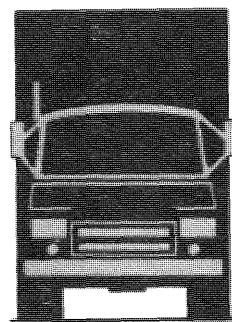
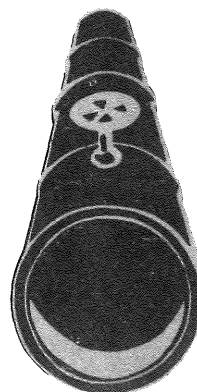
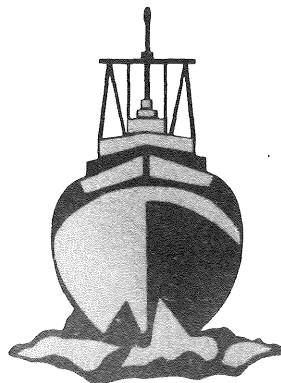
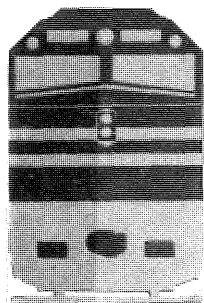


NATIONAL TRANSPORTATION SAFETY BOARD

WASHINGTON, D.C. 20594

AIRCRAFT ACCIDENT REPORTS

BRIEF FORMAT
U.S. CIVIL AND FOREIGN AVIATION
ISSUE NUMBER 8 OF 1989 ACCIDENTS





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TECHNICAL REPORT DOCUMENTATION PAGE

1. Report No. NTSB/AAB-90/08		2. Government Accession No. PB90-916908		3. Recipient's Catalog No.	
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				14. Sponsoring Agency Code	
15. Supplementary Notes					
16. Abstract 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. File Numbers: 1401 through 1409 1411 through 1442 1444 through 1457 1459 through 1600					
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 cowling, dented skin, small punctured holes in the skin or fabric, ground damage to rotor or propeller blades, damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips are not considered "Substantial Damage" for the purpose of this part.

OCCURRENCE

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

Gear Collapsed

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

TYPE OF OPERATING CERTIFICATE/TYPE OF OPERATION

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

1. GENERAL AVIATION

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

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

Personal

Flying by individuals in 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 8

CALENDAR YEAR 1989

File Order Listing - Issue No. 8, 1989

<u>File Number</u>	<u>Aircraft Regist.</u>	<u>Date</u>	<u>Location</u>	<u>Make</u>	<u>Aircraft Model</u>	<u>Injury Index</u>	<u>Page</u>
01401	5252	071589	ELOY, AZ	GRUMMAN	G-164A	NONE	028
01402	8557H	081789	MANASSAS, VA	ROBINSON	R22	NONE	370
01403	4325V	081389	LEESBURG, VA	PIPER	PA-28-161	NONE	368
01404	13906	080389	MIDLAND, VA	TRAVEL AIR	B-4000	NONE	366
01405	3128P	081489	BOUNTIFUL, UT	CONSOLIDATED	LAKE LA-4-	NONE	354
01406	8203G	080489	BRIGHTON, CO	CESSNA	177RG	NONE	070
01407	96096	111489	FRONT ROYAL, VA	CESSNA	152	NONE	376
01408	7597W	082189	CLENDENIN, WV	PIPER	PA-28-180	SERIOUS	392
01409	8849T	120889	CHAKACHAMNA LK, AK	CESSNA	182	NONE	010
01411	4065E	101389	NEAR COLD BAY, AK	PIPER	PA-18	NONE	004
01412	64276	110689	KENAI, AK	DEHAVILLAND	DHC-2	NONE	006
01413	220H	122389	BREVIK MISSION, AK	BEECH	18	NONE	014
01414	8569D	122289	PILOT POINT, AK	PIPER	PA-18	NONE	012
01415	7615S	122989	TANANA, AK	CITABRIA	7ECA	NONE	018
01416	90HS	052789	RIALTO, CA	HOLMAN/SEARS	HS-1	SERIOUS	040
01417	24586	080289	SARASOTA, FL	BEECH	A24R	FATAL	092
01418	118HS	041789	AIKEN, SC	BELL	UH-1E	SERIOUS	298
01419	8693C	050689	AUGUSTA, GA	PIPER	PA-22-135	FATAL	130
01420	45940	032689	FORT WORTH, TX	CESSNA	152	SERIOUS	318
01421	6573R	082589	BARRANQUITAS, PR	BEECH	C23	FATAL	296
01422	132SH	082789	BLANCHARD, ID	AEROSPATIALE	AS-350D	FATAL	144
01423	67691	122889	KODIAK, AK	DEHAVILLAND	DHC-2	NONE	016
01424	99901	081389	PASS-A-GRILLE, FL	CESSNA	172P	FATAL	096
01425	503DA	101489	SALT LAKE CITY, UT	BOEING	727-232	MINOR	364
01426	4985D	050689	LUGOFF, SC	CESSNA	182A	SERIOUS	300

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01427	3775J	070289	HOLLANDALE, MS	CESSNA	T188C	NONE	194
01428	127FB	081989	CLERMONT, FL	COCCHIARELLA	BUCCANEER	MINOR	098
01429	8074R	112289	RICHMOND, MN	BEECH	A24R	MINOR	188
01430	99615	112289	ASHLAND, KS	BURDETTE	CUBY PA-11	NONE	160
01431	4CD	090389	PERRY, FL	PIPER	PA-24-250	MINOR	100
01432	131PW	110589	HOMESTEAD, FL	WARREN/KELEH	JK-1B	NONE	116
01433	40340	100689	ORLANDO, FL	MAULE	M-4-220C	NONE	104
01434	4129E	110389	IMMOKALEE, FL	PIPER	PA-18-150	MINOR	114
01435	9700Q	060489	GULFPORT, MS	BEECH	A24R	NONE	192
01436	732AG	061589	MIRAMAR, FL	CESSNA	210L	MINOR	090
01437	93067	110289	LOXAHATCHEE, FL	BELL	47D1	SERIOUS	112
01438	2605P	122889	GRIFFITH, IN	PIPER	PA-38-112	NONE	154
01439	7037K	071389	WHARTON, TX	LOWE/BENSEN	KB-2	FATAL	336
01440	733VS	051389	FUQUAY, NC	CESSNA	172N	NONE	206
01441	8749D	113089	BARRON, WI	PIPER	PA-22	NONE	388
01442	40973	061889	ALBANY, OH	PIPER	PA-28	SERIOUS	270
01444	8149J	100889	TAMPA, FL	PIPER	PA-28-161	MINOR	108
01445	3647E	122889	CHILLICOTHE, OH	AERONCA	11AC	NONE	274
01446	81D	070289	CHUALAR, CA	PROGRESS AER	DISCOVERY	SERIOUS	046
01447	1976Q	081389	JANICE, MS	CESSNA	177RG	FATAL	196
01448	4519L	110589	WINDMILL POINT, VA	GULFSTREAM A	AA-5B	NONE	374
01449	5005S	101889	ATHENS, TN	PIPER	PA-28R-200	FATAL	310
01450	15LH	111589	PEMBROKE PINES, FL	PIPER	PA-23-250	MINOR	118
01451	8785B	120789	ATLANTIC OCEAN, OF	CESSNA	172	FATAL	266
01452	3976W	021789	CONROE, TX	PIPER	PA-32-260	MINOR	316

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01453	734DR	022689	MARIETTA, OK	CESSNA	172	NONE	276
01454	2155G	100289	NIXON, NV	CESSNA	182A	FATAL	244
01455	5004L	040589	WEST CAMERON, GM	BELL	206B	NONE	140
01456	58228	051889	ROCKSPRINGS, TX	HUGHES	269C	FATAL	326
01457	8785V	041789	JUNCTION, TX	BELLANCA	17-30A	FATAL	322
01459	93110	102589	PENASCO, NM	CESSNA	T210L	FATAL	242
01460	1232J	091689	LA GRANGE, CA	ROCKWELL	112B	FATAL	058
01461	69549	062089	PASO ROBLES, CA	CESSNA	340	NONE	042
01462	84709	080489	RIO LINDA, CA	AERONCA	7AC	NONE	050
01463	8477B	081089	SCOTTSDALE, AZ	ROBINSON	R22	MINOR	032
01464	4359C	111889	HAYWARD, CA	PIPER	PA-28-161	MINOR	068
01465	5300G	012889	BLAIRSTOWN, NJ	CESSNA	305A	FATAL	228
01466	85837	100589	PENN VALLEY, CA	AERONCA	11AC	NONE	066
01467	714MS	110789	BIRCHWOOD, AK	CESSNA	150	NONE	008
01468	4450Y	092689	WARNER SPRINGS, CA	PIPER	PA-25-235	NONE	062
01469	6121R	082489	ENGLEWOOD, CO	CESSNA	T210F	SERIOUS	074
01470	9755	073189	DAWSON, GA	GRUMMAN	G-164A	MINOR	134
01471	83732	091789	SEMMES, AL	AERONCA	7AC	NONE	024
01472	757HJ	041589	GRATIS, OH	CESSNA	152	NONE	268
01473	48257	061689	BIRMINGHAM, AL	CESSNA	R172E	NONE	022
01474	519TW	092889	FLAGSTAFF, AZ	CESSNA	180	NONE	036
01475	7375F	062689	ATLANTA, GA	BOEING	737-291	SERIOUS	132
01476	5556P	122489	DANIELSVILLE, GA	PIPER	PA-24	NONE	138
01477	40892	091789	HAYMARKET, VA	PIPER	PA-28-180	MINOR	372
01478	52491	111989	MITCHELLVILLE, MD	CESSNA	172	NONE	170

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01479	5684S	082789	GALLATIN, TN	BEECH	A23-19	SERIOUS	308
01480	24463	082789	LEONARDTOWN, MD	TAYLORCRAFT	BC-65	NONE	168
01481	9456F	040889	LONG BEACH, CA	HUGHES	269B	MINOR	038
01482	7341W	073089	CORONA, CA	PIPER	PA-28-180	NONE	048
01483	58281	083189	PARKERSBURG, WV	HUGHES	269C	SERIOUS	394
01484	61552	072889	MARANA, AZ	CESSNA	172M	NONE	030
01485	95617	110489	DYERSBURG, TN	CESSNA	152	NONE	312
01486	89212	111989	BURLINGTON, NC	CESSNA	152	SERIOUS	212
01487	67803	082589	SELBYVILLE, DE	CESSNA	152	NONE	088
01488	6879N	122489	FORT LAUDERDALE, FL	MOONEY	M20	NONE	126
01489	13AT	061189	EVERETT, WA	ANDERSON	BD-5	FATAL	378
01490	62873	041989	PELICAN, AK	DEHAVILLAND	DHC-2	FATAL	002
01491	5379P	070989	MEDICINE LODGE, KS	PIPER	PA-24-250	FATAL	156
01492	2841P	082989	MOOSE LAKE, MN	PIPER	PA-20	FATAL	182
01493	4554L	090489	SOUTH HARPSWELL, ME	GRUMMAN	AA-5B	NONE	176
01494	203Q	090889	BOSTON, MA	ENSTROM	F28A	NONE	166
01495	43561	040989	GORHAM, ME	TAYLORCRAFT	BC12-D	SERIOUS	172
01496	2265X	030989	BETHEL, NY	CESSNA	337	MINOR	250
01497	10659	071289	DOYLESTOWN, PA	CESSNA	150L	SERIOUS	286
01498	201MQ	011989	LUMBERTON, NJ	MOONEY	M20J	NONE	226
01499	1361P	120389	JACKSON, TN	PIPER	PA-23-150	NONE	314
01500	3458	091589	BUENA VISTA, CO	BLANIK	L-13	FATAL	080
01501	831SR	122889	SARASOTA, FL	PIPER	PA-34-200	NONE	128
01502	171LE	113089	COVINGTON, KY	CESSNA	550	NONE	162
01503	734PL	101489	RIDGELAND, SC	CESSNA	172	NONE	302

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01504	1155M	101889	KERNERSVILLE, NC	CESSNA	210	NONE	210
01505	57470	102689	FLORENCE, SC	BELLANCA	7KCAB	NONE	304
01506	4556D	091589	LOUISVILLE, GA	SIKORSKY	H-34J	NONE	136
01507	2333L	092989	HATTERAS, NC	BEECH	B23	MINOR	208
01508	38529	021189	YARMOUTH, MA	PIPER	PA-28-161	FATAL	164
01509	51774	040889	PADRE ISLAND, TX	ENSTROM	F28C	NONE	320
01510	525GT	121389	CAPE GIRARDEAU, MO	BEECH	80	NONE	190
01511	4841P	091089	NEWARK, IL	CESSNA	152	SERIOUS	148
01512	77707	102689	SAN ANTONIO, TX	MCCLISH/FUNK	B85C	SERIOUS	348
01513	48472	112789	COCOA, FL	CESSNA	152	NONE	124
01514	5209G	073089	CHALFONT, PA	CESSNA	305A	NONE	290
01515	182BS	042189	LEAKEY, TX	CESSNA	182Q	NONE	324
01516	2946V	070389	TERRELL, TX	BEECH	35	NONE	334
01517	951V	110889	ANGOLA, IN	BEECH	A36	NONE	152
01518	958VJ	100789	ORLANDO, FL	MCDONNELL DO	DC-9-31	FATAL	106
01519	19007	102589	COLUMBIA, MS	CESSNA	150L	FATAL	200
01520	412RC	072889	WAUKESHA, WI	CABRINHA/FRE	412	NONE	384
01521	11WR	062589	KIRKLAND, IL	RENNINGER	MUSTANG II	NONE	146
01522	20428	111789	OSAGE CITY, KS	CESSNA	172	SERIOUS	158
01523	3961H	102289	OGILVIE, MN	HUGHES	369HS	NONE	184
01524	8750R	112089	PLAINWELL, MI	HELIO	H-391B	NONE	180
01525	10GF	090689	HORATIO, AR	PIETENPOL	AIR CAMPER	MINOR	026
01526	2706T	071489	PONTIAC, MI	CESSNA	335	NONE	178
01527	4360K	071689	CELINA, TX	PIPER	PA-32R-301	FATAL	338
01528	8134Y	091889	AGANA, GUAM, OF	HUGHES	269A	FATAL	264

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01530	2YS	092989	GREENCASTLE, IN	BEECH	A36TC	FATAL	150
01531	99766	051389	TROY, NC	ERCOUPE	415-C	FATAL	204
01532	8203	061189	GUNTERSVILLE, AL	HADLEY	TEENIE TWO	MINOR	020
01533	28LR	062289	NEWHALL, CA	AEROSPATIALE	TB-21	FATAL	044
01534	6659D	111889	FERNANDINA BCH, FL	BEECH	58	NONE	120
01535	7628V	112189	MIMS, FL	CESSNA	177RG	NONE	122
01536	3063T	100589	PALM SPRINGS, CA	PIPER	PA-28RT-20	FATAL	064
01537	2553F	112589	SHAWNEE, OK	CHAMPION	7ECA	NONE	280
01538	8654N	042689	EUFAULA, OK	PIPER	PA-32-300	NONE	278
01539	7337G	111189	FABENS, TX	CESSNA	172K	NONE	350
01540	9462V	091789	BRENHAM, TX	MOONEY	M20E	MINOR	346
01541	75GC	092789	GRAND CANYON, AZ	DEHAVILLAND	DHC-6-300	FATAL	034
01542	5793P	022289	SPRING VALLEY, NY	AEROSPATIALE	AS-350D	MINOR	248
01543	14LU	091689	KERRVILLE, TX	ZENAIR	CH-200	FATAL	344
01544	66295	072389	NELIGH, NE	BEECH	C23	FATAL	218
01545	8636V	070489	BROKEN BOW, NE	BELLANCA	8KCAB	FATAL	216
01546	733FY	092089	HYANNIS, NE	CESSNA	172N	SERIOUS	220
01547	13620	090289	BELLVILLE, TX	CESSNA	172M	NONE	340
01548	15250	070189	PORT ARANSAS, TX	PIPER	PA-28R	NONE	332
01549	3279Q	052989	STRATFORD, TX	PIPER	PA-32R	NONE	330
01550	6434J	052589	ADDISON, TX	CESSNA	172	NONE	328
01551	5070H	080589	PARKER DAM, CA	CESSNA	182	NONE	052
01552	94777	090589	CARMIN, TX	CESSNA	152	NONE	342
01553	5145V	122989	WINSTON SALEM, NC	MORRISEY	2150A	SERIOUS	214

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01554	8579M	092089	ZENIA, CA	CESSNA	182	NONE	060
01555	97628	090189	COOL, CA	STINSON	108	NONE	054
01556	2705K	090289	ENGLEWOOD, CO	CESSNA	180K	NONE	078
01557	6029S	100989	LAS VEGAS, NM	BEECH	A36	MINOR	240
01558	9496D	091189	WINSTON, NM	PIPER	PA-18A-150	SERIOUS	238
01559	3456X	091889	NEIHART, MT	MOONEY	M20C	SERIOUS	202
01560	91269	102289	WARRENS, WI	WYCHEN	CHALLENGER	SERIOUS	386
01561	23605	032289	JOHNSTOWN, PA	BEECH	A100	NONE	284
01562	45861	030689	JOHNSTOWN, PA	BEECH	TC-45J	NONE	282
01563	49JC	061889	ALLIANCE, OH	COX/PITTS	SPECIAL S-	NONE	272
01564	2369Q	082789	WATKINS, CO	WACO	UPF7	NONE	076
01565	6697G	082289	LOGAN, UT	CESSNA	150-L	NONE	356
01566	7111W	083089	DUTCH JOHN, UT	PIPER	PA-28-180	NONE	358
01567	84164	081189	BULLFROG, UT	AEROFAB	LAKE LA-25	SERIOUS	352
01568	244MB	102189	TETERBORO, NJ	CESSNA	T210N	NONE	234
01569	90437	040689	UTICA, NY	SMITH	AEROSTAR 6	NONE	252
01570	2685G	090289	PHILIP, SD	CESSNA	182B	MINOR	306
01571	9342R	091089	SUNLAND PARK, NM	CESSNA	188B	NONE	236
01572	87KS	062589	NEW BERLIN, WI	SCHUNING/TER	TERRA II	SERIOUS	382
01573	6372K	083189	DELTA, UT	CESSNA	150M	NONE	360
01574	56654	081989	DOVE CREEK, CO	PIPER	PA-28-235	SERIOUS	072
01575	42027	090189	MOAB, UT	CESSNA	182L	NONE	362
01576	9085T	081489	QUITMAN, MS	CONTINENTAL	TOMCAT MK6	SERIOUS	198
01577	6449M	110689	TOLEDO, IA	CESSNA	152	MINOR	142
01578	3174S	110289	SAINT PAUL, MN	BELL	206L-3	NONE	186

File Order Listing - Issue No. 8, 1989

<u>File Number</u>	<u>Aircraft Regist.</u>	<u>Date</u>	<u>Location</u>	<u>Make</u>	<u>Aircraft Model</u>	<u>Injury Index</u>	<u>Page</u>
01579	21752	100489	WAUCHULA, FL	CESSNA	A188B	NONE	102
01580	80528	102889	ZELLWOOD, FL	TEMCO	GC-1B	NONE	110
01581	302RS	081289	MALABAR, FL	SMITH	KITFOX II	NONE	094
01582	7465P	051489	WAUNAKEE, WI	PIPER	PA-24-250	NONE	380
01583	95554	091189	TORRANCE, CA	CESSNA	152	NONE	056
01584	29216	072489	STONINGTON, CT	PIPER	PA-28-161	SERIOUS	082
01585	758PW	021089	BALLSTON SPA, NY	CESSNA	R172K	NONE	246
01586	1707H	080389	MATTITUCK, NY	PIPER	PA-28R-201	NONE	260
01587	39752	080289	PLYMOUTH, NH	WACO	UPF-7	NONE	224
01588	8909N	080189	DANBURY, CT	PIPER	PA-32-300	NONE	084
01589	1611R	081089	MOUNT JOY, PA	GRUMMAN	AA-5	NONE	294
01590	5266T	070289	GASPORT, NY	PIPER	PA-28-140	MINOR	254
01591	19652	072889	MT PLEASANT, PA	CESSNA	172	NONE	288
01592	8061C	072389	ATLANTIC CITY, NJ	PIPER	PA-18A	MINOR	232
01593	8471P	022789	DELMONT, NJ	PIPER	PA-24-400	NONE	230
01594	1526F	073189	WOLFEBORO, NH	CESSNA	185D	NONE	222
01595	5084X	080589	SHIRLEY, NY	CHAMPION	7KCAB	MINOR	262
01596	75044	080289	PHILADELPHIA, PA	SCHWEIZER	269C	NONE	292
01597	758QB	080589	GRISWOLD, CT	CESSNA	R172K	NONE	086
01598	89JD	081689	MILBRIDGE, ME	ENSTROM	280C	NONE	174
01599	48683	070389	PLATTSBURGH, NY	CESSNA	152	NONE	256
01600	3154T	070989	AKRON, NY	CESSNA	177A	MINOR	258

AIRCRAFT ACCIDENT REPORTS
BRIEF FORMAT
U.S. CIVIL AND FOREIGN AVIATION
ISSUE NUMBER 8 OF 1989 ACCIDENTS

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1490 4/19/89 PELICAN, AK A/C Reg. No. N62873 Time (Lcl) - 1315 ADT

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

Type Operating Certificate-		Aircraft Damage		Injuries			
Type of Operation	-SCHEDULED, DOMESTIC, PAX/CARGO	DESTROYED		Fatal	Serious	Minor	None
Flight Conducted Under	-14 CFR 135	Fire	Crew	1	0	0	0
Accident Occurred During	-MANEUVERING	ON GROUND	Pass	1	0	0	0

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

Make/Model	- DEHAVILLAND DHC-2	Eng Make/Model	- P&W R-985-AN1-4B	ELT Installed/Activated	- YES/NO
Landing Gear	- AMPHIBIAN	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 5100	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 7	Rated Power	- 400 HP		

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

Weather Data		Itinerary		Airport Proximity	
Wx Briefing	-	Last Departure Point	JUNEAU, AK	OFF AIRPORT/STRIP	
Method	- TELEPHONE	Destination	PELICAN, AK	Airport Data	
Completeness	- FULL	ATC/Airspace		Runway Ident	- N/A
Basic Weather	- IMC	Type of Flight Plan	- VFR	Runway Lth/Wid	- N/A
Wind Dir/Speed	330/013 KTS	Type of Clearance	- NONE	Runway Surface	- N/A
Visibility	- UNK/NR	Type Apch/Lndg	- NONE	Runway Status	- N/A
Lowest Sky/Clouds	- UNK/NR				
Lowest Ceiling	- UNK/NR				
Obstructions to Vision	- FOG				
Precipitation	- RAIN				
Condition of Light	- DAYLIGHT				

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

Pilot-In-Command	Age - 42	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL, CFI	Current - YES	Total - 4800	Last 24 Hrs - 3
SE LAND, ME LAND, SE SEA	Months Since - 12	Make/Model - 460	Last 30 Days - 55
	Aircraft Type - C-185	Instrument - 53	Last 90 Days - 95
		Multi-Eng - 243	Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DRG A FLT FROM JUNEAU TO PELICAN, AK, THE ACFT COLLIDED WITH TERRAIN APRX 12 MI EAST OF PELICAN WHILE CROSSING OVER CHICHAGOF ISLAND. IMPACT OCCURRED ON A VERTICAL ROCK WALL AT AN ELEVATION OF ABOUT 1950 FT. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE ACFT WAS EVIDENT. ANOTHER PLT, WHO HAD PLANNED TO FLY THE SAME ROUTE ABOUT 1 HR & 45 MIN EARLIER, DECIDED TO FLY AROUND THE ISLAND DUE TO LOW CLOUDS, RAIN & FOG IN THE AREA. HE RPRTD THAT HE FLEW OVER ICY STRAITS RATHER THAN TAKE A MORE DIRECT ROUTE & THAT CEILINGS WERE ABOUT 2000 FT BROKEN WITH LOWER STRATUS IN THE VALLEYS. A HELICOPTER PLT SAID HE WAS UNABLE TO WORK IN MOUNTAIN PASSES IN THE VICINITY OF THE ACNT DUE TO LOW CLOUDS, RAIN & FOG; HE ALSO SAID THE PASSES WERE "SOCKED IN."

