr> </table>	Total	- 67	Last 24 Hrs	- 1	Make/Model	- 63	Last 30 Days	- 14	Instrument	- 2	Last 90 Days	- 29
Total	- 67	Last 24 Hrs	- 1											
Make/Model	- 63	Last 30 Days	- 14											
Instrument	- 2	Last 90 Days	- 29											

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT & FLT EXAMINER (F/E) WERE ON A PRIVATE PLT CHECK FLT TO CHECK THE STUDENT. WHEN THE TAKEOFF ROLL COMMENCED, THE F/E'S SHOULDER HARNESS WAS HANGING OUTSIDE HIS CLOSED DOOR. AS THE ACFT MOVED FASTER DOWN THE RWY, A "BANGING" NOISE WAS HEARD. THE F/E OPENED HIS DOOR & RETRIEVED THE SHOULDER HARNESS, BUT DRG THIS TIME, THE ACFT MOVED TO THE LEFT, SO THE STUDENT REDUCED POWER TO ABORT THE TAKEOFF. HOWEVER, THE F/E TOOK CONTROL OF THE ACFT, APPLIED POWER & ATTEMPTED TO TAKEOFF. SHORTLY AFTER LIFT-OFF, THE ACFT SETTLED & HIT A SNOWBANK AT THE LEFT SIDE OF THE RWY. THE F/E THEN "CUT" THE POWER & APPLIED MAX BRAKING, BUT BRAKING WAS NOT EFFECTIVE ON SNOW & WET GRASS BESIDE THE RWY. BEFORE STOPPING, THE ACFT STRUCK A PARKED BELL 206 HELICOPTER. THERE WAS A 10 KT QUARTERING X-WIND FROM THE RIGHT WHEN THE ACFT OCCURRED.



Brief of Accident (Continued)

File No. - 409

3/08/89

LINCOLN PARK,NJ

A/C Reg. No. N94252

Time (Lcl) - 1145 EST

Occurrence #1 MISCELLANEOUS/OTHER  
Phase of Operation TAKEOFF

Finding(s)

1. SHOULDER HARNESS - NOT USED - CHECK PILOT
2. MISC EQPT/FURNISHINGS, SHOULDER HARNESS - NOT SECURED
3. AIRCRAFT PREFLIGHT - IMPROPER - CHECK PILOT

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

Finding(s)

4. PLANNING-DECISION - IMPROPER - CHECK PILOT
5. LIFT-OFF - PREMATURE - CHECK PILOT
6. WEATHER CONDITION - CROSSWIND
7. TERRAIN CONDITION - SNOWBANK
8. PROPER ALIGNMENT - NOT MAINTAINED - CHECK PILOT

Occurrence #3 ON GROUND COLLISION WITH OBJECT  
Phase of Operation TAKEOFF - ABORTED

Finding(s)

9. TERRAIN CONDITION - SNOW COVERED
10. TERRAIN CONDITION - WET
11. OBJECT - AIRCRAFT PARKED

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER DECISION AND PLANNING BY THE CHECK PILOT (F/E) WHICH RESULTED IN LOSS OF PROPER ALIGNMENT AND COLLISION  
WITH A SNOWBANK AT THE EDGE OF THE RUNWAY. CONTRIBUTING FACTORS WERE: INADEQUATE PREFLIGHT BY THE F/E, F/E'S  
UNSECURED SHOULDER HARNESS, PREMATURE LIFT-OFF BY THE F/E, CROSSWIND, SNOWBANK & WET/SNOW COVERED TERRAIN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 515      5/09/89      REGINA, NM      A/C Reg. No. N88RA      Time (Lcl) - 1430 MDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries			
Type of Operation -TEST FLIGHT	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 - ENSTROM F-28C	Eng Make/Model - LYCOMING HIO-360-E1AD	ELT Installed/Activated - UNK/NR
Landing Gear - SKID	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 2350	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 3	Rated Power - 205 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	SAME AS ACC/INC	Runway Ident - N/A
Wind Dir/Speed- 080/015 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 30.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 5000 FT	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - 5000 FT BROKEN	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 52	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 10000
SE LAND, ME LAND	Months Since - 1	Make/Model- 60
HELICOPTER	Aircraft Type - UNK/NR	Instrument- 120
		Multi-Eng - 2000
		Last 24 Hrs - 3
		Last 30 Days- 35
		Last 90 Days- 100
		Rotorcraft - 300

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE CONDUCTING A TEST FLT FOLLOWING REPAIRS TO THE TAIL ROTOR DUE TO AN EARLIER ACCIDENT THE PLT STRUCK THE TAIL ROTOR ON THE GROUND WHILE TRANSITIONING FROM FORWARD FLT TO A HOVER. THE GROUND CONTACT CAUSED THE TAIL ROTOR DRIVE SHAFT TO FAIL AND THE HELICOPTER SUSTAINED SUBSTANTIAL DAMAGE IN THE ENSUING CRASH. THE DENSITY ALTITUDE AT THE TIME OF THE ACCIDENT WAS CALCULATED TO BE 10,400 FT. THE ENSTROM F-28C OPERATORS HANDBOOK NOTES THAT THE GROUND EFFECT HOVER CEILING IS 8,800 FT.

Brief of Accident (Continued)

File No. - 515

5/09/89

REGINA,NM

A/C Reg. No. N88RA

Time (Lcl) - 1430 MDT

-----  
Occurrence #1        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

1. TERRAIN CONDITION - GRASS
  2. PLANNED APPROACH - POOR - PILOT IN COMMAND
  3. WEATHER CONDITION - HIGH DENSITY ALTITUDE
  4. PERFORMANCE DATA - DISREGARDED - PILOT IN COMMAND
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S POORLY PLANNED APPROACH AND DISREGARD OF THE HELICOPTERS PERFORMANCE DATA. CONTRIBUTING TO THE ACCIDENT  
WAS THE HIGH DENSITY ALTITUDE CONDITIONS WHICH EXISTED AT THE TIME OF THE ACCIDENT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 418      6/16/89      LAS CRUCES, NM      A/C Reg. No. N36345      Time (Lcl) - 1115 MDT

-----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
Flight Conducted Under	-14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During	-LANDING					2
						1

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

Make/Model	- PIPER PA-34-200T	Eng Make/Model	- CONTINENTAL LTSIO-360	ELT Installed/Activated	- YES/NO
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 2	Stall Warning System	- YES
Max Gross Wt	- 4570	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 6	Rated Power	- 220 HP		

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

Weather Data		Itinerary	Airport Proximity
Wx Briefing	- COMPANY	Last Departure Point	ON AIRPORT
Method	- IN PERSON	SAME AS ACC/INC	
Completeness	- WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather	- VMC	LOCAL	LAS CRUCES
Wind Dir/Speed	- 130/007 KTS	ATC/Airspace	Runway Ident
Visibility	- 60.0 SM	Type of Flight Plan	- 12
Lowest Sky/Clouds	- UNK/NR	SCATTERED	Runway Lth/Wid
Lowest Ceiling	- NONE	Type of Clearance	- 7494/ 150
Obstructions to Vision	- NONE	Type Apch/Lndg	- ASPHALT
Precipitation	- NONE	- TRAFFIC PATTERN	Runway Status
Condition of Light	- DAYLIGHT		- DRY

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

Pilot-In-Command	Age - 36	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL,CFI	Current - YES	Total	- 1540
SE LAND,ME LAND	Months Since - 1	Make/Model	- 30
	Aircraft Type - PA-34	Instrument	- 77
		Multi-Eng	- 42
		Last 24 Hrs	- 3
		Last 30 Days	- 148
		Last 90 Days	- 419

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE LEFT MAIN LANDING GEAR COLLAPSED SHORTLY AFTER TOUCHDOWN. THE ACFT THEN VEERED OFF THE LEFT SIDE OF THE RWY & WAS FURTHER DAMAGED. AN INVESTIGATION REVEALED THE LEFT GEAR COLLAPSED AFTER THE LEFT MAIN LANDING GEAR TRUNNION HAD FAILED. THE TRUNNION FAILED IN AN AREA THAT WAS ADDRESSED BY PIPER SERVICE BULLETIN #787A. SERVICE BULLETIN #787A REQUIRED AN INSPECTION OF THE TRUNNION AT THE 1ST 1000 HRS TIME IN SERVICE AND THEREAFTER AT INTERVALS NOT TO EXCEED 100 HRS UNTIL IT WAS REPLACED BY A MODIFIED TRUNNION. THE ACFT HAD FLOWN 67 HRS SINCE THE LAST INSPECTION.

Brief of Accident (Continued)

File No. - 418

6/16/89

LAS CRUCES, NM

A/C Reg. No. N36345

Time (Lcl) - 1115 MDT

-----  
Occurrence #1      MAIN GEAR COLLAPSED  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

1. LANDING GEAR, MAIN GEAR STRUT - FAILURE, TOTAL
  2. MAINTENANCE, SERVICE BULLETINS - PERFORMED -
  3. PROCEDURE INADEQUATE - MANUFACTURER
- 

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

Finding(s)

4. DIRECTIONAL CONTROL - NOT POSSIBLE -
  5. GROUND LOOP/SWERVE - UNCONTROLLED -
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE LEFT MAIN LANDING GEAR TRUNNION. A CONTRIBUTING FACTOR WAS: INADEQUATE INSPECTION PROCEDURE IN  
PIPER SERVICE BULLETIN #787A.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 421      6/21/89      MORIARITY,NM      A/C Reg. No. N544BM      Time (Lcl) - 1700 MDT

-----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	0
Accident Occurred During -LANDING					

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

Make/Model - BEAUCHESNE/WELLS GLASAIR TD	Eng Make/Model - LYCOMING IO-360	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1600	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 2	Rated Power - 190 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - IN PERSON	TUCUMCARI,NM	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	ALBUQUERQUE,NM	Runway Ident - N/A
Wind Dir/Speed- UNK/NR	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 - FORCED LANDING	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 43	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 520
SE LAND	Months Since - 16	Make/Model- 47
GLIDER	Aircraft Type - TB-20	Instrument- 7
		Last 24 Hrs - 4
		Last 30 Days- 12
		Last 90 Days- 14

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT DRG FLT, THE PROP BEGAN TO WOBBLE & SHOOK THE ACFT VIOLENTLY. HE TURNED THE ACFT AWAY FROM MTNS TO FIND A SUITABLE AREA FOR AN EMERGENCY LANDING. HOWEVER, AT AN ALT OF ABOUT 400' AGL, THE PROP SEPD & THE PLT WAS FORCED TO LAND ON DESERT TERRAIN. DRG THE LANDING, THE ACFT WAS SUBSTANTIALLY DAMAGED. AN INVESTIGATION REVEALED THE PROP HAD BEEN MOUNTED ON THE ENG WITH AN EXTENSION, BUT THE EXTENSION DID NOT HAVE A MEANS TO PRECISELY CENTER THE PROP. SUBSEQUENTLY, THE PROP BEGAN A SEVERE VIBRATION, THE PROP MOUNTING BOLTS FAILED & THE PROP SEPD FROM THE ACFT.

Brief of Accident (Continued)

File No. - 421

6/21/89

MORIARITY,NM

A/C Reg. No. N544BM

Time (Lcl) - 1700 MDT

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation CRUISE - NORMAL

Finding(s)

1. PROPELLER SYSTEM/ACCESSORIES - VIBRATION
2. MAINTENANCE,INSTALLATION - IMPROPER - OTHER MAINTENANCE PSNL
3. PROPELLER SYSTEM/ACCESSORIES - OVERLOAD
4. PROPELLER SYSTEM/ACCESSORIES - SEPARATION

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)

5. TERRAIN CONDITION - ROUGH/UNEVEN

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER INSTALLATION OF THE PROPELLER WHICH RESULTED IN SEVERE VIBRATION AND FAILURE OF THE PROPELLER MOUNTING BOLTS,  
& THE SEPARATION OF THE PROPELLER FROM THE AIRCRAFT. ROUGH/UNEVEN DESERT TERRAIN CONTRIBUTED TO THE ACCIDENT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 537      1/29/89      SENECA FALLS,NY      A/C Reg. No. N17109      Time (Lcl) - 1610 EST

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage	Injuries			
	MINOR	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		Other 0	0	0	1

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

Make/Model - CESSNA 150L	Eng Make/Model - CONTINENTAL O-200A	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 - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	SENECA FALLS,NY	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	SENECA FALLS
Wind Dir/Speed- 200/005 KTS	ATC/Airspace	Runway Ident - 18
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3200/ 50
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 8000 FT BROKEN	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 - 69	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 27
	Months Since - N/A	Last 24 Hrs - UNK/NR
	Aircraft Type - N/A	Make/Model- 27
		Last 30 Days- 2
		Instrument- 1
		Last 90 Days- 7

Instrument Rating(s) - NONE

-----Narrative-----

THE CESSNA 150 LANDED ON TOP OF THE CESSNA 172 AS BOTH AIRCRAFT WERE LANDING AT AN UNCONTROLLED AIRPORT. ALTHOUGH THEY BOTH SAID THAT THEY RADIOED THEIR INTENTIONS ON UNICOM, NEITHER SAW NOR WAS AWARE OF THE OTHERS LOCATION. BOTH AIRPLANES WERE PRACTICING TOUCH AND GO LANDINGS.



Brief of Accident (Continued)

File No. - 537

1/29/89

SENECA FALLS, NY

A/C Reg. No. N17109

Time (Lcl) - 1610 EST

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Occurrence #1        MIDAIR COLLISION  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

1. VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND
  2. RADIO COMMUNICATIONS - INADEQUATE - PILOT OF OTHER AIRCRAFT
  3. RADIO COMMUNICATIONS - INADEQUATE - PILOT IN COMMAND
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT OF THE C-150, N17109, TO MAINTAIN PROPER SEPARATION FROM OTHER AIRCRAFT DURING LANDING AT AN  
UNCONTROLLED AIRPORT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 537      1/29/89      SENECA FALLS, NY      A/C Reg. No. N12679      Time (Lcl) - 1610 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
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During -LANDING		Other	0	0	1

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

Make/Model - CESSNA 172	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-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	SYRACUSE, NY	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SENECA FALLS, NY	SENECA FALLS
Wind Dir/Speed- 200/006 KTS	ATC/Airspace	Runway Ident - 18
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3200/ 50
Lowest Sky/Clouds - 20000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling -	Type Apch/Lndg - FULL STOP	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 31	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - NO	Total - 58
SE LAND	Months Since - 30	Last 24 Hrs - 1
	Aircraft Type - UNK/NR	Make/Model- 7
		Last 30 Days- 1
		Instrument- 3
		Last 90 Days- 1

Instrument Rating(s) - NONE

-----Narrative-----

THE CESSNA 150 LANDED ON TOP OF THE CESSNA 172 AS BOTH AIRCRAFT WERE LANDING AT AN UNCONTROLLED AIRPORT. ALTHOUGH THEY BOTH SAID THAT THEY BROADCASTED THEIR INTENTIONS ON UNICOM, NEITHER SAW NOR WAS AWARE OF THE OTHERS LOCATION. BOTH AIRPLANES WERE PRACTICING TOUCH AND GO LANDINGS.

Brief of Accident (Continued)

File No. - 537

1/29/89

SENECA FALLS, NY

A/C Reg. No. N12679

Time (Lc1) - 1610 EST

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Occurrence #1 MIDAIR COLLISION  
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

1. VISUAL LOOKOUT - INADEQUATE - PILOT OF OTHER AIRCRAFT
  2. RADIO COMMUNICATIONS - INADEQUATE - PILOT IN COMMAND
  3. RADIO COMMUNICATIONS - INADEQUATE - PILOT OF OTHER AIRCRAFT
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE OF THE PILOT OF THE C-150, N17109, TO MAINTAIN PROPER SEPARATION FROM OTHER AIRCRAFT DURING LANDING AT AN  
UNCONTROLLED AIRPORT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 524      2/19/89      GLEN FALLS,NY      A/C Reg. No. N1DQ      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 -CLIMB

Aircraft Damage  
DESTROYED  
Fire  
ON GROUND

	Fatal	Serious	Minor	None
Crew	2	0	0	0
Pass	0	0	0	0
Other	4	0	0	0

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

Make/Model - BEECH A36  
Landing Gear - TRICYCLE-RETRACTABLE  
Max Gross Wt - 3600  
No. of Seats - 4

Eng Make/Model - CONTINENTAL IO-520-BA  
Number Engines - 1  
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  
Wind Dir/Speed- 280/008 KTS  
Visibility - 20.0 SM  
Lowest Sky/Clouds - 4000 FT SCATTERED  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
GLEN FALLS,NY  
Destination  
UNK/NR

ATC/Airspace

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

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

WARREN COUNTY  
Runway Ident - 30  
Runway Lth/Wid - 4000/ 100  
Runway Surface - ASPHALT  
Runway Status - DRY

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

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

Age - 64  
Biennial Flight Review  
Current - UNK/NR  
Months Since - UNK/NR  
Aircraft Type - UNK/NR

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)	
Total - 2250	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) - AIRPLANE

-----Narrative-----

THE CREW OF BEECH A36, N1DG, TOOK OFF FROM RWY 30 AT THE (UNCONTROLLED) WARREN COUNTY ARPT ON AN INSTRUMENT INSTRUCTIONAL FLT. AFTER TAKEOFF, THE ACFT WAS OBSERVED TO TURN RIGHT & BEGIN CLIMBING. AT ABOUT THAT SAME TIME, A STINSON 108-2, N232C, WAS RETURNING TO THE ARPT FROM THE NORTHEAST. FROM THAT DIRECTION, THE STINSON WOULD HAVE BEEN FLYING TOWARD THE SUN. SUBSEQUENTLY, THE TWO ACFT CONVERGED & COLLIDED ABOUT 1 MI NORTH OF THE ARPT.

Brief of Accident (Continued)

File No. - 524

2/19/89

GLEN FALLS, NY

A/C Reg. No. N1DQ

Time (Lc1) - 1600 EST

Occurrence #1 MIDAIR COLLISION  
Phase of Operation CLIMB - TO CRUISE

Finding(s)

1. PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND(CFI)
2. VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND(CFI)
3. LIGHT CONDITION - SUNGLARE
4. VISUAL LOOKOUT - INADEQUATE - PILOT OF OTHER AIRCRAFT
5. VISUAL/AURAL PERCEPTION - PILOT OF OTHER AIRCRAFT

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:  
FAILURE OF BOTH PILOTS TO SEE AND AVOID EACH OTHER. RELATED FACTORS WERE: FAILURE OF THE BEECH AIRCREW  
TO MAKE A NORMAL LEFT TURN OUT OF TRAFFIC AND THE STINSON PILOT'S VISUAL PERCEPTION DUE TO SUNGLARE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 524      2/19/89      GLEN FALLS,NY      A/C Reg. No. N232C      Time (Lcl) - 1600 EST

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

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
DESTROYED

	Fatal	Serious	Minor	None
Injuries				
Crew	1	0	0	0
Pass	3	0	0	0
Other	2	0	0	0

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

Fire  
NONE

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

Make/Model - STINSON 108-2  
Landing Gear - TAILWHEEL-ALL FIXED  
Max Gross Wt - 2400  
No. of Seats - 4

Eng Make/Model - FRANKLIN 6A4-165-B3  
Number Engines - 1  
Engine Type - RECIPROCATING-CARBURETOR  
Rated Power - 165 HP

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

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

Weather Data

Wx Briefing - FSS  
Method - ACFT RADIO  
Completeness - WEATHER NOT PERTINENT  
Basic Weather - VMC  
Wind Dir/Speed- 280/008 KTS  
Visibility - 20.0 SM  
Lowest Sky/Clouds - 4000 FT SCATTERED  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - DAYLIGHT

Itinerary

Last Departure Point  
GLEN FALLS,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

WARREN 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)  
COMMERCIAL  
SE LAND,ME LAND

Age - 47  
Biennial Flight Review  
Current - YES  
Months Since - 4  
Aircraft Type - 108-2

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 969  
Last 24 Hrs - 1  
Make/Model- 661  
Last 30 Days- 6  
Instrument- 3  
Last 90 Days- 8  
Multi-Eng - 20

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE CREW OF BEECH A36, N1DG, TOOK OFF FROM RWY 30 AT THE (UNCONTROLLED) WARREN COUNTY ARPT ON AN INSTRUMENT INSTRUCTIONAL FLT. AFTER TAKEOFF, THE ACFT WAS OBSERVED TO TURN RIGHT & BEGIN CLIMBING. AT ABOUT THAT SAME TIME, A STINSON 108-2, N232C, WAS RETURNING TO THE ARPT FROM THE NORTHEAST. FROM THAT DIRECTION, THE STINSON WOULD HAVE BEEN FLYING TOWARD THE SUN. SUBSEQUENTLY, THE TWO ACFT CONVERGED & COLLIDED ABOUT 1 MI NORTH OF THE ARPT.

Brief of Accident (Continued)

File No. - 524

2/19/89

GLEN FALLS, NY

A/C Reg. No. N232C

Time (Lcl) - 1600 EST

Occurrence #1            MIDAIR COLLISION  
Phase of Operation        APPROACH

Finding(s)

1. PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT OF OTHER AIRCRAFT
2. LIGHT CONDITION - SUNGLARE
3. VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND
4. VISUAL/AURAL PERCEPTION - PILOT IN COMMAND
5. VISUAL LOOKOUT - INADEQUATE - PILOT OF OTHER AIRCRAFT

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:  
FAILURE OF BOTH PILOTS TO SEE-AND-AVOID EACH OTHER. RELATED FACTORS WERE: FAILURE OF THE BEECH AIRCREW  
TO MAKE A NORMAL LEFT TURN OUT OF TRAFFIC AND THE STINSON PILOT'S VISUAL PERCEPTION DUE TO SUNGLARE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 432      4/30/89      HUDSON,NY      A/C Reg. No. N4766X      Time (Lcl) - 1245 EDT

-----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 150G	Eng Make/Model - CONTINENTAL O-200-A	ELT Installed/Activated - YES/YES
Landing Gear - TAILWHEEL-ALL 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	ON AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	HUDSON
Wind Dir/Speed- 090/003 KTS	ATC/Airspace	Runway Ident - 21
Visibility - 25.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4200/ 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 - 60	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 272
SE LAND	Months Since - 8	Make/Model- 138
	Aircraft Type - C-150L	Instrument- UNK/NR
		Multi-Eng - 0
		Last 24 Hrs - 0
		Last 30 Days- 5
		Last 90 Days- 5
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT SHORTLY AFTER TOUCHDOWN, THE ACFT STARTED TO TRACK TO THE LEFT SIDE OF THE RWY. HE STATED THAT HE APPLIED RIGHT RUDDER & BRAKE, BUT THIS HAD NO EFFECT, SO HE INCREASED POWER. SUBSEQUENTLY, THE RIGHT WING DROPPED, THE PROP HIT THE RWY & THE ACFT CONTD OFF THE LEFT SIDE INTO GRASS. AFTER THE ACDNT, THE WHEEL & PART OF THE STRUT FROM THE RIGHT MAIN GEAR WERE FOUND IN THE CENTER OF THE RWY. THE OWNER SAID THE STRUT FAILED THRU A BOLT HOLE & THE FRACTURE WAS CRYSTALLIZED.



Brief of Accident (Continued)

File No. - 432

4/30/89

HUDSON, NY

A/C Reg. No. N4766X

Time (Lc1) - 1245 EDT

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

Finding(s)

1. LANDING GEAR, MAIN GEAR STRUT - FATIGUE
- 

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

Finding(s)

2. DIRECTIONAL CONTROL - NOT MAINTAINED -
  3. GROUND LOOP/SWERVE - UNCONTROLLED -
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FATIGUE FAILURE OF THE RIGHT MAIN STRUT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 538      6/18/89      NIAGARA FALLS,NY      A/C Reg. No. N52HR      Time (Lcl) - 1318 EDT

-----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	1	2
Accident Occurred During -LANDING					

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

Make/Model - CESSNA 172N	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 - 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	NIAGARA FALLS,NY	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	AKRON,NY	
Wind Dir/Speed- 240/014 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 12000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - 25000 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 - 22	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 119
SE LAND	Months Since - 10	Last 24 Hrs - 1
	Aircraft Type - C-152,	Make/Model- 3
		Last 30 Days- 9
		Instrument- 3
		Last 90 Days- 22

Instrument Rating(s) - NONE

-----Narrative-----

THE AIRCRAFT ENGINE STARTED TO RUN ROUGH DURING A PLEASURE FLIGHT OVER NIAGARA FALLS, NY, AND THE PILOT LANDED IN A WHEAT FIELD SHORT OF THE NIAGARA FALLS AIRPORT. THE NOSE WHEEL STUCK IN THE SOFT FIELD AND THE AIRCRAFT FLIPPED OVER, BUT THERE WERE NO INJURIES TO THE PILOT OR HIS THREE PASSENGERS. THE OIL DRAIN PLUG WAS MISSING ALLOWING THE OIL TO DRAIN OUT AND CAUSE THE ENGINE TO SEIZE. THE ENGINE HAD BEEN REPLACED 6 FLIGHT HOURS BEFORE.

Brief of Accident (Continued)

File No. - 538

6/18/89

NIAGARA FALLS,NY

A/C Reg. No. N52HR

Time (Lc1) - 1318 EDT

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

Finding(s)

1. LUBRICATING SYSTEM,OIL QUICKDRAIN/DRAIN PLUG - NOT SECURED
  2. MAINTENANCE,OVERHAUL,MAJOR - INADEQUATE - OTHER MAINTENANCE PSNL
  3. LUBRICATING SYSTEM,OIL QUICKDRAIN/DRAIN PLUG - LOSS,TOTAL
  4. FLUID,OIL - LOSS,TOTAL
- 

Occurrence #2        FORCED LANDING  
Phase of Operation    DESCENT - EMERGENCY

-----

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

Finding(s)

5. TERRAIN CONDITION - SOFT
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
ENGINE FAILURE DUE TO OIL STARVATION AND COLLISION WITH TERRAIN DURING THE FORCED LANDING. THE OIL STARVATION WAS  
CAUSED BY THE OIL LEAKING OUT OF THE DRAIN BECAUSE MAINTENANCE PERSONNEL FAILED TO INSTALL THE DRAIN PLUG.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 526

7/01/89

ELMIRA,NY

A/C Reg. No. N2746H

Time (Lcl) - 1645 EDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

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

Type of Operation -PERSONAL

Flight Conducted Under -14 CFR 91

Accident Occurred During -MANEUVERING

Fire  
NONE

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

Make/Model - SCHWEIZER 1-26

Landing Gear - SKID

Max Gross Wt - 700

No. of Seats - 1

Eng Make/Model - N/A

Number Engines - N/A

Engine Type - N/A

Rated Power - N/A

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- 320/010 KTS

Visibility - 15.0 SM

Lowest Sky/Clouds - CLEAR

Lowest Ceiling -

Obstructions to Vision- NONE

Precipitation - NONE

Condition of Light - DAYLIGHT

Itinerary

Last Departure Point

ELMIRA,NY

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

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

Pilot-In-Command

Certificate(s)/Rating(s)

COMMERCIAL

GLIDER

Age - 28

Biennial Flight Review

Current - YES

Months Since - 8

Aircraft Type - 2-33

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total	-	253	Last 24 Hrs	-	3
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Make/Model-	190	Last 30 Days-	30
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Instrument-	0	Last 90 Days-	34
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Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT OF THE SCHWEIZER GLIDER WAS PARTICIPATING IN A GLIDER MEET AND WHILE ATTEMPTING TO GET BACK TO THE AIRPORT HE EXPERIENCED A DOWN DRAFT WHICH CAUSED HIM TO LOSE ALTITUDE. ATTEMPTING TO MAKE A FIELD FOR AN OFF ARPT LANDING THE PILOT SAID THAT HE HIT A POLE WHICH TURNED THE AIRCRAFT 180 DEGREES BEFORE IT COLLIDED WITH THE GROUND.

Brief of Accident (Continued)

File No. - 526

7/01/89

ELMIRA, NY

A/C Reg. No. N2746H

Time (Lc1) - 1645 EDT

-----  
Occurrence #1           UNDERSHOOT  
Phase of Operation      MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Finding(s)  
1. WEATHER CONDITION - UNFAVORABLE WIND  
-----

Occurrence #2           IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Finding(s)  
2. OBJECT - POLE  
-----

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 INADVERTENT ENCOUNTER WITH A DOWNDRAFT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 540      7/02/89      FISHERS, NY      A/C Reg. No. N1731R      Time (Lcl) - 1645 EDT

-----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	2
Accident Occurred During -TAKEOFF					

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

Make/Model - CESSNA 185	Eng Make/Model - CONTINENTAL IO-520-D-24	ELT Installed/Activated - YES/YES
Landing Gear - AMPHIBIAN	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 ON AIRPORT
Wx Briefing - NWS	Last Departure Point	
Method - UNK/NR	SAME AS ACC/INC	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	
Wind Dir/Speed- 340/005 KTS	ATC/Airspace	Runway Ident - UNK/NR
Visibility - 25.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 1500/ 30
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - GRASS/TURF
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 - 45	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 2173
SE LAND, SE SEA	Months Since - 10	Last 24 Hrs - 0
	Aircraft Type - C-185F	Make/Model- 503
		Last 30 Days- 9
		Instrument- 258
		Last 90 Days- 31

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING TAKEOFF ROLL FROM A GRASS STRIP THE PILOT OF A CESSNA 185 FLOAT PLANE FELT A SHIMMY AND ABORTED TAKEOFF. WHEN THE WEIGHT CAME DOWN ON THE FRONT WHEELS, THE RIGHT FRONT WHEEL BROKE OFF AND THE BROKEN STRUT DUG INTO THE GROUND CAUSING THE AIRCRAFT TO FLIP OVER. THE ACFT HAD FLOWN APPRX 6 HRS SINCE INSTALLATION OF THE FLOATS.

Brief of Accident (Continued)

File No. - 540

7/02/89

FISHERS, NY

A/C Reg. No. N1731R

Time (Lcl) - 1645 EDT

Occurrence #1 MISCELLANEOUS/OTHER  
Phase of Operation TAKEOFF - GROUND RUN

Finding(s)

1. LANDING GEAR, FLOAT ASSEMBLY - VIBRATION
2. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND

Occurrence #2 NOSE OVER  
Phase of Operation TAKEOFF - ABORTED

Finding(s)

3. LANDING GEAR - FAILURE, PARTIAL
4. TERRAIN CONDITION - GRASS

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
LOSS OF CONTROL DURING AN ABORTED TAKEOFF DUE TO IMPROPER FLOAT OPERATION ABORTED TAKEOFF PROCEDURE ON TERRA FIRMA,  
AS OPPOSED TO THE MORE LOGICAL ENVIRONMENT OF WATER, THE INTENDED ELEMENT FOR THE DESIGN HARDWARE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 541      7/02/89      ONEIDA, NY      A/C Reg. No. N4953B      Time (Lcl) - 1250 EDT

-----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
			0	0	1
			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 - 1675	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 110 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	ON AIRPORT
Method - UNK/NR	UTICA, NY	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LOCAL	ONEIDA CO.
Wind Dir/Speed- 280/005 KTS	ATC/Airspace	Runway Ident - 33
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 6001/ 150
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - UNK/NR	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
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)
STUDENT	Current - N/A	Total - 49
	Months Since - N/A	Last 24 Hrs - UNK/NR
	Aircraft Type - N/A	Make/Model- 49
		Last 30 Days- 5
		Instrument- 0
		Last 90 Days- 8

Instrument Rating(s) - NONE

-----Narrative-----

CESSNA 152 ENCOUNTERED A CHANGE IN DIRECTION OF WIND DURING AN APPROACH TO LAND AT ONEIDA COUNTY AIRPORT AND COLLIDED WITH THE RUNWAY. THE PILOT SAID THAT THE WIND CHANGE CAUSED HER TO FLARE TOO SOON AND THE AIRCRAFT BALLOONED AND PORPOISED, EVEN THOUGH THE THROTTLE HAD BEEN PUSHED IN, THE RESPONSE WAS TOO LATE TO RECOVER AND MAINTAIN CONTROL.



Brief of Accident (Continued)

File No. - 541

7/02/89

ONEIDA,NY

A/C Reg. No. N4953B

Time (Lc1) - 1250 EDT

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

Finding(s)

1. WEATHER CONDITION - GUSTS
2. FLARE - PREMATURE - PILOT IN COMMAND
3. LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
4. DIRECTIONAL CONTROL - NOT MAINTAINED - 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:  
LOSS OF DIRECTIONAL CONTROL DURING LANDING DUE TO WIND CHANGE. THE AIRCRAFT LANDED HARD ON THE RUNWAY DUE TO IMPROPER  
FLARE BY THE PILOT AND A DELAYED RESPONSE TO THE BALLOONING OF THE ACFT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 449      2/17/89      WILMINGTON, OH      A/C Reg. No. N739US      Time (Lcl) - 1215 EST

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

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

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

Make/Model - CESSNA 172	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 - FSS	Last Departure Point	ON AIRPORT
Method - ACFT RADIO	SEYMOUR, IN	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	LOCAL	CLINTON COUNTY
Wind Dir/Speed- VARIABLE/020 KTS	ATC/Airspace	Runway Ident - 02
Visibility - 12.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3500/ 25
Lowest Sky/Clouds - N/A	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 25000 FT OVERCAST	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 49	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 537
SE LAND	Months Since - 4	Make/Model- 343
HELICOPTER	Aircraft Type - C-172	Instrument- 3
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - 194

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT RPRTD THAT AS HE STARTED FLARING TO LAND, THE ACFT BEGAN DRIFTING TO THE RIGHT. HE TRIED TO CORRECT THE SITUATION, BUT THE ACFT CONTINUED DRIFTING TO THE RIGHT TOWARD A DITCH. HE INITIATED A GO-AROUND, BUT THE ACFT SETTLED TO THE FROZEN GROUND, HIT A SMALL TREE ON THE EAST SIDE OF THE RWY & WAS DAMAGED. THE PLT ESTIMATED THE WIND WAS VARIABLE AT 20 KTS. ABOUT 30 MI NORTHWEST AT DAYTON, THE WIND WAS RPRTD TO BE FROM 060 DEG AT 10 KTS.