Brief of Accident (Continued)

File No. - 1490

4/19/89

PELICAN, AK

A/C Reg. No. N62873

Time (Lcl) - 1315 ADT

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

Finding(s)

1. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
2. TERRAIN CONDITION - HIGH TERRAIN
3. WEATHER CONDITION - LOW CEILING
4. WEATHER CONDITION - FOG
5. WEATHER CONDITION - RAIN
6. WEATHER CONDITION - OBSCURATION
7. VFR FLIGHT INTO IMC - INADVERTENT - PILOT IN COMMAND

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

Finding(s)

8. TERRAIN CONDITION - MOUNTAINOUS/HILLY
9. TERRAIN CONDITION - RISING

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER IN-FLIGHT DECISION BY THE PILOT, AND HIS INADVERTENT FLIGHT INTO INSTRUMENT METEOROLOGICAL CONDITIONS (IMC).
THE TERRAIN AND WEATHER CONDITIONS WERE CONSIDERED TO BE FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1411 10/13/89 NEAR COLD BAY, AK A/C Reg. No. N4065E Time (Lcl) - 1840 ADT

-----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 - PIPER PA-18	Eng Make/Model - LYCOMING O-320-A2B	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 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 - UNK/NR	COLD BAY, AK	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	LOCAL	
Wind Dir/Speed- 250/015 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 15.0 SM	Type of Flight Plan - VFR	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 1500 FT SCATTERED	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - 4000 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 - 33	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 193
SE LAND	Months Since - 14	Make/Model- 83
	Aircraft Type - C-152	Instrument- 62
		Multi-Eng - 0
		Last 24 Hrs - 3
		Last 30 Days- 11
		Last 90 Days- 31
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT REPORTED HE WAS USING CARBURETOR HEAT ABOUT EVERY HALF HOUR OF THE FLIGHT, BECAUSE HE WAS HAVING PROBLEMS WITH CARBURETOR ICE. AFTER FLYING THRU A PASS, HE BEGAN A LONG, LOW POWER DESCENT, BUT WAS UNABLE TO RECALL IF HE HAD APPLIED CARBURETOR HEAT DURING THE DESCENT. SUBSEQUENTLY, THE ENGINE STOPPED PRODUCING POWER. THE PILOT WAS FORCED TO LAND IN AN AREA OF ALDER BUSHES AND THE AIRCRAFT WAS DAMAGED. AFTER THE AIRCRAFT WAS RECOVERED, AN OPERATIONAL CHECK OF THE ENGINE REVEALED NO MECHANICAL IRREGULARITIES.

Brief of Accident (Continued)

File No. - 1411

10/13/89

NEAR COLD BAY, AK

A/C Reg. No. N4065E

Time (Lcl) - 1840 ADT

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

Finding(s)

1. WEATHER CONDITION - CARBURETOR ICING CONDITIONS
 2. CARBURETOR HEAT - IMPROPER USE OF - PILOT IN COMMAND
 3. FUEL SYSTEM, CARBURETOR - ICE
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

4. TERRAIN CONDITION - HIGH VEGETATION
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER USE OF CARBURETOR HEAT BY THE PILOT, WHICH RESULTED IN LOSS OF ENGINE POWER DUE TO CARBURETOR ICE.
CARBURETOR ICING CONDITIONS AND HIGH VEGETATION IN THE FORCED LANDING AREA WERE CONTRIBUTING FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1412 11/06/89 KENAI, AK A/C Reg. No. N64276 Time (Lcl) - 2030 AST

-----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	0

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

Make/Model - DEHAVILLAND DHC-2	Eng Make/Model - P&W R-985-14B	ELT Installed/Activated - YES/YES
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 5100	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	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	ANCHORAGE, AK	KENAI
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - 01
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 7575/ 150
Lowest Sky/Clouds - UNK/NR	Type of Clearance - VFR	Runway Surface - ASPHALT
Lowest Ceiling - UNK/NR	Type Apch/Lndg - FORCED LANDING	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - NIGHT (DARK)		

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

Pilot-In-Command	Age - 37	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, CFI	Current - YES	Total - 6800
SE LAND, SE SEA	Months Since - 5	Make/Model- 3000
HELICOPTER	Aircraft Type - DHC-2	Instrument- 1300
		Last 24 Hrs - 3
		Last 30 Days- 55
		Last 90 Days- 115
		Rotorcraft - 1800

Instrument Rating(s) - AIRPLANE, HELICOPTER

-----Narrative-----

THE PLT STATED THAT DRG THE INITIAL CLIMB AFTER TAKEOFF, THE ENG BEGAN RUNNING ROUGH. HE STARTED A LEFT TURN TO LAND ON THE RWY; HOWEVER, THE ENG PROGRESSIVELY LOST ALL POWER. SUBSEQUENTLY, THE ACFT WAS DAMAGED DRG A NIGHT LANDING ON TREE COVERED TERRAIN & TUNDRA. A TEARDOWN OF THE ENG REVEALED AN ENG BEARING (PN 80486) HAD FAILED.

Brief of Accident (Continued)

File No. - 1412

11/06/89

KENAI, AK

A/C Reg. No. N64276

Time (Lcl) - 2030 AST

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

Finding(s)

1. ENGINE ASSEMBLY, BEARING - 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

Finding(s)

2. LIGHT CONDITION - DARK NIGHT
3. TERRAIN CONDITION - ROUGH/UNEVEN

----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE ENGINE BEARING, WHICH RESULTED IN A SUBSEQUENT TOTAL LOSS OF POWER. CONTRIBUTING FACTORS WERE:
DARK NIGHT AND ROUGH/UNEVEN TERRAIN.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1467 11/07/89 BIRCHWOOD,AK A/C Reg. No. N714MS Time (Lcl) - 1805 AST

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

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

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

Make/Model - CESSNA 150	Eng Make/Model - CONTINENTAL O-235	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	BIRCHWOOD
Wind Dir/Speed- CALM		Runway Ident - 19
Visibility - 10.0 SM	ATC/Airspace	Runway Lth/Wid - 4010/ 100
Lowest Sky/Clouds - CLEAR	Type of Flight Plan - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type of Clearance - NONE	Runway Status - SNOW - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - NONE	SNOW - COMPACTED
Precipitation - NONE		
Condition of Light - NIGHT(DARK)		

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

Pilot-In-Command	Age - 21	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 296
SE LAND, SE SEA	Months Since - 8	Make/Model- 22
	Aircraft Type - C-150	Instrument- 50
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- 7
		Last 90 Days- 15
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD THAT BEFORE HE STARTED HIS TAKEOFF, HE COULD SEE RWY LIGHTS AT THE FAR END OF THE RWY. HE ALIGNED THE ACFT FOR TAKEOFF BY REFERENCING THE SNOW BERMS (BESIDE THE RWY) & BY SIGHTING DOWN THE RWY. THE TAKEOFF ROLL SEEMED NORMAL UNTIL HE ROTATED THE ACFT FOR LIFT-OFF. AS THE ACFT LIFTED OFF, IT STRUCK THE SNOW BERM ON THE RIGHT SIDE OF THE RWY & NOSED OVER. AN INVESTIGATION REVEALED THAT ARPT PSNL HAD PLOWED THE RIGHT BERM AT A 20 DEG ANGLE AWAY FROM CENTERLINE OF THE RWY TO A POINT WHERE IT WAS ALLOWED TO ANGLE BACK ABRUPTLY TOWARD THE RUNWAY. THE ACNT OCCURRED WHERE THE RIGHT BERM ANGLED SHARPLY TO THE LEFT.

Brief of Accident (Continued)

File No. - 1467

11/07/89

BIRCHWOOD,AK

A/C Reg. No. N714MS

Time (Lcl) - 1805 AST

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

Finding(s)

1. LIGHT CONDITION - DARK NIGHT
 2. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - SNOW COVERED
 3. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND
 4. TERRAIN CONDITION - SNOWBANK
 5. AIRPORT SNOW REMOVAL - INADEQUATE - AIRPORT PERSONNEL
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO MAINTAIN PROPER RUNWAY ALIGNMENT DURING THE TAKEOFF ROLL. RELATED FACTORS WERE:
DARK NIGHT, SNOW COVERED RUNWAY, INADEQUATE SNOW REMOVAL FROM THE RUNWAY BY PERSONNEL (WHO WERE RESPONSIBLE
FOR SNOW REMOVAL), AND THE SNOWBANK (BERM).

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1409 12/08/89 CHAKACHAMNA LK,AK A/C Reg. No. N8849T Time (Lcl) - 1430 AST

-----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 -TAKEOFF					

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

Make/Model - CESSNA 182	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 - 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 SAME AS ACC/INC	OFF AIRPORT/STRIP
Method - N/A	Destination PALMER,AK	Airport Data
Completeness - N/A	ATC/Airspace	Runway Ident - N/A
Basic Weather - VMC	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Wind Dir/Speed- LIGHT AND VARIABLE	Type of Clearance - NONE	Runway Surface - N/A
Visibility - 80.0 SM	Type Apch/Lndg - NONE	Runway Status - N/A
Lowest Sky/Clouds - CLEAR		
Lowest Ceiling - NONE		
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 45	Medical Certificate - EXPIRED
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - NO	Total - 1600
SE LAND	Months Since - 43	Make/Model- 300
	Aircraft Type - C-182	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-----

THE ACDNT OCCURRED AS THE PLT OF THE SKI EQUIPPED ACFT WAS ATTEMPTING TO TAKE OFF FROM AN AREA OF DRIFTED SNOW ON THE SOUTH SHORE OF CHAKACHAMNA LAKE. IN A STATEMENT AFTER THE ACDNT, THE PLT REPORTED HE WAS "TAXIING FOR TAKEOFF AND ATTEMPTED TAKEOFF, HIT SNOW BANK . . ." SUBSEQUENTLY, HE LOST CONTROL OF THE ACFT & IT SKIDDED TO A STOP ON ITS NOSE.

Brief of Accident (Continued)

File No. - 1409

12/08/89

CHAKACHAMNA LK,AK

A/C Reg. No. N8849T

Time (Lcl) - 1430 AST

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

Finding(s)

1. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
 2. TERRAIN CONDITION - SNOW COVERED
 3. TERRAIN CONDITION - SOFT
 4. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
-

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

Occurrence #3 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:
INADEQUATE PREFLIGHT PREPARATION OF THE TAKEOFF AREA BY THE PILOT, AND HIS ATTEMPT TO TAKE OFF ON UNSUITABLE TERRAIN.
THE SOFT/SNOW COVERED TERRAIN WAS CONSIDERED TO BE A CONTRIBUTING FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1414 12/22/89 PILOT POINT, AK A/C Reg. No. N8569D Time (Lcl) - 1230 AST

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

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

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

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

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRSTRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	PILOT POINT
Wind Dir/Speed- 045/010 KTS	ATC/Airspace	Runway Ident - 07
Visibility - 30.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3500/ 90
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - GRAVEL
Lowest Ceiling - UNK/NR	Type Apch/Lndg - NONE	Runway Status - SNOW - COMPACTED
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 29	Medical Certificate - NO MEDICAL
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
NONE	Current - N/A	Total - UNK/NR
	Months Since - N/A	Last 24 Hrs - UNK/NR
	Aircraft Type - N/A	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 NON-CERTIFICATED PILOT REPORTED HE ATTEMPTED TO TAKE OFF WITH LIGHT RIME ICE ON THE AIRPLANE'S RIGHT WING. HE INDICATED THAT WHILE TAKING OFF WITH A LIGHT CROSSWIND COMPONENT, THE AIRCRAFT HAD INSUFFICIENT AIRSPEED TO COMPENSATE FOR LOSS OF LIFT ON THE RIGHT WING. SHORTLY AFTER LIFT-OFF, THE RIGHT WING STALLED & HIT THE RUNWAY. FAA RECORDS SHOWED THAT THE PILOT'S STUDENT PILOT CERTIFICATE HAD EXPIRED IN 1981.

Brief of Accident (Continued)

File No. - 1414

12/22/89

PILOT POINT,AK

A/C Reg. No. N8569D

Time (Lcl) - 1230 AST

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

Finding(s)

1. ICE/FROST REMOVAL FROM AIRCRAFT - NOT PERFORMED - PILOT IN COMMAND
 2. INADEQUATE TRAINING - PILOT IN COMMAND
 3. QUALIFICATION - PILOT IN COMMAND
-

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

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE NON-CERTIFICATED PILOT TO REMOVE ICE/FROST FROM THE WING(S) PRIOR TO FLIGHT. HIS LACK OF TRAINING
AND QUALIFICATION WERE PROBABLE CONTRIBUTING FACTORS.

Brief of Accident (Continued)

File No. - 1413

12/23/89

BREVIG MISSION,AK

A/C Reg. No. N220H

Time (Lcl) - 1650 AST

Occurrence #1 LOSS OF ENGINE POWER
Phase of Operation GO-AROUND (VFR)

Finding(s)

1. 1 ENGINE -
 2. REASON FOR OCCURRENCE UNDETERMINED
-

Occurrence #2 FORCED LANDING
Phase of Operation LANDING

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

Finding(s)

3. TERRAIN CONDITION - ROUGH/UNEVEN
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
LOSS OF POWER IN THE THE RIGHT ENGINE FOR AN UNKNOWN REASON. THE ROUGH/UNEVEN TERRAIN WAS A CONTRIBUTING FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1423 12/28/89 KODIAK, AK A/C Reg. No. N67691 Time (Lcl) - 1400 AST

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

Type Operating Certificate-ON-DEMAND AIR TAXI	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 -TAKEOFF					

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

Make/Model - DEHAVILLAND DHC-2	Eng Make/Model - P&W R-985	ELT Installed/Activated - YES/NO
Landing Gear - FLOAT	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 5040	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 7	Rated Power - 450 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	Runway Ident - N/A
Wind Dir/Speed- 280/030 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 75.0 SM	Type of Flight Plan - COMPANY (VFR)	Runway Surface - N/A
Lowest Sky/Clouds - 1800 FT SCATTERED	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 37	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 5800
SE LAND, ME LAND, SE SEA	Months Since - 6	Make/Model- 1800
	Aircraft Type - DHC-2	Instrument- 64
		Multi-Eng - 20
		Last 24 Hrs - 2
		Last 30 Days- 35
		Last 90 Days- 105

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT PRPTD THAT AFTER MAKING A SEA LANDING NEAR RASPBERRY STRAIT, THE WIND VELOCITY INCREASED TO AN ESTIMATED 30 KTS WITH GUSTS TO 45 KTS. HE ELECTED TO TAKE OFF TOWARD THE WEST FOR THE RETURN FLT. HE SAID THAT AT ABOUT 100 FT ABOVE THE WATER, THE ACFT ROLLED ABRUPTLY TO THE RIGHT & ITS NOSE PITCHED DOWNWARD. HE CORRECTED WITH FULL POWER & OPPOSITE AILERON, BUT THE ACFT CONTACTED THE WATER BEFORE HE COULD RECOVER. DRG IMPACT, THE 2 FRONT COMPARTMENTS OF THE RIGHT FLOAT RUPTURED & THE RIGHT FLOAT STRUT FAILED. SUBSEQUENTLY, THE RIGHT FLOAT SANK & THE ACFT ROLLED OVER IN THE WATER.

Brief of Accident (Continued)

File No. - 1423

12/28/89

KODIAK, AK

A/C Reg. No. N67691

Time (Lcl) - 1400 AST

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

Finding(s)

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

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

Finding(s)

6. TERRAIN CONDITION - WATER
 7. LANDING GEAR, FLOAT ASSEMBLY - OVERLOAD
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER COMPENSATION FOR WIND CONDITIONS BY THE PILOT, WHICH RESULTED IN LOSS OF AIRCRAFT CONTROL DURING TAKEOFF,
AND SUBSEQUENT IMPACT WITH THE WATER. THE WEATHER CONDITIONS WERE CONTRIBUTING FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1415 12/29/89 TANANA, AK A/C Reg. No. N7615S Time (Lcl) - 1330 AST

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

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

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

Make/Model - CITABRIA 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 - 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	OFF AIRPORT/STRIP
Method - N/A	FAIRBANKS, AK	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	
Wind Dir/Speed- 260/006 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 30.0 SM	Type of Flight Plan - VFR	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 8000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - 12000 FT BROKEN	Type Apch/Lndg - FULL STOP	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 32	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 445
SE LAND, ME LAND	Months Since - 7	Make/Model- 410
	Aircraft Type - PA-34	Instrument- 11
		Multi-Eng - 15
		Last 24 Hrs - 3
		Last 30 Days- 20
		Last 90 Days- 42

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT REPORTED THAT HE WAS USING HIS AIRPLANE TO TEND HIS TRAP LINE. SHORTLY AFTER TOUCH DOWN ON A FROZEN, SNOW COVERED LAKE, THE RIGHT MAIN GEAR AXLE BOLT (HOLDING THE SKI TO THE GEAR LEG) FAILED. THE SKI THEN SEPARATED FROM THE GEAR LEG AND THE AIRPLANE WAS FURTHER DAMAGED BEFORE IT CAME TO REST. THE PILOT BELIEVED THE AXLE BOLT HAD FAILED DUE TO THE CUMULATIVE EFFECTS OF CONSISTENTLY LANDING ON ROUGH TERRAIN. ACCORDING TO HIM, THERE WAS NO INHERENT FLAW OR DESIGN PROBLEM WITH THE AXLE BOLT.

Brief of Accident (Continued)

File No. - 1415

12/29/89

TANANA,AK

A/C Reg. No. N7615S

Time (Lcl) - 1330 AST

Occurrence #1 MAIN GEAR COLLAPSED
Phase of Operation LANDING

Finding(s)

1. LANDING GEAR, AXLE - FAILURE, TOTAL
-

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE RIGHT MAIN GEAR AXLE BOLT.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1532 6/11/89 GUNTERSVILLE,AL A/C Reg. No. N8203 Time (Lcl) - 1700 CST

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

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

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

Make/Model - HADLEY TEENIE TWO	Eng Make/Model - VOLKSWAGON 1600CC	ELT Installed/Activated - NO -N/A
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 750	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 1	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	GUNTERSVILLE,AL	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	ONONETA,AL	Runway Ident - N/A
Wind Dir/Speed- 220/008 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 4.000 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 - 10000 FT BROKEN	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)
PRIVATE	Current - YES	Total - 500
SE LAND	Months Since - 12	Make/Model- 7
	Aircraft Type - C182	Instrument- 50
		Multi-Eng - 0
		Last 24 Hrs - 2
		Last 30 Days- 20
		Last 90 Days- 40
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

WHILE CRUISING AT 2000 FT MSL OVER HILLY/WOODED TERRAIN, THE ENG LOST POWER. THE PILOT WAS UNABLE TO GLIDE TO A SUITABLE AREA FOR LANDING. HE TRIED TO LAND IN AN OPENING NEAR A HIGHWAY, THEN SAW POWER LINES & AN EMBANKMENT. WHILE AVOIDING OBSTRUCTIONS, THE ACFT CRASH LANDED, THEN WAS EXTENSIVELY DAMAGED BY GROUND FIRE. THE ACFT WAS MOVED BEFORE AUTHORITIES COULD MAKE AN ON-SCENE INVESTIGATION.

Brief of Accident (Continued)

File No. - 1532

6/11/89

GUNTERSVILLE, AL

A/C Reg. No. N8203

Time (Lcl) - 1700 CST

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

Finding(s)

1. REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

2. TERRAIN CONDITION - NONE SUITABLE
3. TERRAIN CONDITION - HIGH OBSTRUCTION(S)
4. TERRAIN CONDITION - DIRT BANK

----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
UNDETERMINED. FACTORS RELATED TO THE ACCIDENT WERE: LACK OF A SUITABLE LANDING AREA, HIGH OBSTRUCTIONS, AND A DIRT BANK.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1473 6/16/89 BIRMINGHAM,AL A/C Reg. No. N48257 Time (Lcl) - 1500 CDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage	Injuries			
	SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation -BUSINESS	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 R172E	Eng Make/Model - LYCOMING O-360	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2350	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 200 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	CULLMAN,AL	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	BIRMINGHAM MUNI
Wind Dir/Speed- 300/006 KTS		Runway Ident - 23
Visibility - 10.0 SM	ATC/Airspace	Runway Lth/Wid - 10000/ 150
Lowest Sky/Clouds - 3500 FT SCATTERED	Type of Flight Plan - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 25000 FT BROKEN	Type of Clearance - NONE	Runway Status - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - TRAFFIC PATTERN	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 59	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 648
SE LAND	Months Since - 4	Make/Model- 28
	Aircraft Type - UNK/NR	Instrument- 94
		Last 24 Hrs - 2
		Last 30 Days- UNK/NR
		Last 90 Days- 6

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT REPORTED THAT WHEN SHE WAS ESTABLISHED ON FINAL APPROACH TO LAND, THE TOWER TOLD HER TO MAINTAIN HER SPEED BECAUSE OF TWO FIGHTERS BEHIND HER. SHE COMPLIED. SHE PLANNED TO LAND LONG AND TURN ONTO THE NEAREST TAXIWAY TO THE FBO. WHEN SHE WAS OVER THE RUNWAY AND WAS SLOWING TO LAND, THE CONTROLLER INSTRUCTED HER TO EXPEDITE THE LANDING. SUBSEQUENTLY, WHILE SHE WAS ATTEMPTING TO COMPLY, THE AIRCRAFT LANDED HARD, WHICH BUCKLED THE FIRE WALL. THE PILOT (OF N48257) DID NOT INFORM THE TOWER CONTROLLER THAT SHE HAD PLANNED TO LAND LONG.