Brief of Accident (Continued)

File No. - 449

2/17/89

WILMINGTON, OH

A/C Reg. No. N739US

Time (Lcl) - 1215 EST

Occurrence #1 IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation LANDING - ABORTED

Finding(s)

1. WEATHER CONDITION - UNFAVORABLE WIND
2. WEATHER CONDITION - CROSSWIND
3. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
4. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND
5. ABORTED LANDING - DELAYED - PILOT IN COMMAND

Occurrence #2 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation LANDING - ABORTED

-----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 WIND CONDITIONS, TO MAINTAIN PROPER RUNWAY ALIGNMENT, AND HIS  
DELAY IN ABORTING THE LANDING. CONTRIBUTING FACTORS WERE: VARIABLE CROSSWIND CONDITIONS AND A SMALL TREE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 479      2/19/89      WAYNESVILLE, OH      A/C Reg. No. N8510L      Time (Lcl) - 1615 EST

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

Type Operating Certificate-NONE (GENERAL AVIATION)

Type of Operation      -GLIDER TOW  
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      - PIPER PA-25-235  
Landing Gear      - TAILWHEEL-ALL FIXED  
Max Gross Wt      - 2900  
No. of Seats      - 1

Eng Make/Model      - LYCOMING O-540-B2C5  
Number Engines      - 1  
Engine Type      - RECIPROCATING-CARBURETOR  
Rated Power      - 235 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- CALM  
Visibility      - 15.0      SM  
Lowest Sky/Clouds      - UNK/NR  
Lowest Ceiling      - 10000 FT OVERCAST  
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

CAESAR CREEK GLIDERPORT  
Runway Ident      - 09  
Runway Lth/Wid      - 2800/ 200  
Runway Surface      - GRASS/TURF  
Runway Status      - WET

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

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE  
SE LAND, ME LAND  
GLIDER

Age - 46

Biennial Flight Review

Current      - YES  
Months Since      - 15  
Aircraft Type      - PA-23

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total	- 1811	Last 24 Hrs	- 2
Make/Model-	7	Last 30 Days-	14
Instrument-	278	Last 90 Days-	29
Multi-Eng	- 181		

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD HE HAD MADE SEVERAL GLIDER TOW FLTS FROM THE GRASS STRIP, WHICH INITIALLY WAS FROZEN. ON THE LAST 2 FLTS, HE TOOK OFF TO THE WEST & LANDED TO THE EAST IN PREPARATION FOR THE NEXT TOW. AFTER THE 7TH TOW, HE HAD PLANNED A "LONG" LANDING & THE ACFT TOUCHED DOWN PAST THE HALFWAY POINT IN CALM WIND. THE PLT RPRTD THAT WHEN HE APPLIED BRAKES, BRAKING WAS INEFFECTIVE. THE ACFT CONTD OFF THE END OF THE RWY & WENT THRU 2 FENCES BEFORE STOPPING. AT THE TIME OF THE ACNT, THE FROZEN GROUND HAD JUST STARTED TO THAW AT THE SURFACE WHICH MADE THE GRASS SLIPPERY.

Brief of Accident (Continued)

File No. - 479

2/19/89

WAYNESVILLE, OH

A/C Reg. No. N8510L

Time (Lcl) - 1615 EST

Occurrence #1        OVERRUN  
Phase of Operation    LANDING - ROLL

Finding(s)

1. TOUCHDOWN - DELAYED - PILOT IN COMMAND
2. DISTANCE - MISJUDGED - PILOT IN COMMAND
3. TERRAIN CONDITION - FROZEN
4. TERRAIN CONDITION - WET
5. GO-AROUND - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2        ON GROUND COLLISION WITH OBJECT  
Phase of Operation    LANDING - ROLL

Finding(s)

6. OBJECT - FENCE

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT DELAYED HIS LANDING/TOUCHDOWN, MISJUDGED THE DISTANCE OF THE REMAINING RUNWAY AND DID NOT GO AROUND. THE  
SLICK/THAWING RUNWAY CONDITIONS AND THE FENCES WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 511      2/21/89      TIPP CITY, OH      A/C Reg. No. N1139X      Time (Lcl) - 0024 EST

-----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

Crew  
Pass

Fatal  
0  
0

Injuries  
Serious  
1  
1

Minor  
0  
0

None  
0  
0

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

Make/Model      - PIPER PA-28R-200  
Landing Gear      - TRICYCLE-FIXED  
Max Gross Wt      - 2650  
No. of Seats      - 4

Eng Make/Model      - LYCOMING IO-360-C1C  
Number Engines      - 1  
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      - COMMERCIAL WX SERVICE  
Method      - IN PERSON  
Completeness      - PARTIAL, LMTD BY PILOT  
Basic Weather      - IMC  
Wind Dir/Speed-      170/007 KTS  
Visibility      - 1.000 SM  
Lowest Sky/Clouds      - UNK/NR  
Lowest Ceiling      - 200 FT OVERCAST  
Obstructions to Vision-      FOG  
Precipitation      - DRIZZLE  
Condition of Light      - NIGHT(DARK)

Itinerary

Last Departure Point  
SOMERSET, PA  
Destination  
HARRISON, OH

ATC/Airspace

Type of Flight Plan - NONE  
Type of Clearance      - IFR  
Type Apch/Lndg      - ILS-COMPLETE

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

COX-DAYTON INTERNATIONAL  
Runway Ident      - 24  
Runway Lth/Wid      - 9500/ 150  
Runway Surface      - DIRT  
Runway Status      - WET

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

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

Age - 46  
Biennial Flight Review  
Current      - NO  
Months Since      - UNK/NR  
Aircraft Type      - UNK/NR

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)  
Total      - 1250  
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) - AIRPLANE

-----Narrative-----

PIC HAD NOT FLOWN FOR 10 YRS. BOUGHT ACFT & FLEW ON FAMILY VACATION FOR TWO DAYS & HEADED HOME. AT REFUEL STOP CHECKED WX & NOTED LOW CEILINGS AT DESTINATION. PIC FLEW TO DESTINATION TERMINAL AREA, OBTAINED WX FROM ATC & REQUESTED VOR APPROACH. ACFT NOT EQUIPPED FOR APPROACH. ACFT ALSO NOT IFR CERTIFIED & NAV INSTRUMENTS WERE NOT CHECKED FOR CORRECT OPERATION. PIC FLEW IN IMC ABOUT TWO HOURS, EXECUTING SEVEN UNSUCCESSFUL APPROACHES; VOR, LOC, AND ILS. FUEL WAS EVENTUALLY EXHAUSTED & ACFT CRASHED ABOUT 1 MILE FROM THE RUNWAY THRESHOLD.

Brief of Accident (Continued)

File No. - 511

2/21/89

TIPP CITY, OH

A/C Reg. No. N1139X

Time (Lc1) - 0024 EST

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

Finding(s)

1. WEATHER CONDITION - LOW CEILING
2. WEATHER CONDITION - FOG
3. JUDGEMENT - POOR - PILOT IN COMMAND
4. OVER CONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND
5. COMM/NAV EQUIPMENT, LOCALIZER RECEIVER - UNRELIABLE
6. FLIGHT INTO KNOWN ADVERSE WEATHER - INTENTIONAL - PILOT IN COMMAND
7. COMM/NAV EQUIPMENT, GLIDE SLOPE RECEIVER - UNRELIABLE
8. MAINTENANCE, INSPECTION OF AIRCRAFT - DISREGARDED - PILOT IN COMMAND
9. PROCEDURES/DIRECTIVES - DISREGARDED - PILOT IN COMMAND
10. FLIGHT TO ALTERNATE DESTINATION - NOT USED - PILOT IN COMMAND

Occurrence #2 LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL  
Phase of Operation APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Finding(s)

11. FLUID, FUEL - EXHAUSTION
12. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND

Occurrence #3 FORCED LANDING  
Phase of Operation DESCENT - EMERGENCY

Occurrence #4 IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation DESCENT - EMERGENCY

Finding(s)

13. OBJECT - TREE(S)

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER PLANNING BY THE PILOT RESULTING IN FUEL EXHAUSTION. THE PILOTS LACK OF EQUIPMENT AND ABILITY TO HANDLE THE  
WEATHER SITUATION WAS IGNORED BY THE PILOT IN HIS PLANNING FOR THE FLIGHT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 508      2/28/89      SPRINGBORO,OH      A/C Reg. No. N2805S      Time (Lcl) - 1650 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 Crew  
NONE Pass

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

Make/Model - CESSNA 150G  
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 - UNK/NR  
Method - UNK/NR  
Completeness - PARTIAL,LMTD BY PILOT  
Basic Weather - VMC  
Wind Dir/Speed- 260/013 KTS  
Visibility - 7.0 SM  
Lowest Sky/Clouds - 4500 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

DAYTON GENERAL SOUTH  
Runway Ident - 20  
Runway Lth/Wid - 5000/ 60  
Runway Surface - N/A  
Runway Status - N/A

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

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

Age - 38  
Biennial Flight Review  
Current - YES  
Months Since - 4  
Aircraft Type - C-150

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 960  
Make/Model- 400  
Instrument- 3  
Last 24 Hrs - UNK/NR  
Last 30 Days- UNK/NR  
Last 90 Days- 10

Instrument Rating(s) - NONE

-----Narrative-----

ACFT WAS BEING FLOWN BY OWNER ON 1ST FLT AFTER ENGINE CASE HAD BEEN SPLIT, VALVE REPAIR, & CARBURETOR FLOAT REPLACEMENT. AUTO FUEL WAS BEING USED WHICH WAS PUT IN ACFT ABOUT SIX WEEKS BEFORE ACCIDENT. NO CONTAMINATION WAS FOUND IN FUEL, ENGINE WAS RUN ON TEST CELL, & CARB WAS FLOW CHECKED AFTER ACCIDENT. PIC RPTED LONG TAXI TO TAKE OFF RWY PLUS DELAY DUE TO OTHER TRAFFIC. FAA AC 91-33A NOTES CARB ICE WILL FORM AT HIGHER TEMP & MORE RAPIDLY THAN AV GAS. ICE PROBABILITY CHART SHOWED WX COND CONDUCIVE TO CARB ICE WITH USE OF AV GAS. FAA AC 20-113 RECOMMENDS USING CARB HEAT PRIOR TO TAKE OFF WHEN COND ARE CONDUCIVE TO CARB ICE TO REMOVE ANY ICE BUILT UP.



Brief of Accident (Continued)

File No. - 508

2/28/89

SPRINGBORO, OH

A/C Reg. No. N2805S

Time (Lcl) - 1650 EST

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

Finding(s)

1. WEATHER CONDITION - CARBURETOR ICING CONDITIONS
2.      INFORMATION INSUFFICIENT - FAA(ORGANIZATION)
3. FLUID, FUEL GRADE - IMPROPER
4.      MATERIAL DEFECT(INADEQUATE QUALITY CONTROL) - PILOT IN COMMAND
5.      INSUFFICIENT STANDARDS/REQUIREMENTS, OPERATION/OPERATOR - FAA(ORGANIZATION)
6. FUEL SYSTEM, CARBURETOR - ICE
7. CARBURETOR HEAT - IMPROPER USE OF - PILOT IN COMMAND

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING - ROLL

Finding(s)

8. OBJECT - TREE(S)

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
LOSS OF POWER (TAKEOFF) FROM CARBURETOR ICE DUE TO IMPROPER USE OF CARBURETOR HEAT DURING EXTENDED GROUND OPERATION  
USING AUTO FUEL IN WEATHER WHICH WAS CONDUCTIVE TO ICING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 600      3/11/89      DELAWARE, OH      A/C Reg. No. N443JA      Time (Lcl) - 1205 EST

-----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	ON GROUND	Pass	1	0	0
Accident Occurred During -DESCENT			1	0	0

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

Make/Model - ALEXANDER RV-4	Eng Make/Model - LYCOMING O-320-E2A	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1600	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	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- 200/010 KTS</p> <p>Visibility - 15.0 SM</p> <p>Lowest Sky/Clouds - UNK/NR THIN BKN</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</p>	<p>Airport Proximity OFF AIRPORT/STRIP</p> <p>Airport Data DELAWARE MUNICIPAL</p> <p>Runway Ident - 28</p> <p>Runway Lth/Wid - 4100/ 75</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>PRIVATE</p> <p>SE LAND</p>	<p>Age - 63</p> <p>Biennial Flight Review</p> <p>Current - YES</p> <p>Months Since - 8</p> <p>Aircraft Type - CE-120</p>	<p>Medical Certificate - EXPIRED</p> <p>Flight Time (Hours)</p> <p>Total - 325</p> <p>Make/Model- UNK/NR</p> <p>Instrument- 0</p> <p>Last 24 Hrs - UNK/NR</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 PILOT WAS OBSERVED TO BE ON BASE TO FINAL FOR LANDING ON RUNWAY 28 AT DELAWARE MUNICIPAL AIRPORT. HE WAS AT A NORMAL ALTITUDE AND SPEED WHEN THE AIRCRAFT SUDDENLY ROLLED TO A NOSE DOWN ATTITUDE OF APPROXIMATELY 30 DEGREES. THIS ROLLING AND PITCHING DOWN CONTINUED UNTIL THE AIRCRAFT DISAPPEARED BEHIND A CLUMP OF TREES. SMOKE ROSE IMMEDIATELY FROM THE LOCATION OF THE IMPACT. THE TWO OCCUPANTS WERE FATALLY INJURED AND THE AIRCRAFT DESTROYED BY THE CRASH AND ENSUING FIRE. THE AIRCRAFT WAS A HOMEBUILT RV-4 WITH APPROXIMATELY 70 HOURS TOTAL TIME.

Brief of Accident (Continued)

File No. - 600

3/11/89

DELAWARE, OH

A/C Reg. No. N443JA

Time (Lc1) - 1205 EST

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

Finding(s)

1. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
  2. ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
  3. STALL/SPIN - INADVERTENT - PILOT IN COMMAND
- 

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

Finding(s)

4. TERRAIN CONDITION - GROUND
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT INADVERTENTLY LOST CONTROL OF THE AIRCRAFT WHICH RESULTED IN A STALL SPIN AND COLLISION WITH THE GROUND.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 450      4/12/89      XENIA, OH      A/C Reg. No. N4898G      Time (Lcl) - 1635 EDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries Serious	Minor	None
Type of Operation -AERIAL OBSERVATION	Fire	Crew 0	0	0	2
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	0	0
Accident Occurred During -APPROACH					

-----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 - 2307	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	FRENCH LICK, IN	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	GREEN COUNTY
Wind Dir/Speed- 250/016 KTS	ATC/Airspace	Runway Ident - 25
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3972/ 75
Lowest Sky/Clouds - N/A	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 4500 FT BROKEN	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
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)
COMMERCIAL	Current - YES	Total - 3750
SE LAND	Months Since - 2	Make/Model- 3000
HELICOPTER	Aircraft Type - C-172N	Instrument- 32
		Multi-Eng - 5
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD THE ACFT ENCOUNTERED A DOWNDRAFT WHEN IT WAS ON A SHORT FINAL APCH. HE APPLIED POWER & ELECTED TO RETRACT THE WING FLAPS TO REDUCE DRAG & MINIMIZE THE SINK RATE, BUT THE FLAPS WERE RETRACTED TO THE FULL UP POSITION. ALSO, TO AVOID A STEEP EMBANKMENT AT THE APCH END OF THE RWY, THE PLT TURNED THE ACFT SLIGHTLY TO THE LEFT. HOWEVER, THE ACFT CONTINUED TO SETTLE & SUBSEQUENTLY HIT THE GROUND ABOUT 150 FT LEFT OF THE RWY & 5 FT BELOW THE CREST OF THE SLOPE. NEARBY AT DAYTON, OH, THE WIND WAS RPRTD TO BE FROM 250 DEG AT 16 GUSTING 22 KTS.

Brief of Accident (Continued)

File No. - 450

4/12/89

XENIA, OH

A/C Reg. No. N4898G

Time (Lc1) - 1635 EDT

-----  
Occurrence #1        IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation    APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. WEATHER CONDITION - DOWNDRAFT
- 

Occurrence #2        IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation    APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

2. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
  3. RAISING OF FLAPS - IMPROPER - PILOT IN COMMAND
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S IMPROPER IN-FLIGHT PLANNING/DECISION AND IMPROPER USE OF THE FLAPS. CONTRIBUTING WAS THE DOWNDRAFT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 438      6/23/89      MIDDLETOWN, OH      A/C Reg. No. N1961P      Time (Lcl) - 2030 EDT

-----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 -LANDING			0	0	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 - NO
Max Gross Wt - 1016	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	MIDDLETOWN, OH	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 210/004 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 5.0 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 - FORCED LANDING	
Obstructions to Vision- HAZE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 18	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 113
SE LAND	Months Since - UNK/NR	Last 24 Hrs - 1
	Aircraft Type - UNK/NR	Make/Model- 3
		Last 30 Days- 5
		Instrument- 2
		Last 90 Days- 15

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT DRG FLT AT 1500 FT, HE REACHED FOR THE ELEVATOR TRIM & INADVERTENTLY ROTATED THE FUEL SELECTOR TO ONE OF THE OFF POSITIONS. THE ENG THEN LOST POWER FROM FUEL STARVATION. THE PLT ESTABLISHED A GLIDE TO A NEARBY FIELD & ATTEMPTED TO RESTART THE ENG. HOWEVER, HE HAD DIFFICULTY MAINTAINING SPEED DRG THE EMERGENCY APCH & ELECTED TO CONCENTRATE ON FLYING THE ACFT. WHEN HE LANDED IN A BARLEY FIELD, THE WHEELS CONTACTED THE CROP & THE ACFT NOSED OVER. THE PLT RPRTD HE HAD A TOTAL OF 3 HRS OF FLT TIME IN THIS MAKE & MODEL OF ACFT.

Brief of Accident (Continued)

File No. - 438

6/23/89

MIDDLETOWN, OH

A/C Reg. No. N1961P

Time (Lcl) - 2030 EDT

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

Finding(s)

1. FLUID, FUEL - STARVATION
2. FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND
3. LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

4. EMERGENCY PROCEDURE - IMPROPER - PILOT IN COMMAND

Occurrence #3      NOSE OVER  
Phase of Operation      LANDING

Finding(s)

5. TERRAIN CONDITION - CROP

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FUEL STARVATION FROM IMPROPER MOVEMENT OF THE FUEL SELECTOR BY THE PILOT AND HIS IMPROPER USE OF EMERGENCY PROCEDURES  
DURING THE ATTEMPTED ENGINE RESTART. CONTRIBUTING FACTORS WERE THE PILOT'S LACK OF EXPERIENCE IN THIS TYPE OF AIRCRAFT  
AND THE TERRAIN CONDITION (BARLEY CROP).

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 566      6/26/89      WADSWORTH,OH      A/C Reg. No. N19950      Time (Lcl) - 1745 EDT

-----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	0
Accident Occurred During -LANDING					

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

Make/Model - CESSNA C172M	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 - 2350	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	WADSWORTH,OH	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	WADSWORTH,OH	WELTZIEN SKYPARK
Wind Dir/Speed- 290/004 KTS	ATC/Airspace	Runway Ident - 03
Visibility - 7.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2360/ 37
Lowest Sky/Clouds - 4000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Obstructions to Vision- NONE	FULL STOP	
Precipitation - NONE		
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)
PRIVATE	Current - YES	Total - 163
SE LAND	Months Since - 0	Make/Model- 3
	Aircraft Type - C-172M	Instrument- 1
		Last 24 Hrs - UNK/NR
		Last 30 Days- 3
		Last 90 Days- 3

Instrument Rating(s) - NONE

-----Narrative-----

WHILE ON A LOCAL FLIGHT FOR PURPOSE OF PRACTICING TAKEOFFS AND LANDINGS, THE PILOT NOTICED THAT THE WIND HAD BEGUN TO SHIFT. AS A RESULT OF THIS OBSERVATION AND THE INCREASED CROSSWIND COMPONENT, HE ELECTED TO USE ONLY PARTIAL FLAPS ON THE NEXT LANDING. THE PILOT STATED THAT HE KNEW THAT HE WAS HIGH DURING FINAL APPROACH, BUT THOUGHT HE WOULD BE ABLE TO LAND AND SUCCESSFULLY STOP THE AIRCRAFT BEFORE THE END OF THE RUNWAY. HE WAS UNABLE TO STOP THE AIRCRAFT ON THE RUNWAY; IT CONTINUED OFF THE DEPARTURE END, THROUGH A GUARDRAIL AND DOWN AN EMBANKMENT INTO SOME TREES. THE PILOT HAD THREE HOURS OF TOTAL FLIGHT TIME IN THAT MAKE AN MODEL AIRCRAFT, ALL DUAL INSTRUCTION RECEIVED DURING AIRCRAFT FAMILIARIZATION/CHECK OUT AND BFR. THE MOST RECENT FLIGHT OCCURRED FOUR DAYS PRIOR TO THE ACCIDENT.



Brief of Accident (Continued)

File No. - 566

6/26/89

WADSWORTH, OH

A/C Reg. No. N19950

Time (Lc1) - 1745 EDT

Occurrence #1            OVERRUN  
Phase of Operation      LANDING - ROLL

Finding(s)

1. IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
2. WEATHER CONDITION - CROSSWIND
3. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
4. PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
5. LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND

Occurrence #2            ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING - ROLL

Finding(s)

6. OBJECT - WALL/BARRICADE
7. TERRAIN CONDITION - DOWNHILL
8. TERRAIN CONDITION - HIGH VEGETATION
9. OBJECT - TREE(S)

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT'S POOR PLANNING/DECISION MAKING DURING THE APPROACH AND LANDING PHASE OF FLIGHT, WHICH RESULTED IN A LONG LANDING  
AND RUNWAY OVERRUN.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 580      6/02/89      BARTLESVILLE,OK      A/C Reg. No. N47SV      Time (Lcl) - 1930 CDT

-----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      - NORD STAMPE SV4C	Eng Make/Model - FRANKLIN 6A4165	ELT Installed/Activated - NO -N/A
Landing Gear      - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - UNK/NR
Max Gross Wt      - UNK/NR	Engine Type      - RECIPROCATING-CARBURETOR	
No. of Seats      - UNK/NR	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	BARTLESVILLE,OK	
Completeness      - N/A	Destination	Airport Data
Basic Weather      - VMC	SAME AS ACC/INC	FRANK PHILLIPS
Wind Dir/Speed- LIGHT AND VARIABLE	ATC/Airspace	Runway Ident      - 17
Visibility      - 15.0      SM	Type of Flight Plan - NONE	Runway Lth/Wid      - 3900/ 100
Lowest Sky/Clouds      - 4000 FT SCATTERED	Type of Clearance      - NONE	Runway Surface      - ASPHALT
Lowest Ceiling      - 25000 FT BROKEN	Type Apch/Lndg      - STRAIGHT-IN	Runway Status      - DRY
Obstructions to Vision- NONE		
Precipitation      - NONE		
Condition of Light      - DAYLIGHT		

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

Pilot-In-Command	Age - 42	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current      - YES	Total      - 430
SE LAND	Months Since      - 1	Make/Model- 250
	Aircraft Type - C-172	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 6
		Last 30 Days- 0
		Last 90 Days- 25
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING THE LOCAL FLIGHT OF THE EXPERIMENTAL AIRPLANE, A CONNECTING ROD BROKE IN THE ENGINE. THE PILOT WAS ABLE TO MAKE IT BACK TO THE AIRPORT FOR A FORCED LANDING BUT WAS UNABLE TO LAND ON THE RUNWAY DUE TO ANOTHER AIRPLANE THAT TAXIED ONTO THE RUNWAY IN FRONT OF THE APPROACHING AIRPLANE. THE AIRPLANE MADE AN OFF-RUNWAY, HARD LANDING, AND BOTH LANDING GEARS COLLAPSED. THE PLT DID NOT FILE AN ACC REPORT.

Brief of Accident (Continued)

File No. - 580

6/02/89

BARTLESVILLE,OK

A/C Reg. No. N47SV

Time (Lc1) - 1930 CDT

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

Finding(s)

1. ENGINE ASSEMBLY,CONNECTING ROD - FAILURE,TOTAL

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Occurrence #3      HARD LANDING  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

2. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - CONGESTED
3. PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT OF OTHER AIRCRAFT
4. OBJECT - AIRCRAFT MOVING ON GROUND
5. PLANNED APPROACH - NOT POSSIBLE -
6. VISUAL LOOKOUT - INADEQUATE - PILOT OF OTHER AIRCRAFT
7. LANDING GEAR,NOSE GEAR - COLLAPSED
8. MANEUVER - ABRUPT - PILOT IN COMMAND

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
TOTAL FAILURE OF THE ENGINE CONNECTING ROD.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 575      7/13/89      GRANITE,OK      A/C Reg. No. N23414      Time (Lc1) - 1410 CDT

-----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 -TAKEOFF			0	0	0	1
			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 AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	JOE HARP FILED
Wind Dir/Speed- 180/005 KTS	ATC/Airspace	Runway Ident - 17
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2600/ 55
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 - 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)
STUDENT	Current - N/A	Total - 16
	Months Since - N/A	Last 24 Hrs - 1
	Aircraft Type - N/A	Make/Model- 16
		Instrument- 0
		Last 30 Days- 1
		Last 90 Days- 16

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PILOT STATED HE EXPERIENCED A MODERATE NOSE WHEEL SHIMMY ON TAKEOFF ROLL AND LIFTED OFF PREMATURELY. AT THAT POINT HE LOST DIRECTIONAL CONTROL AND RAN OFF THE LEFT SIDE OF THE RUNWAY. THE AIRPLANE STRUCK A FENCE, 30 FEET OFF THE SIDE OF THE RUNWAY. THE AIRPLANE CAME TO A STOP 100 FEET OFF THE SIDE OF THE RUNWAY.

Brief of Accident (Continued)

File No. - 575

7/13/89

GRANITE,OK

A/C Reg. No. N23414

Time (Lcl) - 1410 CDT

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

Finding(s)

1. LANDING GEAR, NOSE GEAR - VIBRATION
  2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
  3. LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
- 

Occurrence #2        ON GROUND COLLISION WITH OBJECT  
Phase of Operation    TAKEOFF - GROUND RUN

Finding(s)

4. OBJECT - FENCE
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT DID NOT MAINTAIN DIRECTIONAL CONTROL.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 529      4/14/89      YAMHILL, OR      A/C Reg. No. N2990P      Time (Lcl) - 1800 PDT

-----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
					1

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

Make/Model - CONSOLIDATED (LAKE) LA-4	Eng Make/Model - LYCOMING IO-360	ELT Installed/Activated - YES/NO
Landing Gear - AMPHIBIAN	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2675	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	ON AIRPORT
Method - TELEPHONE	EUGENE, OR	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	FLYING M
Wind Dir/Speed- UNK/NR		Runway Ident - 07
Visibility - 5.0 SM	ATC/Airspace	Runway Lth/Wid - 2125/ 40
Lowest Sky/Clouds - CLEAR	Type of Flight Plan - NONE	Runway Surface - GRAVEL
Lowest Ceiling - 15000 FT OVERCAST	Type of Clearance - NONE	Runway Status - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - TRAFFIC PATTERN	ROUGH
Precipitation - NONE		
Condition of Light - DUSK		

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

Pilot-In-Command	Age - 33	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 665
SE LAND, SE SEA	Months Since - 14	Last 24 Hrs - 5
	Aircraft Type - M20E	Make/Model- 152
		Last 30 Days- 20
		Instrument- 72
		Last 90 Days- 35
		Rotorcraft - 1

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE ON DOWNWIND FOR LANDING, THE AIRPLANE ENCOUNTERED A SEVERE DOWNDRAFT. THE PILOT OPTED TO ABORT THE LANDING AND RETRACTED THE LANDING GEAR. WITH FULL POWER APPLIED THE AIRPLANE CONTINUED TO DESCEND. THE PILOT DECIDED TO TURN BACK TO THE AIRPORT DUE TO RISING TERRAIN AND INSUFFICIENT CLEARANCE. THE PILOT LANDED THE AIRPLANE WITH THE LANDING GEAR RETRACTED.

Brief of Accident (Continued)

File No. - 529

4/14/89

YAMHILL,OR

A/C Reg. No. N2990P

Time (Lc1) - 1800 PDT

-----  
Occurrence #1            IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation      APPROACH - VFR PATTERN - DOWNWIND

Finding(s)

1. WEATHER CONDITION - DOWNDRAFT
  2.    COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
  3. IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND
- 

Occurrence #2            GEAR NOT EXTENDED  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

4. WHEELS UP LANDING - INTENTIONAL - PILOT IN COMMAND
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT DISPLAYED POOR INFLIGHT PLANNING AND PREPARATION FOR THE FLIGHT. THE PILOT DID NOT ADEQUATELY COMPENSATE FOR THE  
WIND CONDITIONS RESULTING IN AN INTENTIONAL GEAR UP LANDING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 534      4/23/89      DUSHORE, PA      A/C Reg. No. N2127J      Time (Lcl) - 1220 EST

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	DESTROYED	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 - TAKEOFF		0	0	0	3	

-----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-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	ON AIRPORT
Method - UNK/NR	DOYLESTOWN, PA	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	DOYLESTOWN, PA	PRIVATE
Wind Dir/Speed- 300/010 KTS	ATC/Airspace	Runway Ident - 07
Visibility - 25.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 1900/ 60
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling -	Type Apch/Lndg - NONE	Runway Status - DRY
Obstructions to Vision- NONE		SOFT
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 42	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 186
SE LAND	Months Since - 9	Last 24 Hrs - 2
	Aircraft Type - C-152	Make/Model- 86
		Instrument- 3
		Last 30 Days- 4
		Last 90 Days- 21

Instrument Rating(s) - NONE

-----Narrative-----

AFTER ABORTING THREE PREVIOUS TAKEOFFS, THE PILOT ATTEMPTED A FOURTH AND ALTHOUGH THE AIRPLANE LIFTED OFF BEFORE MID FIELD, IT SETTLED BACK TO THE GROUND. THE PILOT ABORTED THIS TAKEOFF ALSO, BUT WAS UNABLE TO STOP BEFORE CRASHING INTO SEVERAL TREES AT THE END OF THE RUNWAY. THE 186 HOUR PILOT SAID THAT HE HAD SOME RESERVATIONS ABOUT FLYING TO THAT AIRSTRIIP BECAUSE HE HAD INSUFFICIENT INFORMATION ABOUT IT.



Brief of Accident (Continued)

File No. - 534

4/23/89

DUSHORE, PA

A/C Reg. No. N2127J

Time (Lc1) - 1220 EST

-----  
Occurrence #1            OVERRUN  
Phase of Operation      TAKEOFF - ABORTED

Finding(s)  
1. WRONG RUNWAY - SELECTED - PILOT IN COMMAND  
2. WEATHER CONDITION - TAILWIND  
-----

Occurrence #2            ON GROUND COLLISION WITH OBJECT  
Phase of Operation      TAKEOFF - ABORTED

Finding(s)  
3. OBJECT - TREE(S)  
-----

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
COLLISION WITH TREES DURING A REJECTED TAKEOFF FROM A PRIVATE TURF STRIP DUE TO THE PILOTS FAILURE TO TAKE ADVANTAGE  
OF THE EXISTING WIND.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 527      6/02/89      ERWINNA, PA      A/C Reg. No. N60812      Time (Lcl) - 1600 EDT

-----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	Pass	0	0	0
Accident Occurred During -LANDING					

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

Make/Model - BOEING - STEARMAN A75N1	Eng Make/Model - CONTINENTAL W670-6A	ELT Installed/Activated - NO -N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 2717	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 220 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	ON AIRPORT
Method - UNK/NR	ERWINNA, PA	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LOCAL	VANSANT
Wind Dir/Speed- 010	ATC/Airspace	Runway Ident - 25
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3058/ 120
Lowest Sky/Clouds - 3000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - GRASS/TURF
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 - 51	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 3010
SE LAND,ME LAND	Months Since - 12	Make/Model- 1850
GLIDER	Aircraft Type - C-152	Instrument- 70
		Multi-Eng - 6
		Last 24 Hrs - 6
		Last 30 Days- 48
		Last 90 Days- 115

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE STEARMAN PT-17 HAD LANDED AND WAS SLOWING DOWN TO CLEAR THE RUNWAY WHEN A GUST OF WIND LIFTED THE RIGHT WING OFF THE GROUND. THE INSTRUCTOR PILOT ATTEMPTED TO GAIN CONTROL BY ADDING POWER AND LEFT BRAKE BUT THE AIRCRAFT WENT OFF THE RUNWAY TO THE LEFT AND DOWN AN INCLINE INTO TREES. THE STU PLT WAS NOT INJURED BUT THE UPPER WING TRAPPED THE INSTRUCTOR PILOT UNTIL HELP ARRIVED.

Brief of Accident (Continued)

File No. - 527

6/02/89

ERWINNA, PA

A/C Reg. No. N60812

Time (Lc1) - 1600 EDT

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

Finding(s)

1. WEATHER CONDITION - GUSTS
  2. COMPENSATION FOR WIND CONDITIONS - NOT MAINTAINED - DUAL STUDENT
  3. GROUND LOOP/SWERVE - UNCONTROLLED - DUAL STUDENT
  4. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
- 

Occurrence #2            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:  
LOSS CONTROL AND COLLISION WITH TREES DUE TO FAILURE OF THE STUDENT PILOT TO COMPENSATE FOR THE WIND AND LACK OF  
SUPERVISION BY THE CFI.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 535      6/13/89      PITTSBURGH,PA      A/C Reg. No. N3420Y      Time (Lcl) - 2030 EDT

-----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	2
				0	0	0

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

Make/Model - CESSNA 180	Eng Make/Model - CONTINENTAL O-470R	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2800	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	OFF AIRPORT/STRIP
Method - N/A	PITTSBURGH,PA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	ALLEGHENY CO.
Wind Dir/Speed- 210/005 KTS	ATC/Airspace	Runway Ident - 28
Visibility - 6.0 SM	Type of Flight Plan - IFR	Runway Lth/Wid - 6500/ 150
Lowest Sky/Clouds - 1600 FT SCATTERED	Type of Clearance - IFR	Runway Surface - CONCRETE
Lowest Ceiling - 2200 FT BROKEN	Type Apch/Lndg - UNK/NR	Runway Status - DRY
Obstructions to Vision- HAZE		
Precipitation - NONE		
Condition of Light - DUSK		

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

Pilot-In-Command	Age - 36	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 2000
SE LAND,ME LAND	Months Since - 1	Make/Model- 40
	Aircraft Type - UNK/NR	Instrument- 130
		Multi-Eng - 125
		Last 24 Hrs - 5
		Last 30 Days- 100
		Last 90 Days- 210

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT HAD JUST COMPLETED A ILS APPROACH AND LANDED AT ALLEGHENY COUNTY AIRPORT. HE TRIED TO TURN OFF THE RUNWAY AT THE FIRST TAXIWAY AND LOST CONTROL OF THE AIRCRAFT. THE PILOT APPLIED EXCESSIVE BRAKING WITH THE TAIL OF THE AIRCRAFT STILL IN THE AIR AND THE AIRCRAFT FLIPPED OVER ON ITS BACK.