Brief of Accident (Continued)

File No. - 1473

6/16/89

BIRMINGHAM, AL

A/C Reg. No. N48257

Time (Lcl) - 1500 CDT

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

Finding(s)

1. FLARE - IMPROPER - PILOT IN COMMAND
 2. PRESSURE INDUCED BY OTHERS - PILOT IN COMMAND
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER FLARE BY THE PILOT, WHICH RESULTED IN A HARD LANDING. THE FACT THAT THE PILOT WAS ASKED TWICE
TO EXPEDITE THE LANDING CREATED PRESSURE ON THE PILOT AND WAS CONSIDERED TO BE A FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1471 9/17/89 SEMMES,AL A/C Reg. No. N83732 Time (Lcl) - 1805 CDT

-----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					1

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

Make/Model - AERONCA 7AC	Eng Make/Model - CONTINENTAL C-90-8F	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1300	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 90 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	GRIMES FIELD
Wind Dir/Speed- 320/005 KTS	ATC/Airspace	Runway Ident - 05
Visibility - 17.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 1800/ 100
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 - 44	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 267
SE LAND	Months Since - 1	Make/Model- 3
	Aircraft Type - 7AC	Instrument- 6
		Last 24 Hrs - UNK/NR
		Last 30 Days- 9
		Last 90 Days- 9

Instrument Rating(s) - NONE

-----Narrative-----

AFTER AN ANNUAL INSPECTION WAS COMPLETED, THE PILOT ELECTED TO REPLACE A FUEL CAP GASKET THAT HE HAD PREVIOUSLY ORDERED. DURING THE REPLACEMENT, HE NOTICED THAT THE NEW GASKET WAS NOT EXACTLY LIKE THE ORIGINAL, BUT HE THOUGHT IT WOULD BE SATISFACTORY. HE THEN REFUELED THE AIRCRAFT AND MADE SEVERAL TAKEOFFS AND LANDINGS. AFTER ABOUT A 30 MINUTE FLIGHT, A PASSENGER BOARDED THE AIRCRAFT AND THE PILOT TOOK OFF AGAIN. DURING THE INITIAL CLIMB AFTER TAKEOFF, THE ENGINE LOST POWER. THE PILOT MADE AN EMERGENCY LANDING, BUT WAS UNABLE TO STOP THE AIRCRAFT BEFORE IT HIT TREES. AFTER THE ACCIDENT, THE PILOT DISCOVERED THAT THE FUEL CAP VENT HAD BECOME BLOCKED BY THE NEW GASKET. ALSO, HE NOTED THAT DURING THE LANDING SEQUENCE, THE FUEL CAP WAS DISLODGED ENOUGH TO ALLOW AIR BACK IN THE TANK AND THE ENGINE BEGAN RUNNING AGAIN.

Brief of Accident (Continued)

File No. - 1471

9/17/89

SEMMES,AL

A/C Reg. No. N83732

Time (Lcl) - 1805 CDT

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

Finding(s)

1. FUEL SYSTEM,CAP -
 2. MAINTENANCE,REPLACEMENT - IMPROPER - PILOT IN COMMAND
 3. FUEL SYSTEM,VENT - BLOCKED(TOTAL)
 4. FLUID,FUEL - STARVATION
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 IN FLIGHT 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:
IMPROPER REPLACEMENT OF THE FUEL CAP GASKET BY THE PILOT, WHICH RESULTED IN A BLOCKED FUEL CAP VENT AND
FUEL STARVATION. TREES IN THE EMERGENCY LANDING AREA CONTRIBUTED TO AIRCRAFT DAMAGE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1525 9/06/89 HORATIO,AR A/C Reg. No. N10GF Time (Lcl) - 1130 CDT

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

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

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

Make/Model - PIETENPOL AIR CAMPER B4A	Eng Make/Model - CONTINENTAL A-65	ELT Installed/Activated - UNK/NR
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 900	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	HOPE,AR	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	ANTLERS,OK	Runway Ident - N/A
Wind Dir/Speed- 210/006 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 6.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - N/A	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - 1000 FT OVERCAST	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- HAZE		
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 - 4500
SE LAND	Months Since - 7	Last 24 Hrs - 1
	Aircraft Type - UNK/NR	Make/Model- 6
		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 PILOT SAID THAT DURING A CROSS COUNTRY PERSONAL FLIGHT, THE ENGINE LOST POWER. SUBSEQUENTLY, THE ACFT WAS DAMAGED DURING A FORCED LANDING. A POST ACCIDENT INVESTIGATION FAILED TO REVEAL ANY ENGINE ABNORMALITIES OR MALFUNCTIONS. ACCORDING TO ICING PROBABILITY CHARTS, METEOROLOGICAL CONDITIONS WERE CONDUCIVE FOR CARBURETOR ICING AT THE TIME OF THE ACCIDENT.

Brief of Accident (Continued)

File No. - 1525

9/06/89

HORATIO,AR

A/C Reg. No. N10GF

Time (Lcl) - 1130 CDT

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

Finding(s)

1. WEATHER CONDITION - CARBURETOR ICING CONDITIONS
 2. CARBURETOR HEAT - IMPROPER USE OF - PILOT IN COMMAND
 3. FUEL SYSTEM, CARBURETOR - ICE
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 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 USE OF CARBURETOR HEAT BY THE PILOT, WHICH RESULTED IN CARBURETOR ICE. A FACTOR RELATED TO
THE ACCIDENT WAS: CARBURETOR ICING CONDITIONS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1401 7/15/89 ELOY,AZ A/C Reg. No. N5252 Time (Lcl) - 0715 MST

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

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

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

Make/Model - GRUMMAN G-164A	Eng Make/Model - P&W R-1340	ELT Installed/Activated - NO	-N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 3725	Engine Type - RECIPROCATING-CARBURETOR		
No. of Seats - 1	Rated Power - 600 HP		

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

Weather Data		Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING		Last Departure Point	OFF AIRPORT/STRIP
Method - N/A		SAME AS ACC/INC	
Completeness - N/A		Destination	Airport Data
Basic Weather - VMC		LOCAL	ELOY "Y"
Wind Dir/Speed- UNK/NR			Runway Ident - N/A
Visibility - 20.0 SM	ATC/Airspace		Runway Lth/Wid - N/A
Lowest Sky/Clouds - UNK/NR	Type of Flight Plan - NONE		Runway Surface - DIRT
Lowest Ceiling - UNK/NR BROKEN	Type of Clearance - NONE		Runway Status - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - FORCED LANDING		
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,ATP	Current - YES	Total - 11000
SE LAND,ME LAND	Months Since - 2	Last 24 Hrs - 5
	Aircraft Type - G-164A	Make/Model- 600
		Last 30 Days- 35
		Instrument- 700
		Last 90 Days- 50
		Multi-Eng - 3000

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DRG TAKEOFF, ON A FLT TO MOVE THE ACFT TO ANOTHER LOCATION, THE ENG LOST POWER. THE POWER LOSS OCCURRED AT AN ALT OF ABOUT 150 FT. SUBSEQUENTLY, THE ACFT NOSED OVER DRG AN EMERGENCY LANDING ON DESERT TERRAIN. IN AN INTERVIEW AFTER THE ACDNT, THE PLT RPRTD THERE WAS ENOUGH FUEL ON BOARD THE ACFT TO REACH THE DESTN. HOWEVER, WHEN IT WAS EXAMINED AFTER THE ACDNT, VERY LITTLE FUEL WAS FOUND REMAINING IN THE FUEL TANKS. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE ACFT OR ENG WAS FOUND.

Brief of Accident (Continued)

File No. - 1401

7/15/89

ELOY, AZ

A/C Reg. No. N5252

Time (Lcl) - 0715 MST

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

Finding(s)

1. AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
2. FLUID, FUEL - STARVATION
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. TERRAIN CONDITION - ROUGH/UNEVEN

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
INAEQUATE PREFLIGHT BY THE PILOT, WHICH RESULTED IN FUEL STARVATION DURING THE CLIMB AFTER TAKEOFF, DUE TO VERY LITTLE
FUEL REMAINING IN THE TANKS. THE ROUGH/UNEVEN DESERT TERRAIN WAS CONSIDERED TO BE A CONTRIBUTING FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1484 7/28/89 MARANA, AZ A/C Reg. No. N61552 Time (Lcl) - 0927 MST

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

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

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

Make/Model - CESSNA 172M	Eng Make/Model - LYCOMING O-320	ELT Installed/Activated - 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 - 150 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	OFF AIRPORT/STRIP
Method - UNK/NR	TUCSON,AZ	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- UNK/NR	ATC/Airspace	Runway lth/Wid - N/A
Visibility - 40.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - UNK/NR	Type Apch/Lndg - FORCED LANDING	
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 - UNK/NR	Total - 1200
SE LAND,ME LAND	Months Since - UNK/NR	Last 24 Hrs - UNK/NR
	Aircraft Type - UNK/NR	Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

BEFORE TAKING OFF ON A FLT FOR A BIENNIAL FLT REVIEW, THE PVT PLT PREFLIGHTED THE ACFT & THE INSTRUCTOR (CFI) TOOK HIS WORD THAT ABOUT 20 GAL OF FUEL WAS ON BOARD. THE OPERATOR RPRTD THE CFI WAS AWARE THAT THE LEFT FUEL GAGE WAS INOP. NO DIP STICK WAS USED TO MEASURE THE QUANTITY OF FUEL BEFORE TAKEOFF. AFTER ABOUT 35 MIN OF FLT, THE ENG LOST POWER AS THE STUDENT WAS MAKING A GO-AROUND FROM A SIMULATED FORCED LNDG, BUT FULL POWER RESUMED WHEN THE NOSE WAS LOWERED. ABOUT 1 TO 2 MINS LATER, THE ENG LOST POWER AGAIN, BUT WOULD NOT RESTART. SUBSEQUENTLY, THE ACFT WAS DAMAGED WHEN IT HIT A SAGUARO (TREE LIKE) CACTUS DRG AN EMERGENCY LANDING. NO FUEL WAS FOUND IN THE TANKS AFTER THE ACNT.

Brief of Accident (Continued)

File No. - 1484

7/28/89

MARANA, AZ

A/C Reg. No. N61552

Time (Lcl) - 0927 MST

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

Finding(s)

1. AIRCRAFT PREFLIGHT - INADEQUATE - DUAL STUDENT
2. SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
3. ENGINE INSTRUMENTS, FUEL QUANTITY GAGE - INOPERATIVE
4. OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - INTENTIONAL - PILOT IN COMMAND(CFI)
5. FLUID, FUEL - EXHAUSTION
6. FUEL SUPPLY - INADEQUATE -

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

7. OBJECT - TREE(S)

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
INADEQUATE PREFLIGHT BY THE STUDENT PILOT, INADEQUATE SUPERVISION BY THE FLIGHT INSTRUCTOR (CFI), AND
FUEL EXHAUSTION DUE TO LACK OF FUEL. RELATED FACTORS WERE: INOPERATIVE LEFT FUEL QUANTITY GAGE, THE
CFI'S DECISION TO MAKE THE FLIGHT WITH A KNOWN DEFICIENCY IN THE FUEL GAGE, AND OBSTRUCTIONS (TREE LIKE
CACTUS) IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1463 8/10/89 SCOTTSDALE, AZ A/C Reg. No. N8477B Time (Lcl) - 1140 MST

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

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage	Injuries			
		SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation	-INSTRUCTIONAL	Fire	Crew 0	0	1	0
Flight Conducted Under	-14 CFR 91	NONE	Pass 0	0	0	0
Accident Occurred During	-TAKEOFF					

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

Make/Model	- ROBINSON R22	Eng Make/Model	- LYCOMING O-320-A2G	ELT Installed/Activated	- NO -N/A
Landing Gear	- SKID	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 2400	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 2	Rated Power	- 160 HP		

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

Weather Data		Itinerary	Airport Proximity	
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT	
Method	- N/A	SAME AS ACC/INC		
Completeness	- N/A	Destination	Airport Data	
Basic Weather	- VMC	LOCAL	SCOTTSDALE MUNI	
Wind Dir/Speed	- 240/004 KTS		Runway Ident	- UNK/NR
Visibility	- 40.0 SM	ATC/Airspace	Runway Lth/Wid	- UNK/NR
Lowest Sky/Clouds	- 15000 FT SCATTERED	Type of Flight Plan	Runway Surface	- CONCRETE
Lowest Ceiling	- 20000 FT BROKEN	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 - 32	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
STUDENT	Current - N/A	Total - 34	Last 24 Hrs - 1
	Months Since - N/A	Make/Model- 34	Last 30 Days- 10
	Aircraft Type - N/A	Instrument- 0	Last 90 Days- 34
			Rotorcraft - 34

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PILOT WAS PRACTICING TAKEOFFS AND LANDINGS ON HIS SECOND SUPERVISED SOLO FLIGHT. AS HE WAS BEGINNING HIS SECOND TAKEOFF, HE LOST CONTROL OF THE HELICOPTER. DURING THE OCCURENCE, THE RIGHT SKID CONTACTED THE GROUND AND THE HELICOPER ROLLED-OVER ONTO ITS RIGHT SIDE. A POST ACCIDENT INVESTIGATION DISCLOSED CONTINUITY OF THE FLIGHT CONTROL SYSTEM; NO PRE-ACCIDENT ABNORMALITIES WERE OBSERVED.

Brief of Accident (Continued)

File No. - 1463

8/10/89

SCOTTSDALE, AZ

A/C Reg. No. N8477B

Time (Lcl) - 1140 MST

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

Finding(s)

1. FLIGHT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND
 2. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
-

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

Occurrence #3 ROLL OVER
Phase of Operation OTHER

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPERLY USE OF THE FLIGHT CONTROLS BY THE PILOT AND HIS FAILURE TO MAINTAIN CONTROL OF THE HELICOPTER.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1541 9/27/89 GRAND CANYON,AZ A/C Reg. No. N75GC Time (Lcl) - 0953 MST

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

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage		Injuries			
Name of Carrier	-GRAND CANYON AIRLINES	DESTROYED		Fatal	Serious	Minor	None
Type of Operation	-NON SCHED,DOMESTIC,PASSENGER	Fire	Crew	2	0	0	0
Flight Conducted Under	-14 CFR 135	NONE	Pass	8	9	2	0
Accident Occurred During	-LANDING						

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

Make/Model	- DEHAVILLAND DHC-6-300	Eng Make/Model	- P&W PT6A-27	ELT Installed/Activated	- UNK/NR
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 2	Stall Warning System	- YES
Max Gross Wt	- 12500	Engine Type	- TURBOPROP		
No. of Seats	- 21	Rated Power	- 620 HP		

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

Weather Data		Itinerary		Airport Proximity	
Wx Briefing	- FSS	Last Departure Point		ON AIRPORT	
Method	- IN PERSON	SAME AS ACC/INC			
Completeness	- WEATHER NOT PERTINENT	Destination		Airport Data	
Basic Weather	- VMC	LOCAL		GRAND CANYON	
Wind Dir/Speed	- 160/007 KTS	ATC/Airspace		Runway Ident	- 21
Visibility	- 50.0 SM	Type of Flight Plan	- COMPANY (VFR)	Runway Lth/Wid	- 8999/ 150
Lowest Sky/Clouds	- 8000 FT SCATTERED	Type of Clearance	- NONE	Runway Surface	- ASPHALT
Lowest Ceiling	- NONE	Type Apch/Lndg	- GO AROUND	Runway Status	- DRY
Obstructions to Vision	- NONE				
Precipitation	- NONE				
Condition of Light	- DAYLIGHT				

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

Pilot-In-Command	Age - 47	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
ATP,CFI,COMMERCIAL	Current - YES	Total	- 4120
SE LAND,ME LAND	Months Since - 1	Make/Model	- 2610
	Aircraft Type - DHC-6	Instrument	- 214
		Multi-Eng	- 2677
		Last 24 Hrs	- 5
		Last 30 Days	- 79
		Last 90 Days	- 297

Instrument Rating(s) - AIRPLANE

-----Narrative-----

GRAND CANYON AIRLINES FLT 5 (DEHAVILLAND DHC-6, N75GC) DEPD GRAND CANYON NATIONAL PARK ARPT ON A LOCAL PART 135, SIGHT-SEEING FLT. AFTER RTRNG FROM A NORMAL TRIP, THE FLT WAS CLEARED TO LAND ON RWY 21. OBSERVERS RPRTD THE APCH TO THE ARPT WAS NORMAL, BUT THE ACFT TRAVELED ABOUT 1000' DOWN THE RWY AT AN ALT OF ABOUT 5' BEFORE TOUCHDOWN. RPRTDLY, IT BOUNCED & TRAVELED ANOTHER 1000' BEFORE TOUCHING DOWN AGAIN. THE ACFT THEN VEERED TO THE RGT & THE FLT CREW INITIATED A GO-AROUND (ABORTED LNDG). THE ACFT CLIMBED IN A NOSE HIGH ALT TO ABOUT 150' TO 200' AGL, THEN IT ROLLED TO THE LEFT & CRASHED ONTO A WOODED HILL ABOUT 120' LEFT OF THE RWY. A PWR LINE WAS SEVERED DURING IMPACT, WHICH INTERRUPTED ELEC PWR TO THE ARPT & DELAYED EMERG RESPONSE TO THE CRASH. SURVIVING PSGRS RPRTD THE RGT SEAT PLT WAS FLYING THE ACFT, WHILE THE LEFT SEAT PLT NARRATED THE TOUR; BUT AFTER A HARD TOUCHDOWN, THE LEFT SEAT PLT TOOK CTL OF THE ACFT & APPLIED FULL PWR FOR A GO-AROUND. A SCRAPE MARK WAS FND WHERE THE RGT WINGTIP SCRAPED THE RWY DURING THE 2ND TOUCHDOWN.

Brief of Accident (Continued)

File No. - 1541

9/27/89

GRAND CANYON,AZ

A/C Reg. No. N75GC

Time (Lcl) - 0953 MST

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

Finding(s)

1. FLARE - IMPROPER - COPILOT/SECOND PILOT
 2. CREW/GROUP COORDINATION - IMPROPER -
 3. RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND
 4. GO-AROUND - ATTEMPTED - PILOT IN COMMAND
-

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER PILOT TECHNIQUES AND CREW COORDINATION DURING THE LANDING ATTEMPT, BOUNCE, AND ATTEMPTED GO-AROUND.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1474 9/28/89 FLAGSTAFF,AZ A/C Reg. No. N519TW Time (Lcl) - 1243 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	1
Accident Occurred During -LANDING					

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

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

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Départure Point	ON AIRPORT
Method - UNK/NR	LLANO,CA	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	PULLIAM
Wind Dir/Speed- 140/004 KTS	ATC/Airspace	Runway Ident - 21
Visibility - 30.0 SM	Type of Flight Plan - VFR	Runway Lth/Wid - 6999/ 150
Lowest Sky/Clouds - CLEAR	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 - 47	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 15000
SE LAND	Months Since - 1	Last 24 Hrs - 4
GLIDER	Aircraft Type - G-103	Make/Model- 250
		Instrument- UNK/NR
		Last 30 Days- 30
		Last 90 Days- 100
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT STATED THAT AS HE STARTED TO USE THE BRAKES TO STEER THE AIRCRAFT, AFTER MAKING A WHEEL LANDING, HE DISCOVERED THAT HE "HAD NO LEFT BRAKE." AT THAT MOMENT, THE TAILWHEEL WAS STILL SLIGHTLY ABOVE THE RUNWAY SURFACE, SO HE HAD NO TAILWHEEL STEERING & HIS RUDDER WAS BECOMING INEFFECTIVE. SUBSEQUENTLY, THE ACFT GROUND LOOPED TO THE RIGHT & WAS DAMAGED.

Brief of Accident (Continued)

File No. - 1474

9/28/89

FLAGSTAFF, AZ

A/C Reg. No. N519TW

Time (Lcl) - 1243 MST

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

Finding(s)

1. LANDING GEAR, NORMAL BRAKE SYSTEM - FAILURE, TOTAL
 2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
 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 LEFT BRAKE. THE PILOT'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL WITH RUDDER AND TAILWHEEL STEERING
WAS CONSIDERED TO BE A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1481 4/08/89 LONG BEACH, CA A/C Reg. No. N9456F Time (Lcl) - 1110 PDT

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

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

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

Make/Model - HUGHES 269B	Eng Make/Model - LYCOMING HIO-360-A1A	ELT Installed/Activated - NO	-N/A
Landing Gear - SKID	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 1670	Engine Type - RECIPROCATING-CARBURETOR		
No. of Seats - 3	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	DAUGHERTY FIELD
Wind Dir/Speed- 170/008 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - VFR	Runway Surface - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 40	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 183
	Months Since - 15	Make/Model- 8
HELICOPTER	Aircraft Type - R22	Instrument- 1
		Last 24 Hrs - 2
		Last 30 Days- 8
		Last 90 Days- 8

Instrument Rating(s) - NONE

-----Narrative-----

THE FLT BEGAN WITH ABOUT 20 GAL OF FUEL IN THE ACFT'S 30 GAL FUEL TANK. ABOUT 1.7 HRS LATER, AS THE PLT WAS RETURNING TO LAND, HE REPORTED A "SLIGHT FUEL SITUATION." ABOUT 2 MIN LATER, THE ENG LOST POWER. SUBSEQUENTLY, THE ACFT WAS DAMAGED AS THE PLT WAS MAKING AN EMERGENCY LANDING ON A STREET ABOUT 1/4 MI FROM THE ARPT.

Brief of Accident (Continued)

File No. - 1481

4/08/89

LONG BEACH, CA

A/C Reg. No. N9456F

Time (Lcl) - 1110 PDT

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

Finding(s)

1. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
 2. FLUID,FUEL - EXHAUSTION
 3. FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
 4. LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Finding(s)

5. AUTOROTATION
-

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

----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 AN INADEQUATE SUPPLY OF FUEL TO REACH THE AIRPORT
AND SUBSEQUENT FUEL EXHAUSTION. THE PILOT'S LACK OF FLIGHT TIME IN THIS MAKE AND MODEL OF HELICOPTER WAS CONSIDERED
TO BE A FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1416 5/27/89 RIALTO, CA A/C Reg. No. N90HS Time (Lcl) - 1126 PDT

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

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

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

Make/Model - HOLMAN/SEARS HS-1	Eng Make/Model - ITAL-AMERICAN KFM-107E	ELT Installed/Activated - NO	-N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 851	Engine Type - RECIPROCATING-CARBURETOR		
No. of Seats - 1	Rated Power - 30 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	RIALTO
Wind Dir/Speed- 340/002 KTS	ATC/Airspace	Runway Ident - 24
Visibility - 5.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4500/ 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- HAZE		
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 - UNK/NR	Total - 82
	Months Since - UNK/NR	Last 24 Hrs - UNK/NR
GLIDER	Aircraft Type - UNK/NR	Make/Model- UNK/NR
		Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT/CO-OWNER HAD ONLY A GLIDER CERTIFICATE, BUT HE ELECTED TO FLY THE HOME BUILT AIRPLANE ON ITS MAIDEN FLIGHT. AFTER DEPARTING ON RUNWAY 24, HE INITIATED A RIGHT TURN ABOUT 3/4 MILE WEST OF THE AIRPORT. WHILE TURNING AT ABOUT 200 FT AGL, THE AIRPLANE ENTERED A SPIN & IMPACTED THE GROUND IN A VERTICAL DESCENT. AN INVESTIGATION REVEALED THE PILOT HAD ABOUT 82 HRS OF FLIGHT TIME, OF WHICH, APRX 25 HRS WERE IN SINGLE ENGINE AIRPLANES.

Brief of Accident (Continued)

File No. - 1416

5/27/89

RIALTO, CA

A/C Reg. No. N90HS

Time (Lcl) - 1126 PDT

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

Finding(s)

1. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
 2. QUALIFICATION - PILOT IN COMMAND
 3. OVER CONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND
 4. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
 5. STALL/SPIN - INADVERTENT - PILOT IN COMMAND
 6. 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 OF THE PILOT TO MAINTAIN SUFFICIENT AIRSPEED, WHILE TURNING AFTER TAKEOFF, WHICH RESULTED IN A STALL/SPIN.
CONTRIBUTING FACTORS WERE: IMPROPER PLANNING/DECISION BY THE PILOT BY TEST FLYING AN AIRPLANE THAT HE WAS NOT
PROPERLY CERTIFICATED TO OPERATE, HIS LACK OF FAMILIARITY WITH THE AIRCRAFT, AND OVERCONFIDENCE IN HIS PERSONAL
ABILITY.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1461 6/20/89 PASO ROBLES, CA A/C Reg. No. N69549 Time (Lcl) - 1315 PDT

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

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

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

Make/Model - CESSNA 340	Eng Make/Model - CONTINENTAL TS10-520	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 5975	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 310 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	LONG BEACH, CA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	PASO ROBLES
Wind Dir/Speed- UNK/NR	ATC/Airspace	Runway Ident - 31
Visibility - 40.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4700/ 100
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	FORCED LANDING	
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)
ATP	Current - YES	Total - 2804
ME LAND	Months Since - 13	Make/Model- 150
	Aircraft Type - C-340	Instrument- 358
		Multi-Eng - 988
		Last 24 Hrs - 2
		Last 30 Days- 28
		Last 90 Days- 34
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

AS THE AIRPLANE WAS ON FINAL APPROACH TO LAND, BOTH ENGINES LOST POWER. THE PILOT IMMEDIATELY MOVED THE BOOST PUMP SWITCHES TO THE HIGH POSITION AND SWITCHED THE FUEL SELECTOR VALVES TO THE AUXILIARY TANKS, BUT TO NO AVAIL. REALIZING THERE WAS INSUFFICIENT ALTITUDE TO REACH THE RUNWAY, HE MANEUVERED THE AIRPLANE TO MISS SOME STRUCTURES, BUT IT COLLIDED WITH TREES. AN INVESTIGATION REVEALED NO FUEL QUANTITY INDICATORS WERE INSTALLED IN THE AIRPLANE AND THAT THE MAIN FUEL TANKS WERE EMPTY; HOWEVER, BOTH AUXILIARY FUEL TANKS WERE FULL. THE OWNER'S MANUAL STATED THAT THE AUXILIARY FUEL SUPPLY WAS TO BE USED IN CRUISE FLIGHT ONLY AND THAT FAILURE OF AN ENGINE OR ENGINE DRIVEN FUEL PUMP WOULD RESULT IN FUEL NOT BEING AVAILABLE FROM THE RESPECTIVE AUXILIARY TANK.

Brief of Accident (Continued)

File No. - 1461

6/20/89

PASO ROBLES, CA

A/C Reg. No. N69549

Time (Lcl) - 1315 PDT

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

Finding(s)

1. ALL ENGINES -
 2. ENGINE INSTRUMENTS, FUEL QUANTITY GAGE - NOT INSTALLED
 3. OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - PERFORMED - PILOT IN COMMAND
 4. FLUID, FUEL - STARVATION
 5. FUEL SYSTEM - IMPROPER USE OF - PILOT IN COMMAND
-

Occurrence #2 FORCED LANDING
Phase of Operation LANDING

Occurrence #3 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation LANDING

Finding(s)

6. OBJECT - TREE(S)
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER USE (MISMANAGEMENT) OF THE FUEL SYSTEM BY THE PILOT, WHICH RESULTED IN FUEL STARVATION. RELATED FACTORS WERE:
THE LACK OF FUEL QUANTITY INDICATORS (NOT INSTALLED) IN THE AIRCRAFT, FLIGHT BY THE PILOT WITH THIS KNOWN DEFICIENCY,
AND TREES IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1533 6/22/89 NEWHALL, CA A/C Reg. No. N28LR Time (Lcl) - 1411 PDT

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

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

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

Make/Model - AEROSPATIALE TB-21	Eng Make/Model - LYCOMING TIO-540-AB1AD	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3086	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 250 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SACRAMENTO, CA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	VAN NUYS, CA	VAN NUYS
Wind Dir/Speed- 140/010 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 6.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 66	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 1269
SE LAND, ME LAND	Months Since - 7	Make/Model- 444
	Aircraft Type - TB-21	Instrument- 30
		Multi-Eng - 447
		Last 24 Hrs - 3
		Last 30 Days- 9
		Last 90 Days- 29
		Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD TO THE TOWER CTLR THAT HE WAS EXPERIENCING ENG PROBLEMS. SHORTLY THEREAFTER, HE RPRTD THAT THE ENG HAD "QUIT". AS THE PLT WAS MAKING AN EMERGENCY LNDG, THE AIRPLANE COLLIDED WITH A TRANSMISSION WIRE & CRASHED. AN INVESTIGATION REVEALED CONTAMINANTS IN THE AIRFRAME & ENG FUEL SYSTEMS. RPRTDLY, THE PLT HAD NEVER DRAINED THE FUEL SELECTOR VALVE FILTER, NOR WAS HE TOLD ABT THE DRAIN WHEN HE WAS CHECKED OUT BY THE MFG SALES REP. THE FUEL SYSTEM HAD BEEN CHECKED FOR CONTAMINANTS BY AN FBO BEFORE THE PLT DEPD ON THE ACDNT FLT. THE FUEL SERVO WAS CLEANED & THE REINSTALLING MECH DRAINED ABT 1/2 GAL OF FUEL. HE FOUND NO CONTAMINANTS, BUT HE DID NOT ENDOSCOPE THE TANKS AS RQRD BY THE MAINT MANUAL.

Brief of Accident (Continued)

File No. - 1533

6/22/89

NEWHALL, CA

A/C Reg. No. N28LR

Time (Lcl) - 1411 PDT

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

Finding(s)

1. FLUID, FUEL - CONTAMINATION
2. MAINTENANCE - INADEQUATE - OTHER MAINTENANCE PSNL
3. LACK OF FAMILIARITY WITH AIRCRAFT - PILOT IN COMMAND
4. INADEQUATE TRANSITION/UPGRADE TRAINING -

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

5. OBJECT - WIRE, TRANSMISSION

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:
FUEL CONTAMINATION, DUE TO THE PILOT'S LACK OF FAMILIARITY WITH THE AIRCRAFT FUEL SYSTEM, AND INADEQUATE MAINTENANCE. A
RELATED FACTOR WAS: INADEQUATE TRANSITION TRAINING.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1446 7/02/89 CHUALAR, CA A/C Reg. No. N81D Time (Lcl) - 1400 PDT

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

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

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

Make/Model - PROGRESS AERO R&D DISCOVERY	Eng Make/Model - LYCOMING O-235	ELT Installed/Activated - YES/NO
Landing Gear - UNK/NR	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1400	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 112 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	MONTEREY, CA	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 125/015 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- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 34	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
ATP,CFI,FLT ENG	Current - YES	Total - 12000
SE LAND,ME LAND	Months Since - 3	Make/Model- 20
GLIDER	Aircraft Type - B-747	Instrument- 800
		Multi-Eng - 5000
		Last 24 Hrs - 2
		Last 30 Days- 60
		Last 90 Days- 175

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE EXPERIMENTAL COMPOSITE STRUCTURED ACFT WAS ON A TEST FLT. DRG A SLOW AIRSPEED TEST, IT ENTERED A FLAT SPIN FROM WHICH THE PLT WAS UNABLE TO RECOVER BY USING NORMAL CONTROLS. THE ACFT WAS EQUIPPED WITH A BALLISTIC PARACHUTE. THE PLT DEPLOYED THE CHUTE & SHUT DOWN THE ENG. SUBSEQUENTLY, THE ACFT TOUCHED DOWN WITH A PARACHUTE DESCENT RATE OF ABOUT 1800 FT/MIN. DRG TOUCHDOWN, THE PLT SUFFERED NECK & BACK INJURIES. HE RPRTD THAT DRG THE FLT, ALL FLT CONTROL SURFACES RESPONDED NORMALLY TO HIS CONTROL INPUTS. THE AERODYNAMIC CHARACTERISTICS WHICH PRODUCED THE SPIN WERE NOT IDENTIFIED.

Brief of Accident (Continued)

File No. - 1446

7/02/89

CHUALAR, CA

A/C Reg. No. N81D

Time (Lcl) - 1400 PDT

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

Finding(s)

1. AIRSPEED - REDUCED - PILOT IN COMMAND
 2. STALL/SPIN - INADVERTENT -
 3. REMEDIAL ACTION - INITIATED - PILOT IN COMMAND
 4. EMERGENCY PROCEDURE - PERFORMED - 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 EXPERIMENTAL AIRCRAFT'S INADVERTENT ENTRY INTO A NON-RECOVERABLE FLAT SPIN DURING A SLOW AIRSPEED TEST; THE
AERODYNAMIC CHARACTERISTICS THAT PRODUCED THE SPIN WERE NOT DETERMINED.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1482 7/30/89 CORONA, CA A/C Reg. No. N7341W Time (Lcl) - 1650 PDT

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

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

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

Make/Model - PIPER PA-28-180	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 - 2450	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 180 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	HUNTINGTON BCH, CA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	CORONA, CA	Runway Ident - N/A
Wind Dir/Speed- 225/025 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- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 57	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - NO	Total - 900
SE LAND	Months Since - UNK/NR	Make/Model- 640
	Aircraft Type - UNK/NR	Instrument- UNK/NR
		Multi-Eng - 0
		Last 24 Hrs - 0
		Last 30 Days- 0
		Last 90 Days- 0
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE ACFT HAD BEEN PARKED FOR SVRL YEARS AT AN ARPT THAT WAS BEING CLOSED. ITS LAST ANNUAL INSPN WAS IN NOV 1986. BEFORE FERRYING THE ACFT TO A NEW LCTN, THE PLT DRAINED THE FUEL TANKS, PUMPED FUEL THRU THE LINES TO THE GASCOLATOR & SVCD IT WITH 22 GAL OF FRESH FUEL, BUT DID NOT OBTAIN A FERRY PERMIT. THE PLT STATED THAT AFTER ABOUT 20 MIN OF FLT, THE ACFT ENCTRD TURBULENCE. HE REDUCED POWER TO 1800 RPM TO SLOW THE ACFT & BEGAN A DSCNT. WHEN THE THROTTLE WAS ADVANCED AGAIN, THE ENG DID NOT RESPOND. THE PLT SAID HE TURNED ON THE BOOST PUMP, SWITCHED FUEL TANKS, NOTED THE FUEL PRESSURE WAS GOOD & CHECKED THE MAGNETOS (BUT HE DID NOT INDICATE THAT HE HAD TURNED ON THE CARB HEAT). SUBSEQUENTLY, THE ACFT WAS DAMAGED WHEN IT HIT TREES DRG AN EMERGENCY LANDING. THE PLT RPRTD THAT FUEL WAS STILL REMAINING IN THE ACFT & NO WATER OR CONTAMINATION WAS FOUND IN THE FUEL SYSTEM. THE TEMP & DEW POINT WERE 75 & 52 DEG, RESPECTIVELY. ACCORDING TO CARB ICING CHARTS, CONDITIONS WERE CONDUCIVE FOR CARB ICE.

Brief of Accident (Continued)

File No. - 1482

7/30/89

CORONA, CA

A/C Reg. No. N7341W

Time (Lcl) - 1650 PDT

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

Finding(s)

1. WEATHER CONDITION - CARBURETOR ICING CONDITIONS
 2. CARBURETOR HEAT - IMPROPER USE OF - PILOT IN COMMAND
 3. FUEL SYSTEM, CARBURETOR - ICE
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Finding(s)

4. EMERGENCY PROCEDURE - IMPROPER - PILOT IN COMMAND
 5. LACK OF RECENT EXPERIENCE - PILOT IN COMMAND
-

Occurrence #3 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation LANDING

Finding(s)

6. OBJECT - TREE(S)
-

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
CONTINUED BUILDUP OF CARBURETOR ICE DUE TO THE PILOT'S IMPROPER USE OF CARBURETOR HEAT, AND HIS IMPROPER USE OF
EMERGENCY PROCEDURES. FACTORS RELATED TO THE ACCIDENT WERE: CARBURETOR ICING CONDITIONS, THE PILOT'S LACK OF RECENT
FLIGHT EXPERIENCE, AND TREES IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1462 8/04/89 RIO LINDA, CA A/C Reg. No. N84709 Time (Lcl) - 0920 PDT

-----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 - AERONCA 7AC	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 - 1300	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	MARYSVILLE, CA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	RIO LINDA
Wind Dir/Speed- LIGHT AND VARIABLE	ATC/Airspace	Runway Ident - 17
Visibility - 30.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2620/ 42
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - GO AROUND	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 59	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 1347
SE LAND	Months Since - 15	Make/Model- 123
	Aircraft Type - BE-C33	Instrument- 157
		Last 24 Hrs - UNK/NR
		Last 30 Days- 17
		Last 90 Days- 36

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT FLEW FROM SACRAMENTO TO RIO LINDA, LINCOLN, MARYSVILLE, THEN BACK TO RIO LINDA. AS HE WAS DEPG MARYSVILLE, HE NOTICED AN IMPROPER INDCN OF THE AIRSPEED INDICATOR (WHICH WAS READING TOO LOW). HE ASSUMED A BUG HAD BLOCKED THE PITOT OPENING & CONTINUED TO RIO LINDA. ON ARRIVAL, THE ACFT BOUNCED DRG AN ATTEMPTED "WHEEL LANDING." THE PLT BELIEVED THE AIRSPEED MAY HAVE BEEN TOO HIGH (OR TOO LOW), CAUSING THE ACFT TO BOUNCE. HE CONTINUED THE LANDING, BUT THE ACFT BOUNCED AGAIN, SO HE INITIATED A GO-AROUND. DRG THE GO-AROUND, HE BECAME DISTRACTED BY HIS INABILITY TO LOCATE & TURN OFF THE CARBURETOR HEAT. AS HE WAS LOOKING FOR THE CARBURETOR HEAT CONTROL, THE ACFT ANGLED OFF THE RWY TO THE RIGHT & HEADED TOWARD THE WIND TEE & A FENCE WHICH PARALLELED THE RWY. THE PLT AVOIDED THE WIND TEE, BUT THE ACFT'S RIGHT WING & TAILWHEEL STRUCK THE FENCE.

Brief of Accident (Continued)

File No. - 1462

8/04/89

RIO LINDA, CA

A/C Reg. No. N84709

Time (Lcl) - 0920 PDT

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

Finding(s)

1. FLIGHT/NAV INSTRUMENTS, AIRSPEED INDICATOR - FALSE INDICATION
2. FLARE - ATTEMPTED - PILOT IN COMMAND
3. RECOVERY FROM BOUNCED LANDING - PERFORMED - PILOT IN COMMAND
4. ABORTED LANDING - INITIATED - PILOT IN COMMAND
5. CARBURETOR HEAT - IMPROPER USE OF - PILOT IN COMMAND
6. LACK OF FAMILIARITY WITH AIRCRAFT - PILOT IN COMMAND
7. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND
8. DIVERTED ATTENTION - PILOT IN COMMAND

Occurrence #2 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation LANDING - ABORTED

Finding(s)

9. OBJECT - FENCE

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO MAINTAIN PROPER RUNWAY ALIGNMENT DURING AN ABORTED LANDING. RELATED FACTORS WERE:
A FALSE AIRSPEED INDICATION, THE PILOT'S LACK OF FAMILIARITY WITH THE AIRCRAFT, HIS IMPROPER USE OF CARBURETOR
HEAT, HIS DIVERTED ATTENTION, AND THE FENCE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1551 8/05/89 PARKER DAM, CA A/C Reg. No. N5070H Time (Lcl) - 1555 PDT

-----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					1
					3

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

Make/Model - CESSNA 182	Eng Make/Model - CONTINENTAL O-470-U	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-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 - FSS	Last Departure Point	ON AIRPORT
Method - ACFT RADIO	EL MONTE, CA	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	LAKE HAVASU PALMS
Wind Dir/Speed- 230/007 KTS	ATC/Airspace	Runway Ident - 18
Visibility - 40.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3000/ 30
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - DIRT
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 - 34	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 267
SE LAND	Months Since - 22	Make/Model- 109
	Aircraft Type - C-182R	Instrument- 5
		Last 24 Hrs - 2
		Last 30 Days- 20
		Last 90 Days- 50

Instrument Rating(s) - NONE

-----Narrative-----

AFTER ARRIVING OVER LAKE HAVASU, THE PLT NOTED THAT HE STILL HAD ABOUT 2 HRS BEFORE HE WAS TO BE MET BY FRIENDS. HE DECIDED TO FLY ALONG THE LAKE FOR SOME SIGHT-SEEING. HE SPOTTED A SMALL AIRSTRIP WHICH WAS CLOSER TO HIS ULTIMATE DESTINATION & HE ELECTED TO LAND. THE PLT SAID HE ENTERED THE PATTERN FOR THE SOUTH BOUND RUNWAY & TOUCHED DOWN IN A NORMAL POSITION. JUST AFTER TOUCHDOWN, HE NOTICED A "RAIN EROSION DEPRESSION" ACROSS THE DIRT AIRSTRIP. HE ABORTED THE LANDING & PROCEEDED WITH A GO-AROUND. AT THAT POINT, HE SAW A LARGE ROCK HILL AT THE DEPARTURE END OF THE RUNWAY. THE PLT SAID THAT AT THE RATE THE ACFT WAS CLIMBING IT WOULD NOT CLEAR THE HILL & HE BEGAN A LEFT TURN TO AVOID THE RISING TERRAIN. DURING THE TURN, THE LEFT WING HIT THE GROUND & THE ACFT CRASHED.

Brief of Accident (Continued)

File No. - 1551

8/05/89

PARKER DAM, CA

A/C Reg. No. N5070H

Time (Lcl) - 1555 PDT

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

Finding(s)

1. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - ROUGH/UNEVEN
 2. GO-AROUND - DELAYED - PILOT IN COMMAND
 3. TERRAIN CONDITION - RISING
 4. TERRAIN CONDITION - HIGH OBSTRUCTION(S)
 5. CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT'S DELAY IN MAKING A GO-AROUND, AND HIS FAILURE TO MAINTAIN CLEARANCE FROM THE TERRAIN DURING THE ABORTED
LANDING. THE RUNWAY/TERRAIN CONDITION WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1555 9/01/89 COOL, CA A/C Reg. No. N97628 Time (Lcl) - 1038 PDT

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

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

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

Make/Model - STINSON 108	Eng Make/Model - FRANKLIN 6A4-165	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 2365	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	Method - N/A	Last Departure Point AUBURN, CA	OFF AIRPORT/STRIP
Completeness - N/A	Basic Weather - VMC	Destination GEORGETOWN, CA	Airport Data AUBURN
Wind Dir/Speed- 360/010 KTS	Visibility - 50.0 SM	ATC/Airspace	Runway Ident - N/A
Lowest Sky/Clouds - CLEAR	Lowest Ceiling - NONE	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Obstructions to Vision- NONE	Precipitation - NONE	Type of Clearance - NONE	Runway Surface - N/A
Condition of Light - DAYLIGHT		Type Apch/Lndg - FORCED LANDING	Runway Status - N/A

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

Pilot-In-Command	Age - 26	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 305
SE LAND	Months Since - 3	Make/Model- 100
	Aircraft Type - 7ECA	Instrument- 0
		Multi-Eng - 0
		Last 24 Hrs - 1
		Last 30 Days- 15
		Last 90 Days- 25
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

WHILE CLIMBING TO CRUISE ALTITUDE, THE ENGINE SUSTAINED A LOSS OF POWER. UNABLE TO MAINTAIN ALTITUDE, THE PILOT ELECTED TO LAND ON AN ACCESS ROAD. THE LANDING WAS UNEVENTFUL, BUT DURING THE LANDING ROLL-OUT, THE LEFT WHEEL PANT STRUCK A ROAD MARKER. THE AIRPLANE THEN YAWED TO THE LEFT, EXITED THE ROADWAY, AND WENT THRU A BARBED WIRE FENCE AND ONTO A DIRT FIELD. AN ENGINE EXAMINATION DISCLOSED THE #2 PISTON WAS DESTROYED. THE PISTON WAS NOT IDENTIFIED AS BEING THE CORRECT ONE FOR THE ENGINE. THE ENGINE HAD ACCRUED 145 HOURS SINCE MAJOR OVERHAUL. THE OVERHAUL WAS PERFORMED BY AN A&P MECHANIC.