Brief of Accident (Continued)

File No. - 535

6/13/89

PITTSBURGH, PA

A/C Reg. No. N3420Y

Time (Lcl) - 2030 EDT

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

Finding(s)

1. AIRCRAFT CONTROL - NOT MAINTAINED - DUAL STUDENT
  2. BRAKES(NORMAL) - IMPROPER USE OF - DUAL STUDENT
  3. GROUND LOOP/SWERVE - EXCESSIVE - DUAL STUDENT
  4. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
- 

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:  
LOSS OF CONTROL DURING LANDING ROLLOUT DUE TO EXCESSIVE APPLICATION OF BRAKES BY THE PILOT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 542      7/23/89      EIGHTY FOUR,PA      A/C Reg. No. N91867      Time (Lcl) - 1615 EDT

-----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	1	0	0
Accident Occurred During -LANDING			0	0	0	0

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

Make/Model - SCHWEIZER 1-23	Eng Make/Model - N/A	ELT Installed/Activated - NO	-N/A
Landing Gear - SKI/WHEEL	Number Engines - N/A	Stall Warning System - NO	
Max Gross Wt - 750	Engine Type - N/A		
No. of Seats - 1	Rated Power - N/A		

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	ON AIRPORT
Method - UNK/NR	EIGHTY-FOUR,PA	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LOCAL	BANDEL
Wind Dir/Speed- UNK/NR	ATC/Airspace	Runway Ident - 18
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2095/ 98
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - UNK/NR	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - UNK/NR		
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 - 165
SE LAND	Months Since - 3	Last 24 Hrs - 1
GLIDER	Aircraft Type - S-33	Make/Model- 2
		Last 30 Days- 4
		Instrument- 0
		Last 90 Days- 10

Instrument Rating(s) - NONE

-----Narrative-----

PILOT MADE A POOR LANDING PATTERN WITH EXCESSIVE AIRSPEED. ON TOUCHDOWN THE PILOT SAID THAT HE OVER-CONTROLLED THE GLIDER ALLOWING THE NOSE TO STRIKE THE RUNWAY SURFACE AND AT THIS TIME HE LOST DIRECTIONAL CONTROL AS THE GLIDER BOUNCED AND GROUNDLOOPED.

Brief of Accident (Continued)

File No. - 542

7/23/89

EIGHTY FOUR,PA

A/C Reg. No. N91867

Time (Lcl) - 1615 EDT

---

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

Finding(s)

1. AIRSPEED - EXCESSIVE - PILOT IN COMMAND
  2. FLARE - IMPROPER - PILOT IN COMMAND
  3. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
  4. RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND
  5. GROUND LOOP/SWERVE - UNCONTROLLED -
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
POOR HANDLING OF THE GLIDER DURING LANDING. THE PILOT OVER CORRECTED AND CAUSED THE NOSE TO STRIKE THE RUNWAY SURFACE.  
DIRECTIONAL CONTROL WAS LOST, RESULTING IN A GROUNDLOOP.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 536      1/14/89      NEWPORT,RI      A/C Reg. No. N6556A      Time (Lcl) - UNK/NR

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

Type Operating Certificate-NONE (GENERAL AVIATION)

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

Aircraft Damage  
DESTROYED  
Fire      NONE

	Fatal	Serious	Minor	None
Crew	0	0	1	0
Pass	0	0	4	0

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

Make/Model      - CESSNA T210  
Landing Gear      - TRICYCLE-RETRACTABLE  
Max Gross Wt      - 4000  
No. of Seats      - 6

Eng Make/Model - CONTINENTAL TS10-520-R  
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- 220/005 KTS  
Visibility      - 20.0 SM  
Lowest Sky/Clouds      - CLEAR  
Lowest Ceiling      -  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point  
ISLIP,NY  
Destination  
NEWPORT,RI

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

NEWPORT STATE  
Runway Ident      - 22  
Runway Lth/Wid      - 3000/ 75  
Runway Surface      - ASPHALT  
Runway Status      - DRY

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

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

Age - 48  
Biennial Flight Review  
Current      - YES  
Months Since      - 0  
Aircraft Type - C-210

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)	
Total	- 546
Last 24 Hrs	- 0
Make/Model-	302
Instrument-	151
Last 30 Days-	8
Last 90 Days-	35

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING ATTEMPTED GO AROUND PILOT SAID THAT ENGINE DID NOT RESPOND. UPON RAISING THE FLAPS AND MAKING NOSE HIGH LEFT TURN THE STALL WARNING HORN SOUNDED SO HE LANDED IN A NEARBY FARM FIELD AND NOSED OVER. A TEST RUN OF THE ENGINE DID NOT REVEAL ANY DISCREPANCIES.



Brief of Accident (Continued)

File No. - 536

1/14/89

NEWPORT, RI

A/C Reg. No. N6556A

Time (Lc1) - UNK/NR

Occurrence #1. LOSS OF CONTROL - IN FLIGHT

Phase of Operation GO-AROUND (VFR)

Finding(s)

1. AIRCRAFT PERFORMANCE, CLIMB CAPABILITY - EXCEEDED
2. GO-AROUND - ATTEMPTED - PILOT IN COMMAND
3. FLIGHT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND
4. STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #2 IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

5. TERRAIN CONDITION - SOFT

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
LOSS OF CONTROL DURING AN ATTEMPTED GO-AROUND DUE TO RAISING THE FLAPS AT LOW AIRSPEED, IN A NOSE HIGH ATTITUDE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 443      3/18/89      PICKENS, SC      A/C Reg. No. N757MY      Time (Lcl) - 0845 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	- CESSNA 182Q	Eng Make/Model	- CONTINENTAL O-470-U	ELT Installed/Activated	- YES/NO
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 2950	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 2	Rated Power	- 230 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 - 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 GREENVILLE, SC</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 - SIMULATED FORCED LANDING</p>	<p>Airport Proximity ON AIRPORT</p> <p>Airport Data</p> <p>PICKENS COUNTY</p> <p>Runway Ident - 22</p> <p>Runway Lth/Wid - 5000/ 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</p>	<p>Age - 42</p> <p>Biennial Flight Review</p> <p>Current - YES</p> <p>Months Since - 0</p> <p>Aircraft Type - C-182Q</p>	<p>Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <p>Total - 711</p> <p>Make/Model- 4</p> <p>Instrument- 139</p> <p>Multi-Eng - 35</p> <p>Last 24 Hrs - 0</p> <p>Last 30 Days- 4</p> <p>Last 90 Days- 4</p>
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Instrument Rating(s) - AIRPLANE

-----Narrative-----

A CIVIL AIR PATROL AIRPLANE LANDED HARD WHILE THE TWO QUALIFIED PILOTS WERE PRACTICING A SIMULATED FORCED LANDING IMMEDIATELY AFTER TAKEOFF. THE PILOT, WHO WAS OPERATING THE CONTROLS, WAS CONSIDERED THE PILOT-IN-COMMAND (PIC) ON THIS FLIGHT, ALTHOUGH THE OTHER PILOT WAS AN INSTRUCTOR (CFI). SHORTLY AFTER LIFT-OFF, THE CFI REDUCED POWER TO SIMULATE A POWER LOSS. THE PIC LANDED ON THE REMAINING RWY, BUT THE AIRPLANE TOUCHED DOWN HARD, WHICH RESULTED IN DAMAGE TO THE AIRFRAME.

Brief of Accident (Continued)

File No. - 443

3/18/89

PICKENS, SC

A/C Reg. No. N757MY

Time (Lcl) - 0845 EST

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Occurrence #1      HARD LANDING

Phase of Operation      LANDING

Finding(s)

1. EMERGENCY PROCEDURE - SIMULATED -
  2. FLARE - IMPROPER - PILOT IN COMMAND
  3. SUPERVISION - INADEQUATE - OTHER CREW MEMBER
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER FLARE BY THE PILOT AND INADEQUATE SUPERVISION OF THE FLIGHT BY THE OTHER CREW MEMBER.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 507      3/25/89      LUGOFF, SC      A/C Reg. No. N70289      Time (Lcl) - 1100 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	0	0	1
Accident Occurred During	-TAKEOFF		Pass 0	0	0	0

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

Make/Model	- UPCHURCH ROTORWAY EXECUTIVE	Eng Make/Model	- ROTORWAY RW 152/D	ELT Installed/Activated	- NO -N/A
Landing Gear	- SKID	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 1320	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 2	Rated Power	- 152 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- CALMABLE</p> <p>Visibility - 30.0 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 LUGOFF, SC</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 ON AIRPORT</p> <p>Airport Data PRIVATE</p> <p>Runway Ident - UNK/NR</p> <p>Runway Lth/Wid - UNK/NR</p> <p>Runway Surface - GRASS/TURF</p> <p>Runway Status - DRY</p>
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-----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 - 21
	Months Since - N/A	Make/Model- 21
HELICOPTER	Aircraft Type - N/A	Instrument- 0
		Last 24 Hrs - 2
		Last 30 Days- 11
		Last 90 Days- 16
		Rotorcraft - 21

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT SAID HE LOST CONTROL OF THE AIRCRAFT DURING AN ATTEMPTED TAKEOFF TO A HOVER AS A RESULT OF THE LEFT SKID BEING SLIGHTLY EMBEDDED IN SOFT EARTH. THE ROTORS CAME INTO CONTACT WITH THE GROUND CAUSING A DYNAMIC ROLLOVER. THE 21-HOUR STUDENT PILOT/BUILDER WAS NOT INJURED AND THE AIRCRAFT WAS DESTROYED.

Brief of Accident (Continued)

File No. - 507

3/25/89

LUGOFF, SC

A/C Reg. No. N70289

Time (Lcl) - 1100 EST

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

Finding(s)

1. AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
2. LANDING GEAR, SKID ASSEMBLY - MOVEMENT RESTRICTED

Occurrence #2      ROLL OVER  
Phase of Operation      TAKEOFF - INITIAL CLIMB

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER EVALUATION OF EXISTING CONDITIONS DURING PREFLIGHT INSPECTION RESULTING IN A DYNAMIC ROLLOVER DUE TO DRAG  
FROM AN IMBEDDED LEFT SKID.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 458      4/14/89      MILBANK, SD      A/C Reg. No. N8272W      Time (Lcl) - 0752 CST

-----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	2
Accident Occurred During -TAKEOFF						

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

Make/Model - PIPER PA-28-180	Eng Make/Model - LYCOMING O-360-A3A	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2175	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	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	GETTYSBURG, SD	PRIVATE STRIP
Wind Dir/Speed- 270/007 KTS	ATC/Airspace	Runway Ident - 36
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 1700/ 60
Lowest Sky/Clouds - 25000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - GRASS/TURF
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 - 57	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 413
SE LAND	Months Since - 0	Make/Model- 388
	Aircraft Type - PA-28	Instrument- 0
		Multi-Eng - 0
		Last 24 Hrs - 0
		Last 30 Days- 9
		Last 90 Days- 9
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THE ACFT SEEMED TO FUNCTION NORMALLY DRG THE TAKEOFF ROLL; HOWEVER, AFTER LIFT-OFF, IT WOULD NOT CLIMB ABOVE GROUND EFFECT. HE SAID IT JUST CLEARED LOW TREES APRX 300 TO 400 FT FROM THE END OF THE RWY, THEN IT STALLED INTO A FENCE. NO PREIMPACT PART FAILURE OR MALFUNCTION WAS FOUND. BEFORE THE FLT, THE TEMP WAS SLIGHTLY BELOW FREEZING & THERE WAS FROST ON THE ACFT. A MECHANIC STATED THE FROST WAS WIPED OFF THE WINGS & TAIL BEFORE THE FLT. BEYOND THE DEPARTURE END OF THE RUNWAY, THE TERRAIN WAS NOT SUITABLE FOR AN ABORTED TAKEOFF. ALSO, THE PLT RPRTD THAT THE FENCE "SAVED THE DAY" AS THERE WERE SIGNIFICANT OBSTRUCTIONS BEYOND THE FENCE.

Brief of Accident (Continued)

File No. - 458

4/14/89

MILBANK, SD

A/C Reg. No. N8272W

Time (Lcl) - 0752 CST

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

Finding(s)

1. ICE/FROST REMOVAL FROM AIRCRAFT - INADEQUATE - PILOT IN COMMAND
2. STALL/MUSH
3. OBJECT - FENCE

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FAILURE BY THE PILOT TO ASSURE ADEQUATE REMOVAL OF FROST FROM THE AIRCRAFT WHICH RESULTED IN A STALL/MUSH.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 452      2/18/89      CLEVELAND, TN      A/C Reg. No. N8032A      Time (Lcl) - 1645 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
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During -LANDING					

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

Make/Model - CESSNA 170B	Eng Make/Model - CONTINENTAL O-300	ELT Installed/Activated - UNK/NR
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1100	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 145 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	JACKSBORO, TN	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - IMC	ROME, GA	Runway Ident - N/A
Wind Dir/Speed- 040/004 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 2.000 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 - 800 FT OVERCAST	Type Apch/Lndg - PRECAUTIONARY LANDING	
Obstructions to Vision- FOG		
Precipitation - RAIN		
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	Current - YES	Total - 11273
SE LAND	Months Since - 10	Make/Model- 560
GLIDER	Aircraft Type - M20	Instrument- 81
		Multi-Eng - 15
		Last 24 Hrs - 4
		Last 30 Days- 60
		Last 90 Days- 84
		Rotorcraft - 19

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPTD HE OBTAINED A WX BRIEFING BEFORE HIS INITIAL FLT. EN ROUTE, HE LANDED TO CHECK THE WX AGAIN. AFTER THE 2ND TAKEOFF, WX WAS OBTAINED IN FLT FROM THE ATIS AT KNOXVILLE, TN. THE ATIS RPTD 900 FEET OVC, 8 MI VIS, & SEVERE ICING IN THE LOCAL AREA. EARLIER IN THE FLT, THE PLT HAD USED CARB HEAT DUE TO THE WX CONDS. WITH THE CARB HEAT APPLIED, THE ACFT ENTERED A SNOW SHOWER & LOSS OF RPM ENSUED. ALSO, AIRFRAME ICING WAS ENCOUNTERED. THE PLT ELECTED TO DIVERT TO A NEARBY ARPT; HOWEVER, THE RPM COULD NOT BE MAINTAINED & A PRECAUTIONARY LANDING WAS MADE IN A FIELD. DRG THE LANDING, THE ACFT ENCOUNTERED SOFT TERRAIN & NOSED OVER.



Brief of Accident (Continued)

File No. - 452

2/18/89

CLEVELAND, TN

A/C Reg. No. N8032A

Time (Lcl) - 1645 EST

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

Finding(s)

1. FLIGHT INTO KNOWN ADVERSE WEATHER - PERFORMED - PILOT IN COMMAND
  2. WEATHER CONDITION - CARBURETOR ICING CONDITIONS
  3. WEATHER CONDITION - RAIN
  4. WEATHER CONDITION - SNOW
  5. WEATHER CONDITION - ICING CONDITIONS
  6. FLIGHT TO ALTERNATE DESTINATION - DELAYED - PILOT IN COMMAND
- 

Occurrence #2      NOSE OVER  
Phase of Operation      LANDING - ROLL

Finding(s)

7. PRECAUTIONARY LANDING - PERFORMED -
  8. TERRAIN CONDITION - SOFT
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
FLIGHT INTO KNOWN ADVERSE WEATHER BY THE PILOT AND HIS DELAY IN DIVERTING TO AN ALTERNATE AIRPORT WHICH LED TO A  
PARTIAL POWER LOSS AND AN EMERGENCY LANDING. THE WEATHER CONDITIONS AND SOFT TERRAIN WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 510      3/04/89      BLOUNTVILLE, TN      A/C Reg. No. N25524      Time (Lcl) - 2229 EST

-----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 - CRUISE

Fire Crew  
NONE 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/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 - 060/006 KTS  
Visibility - 15.0 SM  
Lowest Sky/Clouds - 5000 FT SCATTERED  
Lowest Ceiling - 10000 FT BROKEN  
Obstructions to Vision - NONE  
Precipitation - NONE  
Condition of Light - NIGHT(DARK)

Itinerary

Last Departure Point  
BLOUNTVILLE, TN  
Destination  
ABINGDON, VA

ATC/Airspace

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

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

TRI-CITY AIRPORT  
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, ME LAND

Age - 31  
Biennial Flight Review  
Current - YES  
Months Since - 10  
Aircraft Type - C-172RG

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total - 417  
Last 24 Hrs - 5  
Make/Model - 233  
Last 30 Days - 24  
Instrument - 90  
Last 90 Days - 72  
Multi-Eng - 20

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT REPORTED THAT ABOUT 10 MINUTES AFTER TAKEOFF, HE WAS IN CRUISE FLT AT 3,000 FT WHEN HIS ENGINE DEVELOPED A MISS AND BEGAN TO RUN ROUGH. AFTER EMERGENCY PROCEDURES WHICH INCLUDED APPLYING CARB HEAT, THERE WAS A SLIGHT IMPROVEMENT IN ENGINE PERFORMANCE. SHORTLY, THE ENGINE QUIT COMPLETELY AND THE PILOT WAS UNABLE TO RETURN TO THE DEPARTURE AIRPORT. DURING THE FORCED LANDING ATTEMPT, THE AIRPLANE COLLIDED WITH A UTILITY POLE AND POWER LINE AT OR NEAR STALL SPEED. THE PILOT AND HIS PASSENGER RECEIVED MINOR INJURIES. AFTER RECOVERY OF THE AIRPLANE, THE ENGINE WAS STARTED AND OPERATED SATISFACTORILY. THE EXISTING AMBIENT ATMOSPHERIC CONDITIONS WERE FAVORABLE FOR THE FORMATION OF CARBURETOR ICE.