Brief of Accident (Continued)

File No. - 1555

9/01/89

COOL, CA

A/C Reg. No. N97628

Time (Lcl) - 1038 PDT

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

Finding(s)

1. MAINTENANCE, OVERHAUL, MAJOR - IMPROPER - OTHER MAINTENANCE PSNL
 2. ENGINE ASSEMBLY, PISTON - FAILURE, TOTAL
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

3. OBJECT - SIGN
 4. OBJECT - FENCE
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE #2 PISTON. FAILURE OF THE MECHANIC TO PROPERLY OVERHAUL THE ENGINE WAS A RELATED FACTOR.

Brief of Accident

File No. - 1583 9/11/89 TORRANCE, CA A/C Reg. No. N95554 Time (Lcl) - 1314 PDT

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

Type Operating Certificate-ON-DEMAND AIR TAXI	Aircraft Damage SUBSTANTIAL	Fatal	Injuries		
Type of Operation -INSTRUCTIONAL	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 152	Eng Make/Model - LYCOMING 0-235-N2C	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1670	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 108 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - 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	TORRANCE MUNI
Wind Dir/Speed- 130/008 KTS	ATC/Airspace	Runway Ident - 11L
Visibility - 6.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 5000/ 150
Lowest Sky/Clouds - 2000 FT SCATTERED	Type of Clearance - VFR	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - TOUCH AND GO	Runway Status - DRY
Obstructions to Vision- HAZE		
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)
STUDENT	Current - N/A	Total - 35
	Months Since - N/A	Make/Model- 33
	Aircraft Type - N/A	Instrument- 2
		Multi-Eng - 0
		Last 24 Hrs - 1
		Last 30 Days- 4
		Last 90 Days- 8
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

WHILE PRACTICING TOUCH-&-GO LANDINGS, THE 35 HR STUDENT PLT LANDED ON THE 150 FT WIDE RWY. DURING ROLL-OUT, HE LOST DIRECTIONAL CONTROL AS THE ACFT VEERED TOWARD THE EDGE OF THE RWY. THE STUDENT STATED HE FEARED THAT BY CORRECTING THE GROUND TRACK OF THE ACFT, IT WOULD "TUMBLE." THE ACFT ROLLED OFF THE RWY, COLLIDED WITH A 1.5 FT HIGH DIRT BERM & NOSED OVER.

Brief of Accident (Continued)

File No. - 1583

9/11/89

TORRANCE, CA

A/C Reg. No. N95554

Time (Lcl) - 1314 PDT

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
 3. LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
-

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

Finding(s)

4. TERRAIN CONDITION - BERM
-

Occurrence #3 NOSE OVER
Phase of Operation LANDING - ROLL

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL DURING LANDING ROLL-OUT, WHICH RESULTED A GROUND SWERVE. THE
PILOT'S RELATIVELY LOW LEVEL OF FLYING EXPERIENCE AND THE BERM BESIDE THE RUNWAY WERE RELATED FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1460 9/16/89 LA GRANGE, CA A/C Reg. No. N1232J Time (Lcl) - 1440 PDT

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

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

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

Make/Model - ROCKWELL 112B	Eng Make/Model - LYCOMING O-360	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2800	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 200 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	S LAKE TAHOE, CA	
Completeness - PARTIAL, LMTD BY FCSTR	Destination	Airport Data
Basic Weather - IMC	BURBANK, CA	MARIPOSA
Wind Dir/Speed- 135/015 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - .500 SM	Type of Flight Plan - VFR	Runway Lth/Wid - N/A
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - OBSCURED	Type Apch/Lndg - NONE	Runway Status - N/A
Obstructions to Vision- BLOWING SPRAY		
Precipitation - RAIN		
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 - NO	Total - 277
SE LAND	Months Since - 27	Make/Model- 145
	Aircraft Type - 112B	Instrument- 3
		Last 24 Hrs - 3
		Last 30 Days- 3
		Last 90 Days- 24

Instrument Rating(s) - NONE

-----Narrative-----

BEFORE DEPG ON THE ACDNT FLT, THE PLT OBTAINED A WX BRIEFING & WAS ADVISED OF RAIN SHOWERS ALONG HIS ENTIRE ROUTE. ALSO, HE WAS WARNED OF THUNDERSTORM ACTIVITY THROUGHOUT ALL OF CALIFORNIA. HE FILED A VFR FLT PLAN & TOOK OFF. SHORTLY AFTER TAKEOFF, HE ACTIVATED THE FLT PLAN, THEN THERE WAS NO FURTHER COMMUNICATION WITH THE ACFT. ABOUT 1 HR LATER, THE ACFT WAS OBSERVED FLYING AT LOW ALTITUDE. AS THE ACFT APCHD A SIGN, IT WAS OBSERVED TO ENTER A CLIMB & DISAPPEAR IN A LOW CLOUD LAYER. SHORTLY THEREAFTER, IT WAS OBSERVED BY ANOTHER WITNESS IN A DIVE AS IT DESCENDED BELOW THE CLOUDS. MOMENTS LATER, THE ACFT CRASHED IN A LAKE. AN EXAM OF THE WRECKAGE REVEALED THE ACFT HAD IMPACTED THE WATER WITH VERY HIGH VELOCITY. NO PREIMPACT PART FAILURE/MALFUNCTION OF THE ACFT WAS FOUND. THE NON-INSTRUMENT RATED PILOT HAD ONLY ABOUT 3 HRS OF INSTRUMENT FLT TIME. WITNESSES RPRTD THUNDERSTORMS & LIGHTNING IN THE AREA; THEY ESTIMATED THERE WAS ABOUT A 500 FT OBSCURATION WITH 1/2 MI VISIBILITY, BLOWING RAIN & WIND FROM 135 DEG AT 15 GUSTING 20 KTS.

Brief of Accident (Continued)

File No. - 1460

9/16/89

LA GRANGE, CA

A/C Reg. No. N1232J

Time (Lcl) - 1440 PDT

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

Finding(s)

1. FLIGHT INTO KNOWN ADVERSE WEATHER - INITIATED - PILOT IN COMMAND
2. WEATHER CONDITION - LOW CEILING
3. WEATHER CONDITION - HIGH WIND
4. WEATHER CONDITION - RAIN
5. WEATHER CONDITION - OBSCURATION
6. TERRAIN CONDITION - HIGH OBSTRUCTION(S)
7. VFR FLIGHT INTO IMC - CONTINUED - 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
10. LACK OF TOTAL INSTRUMENT TIME - PILOT IN COMMAND

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

Finding(s)

11. TERRAIN CONDITION - WATER

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
CONTINUED VFR FLIGHT INTO INSTRUMENT METEOROLOGICAL CONDITIONS (IMC) BY THE PILOT, WHICH RESULTED IN SPATIAL
DISORIENTATION AND LOSS OF AIRCRAFT CONTROL. RELATED FACTORS WERE: FLIGHT INTO KNOWN ADVERSE WEATHER BY THE
PILOT, THE ADVERSE WEATHER CONDITIONS, AND THE PILOT'S LACK OF INSTRUMENT FLIGHT CAPABILITIES.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1554 9/20/89 ZENIA, CA A/C Reg. No. N8579M Time (Lcl) - 1730 PDT

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

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage		Injuries			
Name of Carrier	-COMSTOCK AIR SERVICES			Fatal	Serious	Minor	None
Type of Operation	-NON SCHED, DOMESTIC, PASSENGER	Fire	Crew	0	0	0	1
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	2
Accident Occurred During	-LANDING						

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

Make/Model	- CESSNA 182	Eng Make/Model	- CONTINENTAL O-470-S	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	- 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	SACRAMENTO, CA			
Completeness	- N/A	Destination		Airport Data	
Basic Weather	- VMC	SAME AS ACC/INC		SHANNON	
Wind Dir/Speed	- 270/008 KTS			Runway Ident	- 18
Visibility	- 50.0 SM	ATC/Airspace		Runway Lth/Wid	- 2520/ 50
Lowest Sky/Clouds	- CLEAR	Type of Flight Plan	- VFR	Runway Surface	- DIRT
Lowest Ceiling	- NONE	Type of Clearance	- NONE	Runway Status	- DRY
Obstructions to Vision	- NONE	Type Apch/Lndg	- TRAFFIC PATTERN		
Precipitation	- NONE				
Condition of Light	- DAYLIGHT				

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

Pilot-In-Command	Age - 41	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL, CFI	Current - YES	Total - 960	Last 24 Hrs - 1
SE LAND	Months Since - 4	Make/Model- 102	Last 30 Days- 50
	Aircraft Type - C-210	Instrument- 100	Last 90 Days- 150
		Multi-Eng - 5	

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE VFR FLIGHT, CONDUCTED UNDER 14 CFR 135, WAS ROUTINE UNTIL ARRIVING AT SHANNON AIRPORT. AFTER CIRCLING THE ARPT, THE PILOT EXECUTED TWO GO-AROUNDS, BECAUSE HE HAD NOT SLOWED THE AIRPLANE SUFFICIENTLY. HE STATED THAT HE LANDED ON THE THIRD APPROACH, BUT THE AIRPLANE'S AIRSPEED WAS TOO HIGH. REALIZING THAT HE WAS GOING TO OVERSHOOT THE END OF THE RUNWAY, THE PILOT INTENTIONALLY GROUND LOOPED THE AIRPLANE. THIS CAUSED IT TO EXIT THE RIGHT SIDE OF THE RUNWAY AND COLLIDE WITH A FENCE. A POST-ACDNT EXAM DISCLOSED THAT THE FLAP ACTUATOR JACKSCREW HAD SEIZED IN THE UP POSITION.

Brief of Accident (Continued)

File No. - 1554

9/20/89

ZENIA, CA

A/C Reg. No. N8579M

Time (Lcl) - 1730 PDT

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

Finding(s)

1. FLIGHT CONTROL, FLAP ATTACHMENT - SEIZED
 2. LOWERING OF FLAPS - NOT POSSIBLE -
 3. LOWERING OF FLAPS - NOT IDENTIFIED - PILOT IN COMMAND
 4. AIRSPEED - EXCESSIVE - PILOT IN COMMAND
 5. GROUND LOOP/SWERVE - INTENTIONAL - PILOT IN COMMAND
 6. OBJECT - FENCE
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO REALIZE THAT THE FLAPS DID NOT EXTEND, WHICH RESULTED IN EXCESSIVE AIRSPEED. THE SEIZED FLAP
ACTUATOR WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1468 9/26/89 WARNER SPRINGS, CA A/C Reg. No. N4450Y Time (Lcl) - 1425 PDT

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

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

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

Make/Model - PIPER PA-25-235	Eng Make/Model - LYCOMING O-540	ELT Installed/Activated - UNK/NR
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	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	WARNER SPRINGS
Wind Dir/Speed- 180/006 KTS	ATC/Airspace	Runway Ident - 26
Visibility - 30.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3500
Lowest Sky/Clouds - 6000 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 - 31	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 896
SE LAND	Months Since - 1	Make/Model- 3
	Aircraft Type - 7ECA	Instrument- 65
		Multi-Eng - 20
		Last 24 Hrs - 3
		Last 30 Days- 70
		Last 90 Days- 174

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT ESTIMATED THE ACFT HAD ABOUT 10 GAL OF FUEL ON BOARD WHEN HE DEPARTED ON A GLIDER TOW FLIGHT. AFTER THE GLIDER WAS RELEASED, HE RETURNED TO THE ARPT FOR A LANDING. WHEN HE WAS ON FINAL APCH TO LAND, THE ENG LOST POWER. THE PLT TRIED TO GLIDE THE ACFT TO THE RWY; HOWEVER, BEFORE REACHING THE RWY, THE ACFT HIT A TREE & CRASHED. NO REASON WAS FOUND FOR THE LOSS OF POWER.

Brief of Accident (Continued)

File No. - 1468

9/26/89

WARNER SPRINGS, CA

A/C Reg. No. N4450Y

Time (Lcl) - 1425 PDT

Occurrence #1 LOSS OF ENGINE POWER
Phase of Operation APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)
1. REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2 FORCED LANDING
Phase of Operation APPROACH

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

Finding(s)
2. OBJECT - TREE(S)

----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. THE OBSTRUCTION (TREE) WAS A FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1536 10/05/89 PALM SPRINGS, CA A/C Reg. No. N3063T Time (Lcl) - 1714 PDT

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

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

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

Make/Model - PIPER PA-28RT-201T	Eng Make/Model - CONTINENTAL TSIO-360-F8	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2900	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 200 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - TELEPHONE	CALIPATRIA, CA	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	PALM SPRINGS
Wind Dir/Speed- 006 KTS		Runway Ident - 12
Visibility - 30.0 SM	ATC/Airspace	Runway Lth/Wid - 8500/ 150
Lowest Sky/Clouds - CLEAR	Type of Flight Plan - NONE	Runway Surface - DIRT
Lowest Ceiling - NONE	Type of Clearance - VFR	Runway Status - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - TRAFFIC PATTERN	
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)
COMMERCIAL	Current - YES	Total - 1665
SE LAND, ME LAND	Months Since - 1	Make/Model- 877
	Aircraft Type - PA-28RT	Instrument- 71
		Multi-Eng - UNK/NR
		Last 24 Hrs - 5
		Last 30 Days- 51
		Last 90 Days- 164
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PIPER PA-28 PLT ENTERED LEFT TRAFFIC TO LAND ON RWY 12 IN WINDS THAT WERE VARIABLE AT 6 KTS. THE RWY WAS 8500' LONG, BUT IT HAD A 1200' DISPLACED THRESHOLD. AT APT THE SAME TIME, A BOEING 727 (ALASKA FLT 192) WAS ON AN APCH TO LAND ON THE SAME RWY. THE TWR CTLR ADZD THE PA-28 PLT OF THE OTHER TRAFFIC & CAUTIONED HIM APT WAKE TURBULENCE. THE PA-28 WAS ABEAM THE APCH END OF THE RWY ON A CLOSE DOWNWIND AS FLT 192 LANDED. THE PA-28 PLT WAS CLRD TO LAND & HE ENTERED AN "IMMEDIATE STEEP BANK AND DESCENDING TURN." RPRTDLY, THE PA-28 WAS MANEUVERED ONTO FINAL APCH APT 100' TO 200' AGL, THEN IT BEGAN OSCILLATING EXCESSIVELY & CRASHED. NO PREIMPACT MECHANICAL PROBLEM WAS EVIDENT. A WEIGHT & BALANCE COMPUTATION SHOWED THE PA-28 WAS APT 150 LBS OVER ITS MAX GROSS WEIGHT LIMITATION & THE CG WAS 3.86 INCHES BEHIND THE AFT LIMIT.

Brief of Accident (Continued)

File No. - 1536

10/05/89

PALM SPRINGS, CA

A/C Reg. No. N3063T

Time (Lcl) - 1714 PDT

Occurrence #1 VORTEX TURBULENCE ENCOUNTERED
Phase of Operation APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
 2. PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND
 3. AIRCRAFT WEIGHT AND BALANCE - EXCEEDED - PILOT IN COMMAND
-

Occurrence #2 LOSS OF CONTROL - IN FLIGHT
Phase of Operation APPROACH - VFR PATTERN - FINAL APPROACH

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 IN-FLIGHT PLANNING/DECISION BY THE PILOT, AND HIS FAILURE TO FOLLOW WAKE TURBULENCE AVOIDANCE PROCEDURES,
WHICH RESULTED IN A VORTEX TURBULENCE ENCOUNTER. A FACTOR RELATED TO THE ACCIDENT WAS: THE PILOT'S FAILURE TO ASSURE
THE AIRCRAFT WAS LOADED WITHIN ITS WEIGHT AND BALANCE LIMITATIONS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1466 10/05/89 PENN VALLEY, CA A/C Reg. No. N85837 Time (Lcl) - 1100 PDT

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

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

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

Make/Model - AERONCA 11AC	Eng Make/Model - CONTINENTAL A-65-8	ELT Installed/Activated - NO	-N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 1250	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 GRASS VALLEY, CA	ON AIRPORT
Method - N/A	Destination SAME AS ACC/INC	Airport Data
Completeness - N/A	ATC/Airspace	LIMBERLOST RANCH
Basic Weather - VMC	Type of Flight Plan - NONE	Runway Ident - 25
Wind Dir/Speed- 225/002 KTS	Type of Clearance - NONE	Runway Lth/Wid - 1700/ 60
Visibility - 50.0 SM	Type Apch/Lndg - FULL STOP	Runway Surface - GRASS/TURF
Lowest Sky/Clouds - CLEAR		Runway Status - DRY
Lowest Ceiling - NONE		
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 62	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 147
SE LAND	Months Since - 3	Last 24 Hrs - UNK/NR
	Aircraft Type - 11AC	Make/Model- 17
		Last 30 Days- UNK/NR
		Instrument- UNK/NR
		Last 90 Days- 17
		Rotorcraft - UNK/NR
		Multi-Eng - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DURING THE LANDING ROLL-OUT, THE PLT FAILED TO MAINTAIN DIRECTIONAL CONTROL. SUBSEQUENTLY, THE ACFT WENT OFF THE RIGHT SIDE OF THE RWY, ENCOUNTERED UNEVEN TERRAIN & THE LEFT MAIN GEAR COLLAPSED.

Brief of Accident (Continued)

File No. - 1466

10/05/89

PENN VALLEY, CA

A/C Reg. No. N85837

Time (Lcl) - 1100 PDT

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 MAIN GEAR COLLAPSED
Phase of Operation LANDING

Finding(s)

3. TERRAIN CONDITION - ROUGH/UNEVEN
 4. LANDING GEAR, MAIN GEAR - OVERLOAD
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO MAINTAIN DIRECTIONAL CONTROL DURING THE LANDING ROLL-OUT, WHICH RESULTED IN AN
INADVERTENT GROUND SWERVE. UNEVEN TERRAIN BESIDE THE RUNWAY WAS A FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1464 11/18/89 HAYWARD, CA A/C Reg. No. N4359C Time (Lcl) - 2056 PST

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

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

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

Make/Model - PIPER PA-28-161	Eng Make/Model - LYCOMING O-320-D3G	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2440	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	OFF AIRPORT/STRIP
Method - N/A	COALINGA, CA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	HAYWARD AIR TERMINAL
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - 28R
Visibility - 5.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3107/ 75
Lowest Sky/Clouds - PART OBS	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - STRAIGHT-IN	Runway Status - DRY
Obstructions to Vision- HAZE		
Precipitation - NONE	FORCED LANDING	
Condition of Light - NIGHT (DARK)		

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

Pilot-In-Command	Age - 29	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate (s)/Rating (s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 415
SE LAND	Months Since - UNK/NR	Make/Model- 395
	Aircraft Type - UNK/NR	Instrument- 4
		Last 24 Hrs - 4
		Last 30 Days- 30
		Last 90 Days- 126

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THE ENG LOST POWER AS THE ACFT WAS ON FINAL APCH TO LAND. THE POWER LOSS OCCURRED ABOUT 3/4 MI FROM THE ARPT. HAVING INSUFFICIENT ALT TO GLIDE TO THE RWY, THE PLT ELECTED TO LAND IN A PARKING LOT. WHILE LANDING, THE ACFT STRUCK AN AUTOMOBILE & WAS DAMAGED. THERE WERE 2 OCCUPANTS IN THE VEHICLE; BOTH RECEIVED MINOR INJURIES. AN EXAM OF THE ACFT REVEALED ONLY A SMALL AMOUNT OF FUEL WAS REMAINING IN THE FUEL TANKS. NO PRE-ACDNT ANOMALIES OF THE ACFT WERE FOUND.

Brief of Accident (Continued)

File No. - 1464

11/18/89

HAYWARD, CA

A/C Reg. No. N4359C

Time (Lcl) - 2056 PST

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

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 LANDING

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

Finding(s)

4. OBJECT - VEHICLE
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
INADEQUATE PREFLIGHT OF THE AIRCRAFT BY THE PILOT, WHICH RESULTED IN FUEL EXHAUSTION DUE TO AN INADEQUATE SUPPLY
OF FUEL. COLLISION WITH A VEHICLE IN THE EMERGENCY LANDING AREA CONTRIBUTED TO THE DAMAGE AND INJURIES.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1406 8/04/89 BRIGHTON, CO A/C Reg. No. N8203G Time (Lcl) - 0930 MDT

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

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

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

Make/Model - CESSNA 177RG	Eng Make/Model - LYCOMING IO-360-A1B6	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2800	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 200 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point BRIGHTON, CO	ON AIRPORT
Method - N/A	Destination	Airport Data
Completeness - N/A	SAME AS ACC/INC	VAN AIRE
Basic Weather - VMC	ATC/Airspace	Runway Ident - 30
Wind Dir/Speed- LIGHT AND VARIABLE	Type of Flight Plan - NONE	Runway Lth/Wid - 3950/ 50
Visibility - 50.0 SM	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Sky/Clouds - CLEAR	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Lowest Ceiling - NONE	FULL STOP	
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 - 763
SE LAND, ME LAND	Months Since - 12	Make/Model- 58
	Aircraft Type - 7KCAB	Instrument- 63
		Multi-Eng - 26
		Last 24 Hrs - 0
		Last 30 Days- 6
		Last 90 Days- 10

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT TOOK OFF ON A FLT FROM HECKENDORF RANCH STRIP (CO13) TO VAN AIRE ARPT (CO12), WHICH WAS NEARBY, TO LOAD THE ACFT & PROCEED ON ANOTHER FLT. BEFORE LANDING (AT CO12), HE MOVED THE GEAR SELECTOR DOWN & NOTED A SAFE INDICATOR LIGHT. AT TOUCHDOWN, BOTH MAIN GEAR COLLAPSED & THE PLANE TRACKED OFF THE RWY TO THE LEFT. AFTER LEAVING THE RWY, THE NOSE GEAR COLLAPSED IN THE DIRT & THE WINGS & FUSELAGE WERE DAMAGED. AN INVESTIGATION REVEALED THE DOWN LOCK SPRING HAD FAILED & ALLOWED THE DOWNLOCK TO RELEASE AT TOUCHDOWN.