Brief of Accident (Continued)

File No. - 510

3/04/89

BLOUNTVILLE, TN

A/C Reg. No. N25524

Time (Lc1) - 2229 EST

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

Finding(s)

1. FUEL SYSTEM, CARBURETOR - ICE
  2. CARBURETOR HEAT - DELAYED - PILOT IN COMMAND
  3. WEATHER CONDITION - CARBURETOR ICING CONDITIONS
- 

Occurrence #2            FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

-----

Occurrence #3            IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)

4. OBJECT - POLE
  5. LIGHT CONDITION - DARK NIGHT
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
CARBURETOR ICE. THE PILOT FAILED TO APPLY CARBURETOR HEAT IN A TIMELY AND ADEQUATE MANNER. THIS FAILURE RESULTED IN  
THE ACCUMULATION OF ICE TO A POINT OF FAILURE OF THE ENGINE WHICH ELIMINATED THE HEAT NECESSARY TO REMOVE THE ICE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 431      5/19/89      EAST BERNARD, TX      A/C Reg. No. N1722B      Time (Lcl) - 1500 CDT

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

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

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

Make/Model - BOEING A75	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 - NO
Max Gross Wt - 3520	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	EAST BERNARD, TX	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 090/021 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 12.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 3500 FT 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 - 45	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 9745
SE LAND, ME LAND	Months Since - 1	Make/Model- 6000
	Aircraft Type - C-150	Instrument- UNK/NR
		Multi-Eng - 125
		Last 24 Hrs - 6
		Last 30 Days- UNK/NR
		Last 90 Days- 35
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

AFTER THE PLT DEPARTED ON AN AERIAL APPLICATION FLT, THE ENG LOST POWER. CHEMICALS WERE JETTISONED & AN EMERGENCY LANDING WAS MADE. HOWEVER, THE ACFT TOUCHED DOWN IN A MUDDY FIELD WITH A TAILWIND & NOSED OVER. AN EXAM OF THE ACFT REVEALED THERE WAS WATER IN THE FUEL SYS. THE ACDNT OCCURRED AFTER THE ACFT HAD BEEN REFUELED FOR THE 3RD TIME THAT DAY.

Brief of Accident (Continued)

File No. - 431

5/19/89

EAST BERNARD, TX

A/C Reg. No. N1722B

Time (Lc1) - 1500 CDT

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

Finding(s)

1. MAINTENANCE, SERVICE OF AIRCRAFT - INADEQUATE -
  2. FLUID, FUEL - WATER
  3. AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
- 

Occurrence #2       FORCED LANDING  
Phase of Operation   DESCENT - EMERGENCY

Finding(s)

4. LOAD JETTISON
- 

Occurrence #3       NOSE OVER  
Phase of Operation   LANDING

Finding(s)

5. WEATHER CONDITION - TAILWIND
  6. TERRAIN CONDITION - SOFT
  7. TERRAIN CONDITION - WET
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
WATER IN FUEL FROM IMPROPER SERVICING OF THE AIRCRAFT AND IMPROPER PREFLIGHT BY THE PILOT. THE TAILWIND & SOFT/WET  
TERRAIN WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 579      5/27/89      SAINT JO, TX      A/C Reg. No. N72279      Time (Lcl) - 1700 CDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage DESTROYED	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	2
Accident Occurred During -TAKEOFF					

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

Make/Model - CESSNA 206D	Eng Make/Model - CONTINENTAL IO-520F	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3600	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 300 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	SAME AS ACC/INC	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	BRECKENRIDGE, TX	Runway Ident - N/A
Wind Dir/Speed- LIGHT AND VARIABLE	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 7.0 SM	Type of Flight Plan - NONE	Runway Surface - GRASS/TURF
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Status - ROUGH
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
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 - 300
SE LAND	Months Since - 4	Make/Model- 150
	Aircraft Type - C-206	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT HAD LANDED THE AIRPLANE IN AN UNIMPROVED FIELD DUE TO INCLEMENT WEATHER. THEY REMAINED ON THE GROUND FOR FOUR AND ONE HALF HOURS UNTIL THE WEATHER CLEARED. THE PILOT SAID HE WALKED THE TERRAIN AND HAD FELT IT WAS SAFE TO MAKE A TAKEOFF. DURING THE TAKEOFF ROLL, HE CHANGED HIS MIND AND ABORTED THE TAKEOFF AFTER THE AIRPLANE WAS AIRBORNE. AFTER ABORTING THE TAKEOFF, HE MOVED THE AIRPLANE TO THE LEFT AND KEPT THE NOSEWHEEL OFF THE GROUND AS LONG AS POSSIBLE. WHEN THE NOSEWHEEL TOUCHED, IT RAN THROUGH A SERIES OF RUTS IN THE SURFACE, AND THE AIRPLANE FLIPPED FORWARD TO THE INVERTED POSITION. THE PLT DID NOT FILE AN ACC REPORT.

Brief of Accident (Continued)

File No. - 579

5/27/89

SAINT JO, TX

A/C Reg. No. N72279

Time (Lcl) - 1700 CDT

-----  
Occurrence #1            ON GROUND COLLISION WITH TERRAIN/WATER  
Phase of Operation      TAKEOFF - ABORTED

Finding(s)

1. TERRAIN CONDITION - ROUGH/UNEVEN
  2. PREFLIGHT PLANNING/PREPARATION - IMPROPER - PILOT IN COMMAND
- 

Occurrence #2            NOSE OVER  
Phase of Operation      TAKEOFF - ABORTED

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE PILOT'S DECISION TO ATTEMPT TO TAKEOFF FROM A FIELD THAT WAS NOT SUITABLE FOR SUCH PURPOSE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 578      5/29/89      ONALASKA, TX      A/C Reg. No. N17130      Time (Lcl) - 1230 CDT

-----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 150L	Eng Make/Model - CONTINENTAL O-200A	ELT Installed/Activated - 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 - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	CONROE, TX	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	CONROE, TX	
Wind Dir/Speed- 170/007 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 7.0 SM	Type of Flight Plan - VFR	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 3000 FT SCATTERED	Type of Clearance - VFR	Runway Surface - GRASS/TURF
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	Runway Status - DRY
Obstructions to Vision- HAZE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 40	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 29
	Months Since - N/A	Make/Model- 29
	Aircraft Type - N/A	Instrument- 0
		Multi-Eng - 0
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

PRIOR TO THE FLIGHT, THE STUDENT PILOT AND HIS INSTRUCTOR DISCUSSED THE FACT THAT THE AIRPLANE WAS NOT FULL OF FUEL. THE STUDENT SAID IT WAS HIS UNDERSTANDING THAT HE WOULD HAVE SUFFICIENT FUEL FOR THE SOLO CROSS-COUNTRY FLIGHT IF THE FLIGHT WENT ACCORDING TO THE FLIGHT PLAN. THE STUDENT PILOT DID NOT INDICATE THERE WERE ANY PROBLEMS WITH THE FLIGHT UNTIL HE NOTICED THE FUEL GAGES WERE ON EMPTY. THE STUDENT PILOT SAID HE HAD FLOWN TO THE TURNAROUND AIRPORT, MADE A TOUCH-AND-GO LANDING, AND WAS ENROUTE HOME WHEN HE NOTICED THE FUEL GAGES WERE ON ZERO. HE HEADED FOR A NEARBY AIRPORT BUT THE ENGINE STOPPED BEFORE HE MADE IT THERE. DURING THE LANDING ROLL OF THE FORCED LANDING, THE AIRPLANE HIT A TREE STUMP AND WENT FORWARD TO THE INVERTED POSITION.



Brief of Accident (Continued)

File No. - 578

5/29/89

ONALASKA, TX

A/C Reg. No. N17130

Time (Lcl) - 1230 CDT

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

Finding(s)

1. SUPERVISION - INADEQUATE - FLIGHT INSTRUCTOR(ON GROUND)
2. FUEL CONSUMPTION CALCULATIONS - IMPROPER - PILOT IN COMMAND
3. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
4. LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND

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 - OTHER

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:  
FUEL SYSTEM EXHAUSTION DUE TO THE IMPROPER PLANNING/DECISION BY THE FLIGHT INSTRUCTOR, ON THE GROUND, PRIOR TO THE  
FLIGHT AND THE IMPROPER INFLIGHT PLANNING/DECISION BY THE STUDENT PILOT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 430      6/01/89      LISSIE,TX      A/C Reg. No. N6822Q      Time (Lcl) - 1545 CDT

-----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

Fire

Crew

Flight Conducted Under -14 CFR 137

NONE

Pass

Accident Occurred During -LANDING

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

Make/Model - GRUMMAN G-164B

Eng Make/Model - GARRETT TPE-331-43A

ELT Installed/Activated - NO -N/A

Landing Gear - TAILWHEEL-ALL FIXED

Number Engines - 1

Stall Warning System - NO

Max Gross Wt - 5200

Engine Type - TURBOPROP

No. of Seats - 1

Rated Power - 580 HP

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

Weather Data

Wx Briefing - NO RECORD OF BRIEFING

Method - N/A

Completeness - N/A

Basic Weather - VMC

Wind Dir/Speed- 240/005 KTS

Visibility - 5.0 SM

Lowest Sky/Clouds - CLEAR

Lowest Ceiling - NONE

Obstructions to Vision- NONE

Precipitation - NONE

Condition of Light - DAYLIGHT

Itinerary

Last Departure Point

LISSIE,TX

Destination

SAME AS ACC/INC

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 - 57

Biennial Flight Review

Current - YES

Months Since - 15

Aircraft Type - C-172

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total - 8600

Make/Model- 3000

Instrument- UNK/NR

Multi-Eng - 140

Last 24 Hrs - 3

Last 30 Days- 70

Last 90 Days- 220

Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE ACFT WAS ON AN AERIAL APPLICATION FLIGHT WHEN A BIRD STRIKE OCCURRED AT THE AIR INTAKE AREA. IMPACT RESULTED IN DAMAGE TO THE ENGINE COMPRESSOR SECTION & THE ENGINE FLAMED OUT. THE PILOT MADE A FORCED LANDING INTO A PLANTED FIELD. DURING TOUCHDOWN, THE ACFT HIT A SMALL LEVEE AND FLIPPED OVER. NO SUITABLE LANDING AREA WAS AVAILABLE.

Brief of Accident (Continued)

File No. - 430

6/01/89

LISSIE, TX

A/C Reg. No. N6822Q

Time (Lcl) - 1545 CDT

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

Finding(s)  
1. OBJECT - BIRD(S)

-----  
Occurrence #2            LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation      MANEUVERING - AERIAL APPLICATION

Finding(s)  
2. COMPRESSOR ASSEMBLY - FOREIGN OBJECT DAMAGE

-----  
Occurrence #3            FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)  
3. LOAD JETTISON

-----  
Occurrence #4            IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation      LANDING - FLARE/TOUCHDOWN

Finding(s)  
4. TERRAIN CONDITION - NONE SUITABLE  
5. TERRAIN CONDITION - BERM

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
A BIRD STRIKE WHICH RESULTED IN FOREIGN OBJECT DAMAGE TO THE ENGINE COMPRESSOR. A BERM AND THE LACK OF SUITABLE TERRAIN  
FOR A FORCED LANDING WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 581      6/11/89      KAUFMAN, TX      A/C Reg. No. N24258      Time (Lcl) - 1320 CDT

-----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	-LANDING					

-----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	OFF AIRPORT/STRIP
Method - N/A		ARLINGTON, TX	
Completeness - N/A		Destination	Airport Data
Basic Weather - VMC		TYLER, TX	
Wind Dir/Speed- 180/012 KTS		ATC/Airspace	Runway Ident - N/A
Visibility - 6.0 SM		Type of Flight Plan - VFR	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 3500 FT SCATTERED		Type of Clearance - VFR	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 - 24	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 47
	Months Since - N/A	Last 24 Hrs - 2
	Aircraft Type - N/A	Make/Model- 47
		Last 30 Days- 9
		Instrument- 1
		Last 90 Days- 9
		Multi-Eng - 0
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PILOT WAS SENT ON A SOLO CROSS-COUNTRY FLIGHT WITH AN AIRPLANE THAT WAS LESS THAN FULL. HE WAS TOLD THAT THE AIRPLANE HAD BEEN FLOWN 1.5 HOURS SINCE IT HAD BEEN TOPPED OFF WITH FUEL. HE FLEW THE AIRPLANE FOR ONE HOUR AND FIFTY MINUTES BEFORE THE ENGINE STOPPED DUE TO FUEL EXHAUSTION AND MADE A FORCED LANDING ON A ROAD. DURING THE LANDING ON THE ROAD, THE AIRPLANE RAN OFF THE SIDE, HIT A DITCH AND THEN A UTILITY POLE. LATER IT WAS DETERMINED THE AIRPLANE HAD BEEN FLOWN 2.5 HOURS BEFORE THE STUDENT PILOT RECEIVED IT FOR HIS FLIGHT. HE WAS ABLE TO KEEP IT AIRBORNE LONGER THAN NORMAL FOR THE AMOUNT OF FUEL HE STARTED WITH. THE STUDENT PILOT STATED HE HAD BEEN UNABLE TO LOCATE HIS AIRPORT DUE TO FLOODED CONDITIONS AND A FAULTY RADIO, AND THAT HE WAS RETURNING TO HIS DEPARTURE AIRPORT WHEN THE ENGINE STOPPED PRODUCING POWER.

Brief of Accident (Continued)

File No. - 581

6/11/89

KAUFMAN, TX

A/C Reg. No. N24258

Time (Lcl) - 1320 CDT

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

Finding(s)

1. FLUID, FUEL - EXHAUSTION
  2. PLANNING-DECISION - IMPROPER - COMPANY/OPERATOR MGMT
  3. BECAME LOST/DISORIENTED - INADVERTENT - PILOT IN COMMAND
  4. LACK OF TOTAL EXPERIENCE - 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)

5. TERRAIN CONDITION - ROADWAY/HIGHWAY
  6. TERRAIN CONDITION - DITCH
- 

Occurrence #4      ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING - ROLL

Finding(s)

7. OBJECT - UTILITY POLE
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
STUDENT PILOT INADVERTENTLY BECOMING LOST/DISORIENTED AND EXHAUSTING THE FUEL IN THE FUEL SYSTEM.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 576      6/26/89      CLEVELAND, TX      A/C Reg. No. N601MF      Time (Lcl) - 0300 CDT

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

Type Operating Certificate	ON-DEMAND AIR TAXI	Aircraft Damage					
Name of Carrier	-CONROE AVIATION SERVICES,	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	-LANDING			0	0	1	0
				0	0	0	0

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

Make/Model	- PIPER PA-601B	Eng Make/Model	- LYCOMING IO-540	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	- 2	Rated Power	- 290 HP		

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

Weather Data		Itinerary	Airport Proximity
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method	- N/A	BATON ROUGE, LA	
Completeness	- N/A	Destination	Airport Data
Basic Weather	- IMC	CONROE, TX	MUNICIPAL
Wind Dir/Speed	- 120/020 KTS	ATC/Airspace	Runway Ident
Visibility	- 10.0 SM	Type of Flight Plan	- N/A
Lowest Sky/Clouds	- 1500 FT SCATTERED	- IFR	Runway Lth/Wid
Lowest Ceiling	- BROKEN	- IFR	- N/A
Obstructions to Vision	- NONE	Type Apch/Lndg	Runway Surface
Precipitation	- NONE	- FORCED LANDING	- GRASS/TURF
Condition of Light	- NIGHT(DARK)		Runway Status
			- HIGH VEGETATION
			ROUGH

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

Pilot-In-Command	Age - 36	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL	Current - YES	Total - 1624	Last 24 Hrs - 4
SE LAND, ME LAND	Months Since - 11	Make/Model - 30	Last 30 Days - 78
	Aircraft Type - PA-601B	Instrument - 243	Last 90 Days - 322
		Multi-Eng - 217	Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

AIRPLANE WAS ON A REGULAR NIGHT PART 135 FLIGHT AND WAS 17 MILES FROM DESTINATION WHEN ONE ENGINE STARTED TO SURGE AND LOST POWER. THE PILOT DECLARED AN EMERGENCY AND SAID HE WAS RUNNING OUT OF FUEL. ATC VECTORED AIRPLANE TO CLOSEST AIRPORT BUT AIRPORT DID NOT HAVE BEACON LIGHTED AND PILOT WAS LOW OVER AIRPORT BEFORE HE SAW IT. THEN THE OTHER ENGINE SURGED AND THE PILOT MADE A FORCED LANDING OFF THE AIRPORT IN HEAVY UNDERBRUSH AND ROUGH TERRAIN. INSPECTION REVEALED AIRPLANE HAD 23 GALLONS OF FUEL IN RIGHT WING, 3 GALLONS IN FUSELAGE TANK, AND ZERO FUEL IN LEFT TANK. PLT SAID AFTER THE ACC HE DECIDED NOT TO CROSS FEED BECAUSE HE THOUGHT THE FUSELAGE TANK HAD ENOUGH FUEL.

Brief of Accident (Continued)

File No. - 576

6/26/89

CLEVELAND, TX

A/C Reg. No. N601MF

Time (Lc1) - 0300 CDT

Occurrence #1      LOSS OF ENGINE POWER  
Phase of Operation      CRUISE - NORMAL

Finding(s)

1. FLUID, FUEL - STARVATION
2. FUEL SUPPLY - MISJUDGED - PILOT IN COMMAND
3. PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND

Occurrence #2      FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

4. LIGHT CONDITION - DARK NIGHT
5. AIRPORT FACILITIES, AERONAUTICAL LIGHT BEACON(OBST) - UNAVAILABLE

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

Finding(s)

6. TERRAIN CONDITION - ROUGH/UNEVEN
7. TERRAIN CONDITION - HIGH VEGETATION

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
A LOSS OF ENGINE POWER, DUE TO FUEL STARVATION BECAUSE THE PLT MISJUDGED HIS FUEL SUPPLY AND DISTRIBUTION OF FUEL PER  
TANKS, AND AS A RESULT MISMANAGED THE SUPPLY REMAINING.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 577      8/04/89      MCKINNEY, TX      A/C Reg. No. N4377L      Time (Lcl) - 2230 CDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)

Aircraft Damage  
SUBSTANTIAL

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

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

Fire      Crew      Pass  
NONE

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

Make/Model      - CESSNA 172G  
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/NO  
Stall Warning System - YES

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

Weather Data

Wx Briefing      - FSS  
Method      - IN PERSON  
Completeness      - FULL  
Basic Weather      - VMC  
Wind Dir/Speed- 160/012 KTS  
Visibility      - 12.0 SM  
Lowest Sky/Clouds      - CLEAR  
Lowest Ceiling      - NONE  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - NIGHT(DARK)

Itinerary

Last Departure Point  
MCALESTER, OK  
Destination  
MESQUITE, TX

ATC/Airspace

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

Airport Proximity  
OFF AIRPORT/STRIP

Airport Data

MUNICIPAL  
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 - 39  
Biennial Flight Review  
Current      - YES  
Months Since      - 17  
Aircraft Type      - C-172

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT  
Flight Time (Hours)  
Total      - 600      Last 24 Hrs - 6  
Make/Model- 550      Last 30 Days- 28  
Instrument- UNK/NR      Last 90 Days- 50  
Multi-Eng - UNK/NR      Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DURING A NIGHT CROSS-COUNTRY FLIGHT, THE ENGINE LOST POWER AND DURING THE FORCED LANDING, THE AIRPLANE IMPACTED TREES AND THEN THE TERRAIN. DURING A PARTIAL TEARDOWN OF THE ENGINE, IT WAS FOUND THAT THE NUMBER 3 CYLINDER EXHAUST VALVE ROCKER ARM SHAFT HAD BROKEN. THERE WAS ALSO A LARGE GAP BETWEEN THE ROCKER ARM AND THE EXHAUST VALVE STEM.



Brief of Accident (Continued)

File No. - 577

8/04/89

MCKINNEY, TX

A/C Reg. No. N4377L

Time (Lc1) - 2230 CDT

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

Finding(s)

1. ENGINE ASSEMBLY,ROCKER ARM/TAPPET - FAILURE,TOTAL  
-----

Occurrence #2            FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

Finding(s)

2. LIGHT CONDITION - DARK NIGHT  
-----

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:  
TOTAL FAILURE OF THE ENGINE ASSEMBLY/ROCKER ARM/TAPPET SHAFT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 405      2/10/89      SAINT GEORGE,UT      A/C Reg. No. N1010Z      Time (Lcl) - 1725 MST

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

Type Operating Certificate-COMMUTER

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

Aircraft Damage  
SUBSTANTIAL

Fire  
NONE

	Fatal	Serious	Minor	None
Crew	0	0	0	2
Pass	0	0	0	4

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

Make/Model      - SWEARINGEN SA226TC  
Landing Gear      - TRICYCLE-RETRACTABLE  
Max Gross Wt      - 12500  
No. of Seats      - 19

Eng Make/Model      - AIRESEARCH TPE-331  
Number Engines      - 2  
Engine Type      - TURBOPROP  
Rated Power      - 940 HP

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

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

Weather Data

Wx Briefing      - NWS  
Method      - IN PERSON  
Completeness      - FULL

Basic Weather      - VMC  
Wind Dir/Speed- CALM

Visibility      - 20.0      SM  
Lowest Sky/Clouds      - 6000 FT SCATTERED  
Lowest Ceiling      - NONE  
Obstructions to Vision- NONE  
Precipitation      - NONE  
Condition of Light      - DAYLIGHT

Itinerary

Last Departure Point  
SAME AS ACC/INC

Destination  
PALM SPRINGS,CA

ATC/Airspace

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

Airport Proximity  
ON AIRPORT

Airport Data

SAINT GEORGE  
Runway Ident      - 16  
Runway Lth/Wid      - 6100/ 100  
Runway Surface      - ASPHALT  
Runway Status      - DRY

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

Pilot-In-Command

Certificate(s)/Rating(s)

ATP  
SE LAND,ME LAND

Age - 40

Biennial Flight Review

Current      - YES  
Months Since      - 2  
Aircraft Type      - SA226TC

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total	- 7282	Last 24 Hrs	- 9
Make/Model-	1825	Last 30 Days-	55
Instrument-	UNK/NR	Last 90 Days-	148
Multi-Eng	- 1825	Rotorcraft	- UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DRG THE TAKEOFF ROLL WITH THE COPLT AT THE CTLS, THE ACFT BEGAN TURNING TO THE LEFT. THE COPLT CORRECTED WITH RGT RUDDER, BUT AS THE TAKEOFF CONTD, THE ACFT VEERED UNCONTROLLABLY TO THE LEFT. THE TAKEOFF WAS ABORTED, BUT BEFORE STOPPING, THE ACFT TURNED FURTHER LEFT & HIT A CESSNA 172 & A UPS VEHICLE, BOTH OF WHICH WERE UNOCCUPIED. THIS WAS THE 1ST FLT AFTER MAINT ON THE NOSEWHEEL STEERING SYS. A SYS CHECK REVEALED THAT WHEN HYDRAULIC & ELECTRICAL PWR WERE APPLIED, THE NOSEWHEEL STEERING SYS WOULD DEFLECT TO THE LEFT AT A RATE OF ABOUT ONE DEGREE PER SECOND. INVESTIGATION REVEALED THAT WHEN MAINT WAS PERFORMED, A ONE-PIECE ARMING/POPPET VLV WAS USED TO REPLACE A TWO-PIECE VLV, WHICH WAS PREVIOUSLY INSTALLED. DRG THE INSTLN, THE SMALL PART OF THE TWO-PIECE VLV (ABT THE SIZE OF A WASHER) WAS NOT REMOVED. WHEN THE ONE-PIECE VLV WAS INSTLD PROPERLY, THE SYS OPERD NORMALLY. MAINT INSTRNS & DRAWINGS DID NOT ADDRESS THE TWO-PIECE VLV & NO INSTRNS WERE FND TO INDC THE TWO PIECES OF THE OLD VLV SHOULD BE CHGD AS A PACKAGE.

Brief of Accident (Continued)

File No. - 405

2/10/89

SAINT GEORGE, UT

A/C Reg. No. N1010Z

Time (Lcl) - 1725 MST

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

Finding(s)

1. LANDING GEAR, STEERING SYSTEM - INCORRECT
  2. MAINTENANCE, REPLACEMENT - IMPROPER - COMPANY MAINTENANCE PSNL
  3. PROCEDURE INADEQUATE - MANUFACTURER
  4. CONDITION(S)/STEP(S) INSUFFICIENTLY DEFINED -
- 

Occurrence #2            LOSS OF CONTROL - ON GROUND  
Phase of Operation      TAKEOFF - GROUND RUN

Finding(s)

5. DIRECTIONAL CONTROL - NOT MAINTAINED -
  6. GROUND LOOP/SWERVE - UNCONTROLLED -
- 

Occurrence #3            ON GROUND COLLISION WITH OBJECT  
Phase of Operation      TAKEOFF - ABORTED

Finding(s)

7. OBJECT - AIRCRAFT PARKED
  8. OBJECT - VEHICLE
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
MALFUNCTION OF THE NOSEWHEEL STEERING SYSTEM DUE TO IMPROPER INSTALLATION OF THE NOSEWHEEL STEERING POPPET VALVE &  
INADEQUATE MAINTENANCE INSTRUCTIONS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 441      3/09/89      TOOELE,UT      A/C Reg. No. N3613U      Time (Lcl) - 1500 MST

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries 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 182	Eng Make/Model - CONTINENTAL O-470-R	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2800	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 230 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	BRIGHAM CITY,UT	BOLINDER
Wind Dir/Speed- 180/020 KTS	ATC/Airspace	Runway Ident - 16
Visibility - 20.0 SM	Type of Flight Plan - VFR	Runway Lth/Wid - 5500/ 75
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 - DAYLIGHT		

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

Pilot-In-Command	Age - 27	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 30
	Months Since - N/A	Last 24 Hrs - 2
	Aircraft Type - N/A	Make/Model- 9
		Last 30 Days- 13
		Instrument- UNK/NR
		Last 90 Days- 15
		Multi-Eng - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PLT WAS ON A SOLO X-COUNTRY TRAINING FLT. HE RPRTD THAT DRG THE TAKEOFF ROLL ON RWY 16, A GUST OF WIND BLEW THE PLANE OFF THE LEFT SIDE OF THE RWY. ALSO, HE RPRTD THE WINDS WERE FROM 180 DEG AT 20 GUSTING 30 KTS. THE NOSE GEAR, PROP & WINGS WERE DAMAGED DRG THE OCCURRENCE.

Brief of Accident (Continued)

File No. - 441

3/09/89

T00ELE,UT

A/C Reg. No. N3613U

Time (Lcl) - 1500 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. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
  4. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
  5. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
  6.        LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
- 

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

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE COMPENSATION FOR WIND CONDITIONS BY THE PILOT WHICH RESULTED IN LOSS OF DIRECTIONAL CONTROL AND INADVERTENT  
GROUND SWERVE. THE QUARTERING CROSSWIND, GUSTS, AND LACK OF PILOT EXPERIENCE WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 495      4/09/89      MORGAN,UT      A/C Reg. No. N7847U      Time (Lcl) - 1800 MDT

-----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 172F	Eng Make/Model	- CONTINENTAL O-300-D	ELT Installed/Activated	- YES/NO
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	- 145 HP		

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	PARIS, ID	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	BOUNTIFUL, UT	MORGAN MUNI
Wind Dir/Speed- 270/010 KTS	ATC/Airspace	Runway Ident - 21
Visibility - 30.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3804/ 50
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 - 37	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 301
SE LAND	Months Since - 9	Make/Model- 150
	Aircraft Type - C-172	Instrument- 41
		Last 24 Hrs - 0
		Last 30 Days- 10
		Last 90 Days- 24

Instrument Rating(s) - NONE

-----Narrative-----

DRG FLT AT 10,500' MSL, THE ENG LOST POWER & WOULD NOT RESTART. THE PLT MADE A FORCED LANDING ON RWY 21 AT A NEARBY ARPT. THE RWY WAS ONLY 3800' LONG & HAD A RPRTD DOWNWARD SLOPE OF 1.5 DEG. THE WIND WAS ESTIMATED TO BE FROM 270 DEG AT 10 KTS. THE PLT RPRTD THAT DRG THE LANDING, THE ACFT TOUCHED DOWN AT ABOUT MIDFIELD & HE WAS UNABLE TO STOP ON THE REMAINING RWY. AFTER GOING OFF THE DEPARTURE END, IT HIT A FENCE & WAS DAMAGED. A POST ACDNT EXAM REVEALED THERE WAS SEVEN GAL OF FUEL REMAINING. A CHECK OF THE FUEL SYSTEM REVEALED EVIDENCE THAT THE MAIN FUEL LINE & FUEL FILTER WERE RESTRICTING FUEL FLOW. THE PLT RELATED THAT THIS ACFT HAD A SIMILAR PROBLEM PREVIOUSLY & HE HAD DRAINED A CONSIDERABLE AMOUNT OF WATER FROM THE FUEL SYSTEM. AUTOMOTIVE FUEL WAS BEING USED IN THE ACFT.

Brief of Accident (Continued)

File No. - 495

4/09/89

MORGAN,UT

A/C Reg. No. N7847U

Time (Lcl) - 1800 MDT

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

Finding(s)

1. MAINTENANCE,SERVICE OF AIRCRAFT - INADEQUATE - PILOT IN COMMAND
  2. FUEL SYSTEM,FILTER - BLOCKED(PARTIAL)
  3. FUEL SYSTEM,LINE - BLOCKED(PARTIAL)
  4. FLUID,FUEL - STARVATION
- 

Occurrence #2            FORCED LANDING  
Phase of Operation      DESCENT - EMERGENCY

-----

Occurrence #3            OVERRUN  
Phase of Operation      LANDING - ROLL

Finding(s)

5. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - DOWNHILL
- 

Occurrence #4            ON GROUND COLLISION WITH OBJECT  
Phase of Operation      LANDING - ROLL

Finding(s)

6. OBJECT - FENCE
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
INADEQUATE SERVICING OF THE AIRCRAFT BY THE PILOT, PARTIAL BLOCKAGE OF THE FUEL LINE AND FUEL FILTER, AND FUEL  
STARVATION. CONTRIBUTING FACTORS WERE: THE DOWNWARD SLOPING RUNWAY AND A FENCE.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 497      7/07/89      BOUNTIFUL,UT      A/C Reg. No. N6318K      Time (Lcl) - 0839 MDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage DESTROYED	Fatal	Injuries 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 -TAKEOFF					

-----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-----

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	SALT LAKE SKYPARK
Wind Dir/Speed- 180/005 KTS	ATC/Airspace	Runway Ident - 34
Visibility - 25.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4700/ 60
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		
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)
STUDENT	Current - N/A	Total - 37
	Months Since - N/A	Make/Model- 37
	Aircraft Type - N/A	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- 1
		Last 90 Days- 13
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

AFTER MAKING A TOUCH-&-GO LANDING, THE PLT BEGAN A TAKEOFF WITH 10 DEG OF FLAPS. THE FLT MANUAL RCMD TAKEOFFS BE MADE WITH THE FLAPS FULLY RETRACTED, EXCEPT FOR SHORT FIELD TAKEOFFS OR TAKEOFFS ON SOFT OR ROUGH FIELDS WITH NO OBSTACLES AHEAD. THE PLT STATED THAT AFTER CLIMBING TO ABOUT 300' AGL, HE NOTED THE ACFT WAS NOT CLIMBING PROPERLY & THAT THE ENG DID NOT SEEM TO BE PROVIDING FULL POWER. HE DID NOT CHECK THE ENG INSTRUMENTS TO VERIFY THE ENG PERFORMANCE. HE LOWERED THE NOSE TO ACCELERATE & STARTED A RIGHT TURN TO AVOID AN OBSTACLE. AT ABOUT THAT TIME, THE ACFT STALLED, THEN CRASHED BEFORE THE PILOT COULD RECOVER FROM A DESCENT. THERE WAS EVIDENCE THE ENG WAS DEVELOPING POWER AT IMPACT. A TEARDOWN OF THE ENG REVEALED NO EVIDENCE OF A PART FAILURE OR MALFUNCTION. DENSITY ALTITUDE AT THE ARPT WAS APRX 6500'.



Brief of Accident (Continued)

File No. - 497

7/07/89

BOUNTIFUL, UT

A/C Reg. No. N6318K

Time (Lc1) - 0839 MDT

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

Finding(s)

1. TOUCH-AND-GO - INITIATED -
  2. RAISING OF FLAPS - IMPROPER - PILOT IN COMMAND
  3. WEATHER CONDITION - HIGH DENSITY ALTITUDE
  4. TERRAIN CONDITION - HIGH OBSTRUCTION(S)
  5.    MANEUVER - INITIATED -
  6. AIRSPEED - INADEQUATE - PILOT IN COMMAND
  7. STALL - INADVERTENT - 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:  
THE PILOT FAILED TO MAINTAIN ADEQUATE SPEED FOR THE TURNING MANEUVER (TO AVOID AN OBSTACLE) AND INADVERTENTLY ALLOWED  
THE AIRCRAFT TO STALL. CONTRIBUTING FACTORS WERE: IMPROPER UUSE OF THE FLAPS, HIGH DENSITY ALTITUDE, AND A HIGH  
OBSTRUCTION.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 502      7/08/89      HOLDEN,UT      A/C Reg. No. N6754Q      Time (Lcl) - 0650 MDT

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

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

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

Make/Model - GRUMMAN/SCHWEIZER 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 - 6400	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 1	Rated Power - 450 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	OFF AIRPORT/STRIP
Method - UNK/NR	SAME AS ACC/INC	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LOCAL	
Wind Dir/Speed- 090/004 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 50.0 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 - DAWN		

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

Pilot-In-Command	Age - 45	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 10000
SE LAND	Months Since - 18	Last 24 Hrs - 5
	Aircraft Type - C-172	Make/Model- 5500
		Last 30 Days- UNK/NR
		Instrument- UNK/NR
		Last 90 Days- 150
		Multi-Eng - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT SAID HE WAS APPROACHING THE POTATO FIELD TO BE SPRAYED AND WAS OVER A GRAIN FIELD WHEN THE AIRCRAFT BEGAN TO SETTLE. HE SAID HE DECIDED TO DUMP THE LOAD OF FERTILIZER BUT BY THAT TIME THE WHEELS WERE IN THE GRAIN AND HE REDUCED POWER AND LANDED. ABOUT 100 FEET AFTER TOUCHDOWN THE LEFT MAIN LANDING GEAR BROKE OFF AND THE AIRCRAFT SETTLED ONTO THE WING WHICH WAS DAMAGED. THE DENSITY ALTITUDE AT THE TIME WAS 7500 FEET.