Brief of Accident (Continued)

File No. - 1406

8/04/89

BRIGHTON, CO

A/C Reg. No. N8203G

Time (Lcl) - 0930 MDT

Occurrence #1

GEAR COLLAPSED

Phase of Operation

LANDING - FLARE/TOUCHDOWN

Finding(s)

1. LANDING GEAR, GEAR LOCKING MECHANISM - FAILURE, TOTAL
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE LANDING GEAR DOWN LOCK, WHICH ALLOWED THE LANDING GEAR TO COLLAPSE DURING THE LANDING.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1574 8/19/89 DOVE CREEK, CO A/C Reg. No. N56654 Time (Lcl) - 0845 MDT

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

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

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

Make/Model - PIPER PA-28-235	Eng Make/Model - LYCOMING O-540-B4B5	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3000	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	OFF AIRPORT/STRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	ENGLEWOOD, CO	Runway Ident - 01
Wind Dir/Speed- 200/005 KTS	ATC/Airspace	Runway Lth/Wid - 4000/ 50
Visibility - 50.0 SM	Type of Flight Plan - NONE	Runway Surface - DIRT
Lowest Sky/Clouds - 15000 FT SCATTERED	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 - 72	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 5807
SE LAND	Months Since - 13	Last 24 Hrs - 0
	Aircraft Type - PA-28	Make/Model- UNK/NR
		Instrument- UNK/NR
		Last 30 Days- 23
		Last 90 Days- 50
		Multi-Eng - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT & 3 PSGRS WERE BEGINNING A X-COUNTRY FLT. THE PLT SAID HE MADE A "QUICK OUTSIDE CHECK" OF THE AIRPLANE THAT DID NOT INCLUDE A FUEL SUMP DRAIN. HE TAXIED ONTO RWY 1, WHICH SLOPED UPWARD TO THE NORTH. HE ESTIMATED THE WINDS WERE CALM. THE PLT SAID HE STARTED HIS TAKEOFF RUN 300 FT DOWN THE RUNWAY, MADE A "RUNNING" MAGNETO CHECK, BUT HE DID NOT MAKE A CARBURETOR HEAT CHECK. HE SAID THE PLANE ONLY CLIMBED ABOUT 30 FT AGL. HE NOTICED IT WAS NOT CLIMBING AS FAST AS THE TERRAIN ROSE, SO HE DECIDED TO LAND IN A FIELD TO AVOID POWER LINES IN THE FLT PATH. SUBSEQUENTLY, THE LEFT WING HIT THE GND & THE LANDING GEAR WAS TORN OFF. THE DOOR JAMMED, BUT A PASSERBY HELPED THE OCCUPANTS FROM THE CABIN. AN INVESTIGATION FAILED TO REVEAL ANY PRE-ACDNT PART FAILURE OR MALFUNCTION. DENSITY ALT WAS ABOUT 8700 FT. ABOUT 37 MI WEST, THE WIND FROM 200 DEG AT 5 KTS.

Brief of Accident (Continued)

File No. - 1574

8/19/89

DOVE CREEK, CO

A/C Reg. No. N56654

Time (Lcl) - 0845 MDT

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

Finding(s)

1. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
 2. WEATHER CONDITION - HIGH DENSITY ALTITUDE
 3. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - UPHILL
 4. CHECKLIST - NOT FOLLOWED - PILOT IN COMMAND
 5. ALL AVAILABLE RUNWAY - NOT USED - PILOT IN COMMAND
 6. TERRAIN CONDITION - RISING
 7. TERRAIN CONDITION - HIGH OBSTRUCTION(S)
 8. PROPER CLIMB RATE - NOT POSSIBLE -
-

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER PLANNING/DECISION BY THE PILOT. FACTORS RELATED TO THE ACCIDENT WERE: HIGH DENSITY ALTITUDE, UPHILL SLOPING
RUNWAY, FAILURE OF THE PILOT TO FOLLOW THE CHECKLIST AND USE ALL OF THE AVAILABLE RUNWAY, AND THE RISING TERRAIN AND
OBSTRUCTION (POWER LINE) BEYOND THE END OF THE RUNWAY.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1469 8/24/89 ENGLEWOOD, CO A/C Reg. No. N6121R Time (Lcl) - 1230 MDT

----Basic Information----

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

----Aircraft Information----

Make/Model - CESSNA T210F	Eng Make/Model - CONTINENTAL TS10-520-C	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 - 4	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	CENTENNIAL
Wind Dir/Speed- 210/014 KTS	ATC/Airspace	Runway Ident - 17
Visibility - 50.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 7000/ 75
Lowest Sky/Clouds - UNK/NR 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 - 54	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, CFI	Current - YES	Total - 2386
SE LAND, ME LAND	Months Since - 1	Last 24 Hrs - 6
	Aircraft Type - PA-28	Make/Model- UNK/NR
		Last 30 Days- UNK/NR
		Instrument- 301
		Last 90 Days- 62
		Multi-Eng - 88
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

----Narrative----

THE INSTRUCTOR PILOT (CFI) & DUAL STUDENT WERE PRACTICING SIMULATED INSTRUMENT APCHS. DRG AN APCH, THE LANDING GEAR FAILED TO EXTEND. THE PILOTS WERE UNABLE TO EXTEND THE GEAR BY USING EITHER THE NORMAL OR EMERGENCY SYSTEMS. SUBSEQUENTLY, AN APCH WAS MADE TO RWY 17 FOR A WHEELS UP LANDING. TO MINIMIZE THE RISKS OF SPARKS & FIRE, THE CFI ELECTED TO LAND THE ACFT ON DIRT, SHORT OF THE THRESHOLD, THEN ALLOW THE ACFT TO SKID ONTO THE PAVED RWY. HOWEVER, HE WAS UNAWARE OF A 6 INCH LIP AT THE RWY THRESHOLD. THE CFI RPRTD THAT DRG THE WHEELS UP LANDING, THE ACFT STRUCK THE RAISED LIP, WHICH RESULTED IN A HARD IMPACT. THE CFI RECEIVED A COMPRESSION FRACTURE OF HIS BACK. A POST-ACDNT EXAM OF THE HYDRAULIC POWER UNIT REVEALED A "LEE PLUG" HAD "BLOWN OUT." WITH THE PLUG OUT, NO ENG DRIVEN OR EMERGENCY PUMP PRESSURE COULD HAVE BEEN APPLIED TO THE GEAR EXTENSION SYSTEM.

Brief of Accident (Continued)

File No. - 1469

8/24/89

ENGLEWOOD, CO

A/C Reg. No. N6121R

Time (Lcl) - 1230 MDT

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

Finding(s)

1. HYDRAULIC SYSTEM - FAILURE, TOTAL
 2. LANDING GEAR, NORMAL RETRACTION/EXTENSION ASSEMBLY - INOPERATIVE
 3. LANDING GEAR, EMERGENCY EXTENSION ASSEMBLY - INOPERATIVE
-

Occurrence #2 GEAR NOT EXTENDED
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

4. GEAR EXTENSION - NOT POSSIBLE -
 5. WHEELS UP LANDING
-

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

Finding(s)

6. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - RUNWAY
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
A FAILURE IN THE HYDRAULIC POWER UNIT, WHICH PREVENTED OPERATION OF EITHER THE NORMAL OR EMERGENCY
GEAR EXTENSION SYSTEMS. THE RAISED RUNWAY LIP CONTRIBUTED TO AIRCRAFT DAMAGE AND PILOT INJURY.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1564 8/27/89 WATKINS,CO A/C Reg. No. N2369Q Time (Lcl) - 1630 MDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries		
Type of Operation -AIR SHOW	Fire	0	Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	0	0	0	2
Accident Occurred During -LANDING		0	0	0	0

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

Make/Model - WACO UPF7	Eng Make/Model - P&W R-1340	ELT Installed/Activated - NO	-N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 3400	Engine Type - RECIP-FUEL INJECTED		
No. of Seats - 2	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	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	FRONT RANGE
Wind Dir/Speed- 090/010 KTS	ATC/Airspace	Runway Ident - 08
Visibility - 100.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 8000/ 100
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 - 31	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 7650
SE LAND,ME LAND	Months Since - 4	Make/Model- 28
HELICOPTER	Aircraft Type - BH-206B	Instrument- 338
		Multi-Eng - 854
		Last 24 Hrs - 3
		Last 30 Days- 59
		Last 90 Days- 136
		Rotorcraft - 4899

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT WAS TAKING PART IN AN AIRSHOW WITH A PERSON STANDING ON THE LEFT WING. THE PLT SAID THAT WHEN BRAKES WERE APPLIED DURING LANDING ROLL, THE RIGHT BRAKE OPERATED PROPERLY, BUT THE LEFT BRAKE FAILED. THE PLANE THEN TURNED RIGHT AND DEPARTED THE RUNWAY, RESULTING IN A GROUND LOOP. THE LEFT WING STRUCK THE GROUND AND BOTH LEFT WINGS WERE BENT. THE PERSON, WHO WAS STANDING ON THE LEFT LOWER WING, WAS THROWN CLEAR. A POST-ACDNT EXAM REVEALED THAT 3 OF THE 4 BRAKE PADS WERE MISSING FROM THE LEFT BRAKE.

Brief of Accident (Continued)

File No. - 1564

8/27/89

WATKINS,CO

A/C Reg. No. N2369Q

Time (Lcl) - 1630 MDT

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

Finding(s)

1. LANDING GEAR, NORMAL BRAKE SYSTEM - FAILURE, TOTAL
 2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
 3. GROUND LOOP/SWERVE - UNCONTROLLED - PILOT IN COMMAND
-

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:
FAILURE OF THE LEFT BRAKE ASSEMBLY, AND SUBSEQUENT LOSS OF DIRECTIONAL CONTROL BY THE PILOT.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1556 9/02/89 ENGLEWOOD, CO A/C Reg. No. N2705K Time (Lcl) - 1500 MDT

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

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

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

Make/Model - CESSNA 180K	Eng Make/Model - CONTINENTAL O-470-U4	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	ON AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	CONTENNIAL
Wind Dir/Speed- 280/004 KTS	ATC/Airspace	Runway Ident - 17R
Visibility - 50.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 7000/ 75
Lowest Sky/Clouds - 20000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Obstructions to Vision- NONE	TOUCH AND GO	
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)
COMMERCIAL, CFI	Current - YES	Total - 2960
SE LAND, ME LAND, SE SEA	Months Since - 4	Last 24 Hrs - 2
	Aircraft Type - C-172	Make/Model- 55
		Last 30 Days- 20
		Instrument- 60
		Last 90 Days- 60
		Multi-Eng - 60

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE COMMERCIAL PLT & A PSGR WERE MAKING A LOCAL FLT. THE PLT SAID HE PLANNED A TOUCH & GO LANDING ON RWY 17R WITH WINDS FROM 280 DEG AT 4 KTS. HE SAID THAT AT TOUCHDOWN, HE FELT A "SHIMMY" FROM THE TAILWHEEL. HE WAS ABLE TO STOP THE SHIMMY BY RELAXING THE BACK PRESSURE ON THE CONTROL YOKE. HE THEN REAPPLIED THE BACK PRESSURE & LOST DIRECTIONAL CONTROL. THE PLANE DEPARTED THE RWY TO THE RIGHT & GROUND LOOPED. THE LEFT WING, STABILIZER & ELEVATOR WERE DAMAGED. NO PREIMPACT MECHANICAL PROBLEM WAS FOUND WITH THE TAILWHEEL ASSEMBLY.

Brief of Accident (Continued)

File No. - 1556

9/02/89

ENGLEWOOD, CO

A/C Reg. No. N2705K

Time (Lcl) - 1500 MDT

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
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO MAINTAIN DIRECTIONAL CONTROL, WHICH RESULTED IN A GROUND SWERVE. THE CROSSWIND WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1500 9/15/89 BUENA VISTA, CO A/C Reg. No. N3458 Time (Lcl) - 1830 MDT

-----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	1	0	0
Accident Occurred During -DESCENT		Pass 1	0	0	0

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

Make/Model - BLANIK L-13	Eng Make/Model - N/A	ELT Installed/Activated - NO -N/A
Landing Gear - UNK/NR	Number Engines - N/A	Stall Warning System - NO
Max Gross Wt - 1102	Engine Type - UNK/NR	
No. of Seats - 2	Rated Power - N/A	

-----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	BUENA VISTA
Wind Dir/Speed- 300/004 KTS	ATC/Airspace	Runway Ident - 15
Visibility - 30.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 9000/ 50
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 - 44	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, CFI	Current - YES	Total - 2442
SE LAND, ME LAND, SE SEA, ME SEA	Months Since - 4	Make/Model- 10
HELICOPTER , GLIDER	Aircraft Type - C-182	Instrument- 165
		Multi-Eng - 47
		Last 24 Hrs - 1
		Last 30 Days- 9
		Last 90 Days- 30
		Rotorcraft - 63

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT WAS GIVING A PASSENGER A GLIDER RIDE. THE FLT WAS LAUNCHED FROM A 9000 FT RWY (RWY 15) WITH AN AUTO TOW IN WIND THAT WAS FROM 300 DEG AT 4 KTS. A WITNESS RPTD THE INITIAL CLIMB AFTER TAKEOFF SEEMED NORMAL UNTIL THE PLT RELEASED THE GLIDER AT ABOUT 300 FT AGL. THE PLT THEN BEGAN A LEVEL LEFT TURN WITH INCREASING BANK. SUBSEQUENTLY, THE GLIDER PITCHED DOWN & CRASHED AFTER COMPLETING ABOUT 300 DEG OF TURN. IMPACT OCCURRED ON AN INCLINED BANK AS THE GLIDER WAS IN AN EXTREME NOSE DOWN ATTITUDE.

Brief of Accident (Continued)

File No. - 1500

9/15/89

BUENA VISTA, CO

A/C Reg. No. N3458

Time (Lcl) - 1830 MDT

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

Finding(s)

1. GLIDER TOW RELEASE - PREMATURE - PILOT IN COMMAND
 2. MANEUVER - INITIATED - PILOT IN COMMAND
 3. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
 4. STALL - INADVERTENT - PILOT IN COMMAND
-

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

Finding(s)

5. TERRAIN CONDITION - ROUGH/UNEVEN
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
A PREMATURE RELEASE OF THE GLIDER TOW LINE BY THE GLIDER PILOT AND HIS FAILURE TO MAINTAIN SUFFICIENT AIRSPEED,
WHILE MANEUVERING BACK TOWARD THE RUNWAY, WHICH RESULTED IN AN INADVERTENT STALL.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1584 7/24/89 STONINGTON, CT A/C Reg. No. N29216 Time (Lcl) - 2236 EDT

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

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

-----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	- 310	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	OFF AIRPORT/STRIP	
Method	- TELEPHONE	WESTERLY, RI		
Completeness	- PARTIAL, LMTD BY FCSTR	Destination	Airport Data	
Basic Weather	- UNK/NR	HARTFORD, CT	WESTERLY STATE	
Wind Dir/Speed	- CALM		Runway Ident	- 25
Visibility	- UNK/NR	ATC/Airspace	Runway Lth/Wid	- 4000/ 100
Lowest Sky/Clouds	- UNK/NR	Type of Flight Plan	Runway Surface	- ASPHALT
Lowest Ceiling	- UNK/NR	Type of Clearance	Runway Status	- DRY
Obstructions to Vision	- GROUND FOG	Type Apch/Lndg		
Precipitation	- NONE			
Condition of Light	- NIGHT (DARK)			

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

Pilot-In-Command	Age - 25	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
PRIVATE	Current	Total	- 90
SE LAND	Months Since	Make/Model	- UNK/NR
	Aircraft Type	Instrument	- UNK/NR
		Multi-Eng	- 0
		Rotorcraft	- 0

Instrument Rating(s) - NONE

-----Narrative-----

BEFORE TAKEOFF, THE PLT OBTAINED WX INFO. NO WX RPTD WAS AVAILABLE FOR THE DEP ARPT, BUT THE DESTN (HARTFORD, CT) WAS RPTD AS CLEAR. THE PLT SAID HE WAS INFORMED ON UNICOM FREQ THAT THERE WAS ONLY GROUND FOG IN RHODE ISLAND, WHICH SHOULD NOT HAVE INTERFERED WITH HIS FLT TO HARTFORD. AFTER PREFLIGHTING THE ACFT, HE "OBSERVED THE STARS DIRECTLY OVERHEAD AND CONCLUDED THAT THERE WAS JUST GROUND FOG." ALSO, THE PLT STATED THAT AFTER TAKEOFF, THE ACFT HAD CLIMBED TO 200 FT MSL WHEN HE SUDDENLY REALIZED THE DENSITY OF THE FOG WAS THICKER THAN RPTD OR ANTICIPATED. (THE ARPT ELEV WAS 81 FT.) HE SAID HE THEN EXPERIENCED VERTIGO (SPATIAL DISORIENTATION) & LOST CONTROL OF THE ACFT. SUBSEQUENTLY, THE ACFT HIT THE TOPS OF TREES & CRASHED IN THE PAWCATUCK RIVER. AS THE ACFT SANK, THE OCCUPANTS EGRESSSED, THEN SWAM TO A DOCK WHERE THEY RCVD HELP.

Brief of Accident (Continued)

File No. - 1584

7/24/89

STONINGTON, CT

A/C Reg. No. N29216

Time (Lcl) - 2236 EDT

Occurrence #1 IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation TAKEOFF - INITIAL CLIMB

Finding(s)

1. LIGHT CONDITION - DARK NIGHT
 2. WEATHER CONDITION - FOG
 3. VFR FLIGHT INTO IMC - INADVERTENT - PILOT IN COMMAND
-

Occurrence #2 LOSS OF CONTROL - IN FLIGHT
Phase of Operation TAKEOFF - INITIAL CLIMB

Finding(s)

4. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
 5. SPATIAL DISORIENTATION - PILOT IN COMMAND
 6. LACK OF TOTAL INSTRUMENT TIME - PILOT IN COMMAND
-

Occurrence #3 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation TAKEOFF

Finding(s)

7. OBJECT - TREE(S)
-

Occurrence #4 IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation DESCENT - UNCONTROLLED

Finding(s)

8. TERRAIN CONDITION - WATER
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT'S INADVERTENT FLIGHT INTO INSTRUMENT METEOROLOGICAL CONDITIONS (IMC) AND HIS LOSS OF AIRCRAFT
CONTROL DUE TO SPATIAL DISORIENTATION. FACTORS RELATED TO THE ACCIDENT WERE: THE ENVIRONMENTAL CONDITIONS
(DARK NIGHT & FOG) AND THE PILOT'S LACK OF INSTRUMENT EXPERIENCE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1588 8/01/89 DANBURY,CT A/C Reg. No. N8909N Time (Lcl) - 0901 EDT

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

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

-----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 - FSS	Last Departure Point	ON AIRPORT
Method - UNK/NR	BRIDGEPORT,CT	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	DANBURY
Wind Dir/Speed- 070/010 KTS	ATC/Airspace	Runway Ident - 35
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3135/ 150
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 - 41	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 549
SE LAND	Months Since - 1	Make/Model- 6
	Aircraft Type - PA-32	Instrument- 140
		Last 24 Hrs - 1
		Last 30 Days- 6
		Last 90 Days- 6

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT WAS CLEARED FOR A TOUCH-&-GO LANDING ON RUNWAY 35. THE AIRCRAFT WAS OBSERVED TO TOUCH DOWN AT ABOUT MIDFIELD. THE PILOT SAID A GO-AROUND SEEMED ILL ADVISED, SO HE APPLIED BRAKES & RAISED THE FLAPS. AS THE AIRCRAFT NEARED A FENCE, A RIGHT GROUND LOOP WAS MADE IN AN ATTEMPT TO AVOID A COLLISION. HOWEVER, THE LEFT WING MADE CONTACT WITH THE FENCE & THE PROP CONTACTED THE GROUND.

Brief of Accident (Continued)

File No. - 1588

8/01/89

DANBURY, CT

A/C Reg. No. N8909N

Time (Lcl) - 0901 EDT

Occurrence #1 OVERRUN
Phase of Operation LANDING - ROLL

Finding(s)

1. AIRSPEED - EXCESSIVE - PILOT IN COMMAND
 2. PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
 3. GO-AROUND - NOT PERFORMED - PILOT IN COMMAND
-

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

Finding(s)

4. OBJECT - FENCE
 5. GROUND LOOP/SWERVE - INTENTIONAL - PILOT IN COMMAND
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT'S MISJUDGEMENT OF (EXCESSIVE) AIRSPEED, HIS FAILURE TO ATTAIN THE PROPER TOUCHDOWN POINT, AND FAILURE TO MAKE
A GO-AROUND, WHILE THERE WAS SUFFICIENT RUNWAY REMAINING. THE FENCE WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1597 8/05/89 GRISWOLD,CT A/C Reg. No. N758QB Time (Lcl) - 1045 EDT

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

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

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

Make/Model - CESSNA R172K	Eng Make/Model - CONTINENTAL IO-360-K8	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2558	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 195 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	ON AIRPORT
Method - UNK/NR	HARTFORD,CT	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	LAKESIDE
Wind Dir/Speed- CALM		Runway Ident - 29
Visibility - 3.000 SM	ATC/Airspace	Runway Lth/Wid - 2640/ 50
Lowest Sky/Clouds - UNK/NR	Type of Flight Plan - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 6000 FT OVERCAST	Type of Clearance - NONE	Runway Status - DRY
Obstructions to Vision- HAZE	Type Apch/Lndg - GO AROUND	
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)
PRIVATE	Current - YES	Total - 520
SE LAND	Months Since - 11	Make/Model- 242
	Aircraft Type - R172K	Instrument- 165
		Last 24 Hrs - UNK/NR
		Last 30 Days- 3
		Last 90 Days- 28

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PERSONAL FLIGHT DEPARTED HARTFORD-BRAINARD AIRPORT EN ROUTE TO LAKESIDE AND WAS UNEVENTFUL. THE APPROACH WAS NORMAL, BUT TOUCHDOWN WAS HARD. POWER WAS ADDED FOR A GO-AROUND, BUT THE AIRCRAFT VEERED LEFT OFF OF THE RUNWAY. THE PILOT STATED THE AIRCRAFT WAS STILL IN GROUND EFFECT, SO HE DECREASED THE FLAPS TO 20 DEGREES. THE AIRCRAFT THEN SETTLED HARD, THE PROPELLER CAUGHT IN SOME DIRT AND THE AIRCRAFT FLIPPED OVER.

Brief of Accident (Continued)

File No. - 1597

8/05/89

GRISWOLD,CT

A/C Reg. No. N758QB

Time (Lcl) - 1045 EDT

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

Finding(s)

1. FLARE - IMPROPER - PILOT IN COMMAND
 2. ABORTED LANDING - INITIATED - PILOT IN COMMAND
-

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

Finding(s)

3. AIRSPEED - INADEQUATE - PILOT IN COMMAND
 4. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
-

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

Occurrence #4 NOSE OVER
Phase of Operation LANDING

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER FLARE BY THE PILOT, AND HIS FAILURE TO ATTAIN ADEQUATED AIRSPEED FOR AN ABORTED LANDING (GO-AROUND), WHICH
RESULTED IN A LOSS OF AIRCRAFT CONTROL.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1487 8/25/89 SELBYVILLE,DE A/C Reg. No. N67803 Time (Lcl) - 1125 EDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage	Injuries			
	SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation -BANNER TOW	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 152	Eng Make/Model - LYCOMING O-360-A2F	ELT Installed/Activated - UNK/NR
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 - 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	SELBYVILLE,DE	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	WARRINGTON
Wind Dir/Speed- 135/005 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 8.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 2000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	Runway Status - N/A
Obstructions to Vision- HAZE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 21	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 520
SE LAND	Months Since - 4	Make/Model- 450
	Aircraft Type - C-150	Instrument- 51
		Last 24 Hrs - 1
		Last 30 Days- 75
		Last 90 Days- 200

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE ACFT HAD JUST CLIMBED OUT AFTER A BANNER PICKUP WHEN THE ENG BEGAN TO RUN ROUGH. THE PLT ADJUSTED THE MIXTURE & THE ENG TEMPORARILY SMOOTHED OUT. ABOUT 2 MINUTES LATER, THE ENG RAN ROUGH AGAIN & THE PLT RELEASED THE BANNER. THE ENG BEGAN A SEVERE VIBRATION, BACKFIRED, & QUIT RUNNING. SUBSEQUENTLY, THE ACFT NOSED OVER DRG AN EMERGENCY LANDING IN A SOYBEAN FIELD. AN ENG TEARDOWN REVEALED THE #4 EXHAUST LOBE OF THE CAMSHAFT WAS WORN & THAT THE \$4 EXHAUST TAPPET WAS IN POOR CONDITION. ALSO, THERE WAS EVIDENCE THAT THE #4 CONNECTING ROD HAD BEEN SUBJECTED TO HIGH TEMP.

Brief of Accident (Continued)

File No. - 1487

8/25/89

SELBYVILLE, DE

A/C Reg. No. N67803

Time (Lcl) - 1125 EDT

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

Finding(s)

1. ENGINE ASSEMBLY,ROCKER ARM/TAPPET - WORN
 2. ENGINE ASSEMBLY,CAMSHAFT - WORN
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

3. TERRAIN CONDITION - CROP
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
EXCESSIVE WEAR OF THE NUMBER FOUR EXHAUST LOBE ON THE CAMSHAFT AND POOR CONDITION (WEAR) OF THE NUMBER FOUR EXHAUST
TAPPET. THE SOYBEAN CROP IN THE EMERGENCY LANDING AREA WAS CONSIDERED TO BE A FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1436 6/15/89 MIRAMAR, FL A/C Reg. No. N732AG Time (Lcl) - 2039 EDT

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

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

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

Make/Model - CESSNA 210L	Eng Make/Model - CONTINENTAL IO-520-L	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3400	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 300 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	WEST JEFFERSON, NC	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	
Wind Dir/Speed- 130/009 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 12.0 SM	Type of Flight Plan - IFR	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 3000 FT SCATTERED	Type of Clearance - IFR	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 - DUSK		

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

Pilot-In-Command	Age - 47	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate (s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 1304
SE LAND, ME LAND	Months Since - 1	Make/Model- 350
	Aircraft Type - C-210L	Instrument- 198
		Multi-Eng - 184
		Last 24 Hrs - 5
		Last 30 Days- 8
		Last 90 Days- 12

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DRG ARRIVAL AT THE DESTN, THE ENG LOST POWER FROM FUEL EXHAUSTION WITH THE FUEL SELECTOR PSND TO THE RGT TANK. AT THAT TIME, THE FUEL QUANTITY INDCR SHOWED THE RGT TANK WAS 1/4 FULL. SUBSEQUENTLY, THE ACFT NOSED OVER DRG A FORCED LNDG. THE PLT RPRTD THE ACFT WAS TOPPED OFF WITH 77.1 GAL (462.6 LBS) OF FUEL BEFORE THE FLT, BUT HE DID NOT VISUALLY VERIFY THE TANKS WERE FULL. FUEL CONSUMPTION CALCULATIONS FOR A WORSE CASE SCENARIO SHOWED THAT ABOUT 473 LBS OF FUEL WOULD HAVE BEEN USED DRG THE APRX 5 HRS OF FLT. TOTAL USABLE FUEL CAPACITY FOR THE ACFT WAS 534 LBS.

Brief of Accident (Continued)

File No. - 1436

6/15/89

MIRAMAR, FL

A/C Reg. No. N732AG

Time (Lcl) - 2039 EDT

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

Finding(s)

1. PLANNING-DECISION - INADEQUATE - 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 NOSE OVER
Phase of Operation LANDING

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
INADEQUATE PLANNING/DECISION BY THE PILOT, WHICH RESULTED IN LOSS OF ENGINE POWER DUE TO FUEL EXHAUSTION.
A CONTRIBUTING FACTOR WAS THE FAULTY READING FROM THE FUEL QUANTITY INDICATOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1417 8/02/89 SARASOTA, FL A/C Reg. No. N24586 Time (Lcl) - 1350 EDT

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

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

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

Make/Model - BEECH A24R	Eng Make/Model - LYCOMING IO-360-A1B	ELT Installed/Activated - YES/NO
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-----

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	STUART, FL	SARASOTA-BRADENTON
Wind Dir/Speed- 280/010 KTS	ATC/Airspace	Runway Ident - 32
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 7003/ 150
Lowest Sky/Clouds - 2000 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 - 31	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT	
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
ATP, CFI, MILITARY	Current - YES	Total - 3200	Last 24 Hrs - 1
SE LAND, ME LAND	Months Since - 1	Make/Model- UNK/NR	Last 30 Days- 50
HELICOPTER	Aircraft Type - PA-34	Instrument- 480	Last 90 Days- 150
		Multi-Eng - 1550	Rotorcraft - 1150

Instrument Rating(s) - AIRPLANE, HELICOPTER

-----Narrative-----

WITNESSES SAW THE ACFT CLIMB TO AN ALT OF ABOUT 500 TO 800 FT AGL AFTER TAKING OFF FROM RWY 32. AT ABOUT THAT TIME, THEY HEARD A LOUD NOISE FM THE ACFT, THEN THEY NOTED THAT THE ENG SOUND HAD CEASED. THE ACFT WAS OBSERVED TO MANEUVER AS IF THE PLT WAS TRYING TO RETURN TO THE RWY. THE PLT TRANSMITTED A "MAYDAY" REPORT, STATING HE HAD "LOST THE ENGINE." WHILE TURNING BACK TO THE RWY, THE LEFT WING & NOSE OF THE ACFT DROPPED & THE PLANE ENTERED A LEFT DSCNDG TURN. IT IMPACTED THE GND IN A NR FLAT ATTITUDE WHILE IN A HIGH RATE OF DSCNT, THEN IT SLID INTO A TREE & BURNED. AN EXAM OF THE WRECKAGE REVEALED 1 PROP BLADE HAD SEPD FM THE HUB DRG FLT. A METALLURGICAL EXAM SHOWED THE HUB HAD FAILED FM FATIGUE. DRG THE PREVIOUS 87 HRS OF OPN, THE ACFT HAD BEEN INVOLVED IN TWO OCCURRENCES OF GEAR COLLAPSE, WHICH RESULTED IN PROP STRIKES WITH THE GND. ACCORDING TO RECORDS, THE HUB WAS INSPECTED & FOUND TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER (MCCAULEY) & THE FAA. THE PLT'S PREVIOUS FLT TIME IN THIS MAKE/MODEL OF ACFT WAS NOT DETERMINED.

Brief of Accident (Continued)

File No. - 1417

8/02/89

SARASOTA, FL

A/C Reg. No. N24586

Time (Lcl) - 1350 EDT

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation TAKEOFF - INITIAL CLIMB

Finding(s)

1. PROPELLER SYSTEM/ACCESSORIES, HUB - PREVIOUS DAMAGE
2. MAINTENANCE, INSPECTION OF AIRCRAFT - INADEQUATE -
3. PROPELLER SYSTEM/ACCESSORIES, HUB - FATIGUE
4. PROPELLER SYSTEM/ACCESSORIES, BLADE - SEPARATION
5. POWERPLANT - VIBRATION

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

Occurrence #3 LOSS OF CONTROL - IN FLIGHT
Phase of Operation MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Finding(s)

6. AIRSPEED (VS) - NOT MAINTAINED - PILOT IN COMMAND
7. STALL/MUSH - INADVERTENT - PILOT IN COMMAND

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:
FAILURE OF THE PROPELLER HUB DUE TO PREVIOUS DAMAGE, WHICH RESULTED IN SUBSEQUENT FATIGUE FAILURE OF THE HUB; AND
FAILURE OF THE PILOT TO MAINTAIN FLYING SPEED, WHICH RESULTED IN A STALL AND SUBSEQUENT IMPACT WITH THE GROUND.
INADEQUATE MAINTENANCE/INSPECTION OF THE PROPELLER HUB (AFTER THE PROPELLER STRIKES) WAS CONSIDERED TO BE A
CONTRIBUTING FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1581 8/12/89 MALABAR, FL A/C Reg. No. N302RS Time (Lcl) - 1600 EDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	SUBSTANTIAL					
Type of Operation -TEST FLT	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 - SMITH KITFOX II	Eng Make/Model - ROTAX 532LC	ELT Installed/Activated - NO	-N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - UNK/NR	Engine Type - RECIPROCATING-CARBURETOR		
No. of Seats - 2	Rated Power - 64 HP		

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRSTRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	VALKARIA
Wind Dir/Speed- 060/007 KTS	ATC/Airspace	Runway Ident - 04
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3600/ 75
Lowest Sky/Clouds - 1500 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 20000 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 - 46	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 1200
SE LAND	Months Since - UNK/NR	Last 24 Hrs - UNK/NR
	Aircraft Type - UNK/NR	Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT STATED THAT DURING TAKEOFF ON THE ACFT'S 1ST FLT, IT ENTERED A NOSE HIGH ATTITUDE, STALLED & CRASHED ABOUT 100 YDS FROM THE DEPARTURE END OF THE RWY. THE PLT WAS RPRTD TO HAVE SAID THAT "THERE WAS INSUFFICIENT DOWNWARD ELEVATOR TRAVEL AND THE ANGLE OF INCIDENCE OF THE HORIZONTAL STABILIZER WAS PAST THE NEGATIVE LIMITS." THE ACFT DESIGNER RPRTD THAT THE HORIZONTAL STABILIZER WAS PROPERLY POSITIONED. THE WING TWIST WAS FOUND TO BE 1.88 DEG PER 13.5 FT VERSUS THE SPECIFIED WING TWIST OF 3.65 DEG. THE DOWNWARD DEFLECTION OF THE ELEVATOR WAS MEASURED TO BE 28.2 DEGREES VERSUS THE DESIGNED 25 DEGREES. THE C.G. WAS RPRTD TO BE WITHIN LIMITS.

Brief of Accident (Continued)

File No. - 1581

8/12/89

MALABAR, FL

A/C Reg. No. N302RS

Time (Lcl) - 1600 EDT

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

Finding(s)

1. WING - INCORRECT
 2. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
 3. 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:
FAILURE OF THE PILOT TO MAINTAIN ADEQUATE AIRSPEED DURING TAKEOFF, WHICH RESULTED IN A STALL.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1424 8/13/89 PASS-A-GRILLE,FL A/C Reg. No. N99901 Time (Lcl) - 1355 EDT

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

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

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

Make/Model - CESSNA 172P	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 - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	ST PETERSBURG,FL	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 020/005 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 14.0 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 - 10000 FT BROKEN	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 42	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 3458
SE LAND,ME LAND	Months Since - 14	Last 24 Hrs - 0
	Aircraft Type - C-172	Make/Model- 245
		Last 30 Days- 1
		Instrument- 479
		Last 90 Days- 14
		Multi-Eng - 1005

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE ACFT WAS BEING USED TO DEMONSTRATE FLT CHARACTERISTICS TO CAP CADETS. DRG AN OFF-SHORE FLT OVER THE GULF OF MEXICO, THE ACFT ENTERED A DESCENT & CRASHED APRX 3 MI FROM LAND. A WITNESS, WHO SAW THE ACFT JUST BEFORE IMPACT, RPRTD THAT IT WAS SPINNING IN A NOSE DOWN ATTITUDE. THE ACFT SANK ALMOST IMMEDIATELY IN 28 FT OF WATER. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE ACFT WAS FOUND. A CHECK OF THE WEIGHT & BALANCE INFO SHOWED THE ACFT HAD BEEN LOADED APRX 114 LBS OVER ITS MAX WT LIMIT. RADAR DATA SHOWED THAT JUST BEFORE THE LOSS OF RADAR CONTACT, THE PLT HAD MADE TWO RAPID 180 DEG TURNS.

Brief of Accident (Continued)

File No. - 1424

8/13/89

PASS-A-GRILLE, FL

A/C Reg. No. N99901

Time (Lcl) - 1355 EDT

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

Finding(s)

1. AIRCRAFT WEIGHT AND BALANCE - EXCEEDED - PILOT IN COMMAND
2. MANEUVER - INITIATED - PILOT IN COMMAND
3. STALL/SPIN - NOT CORRECTED - PILOT IN COMMAND
4. ALTITUDE - INADEQUATE - 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 RECOVER FROM A STALL/SPIN. EXCESSIVE GROSS WEIGHT OF THE AIRCRAFT AND LACK OF AVAILABLE
ALTITUDE FOR SPIN RECOVERY WERE PROBABLE CONTRIBUTING FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1428 8/19/89 CLERMONT, FL A/C Reg. No. N127FB Time (Lcl) - 1430 EDT

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

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

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

Make/Model - COCCHIARELLA BUCCANEER II	Eng Make/Model - ROTAX 532LC	ELT Installed/Activated - NO	-N/A
Landing Gear - TAILWHEEL-RETRACTABLE MAINS	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 1025	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	ON AIRSTRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	FLYING GATORS ULTALIGHT
Wind Dir/Speed- 130/004 KTS	ATC/Airspace	Runway Ident - 05
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 1100/ 70
Lowest Sky/Clouds - 3000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - 25000 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 - 33	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 201
SE LAND	Months Since - 1	Make/Model- 120
	Aircraft Type - C-152	Instrument- 2
		Last 24 Hrs - 1
		Last 30 Days- 7
		Last 90 Days- 17

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT ELECTED TO TAKEOFF FROM A 1100 FT RWY ON A HOT/HUMID DAY WITH THE ACFT LOADED NEAR ITS MAX WEIGHT LIMIT. HE STATED THAT WHEN THE SPEED WAS ADEQUATE, HE ROTATED THE ACFT & IT LIFTED OFF. AFTER LIFT-OFF, HE REALIZED THE ACFT WOULD NOT CLEAR A TREE LINE NEAR THE END OF THE RWY. HE INITIATED A TURN TO AVOID THE TREES, WHICH RESULTED IN LOSS OF THE VERTICAL COMPONENT OF LIFT. SUBSEQUENTLY, THE ACFT DESCENDED, IMPACTED IN A VACANT FIELD & WAS DAMAGED. THE ENG OPERATED NORMALLY DRG A POST-ACDNT CHECK. THE TEMP, DEW POINT & ELEVATION AT THE AIRSTRIP WERE 90 DEG, 73 DEG & 30 FT, RESPECTIVELY. APRX 25 MI EAST AT ORLANDO (ELEV 96'), THE DENSITY ALTITUDE WAS ABOUT 2200 FT.

Brief of Accident (Continued)

File No. - 1428

8/19/89

CLERMONT, FL

A/C Reg. No. N127FB

Time (Lcl) - 1430 EDT

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

Finding(s)

1. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
 2. WEATHER CONDITION - HIGH DENSITY ALTITUDE
 3. CLIMB - NOT ATTAINED -
 4. TERRAIN CONDITION - HIGH OBSTRUCTION(S)
 5. MANEUVER - INITIATED - PILOT IN COMMAND
 6. DESCENT - INADVERTENT -
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER PLANNING/DECISION BY THE PILOT, WHICH RESULTED IN A SUBSEQUENT COLLISION WITH THE GROUND, WHEN THE ACFT
WOULD NOT CLIMB AFTER TAKEOFF. THE HIGH OBSTRUCTIONS (TREES) AND HIGH DENSITY ALTITUDE WERE CONSIDERED TO BE
CONTRIBUTING FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1431 9/03/89 PERRY, FL A/C Reg. No. N4CD Time (Lcl) - 1902 EDT

-----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	0 0 1	1 0
Accident Occurred During -LANDING			0	0 1 0		

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

Make/Model - PIPER PA-24-250	Eng Make/Model - LYCOMING O-540-A1C5	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2800	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 250 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - UNK/NR	DOTHAN, AL	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	LAKELAND, FL	Runway Ident - N/A
Wind Dir/Speed- 010/006 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 7.0 SM	Type of Flight Plan - VFR	Runway Surface - N/A
Lowest Sky/Clouds - 2900 FT SCATTERED	Type of Clearance - VFR	Runway Status - N/A
Lowest Ceiling - 2500 FT OVERCAST	Type of Apch/Lndg - FORCED LANDING	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 62	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, FLT ENG	Current - YES	Total - 6000
SE LAND	Months Since - 17	Make/Model- 122
	Aircraft Type - PA-28	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 4
		Last 30 Days- 5
		Last 90 Days- 27
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE EN ROUTE AT 3500 FT, THE ENG LOST POWER & ATTEMPTS TO RESTART IT WERE UNSUCCESSFUL. THE PLT LANDED THE ACFT IN A PLOWED FIELD, BUT THE NOSE GEAR COLLAPSED & THE ACFT WAS DAMAGED. DURING AN INVESTIGATION, THE CARBURETOR WAS REMOVED. AN INTERNAL EXAM REVEALED THE FLOAT-TO-BOWL CLEARANCE WAS LESS THAN REQUIRED DUE TO FLOAT SHAFT BRACKET WEAR. EXCESSIVE FLOAT DROP (BETWEEN 1.58 & 1.8 INCHES) WAS REQUIRED TO START THE NEEDLE VALVE OPENING & ALLOW FUEL TO ENTER THE CHAMBER. ALSO, THE FLOAT CHAFFED THE WALL OF THE CARBURETOR BOWL PRIOR TO THE NEEDLE VALVE OPENING. NO OTHER MECHANICAL PROBLEM WAS EVIDENT.

Brief of Accident (Continued)

File No. - 1431

9/03/89

PERRY, FL

A/C Reg. No. N4CD

Time (Lcl) - 1902 EDT

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

Finding(s)

1. FUEL SYSTEM, CARBURETOR FLOAT - WORN
 2. FUEL SYSTEM, CARBURETOR FLOAT - MOVEMENT RESTRICTED
 3. FLUID, FUEL - STARVATION
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 NOSE GEAR COLLAPSED
Phase of Operation LANDING - ROLL

Finding(s)

4. TERRAIN CONDITION - SOFT
 5. LANDING GEAR, NOSE GEAR - OVERLOAD
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FUEL STARVATION DUE TO WEAR AND RESTRICTED MOVEMENT OF THE CARBURETOR FLOAT, WHICH RESULTED IN LOSS OF ENGINE POWER.
SOFT TERRAIN IN THE EMERGENCY LANDING AREA CONTRIBUTED TO OVERLOAD FAILURE OF THE NOSE GEAR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1579 10/04/89 WAUCHULA, FL A/C Reg. No. N21752 Time (Lcl) - 1100 EDT

-----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 -LANDING					

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

Make/Model - CESSNA A188B	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 - 4000	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	Runway Ident - N/A
Wind Dir/Speed- CALM	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 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 - 56	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 2100
SE LAND, ME LAND	Months Since - 4	Make/Model- UNK/NR
	Aircraft Type - C-150	Instrument- 178
		Multi-Eng - 733
		Last 24 Hrs - 2
		Last 30 Days- 50
		Last 90 Days- 50

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE CLIMBING DURING AN AERIAL APPLICATION FLT, THE ENG LOST POWER. THE PLT DID NOT TURN ON THE ELECTIC BOOST PUMP & ELECTED TO LAND IN A FIELD. DURING THE LANDING ROLL, THE LEFT MAIN LANDING GEAR COLLIDED WITH A STUMP & FAILED. THE PLT STATED THAT AFTER THE ACCIDENT HE DRAINED THE FUEL TANKS & RECOVERED 18 GALLONS, BUT THIS WAS NOT CONFIRMED. THE ENG RAN NORMALLY DURING AN OPNL CHECK.

Brief of Accident (Continued)

File No. - 1579

10/04/89

WAUCHULA, FL

A/C Reg. No. N21752

Time (Lcl) - 1100 EDT

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

Finding(s)

1. FLUID,FUEL - LOW LEVEL
2. FLUID,FUEL - STARVATION
3. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND

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

Finding(s)

4. EMERGENCY PROCEDURE - NOT ATTAINED - PILOT IN COMMAND

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:
FUEL STARVATION, IMPROPER PLANNING/DECISION BY THE PILOT, AND HIS FAILURE TO ATTAINED THE EMERGENCY PROCEDURE. FACTORS
RELATED TO THE ACCIDENT WERE: THE LOW FUEL LEVEL, AND IMPROPER PLANNING/DECISION BY THE PILOT.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1433 10/06/89 ORLANDO, FL A/C Reg. No. N40340 Time (Lcl) - 1610 EDT

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

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

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

Make/Model - MAULE M-4-220C	Eng Make/Model - FRANKLIN 6A-350-C1	ELT Installed/Activated - UNK/NR
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2300	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 220 HP	

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

Weather Data		Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING		Last Departure Point	ON AIRPORT
Method - N/A		ORLANDO, FL	
Completeness - N/A		Destination	Airport Data
Basic Weather - VMC		SAME AS ACC/INC	ORLANDO EXECUTIVE
Wind Dir/Speed- 110/008 KTS			Runway Ident - 07
Visibility - 7.0 SM	ATC/Airspace		Runway Lth/Wid - 4638/ 100
Lowest Sky/Clouds - CLEAR	Type of Flight Plan - NONE		Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type of Clearance - NONE		Runway Status - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - FULL STOP		
Precipitation - NONE			
Condition of Light - DAYLIGHT			

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

Pilot-In-Command	Age - 74	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 1303
SE LAND, SE SEA	Months Since - 12	Make/Model- 771
	Aircraft Type - C-182	Instrument- 69
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - 335

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT LANDED ON RWY 7 WITH A WIND FROM 110 DEG AT 8 KTS. HE STATED THAT AFTER TOUCHDOWN, HE SENSED THE LEFT SIDE OF THE ACFT WAS LOWER THAN IT SHOULD BE. AS HE APPLIED BRAKES, THE LEFT BRAKE WAS INEFFECTIVE. SUBSEQUENTLY, THE LEFT MAIN GEAR COLLAPSED & THE ACFT CAME TO REST IN THE MIDDLE OF THE RWY.