Brief of Accident (Continued)

File No. - 502

7/08/89

HOLDEN,UT

A/C Reg. No. N6754Q

Time (Lc1) - 0650 MDT

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

Finding(s)

1. WEATHER CONDITION - HIGH DENSITY ALTITUDE
  2. STALL/MUSH - INADVERTENT - PILOT IN COMMAND
  3. LOAD JETTISON - INITIATED - PILOT IN COMMAND
  4. AIRCRAFT WEIGHT AND BALANCE - MISJUDGED - PILOT IN COMMAND
- 

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

Finding(s)

5. TERRAIN CONDITION - CROP
  6. 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 MISJUDGEMENT OF THE EFFECT OF HIGH DENSITY ALTITUDE ON A HEAVILY LOADED AIRCRAFT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 444	4/30/89	WATERTOWN, WI	A/C Reg. No. N29HU	Time (Lcl) - 0700 CDT
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-----Basic Information-----

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

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

Make/Model - TESMER GLASSAIR SH-2	Eng Make/Model - LYCOMING O-320-B3B	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1600	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 160 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	WATERLOO, WI	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	WATERTOWN MUNI
Wind Dir/Speed- 300/010 KTS	ATC/Airspace	Runway Ident - 23
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3600/ 75
Lowest Sky/Clouds - N/A	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 2500 FT OVERCAST	Type Apch/Lndg - FORCED LANDING	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 28	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 354
SE LAND	Months Since - 4	Make/Model- 3
	Aircraft Type - PA-28	Instrument- 35
		Multi-Eng - 0
		Last 24 Hrs - 1
		Last 30 Days- 5
		Last 90 Days- 21
		Rotorcraft - 0

Instrument Rating(s) - NONE

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-----Narrative-----

THE NEW, HOME BUILT, ACFT WAS ON ITS MAIDEN FLT. AS THE OWNER WAS PERFORMING STALLS ABOUT 1/2 HR AFTER TAKEOFF, THE ENG BEGAN RUNNING ROUGH. POWER WAS RESTORED WHEN THE PLT TURNED ON THE ELEC BOOST PUMP & SELECTED THE HEADER TANK. ABOUT 2 MIN LATER, AS HE WAS APCHG THE ARPT TO LAND, THE ENG LOST POWER AGAIN & WOULD NOT RESTART. SUBSEQUENTLY, THE ACFT WAS DAMAGED DRG AN EMERG LNDG. DRG AN EXAM OF THE FUEL SYS, AIR WAS FOUND IN THE PLASTIC FUEL LINE & NO FUEL WAS FOUND IN THE GASCOLATOR. THE FLOAT/NEEDLE VALVE WAS FOUND STUCK IN THE OPEN PSN & THE FLOAT SETTING WAS ABOUT 1/2 INCH OUT OF ADJUSTMENT. HOWEVER, THE OPEN VALVE SHOULD HAVE ALLOWED UNRESTRICTED FUEL FLOW RATHER THAN FUEL STARVATION. THE BUILDER HAD MODIFIED THE FUEL SYS BY INSTALLING AN EXTRA FUEL FILTER. THE EXTRA FUEL FILTER WAS INSTALLED IN THE PLASTIC FUEL LINE & WAS IN ADDITION TO THE SCREENS IN THE GASCOLATOR & THE CARBURETOR INLET.

Brief of Accident (Continued)

File No. - 444

4/30/89

WATERTOWN,WI

A/C Reg. No. N29HJ

Time (Lc1) - 0700 CDT

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Occurrence #1        LOSS OF ENGINE POWER  
Phase of Operation    APPROACH

Finding(s)

1. FUEL SYSTEM - UNDETERMINED
  2. 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

-----

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
LACK FUEL FLOW TO THE ENGINE (FUEL STARVATION) DUE TO AN UNDETERMINED FUEL SYSTEM PROBLEM.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 569      5/27/89      NECEDAH,WI      A/C Reg. No. N4526Z      Time (Lcl) - 1620 CDT

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

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

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

Make/Model - PIPER PA-22-108	Eng Make/Model - LYCOMING O-235-C1B	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1650	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 108 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	NECEDAH,WI	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	NECEDAH,WI	NACEDAH
Wind Dir/Speed- 300/008 KTS	ATC/Airspace	Runway Ident - 34
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2400/ 120
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - GRASS/TURF
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 - 19	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 103
SE LAND	Months Since - 6	Make/Model- 1
	Aircraft Type - UNK/NR	Instrument- 5
		Last 24 Hrs - 1
		Last 30 Days- 1
		Last 90 Days- 1

Instrument Rating(s) - NONE

-----Narrative-----

WHILE DESCENDING FOR A LANDING THE AIRCRAFT EXPERIENCED A COMPLETE POWER LOSS DUE TO FUEL STARVATION. THE AIRCRAFT LANDED IN SOFT TERRAIN AND NOSED OVER. THE AIRCRAFT WAS DESTROYED. THE PILOT SUSTAINED MINOR INJURIES WHILE HIS PASSENGER RECEIVED SERIOUS INJURIES. THE FUEL SELECTOR WAS ON THE RIGHT TANK WHICH IS PLACARDED FOR LEVEL FLIGHT ONLY.

Brief of Accident (Continued)

File No. - 569

5/27/89

NECEDAH,WI

A/C Reg. No. N4526Z

Time (Lcl) - 1620 CDT

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

Finding(s)

1. FLUID,FUEL - STARVATION
  2. FUEL TANK SELECTOR POSITION - IMPROPER USE OF - PILOT IN COMMAND
  3. LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
- 

Occurrence #2        FORCED LANDING  
Phase of Operation    DESCENT - EMERGENCY

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

Finding(s)

4. TERRAIN CONDITION - SOFT
- 

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT-IN-COMMAND'S IMPROPER USE OF THE FUEL SELECTOR.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 440      5/28/89      CRANDON,WI      A/C Reg. No. N4734L      Time (Lcl) - 1330 CDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries Serious	Minor	None
Type of Operation - PERSONAL	Fire	0	0	1	0
Flight Conducted Under -14 CFR 91	NONE	0	0	0	2
Accident Occurred During -LANDING					

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

Make/Model - PIPER PA-28-180	Eng Make/Model - LYCOMING O-360-A4A	ELT Installed/Activated - YES/YES
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 ON AIRPORT
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point WAUKESHA,WI	
Method - N/A	Destination	Airport Data
Completeness - N/A	SAME AS ACC/INC	CRANDON MUNI
Basic Weather - VMC	ATC/Airspace	Runway Ident - 11
Wind Dir/Speed- 180/020 KTS	Type of Flight Plan - NONE	Runway Lth/Wid - 3100/ 75
Visibility - 10.0 SM	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Sky/Clouds - N/A	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Lowest Ceiling - 15000 FT BROKEN	FULL STOP	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 39	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 80
SE LAND	Months Since - 7	Make/Model- 10
	Aircraft Type - UNK/NR	Instrument- 3
		Multi-Eng - 0
		Last 24 Hrs - 1
		Last 30 Days- 2
		Last 90 Days- 10
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT AS HE WAS LANDING, THE ACFT ENCOUNTERED WIND THAT WAS SWIRLING BELOW TREETOP LEVEL. SUBSEQUENTLY, THE ACFT STRUCK THE GROUND WITH THE LEFT WING TIP & DEPARTED THE LEFT SIDE OF THE RWY. APRX 23 MI NORTHWEST AT RHINELANDER, WI, THE 1450 CDT WIND WAS FROM 230 DEG AT 10 KTS. THE PLT ESTIMATED THE WIND AT CRANDON WAS FROM THE SOUTH AT 20 GUSTING 25 KTS.



Brief of Accident (Continued)

File No. - 440

5/28/89

CRANDON, WI

A/C Reg. No. N4734L

Time (Lcl) - 1330 CDT

Occurrence #1 LOSS OF CONTROL - IN FLIGHT  
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

1. WEATHER CONDITION - TURBULENCE, CLEAR AIR
2. WEATHER CONDITION - CROSSWIND
3. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
4. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
5. LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND

Occurrence #2 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 INFLIGHT PLANNING/DECISION BY THE PILOT WHICH RESULTED IN LOSS OF CONTROL & SUBSEQUENT WINGTIP COLLISION  
WITH THE GROUND DURING THE LANDING. THE CROSSWIND AND TURBULENCE WERE CONTRIBUTING FACTORS.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 480      7/02/89      EVANSTON,WY      A/C Reg. No. N1113E      Time (Lcl) - 1615 MDT

-----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	1
Accident Occurred During -LANDING						

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

Make/Model - STITTS SA7D	Eng Make/Model - LYCOMING O-235-C1	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1550	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 115 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - TELEPHONE	OGDEN,UT	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	EVANSTON
Wind Dir/Speed- 230/018 KTS	ATC/Airspace	Runway Ident - 23
Visibility - 50.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 7300/ 100
Lowest Sky/Clouds - 10000 FT SCATTERED	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 - 28	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 75
SE LAND	Months Since - 15	Make/Model- 16
	Aircraft Type - C-150	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 1
		Last 30 Days- 1
		Last 90 Days- 3
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT WHILE ON AN APCH FOR A LANDING AT A HIGH ALTITUDE ARPT WITH A DENSITY ALT OF 9800 FT, THE ACFT ENCOUNTERED A STRONG DOWNDRAFT. THE APCH WAS BEING MADE TO RWY 23 WITH A WIND FROM THE SOUTHWEST AT 18 KTS. THE PLT SAID THE DOWNDRAFT OCCURRED WHEN THE ACFT WAS AT ABOUT 50 FT AGL & THAT SHE ADDED POWER TO LAND FURTHER DOWN THE RWY. HOWEVER, THE DOWNDRAFT FORCED THE ACFT TO THE RWY & IT LANDED HARD WHICH DAMAGED THE FUSELAGE.

Brief of Accident (Continued)

File No. - 480

7/02/89

EVANSTON,WY

A/C Reg. No. N1113E

Time (Lc1) - 1615 MDT

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

Finding(s)

1. WEATHER CONDITION - HIGH DENSITY ALTITUDE
2. WEATHER CONDITION - UNFAVORABLE WIND
3. WEATHER CONDITION - DOWNDRAFT
4. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
5.      LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
IMPROPER COMPENSATION BY THE PILOT FOR WIND CONDITIONS. CONTRIBUTING FACTORS WERE: HIGH DENSITY ALTITUDE, UNFAVORABLE WIND, AND DOWNDRAFT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 501 7/04/89 NEWCASTLE,WY

A/C Reg. No. N4831N

Time (Lcl) - 0715 MDT

-----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 -PERSONAL

Fire

Crew

Flight Conducted Under -14 CFR 91

NONE

Pass

Accident Occurred During -LANDING

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

Make/Model - HENRY VICKERS HCV-110

Eng Make/Model - CONTINENTAL GPV

ELT Installed/Activated - YES/NO

Landing Gear - TAILWHEEL-ALL FIXED

Number Engines - 1

Stall Warning System - NO

Max Gross Wt - 1160

Engine Type - RECIPROCATING-CARBURETOR

No. of Seats - 1

Rated Power - 100 HP

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

Weather Data

Wx Briefing - UNK/NR

Method - UNK/NR

Completeness - UNK/NR

Basic Weather - VMC

Wind Dir/Speed- 135/025 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

NEWCASTLE,WY

Destination

LOCAL

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

Runway Ident - N/A

Runway Lth/Wid - N/A

Runway Surface - GRASS/TURF

Runway Status - DRY

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 - 65

Biennial Flight Review

Current - YES

Months Since - 11

Aircraft Type - C-150

Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT

Flight Time (Hours)

Total - 484

Make/Model- 87

Instrument- 0

Last 24 Hrs - 1

Last 30 Days- 3

Last 90 Days- 3

Instrument Rating(s) - NONE

-----Narrative-----

THE ACFT HAD BEEN AIRBORNE FOR ABOUT ONE HOUR WHEN THE ENG LOST POWER. THE PLT ATTEMPTED A FORCED LANDING AND PICKED AN OPEN AREA. STRONG SURFACE WINDS RESULTED IN AN UNDERSHOOT OF THE SELECTED AREA AND WHEN HE TRIED TO STRETCH THE GLIDE THE ACFT STALLED AND LANDED HARD. THE PLT SAID THE ENG IS FROM A GROUND POWER UNIT AND HAS ONLY ONE MAGNETO. HE SAID THE MAGNETO COIL FAILED.

Brief of Accident (Continued)

File No. - 501

7/04/89

NEWCASTLE,WY

A/C Reg. No. N4831N

Time (Lcl) - 0715 MDT

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

Finding(s)

1. IGNITION SYSTEM,MAGNETO - FAILURE,TOTAL
- 

Occurrence #2        FORCED LANDING  
Phase of Operation    DESCENT - EMERGENCY

-----

Occurrence #3        HARD LANDING  
Phase of Operation    LANDING - FLARE/TOUCHDOWN

Finding(s)

2. PLANNED APPROACH - POOR - PILOT IN COMMAND
  3. STALL - INADVERTENT - PILOT IN COMMAND
  4. LANDING GEAR,MAIN GEAR - OVERLOAD
- 

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
THE FAILURE TO THE MAGNETO. THE SELECTION OF A POWERPLANT WITH A SINGLE MAGNETO SYSTEM WAS AN IMPROPER CHOICE AND  
DIRECTLY CONTRIBUTED TO THE CAUSE. THE PILOT'S MISJUDGEMENT OF THE WIND FOR THE APPROACH TO A FORCED LANDING RESULTED  
IN AN IMPROPER GROUND CONTACT.

National Transportation Safety Board  
Washington, D.C. 20594

Brief of Accident

File No. - 574      7/14/89      ALPINE,WY      A/C Reg. No. N21170      Time (Lcl) - 2215 MDT

-----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	2

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

-----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 - UNK/NR  
Method - UNK/NR  
Completeness - WEATHER NOT PERTINENT  
Basic Weather - VMC  
Wind Dir/Speed- LIGHT AND VARIABLE  
Visibility - 30.0 SM  
Lowest Sky/Clouds - CLEAR  
Lowest Ceiling - NONE  
Obstructions to Vision- NONE  
Precipitation - NONE  
Condition of Light - NIGHT(DARK)

Itinerary

Last Departure Point  
AFTON,WY

Destination  
SAME AS ACC/INC

ATC/Airspace

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

Airport Proximity  
ON AIRPORT

Airport Data

ALPINE  
Runway Ident - 13  
Runway Lth/Wid - 5700/ 50  
Runway Surface - ASPHALT  
Runway Status - DRY

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

Pilot-In-Command

Certificate(s)/Rating(s)

PRIVATE  
SE LAND

Age - 23

Biennial Flight Review

Current - YES  
Months Since - 10  
Aircraft Type - UNK/NR

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT

Flight Time (Hours)

Total	- 108	Last 24 Hrs	- UNK/NR
Make/Model-	24	Last 30 Days-	7
Instrument-	7	Last 90 Days-	19

Instrument Rating(s) - NONE

-----Narrative-----

THE ACFT WAS LANDING ON AN UNLIGHTED, 5700 X 50 FT, ASPHALT RWY AT NIGHT. THE ACFT OVERRAN THE RWY AND COLLIDED WITH A DITCH WHICH BROKE OFF THE LT MAIN GEAR AND DAMAGED THE WING. THE AIRPORT DIRECTORIES SHOW THE AIRPORT IS CLOSED AT NIGHT. THE ACFT OCCURRED AT 2215 AND THE SUN HAD SET AT ABOUT 2105.

Brief of Accident (Continued)

File No. - 574

7/14/89

ALPINE,WY

A/C Reg. No. N21170

Time (Lcl) - 2215 MDT

Occurrence #1        OVERRUN  
Phase of Operation    LANDING - ROLL

Finding(s)

1. LIGHT CONDITION - NIGHT
2. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
3. OVER CONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND
4. AIRPORT FACILITIES,RUNWAY EDGE LIGHTS - NOT OPERATING
5. PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
6. VISUAL/AURAL PERCEPTION - PILOT IN COMMAND
7. AIRPORT FACILITIES - NOT OPERATING

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

Finding(s)

8. TERRAIN CONDITION - DITCH

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:  
PILOT'S DECISION TO LAND AT AN UNLIGHTED AIRPORT AT NIGHT. THE AIRCRAFT LANDED LONG AND OVERRAN THE RUNWAY.











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