Brief of Accident (Continued)

File No. - 1433

10/06/89

ORLANDO,FL

A/C Reg. No. N40340

Time (Lcl) - 1610 EDT

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

Finding(s)

1. LANDING GEAR, MAIN GEAR - FAILURE, TOTAL
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE LEFT MAIN LANDING GEAR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1518 10/07/89 ORLANDO, FL A/C Reg. No. N958VJ Time (Lcl) - 1850 EDT

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

Type Operating Certificate	AIR CARRIER - FLAG/DOMESTIC	Aircraft Damage	Injuries			
Name of Carrier	-US AIR	NONE	Fatal	Serious	Minor	None
Type of Operation	-NON SCHED, DOMESTIC, PASSENGER	Fire	Crew 0	0	0	5
Flight Conducted Under	-14 CFR 121	NONE	Pass 0	0	0	102
Accident Occurred During	-TAXI		Other 1	0	0	0

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

Make/Model	- MCDONNELL DOUGLAS DC-9-31	Eng Make/Model	- P&W JT8D	ELT Installed/Activated	- NO -N/A
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 2	Stall Warning System	- YES
Max Gross Wt	- 104000	Engine Type	- TURBOFAN		
No. of Seats	- 116	Rated Power	- 14000 LBS THRUST		

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

Weather Data		Itinerary	Airport Proximity
Wx Briefing	- COMPANY	Last Departure Point	ON AIRPORT
Method	- TELETYPE	SAME AS ACC/INC	
Completeness	- WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather	- VMC	PHILADELPHIA, PA	ORLANDO INTL
Wind Dir/Speed	- 030/005 KTS	ATC/Airspace	Runway Ident - UNK/NR
Visibility	- 2.000 SM	Type of Flight Plan	- UNK/NR
Lowest Sky/Clouds	- 2000 FT SCATTERED	Type of Clearance	- CONCRETE
Lowest Ceiling	- 8000 FT BROKEN	Type Apch/Lndg	- WET
Obstructions to Vision	- NONE		
Precipitation	- RAIN		
Condition of Light	- DUSK		

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

Pilot-In-Command	Age - 35	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
ATP	Current - YES	Total - 12800	Last 24 Hrs - UNK/NR
ME LAND	Months Since - UNK/NR	Make/Model- UNK/NR	Last 30 Days- UNK/NR
	Aircraft Type - UNK/NR	Instrument- UNK/NR	Last 90 Days- 180
		Multi-Eng - UNK/NR	Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

RAINFALL BECAME MODERATE TO HEAVY AS THE ACFT WAS BEING PUSHED BACK IN PREPARATION FOR FLT. DURING THAT TIME, LIGHTNING STRUCK THE TAIL OF THE ACFT WHILE A MECHANIC (GROUND GUIDE) WAS WEARING A HEADSET CONNECTED TO THE ACFT. THE LIGHTNING TRAVELED THRU THE ACFT & FATALLY INJURED THE MECHANIC. WITNESSES & SUPERVISORS STATED THAT THEY HAD OBSERVED LIGHTNING IN THE AREA BEFORE THE ACFT, BUT THEY HAD NOT OBSERVED ANY FOR ABOUT 15 MIN; PUSH BACK WAS INITIATED AFTER PHONE CONVERSATION WITH TOWER PSNL. THE AIRLINE'S SAFETY MANUAL PROHIBITED GROUND GUIDE OPN DURING PERIODS OF OBSERVED LIGHTNING.

Brief of Accident (Continued)

File No. - 1518

10/07/89

ORLANDO,FL

A/C Reg. No. N958VJ

Time (Lcl) - 1850 EDT

Occurrence #1 ON GROUND ENCOUNTER WITH WEATHER
Phase of Operation TAXI - PUSHBACK/TOW

Finding(s)

1. WEATHER EVALUATION - INADEQUATE - COMPANY/OPERATOR MGMT
 2. SUPERVISION - INADEQUATE - COMPANY/OPERATOR MGMT
 3. PROCEDURES/DIRECTIVES - NOT FOLLOWED - GROUND PERSONNEL
 4. OBJECT - LIGHTNING STRIKE
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
INADEQUATE WEATHER EVALUATION AND INADEQUATE SUPERVISION OF THE GROUND GUIDE (MECHANIC) BY COMPANY/OPERATOR/MANAGEMENT
PERSONNEL, FAILURE OF THE GROUND GUIDE TO FOLLOW SAFETY PROCEDURES, AND THE WEATHER CONDITION (LIGHTNING).

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1444 10/08/89 TAMPA, FL A/C Reg. No. N8149J Time (Lcl) - 2105 EDT

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

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

-----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 - FSS	Last Departure Point	ON AIRPORT
Method - TELEPHONE	SAME AS ACC/INC	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	POMPANO BEACH, FL	VANDENBERG
Wind Dir/Speed- 330/005 KTS	ATC/Airspace	Runway Ident - 18
Visibility - 15.0 SM	Type of Flight Plan - IFR	Runway Lth/Wid - 3260/ 65
Lowest Sky/Clouds - 4000 FT SCATTERED	Type of Clearance - IFR	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - NIGHT (BRIGHT)		

-----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 - 440
SE LAND	Months Since - 17	Make/Model- 335
	Aircraft Type - PA-28	Instrument- 91
		Multi-Eng - 0
		Last 24 Hrs - 1
		Last 30 Days- 31
		Last 90 Days- 55
		Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING TAKEOFF AT NIGHT, THE AIRPLANE COLLIDED WITH A COW THAT HAD GOTTEN ONTO THE AIRPORT. THE PILOT REPORTED THAT HE WAS UNABLE TO SEE THE ANIMAL ON THE APSHALT RUNWAY WITH A DARK BACKGROUND UNTIL JUST BEFORE IMPACT. THERE WERE SEVERAL ACCESS POINTS WHERE A LARGE ANIMAL COULD HAVE COME ONTO THE AIRPORT. THE EXACT ACCESS POINT WAS NOT DETERMINED.

Brief of Accident (Continued)

File No. - 1444

10/08/89

TAMPA, FL

A/C Reg. No. N8149J

Time (Lcl) - 2105 EDT

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

Finding(s)

1. OBJECT - ANIMAL(S)
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
AN ANIMAL (COW) THAT HAD WANDERED ONTO THE ARPT.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1580 10/28/89 ZELLWOOD, FL A/C Reg. No. N80528 Time (Lcl) - 1600 EDT

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

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

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

Make/Model - TEMCO GC-1B	Eng Make/Model - CONTINENTAL C-125-2	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1741	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 125 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRSTRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	CLEARWATER, FL	BOB WHITE
Wind Dir/Speed- 360/020 KTS	ATC/Airspace	Runway Ident - 09
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3365/ 150
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	Runway Status - WET
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 59	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 525
SE LAND	Months Since - 7	Make/Model- 104
	Aircraft Type - GC-1B	Instrument- UNK/NR
		Multi-Eng - 0
		Last 24 Hrs - 0
		Last 30 Days- 7
		Last 90 Days- 23
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT THE WIND WAS FROM THE NORTH AT 20 GUSTING 25 KTS. WHILE ATTEMPTING TO TAKE OFF ON RWY 9, HE LOST CONTROL OF THE ACFT & IT GROUND LOOPED. IT THEN TRAVELED OFF THE RWY & WENT INTO A DITCH.

Brief of Accident (Continued)

File No. - 1580

10/28/89

ZELLWOOD, FL

A/C Reg. No. N80528

Time (Lcl) - 1600 EDT

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

Finding(s)

1. WEATHER CONDITION - CROSSWIND
 2. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
 3. DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND
 4. GROUND LOOP/SWERVE - UNCONTROLLED - PILOT IN COMMAND
-

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

Finding(s)

5. TERRAIN CONDITION - DITCH
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER PLANNING/DECISION BY THE PILOT. THE CROSSWIND AND DITCH WERE RELATED FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1437 11/02/89 LOXAHATCHEE, FL A/C Reg. No. N93067 Time (Lcl) - 0930 EST

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

Type Operating Certificate-AGRICULTURAL AIRCRAFT	Aircraft Damage				
	SUBSTANTIAL		Fatal	Injuries	
Type of Operation -AERIAL APPLICATION	Fire	Crew	0	Serious	Minor
Flight Conducted Under -14 CFR 137	NONE	Pass	0	2	0
Accident Occurred During -DESCENT			0	0	0
				0	0

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

Make/Model - BELL 47D1	Eng Make/Model - FRANKLIN 6V4	ELT Installed/Activated - NO	-N/A
Landing Gear - SKID	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 2200	Engine Type - RECIPROCATING-CARBURETOR		
No. of Seats - 2	Rated Power - 210 HP		

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	
Wind Dir/Speed- 315/001 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 10.0 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 - 27	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 370
SE LAND	Months Since - 6	Make/Model- 70
HELICOPTER	Aircraft Type - BELL 47	Instrument- 10
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - 85

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPTD THAT AFTER COMPLETING A SWATH RUN, HE "PULLED UP AND HELD BACK LONGER TO CLEAR TREES AT THE END OF THE FIELD." THE HELICOPTER LOST AIRSPEED FASTER THAN THE PLT REALIZED. HE STATED THAT AT THE TOP OF THE TURN, THE HELICOPTER FELT LIKE IT WOULD SLIDE BACKWARDS, SO HE PUSHED THE CYCLIC FORWARD, APPLIED FULL POWER & TRIED TO FLY OUT OF THE SITUATION. HOWEVER, THE HELICOPTER CONTD TO DESCEND. SUBSEQUENTLY, IT IMPACTED WITH TREES & WAS DAMAGED.

Brief of Accident (Continued)

File No. - 1437

11/02/89

LOXAHATCHEE, FL

A/C Reg. No. N93067

Time (Lcl) - 0930 EST

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

Finding(s)

1. PULL-UP - PERFORMED -
 2. ROTOR RPM - NOT MAINTAINED - PILOT IN COMMAND
 3. LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
-

Occurrence #2 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation DESCENT - UNCONTROLLED

Finding(s)

4. OBJECT - TREE(S)
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO MAINTAIN ROTOR RPM AFTER PULLING UP FROM A SWATH RUN. A RELATED FACTOR WAS THE
PRESENCE OF TREES.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1434 11/03/89 IMMOKALEE, FL A/C Reg. No. N4129E Time (Lcl) - 1540 EST

-----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	0
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	1	0
Accident Occurred During -MANEUVERING					

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

Make/Model - PIPER PA-18-150	Eng Make/Model - LYCOMING O-320-A2B	ELT Installed/Activated - YES/YES
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1750	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 150 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LAKE PLACID, FL	Runway Ident - N/A
Wind Dir/Speed- 045/010 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 41	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - NO	Total - 1510
SE LAND	Months Since - 28	Make/Model- 300
	Aircraft Type - PA-18	Instrument- UNK/NR
		Multi-Eng - 0
		Last 24 Hrs - 1
		Last 30 Days- 20
		Last 90 Days- 30
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

AFTER TAKEOFF, THE PLT TURNED TO A NORTHERLY HEADING & REMAINED AT LOW ALT TO VIEW HIS AGRICULTURAL DEVELOPEMENT NEAR THE AIRSTRIP. THIS HEADING TOOK THE ACFT TOWARD HIGH TENSION POWER LINES, JUST NORTH OF THE PRIVATE STRIP. THE PLT SELECTED A FLT PATH OVER THE LOWEST SAG IN THE LINES; HOWEVER, NEITHER HE NOR THE PASSENGER SAW THE STATIC CABLES ABOVE THE MAIN TRANSMISSION LINES. SUBSEQUENTLY, THE ACFT COLLIDED WITH AN UPPER (STATIC) CABLE. THE CABLE STOPPED THE ACFT'S FORWARD MOVEMENT & IT DROPPED NEARLY STRAIGHT-DOWN TO THE GROUND.

Brief of Accident (Continued)

File No. - 1434

11/03/89

IMMOKALEE, FL

A/C Reg. No. N4129E

Time (Lcl) - 1540 EST

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

Finding(s)

1. LOW PASS - INITIATED -
 2. PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
 3. OBJECT - WIRE, STATIC
 4. VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND
-

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

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO MAINTAIN PROPER ALTITUDE AND HIS FAILURE TO MAINTAIN ADEQUATE VISUAL LOOKOUT TO SEE AND AVOID
OBSTRUCTIONS. THE STATIC LINE (OBSTRUCTION) WAS A CONTRIBUTING FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1432 11/05/89 HOMESTEAD, FL A/C Reg. No. N131PW Time (Lcl) - 1245 EST

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

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

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

Make/Model - WARREN/KELEHER/LARK JK-1B	Eng Make/Model - CONTINENTAL O-200-A	ELT Installed/Activated - NO	-N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 1050	Engine Type - RECIPROCATING-CARBURETOR		
No. of Seats - 1	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	RICHARDS FIELD
Wind Dir/Speed- 040/007 KTS	ATC/Airspace	Runway Ident - 27
Visibility - 7.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2620/ 300
Lowest Sky/Clouds - N/A	Type of Clearance - NONE	Runway Surface - GRASS/TURF
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 - 35	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 1074
SE LAND, SE SEA	Months Since - 14	Make/Model- 15
GLIDER	Aircraft Type - 7AC	Instrument- 3
		Multi-Eng - 0
		Last 24 Hrs - 1
		Last 30 Days- 12
		Last 90 Days- 40
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT STATED THAT DRG THE LNDG ROLL, THE AIRPLANE SWERVED TO THE LEFT & COLLIDED WITH A PARKED AIRPLANE & A CAR. AN EXAM OF THE LEFT MAIN LANDING GEAR SHOWED EVIDENCE OF A WHEEL SEIZURE.

Brief of Accident (Continued)

File No. - 1432

11/05/89

HOMESTEAD, FL

A/C Reg. No. N131PW

Time (Lcl) - 1245 EST

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

Finding(s)

1. LANDING GEAR, WHEEL - SEIZED
-

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

Finding(s)

2. DIRECTIONAL CONTROL - NOT POSSIBLE -
 3. GROUND LOOP/SWERVE - UNCONTROLLED -
-

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

Finding(s)

4. OBJECT - AIRCRAFT PARKED
 5. OBJECT - VEHICLE
-

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
SEIZURE OF THE LEFT MAIN GEAR WHEEL. CONTRIBUTING FACTORS WERE: THE PARKED AIRCRAFT AND VEHICLE (CAR) NEAR THE RUNWAY.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1450 11/15/89 PEMBROKE PINES, FL A/C Reg. No. N15LH Time (Lcl) - 1304 EST

-----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 - PIPER PA-23-250	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 - 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	OFF AIRPORT/STRIP
Method - N/A	HOLLYWOOD, FL	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	MIAMI, FL	NORTH PERRY
Wind Dir/Speed- 120/009 KTS	ATC/Airspace	Runway Ident - 09R
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3000/ 100
Lowest Sky/Clouds - 20000 FT SCATTERED	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 - 31	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 2500
SE LAND, ME LAND	Months Since - UNK/NR	Last 24 Hrs - UNK/NR
	Aircraft Type - UNK/NR	Make/Model- UNK/NR
		Instrument- 0
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

AFTER TAKEOFF, THE ACFT WAS MANEUVERED DOWNWIND ABOUT 1/2 MI SOUTH OF THE ARPT AT APRX 1000' AGL. WHEN THE ACFT WAS ABEAM MID-FIELD, THE PLT REQUESTED CLNC TO LAND BACK ON THE ARPT. HE WAS CLRD FOR RIGHT TRAFFIC TO LAND ON RWY 9R & WAS ASKED IF HE HAD ANY DIFFICULTIES. SUBSEQUENTLY, THE PLT REPLIED THAT BOTH ENGS HAD LOST POWER. HE TURNED TOWARD THE ARPT, BUT WAS UNABLE TO REACH THE RWY. DRG AN EMERG LANDING, THE ACFT HIT A CHAIN LINK FENCE & WAS EXTENSIVELY DMGD. AN EXAM REVEALED THERE WAS WATER & RESIDUE IN THE FUEL SYS. THE OWNER HAD PURCHASED THE PREVIOUSLY SEIZED ACFT AT A SHERIFF'S DEPARTMENT SALE. UNTIL THE DAY OF THE ACDNT, THE ACFT HAD NOT BEEN REFUEL SINCE IT WAS LAST FLOWN ON 7/27/89. AN ANNUAL INSPN HAD BEEN COMPLETED ON 9/22/89. THE ACDNT FLT WAS THE 1ST FLT AFTER THE ANNUAL INSPN & IT LASTED APRX 4 MIN. NEITHER PROP WAS FEATHERED AFTER THE ENGS LOST POWER.

Brief of Accident (Continued)

File No. - 1450

11/15/89

PEMBROKE PINES, FL

A/C Reg. No. N15LH

Time (Lcl) - 1304 EST

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

Finding(s)

1. ALL ENGINES -
 2. MAINTENANCE, ANNUAL INSPECTION - INADEQUATE - OTHER MAINTENANCE PSNL
 3. AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
 4. FLUID, FUEL - WATER
 5. FLUID, FUEL - CONTAMINATION
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Finding(s)

6. PROPELLER FEATHERING - NOT PERFORMED - PILOT IN COMMAND
-

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

Finding(s)

7. OBJECT - FENCE
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
INADEQUATE ANNUAL INSPECTION BY OTHER MAINTENANCE PERSONNEL AND INADEQUATE PREFLIGHT INSPECTION BY THE PILOT,
WHICH RESULTED IN FAILURE TO DETECT WATER AND CONTAMINATION (RESIDUE) IN THE FUEL. CONTRIBUTING FACTORS WERE:
FAILURE OF THE PLT TO FEATHER THE PROPELLERS AND A FENCE IN THE EMERGENCY LANDING AREA.

Brief of Accident

File No. - 1534 11/18/89 FERNANDINA BCH,FL A/C Reg. No. N6659D Time (Lcl) - 1145 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	0	0	0	1
Accident Occurred During -LANDING		0	0	0	0

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

Make/Model - BEECH 58	Eng Make/Model - CONTINENTAL IO-520	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 5400	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 285 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - TELEPHONE	METTER, GA	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	FERNANDINA BEACH MUNI
Wind Dir/Speed- 350/005 KTS	ATC/Airspace	Runway Ident - 04
Visibility - 7.0 SM	Type of Flight Plan - IFR	Runway Lth/Wid - 5350/ 100
Lowest Sky/Clouds - 10000 FT SCATTERED	Type of Clearance - IFR	Runway Surface - ASPHALT
Lowest Ceiling - 25000 FT BROKEN	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 - 50	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 1617
SE LAND, ME LAND	Months Since - 10	Make/Model- 362
	Aircraft Type - 58	Instrument- 166
		Multi-Eng - 787
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING FLT, THE PLT NOTED THAT OIL PRESSURE IN THE RGT ENG HAD DROPPED TO THE RED LINE, SO HE SHUT DOWN & FEATHERED THE ENG. HE STATED THAT AFTER ENTERING TRAFFIC TO LND, HE "LOWERED" THE GEAR, THEN NOTED THAT THE RADAR & RADIOS BECAME INOP (AS ELECTRICAL POWER WAS LOST). THOUGH HE HEARD & FELT THE GEAR EXTEND, HE DID NOT SEE ILLUMINATION OF THE DOWNLOCK LIGHTS. THE PLT MADE A 360 DEG TURN TO GET SPACING BEHIND ANOTHER ACFT, THEN CONTD THE APCH TO LAND. DURING THE LANDING, THE GEAR COLLAPSED & THE ACFT WAS DAMAGED. AN EXAM OF THE RGT ENG REVEALED THAT THE LOW OIL PRESSURE WAS DUE TO A PIECE OF CARBON UNDER THE OIL PRESSURE RELIEF VALVE SEAT. BOTH ALTERNATORS TESTED SATISFACTORILY; HOWEVER, BOTH VOLTAGE REGULATORS HAD FAILED INTERNALLY & BOTH ALTERNATOR CIRCUIT BREAKERS WERE POPPED.

Brief of Accident (Continued)

File No. - 1534

11/18/89

FERNANDINA BCH, FL

A/C Reg. No. N6659D

Time (Lcl) - 1145 EST

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

Finding(s)

1. LUBRICATING SYSTEM - PRESSURE TOO LOW
 2. PROPELLER FEATHERING - PERFORMED - PILOT IN COMMAND
 3. ELECTRICAL SYSTEM, VOLTAGE REGULATOR - FAILURE, TOTAL
 4. ELECTRICAL SYSTEM, BATTERY - LOW LEVEL
-

Occurrence #2 COMPLETE GEAR COLLAPSED
Phase of Operation LANDING

Finding(s)

5. GEAR DOWN AND LOCKED - NOT ATTAINED - PILOT IN COMMAND
 6. EMERGENCY PROCEDURE - 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 PERFORM THE EMERGENCY GEAR EXTENSION PROCEDURE TO ASSURE THAT THE GEAR WAS DOWN AND LOCKED.
FACTORS RELATED TO THE ACCIDENT WERE: LOW OIL PRESSURE IN THE RIGHT ENG, FAILURE OF BOTH VOLTAGE REGULATORS, AND THE
LOW LEVEL OF CHARGE IN THE BATTERY.

Brief of Accident

File No. - 1535 11/21/89 MIMS,FL A/C Reg. No. N7628V Time (Lcl) - 1200 EST

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Injuries			
Type of Operation -CHECK FLT	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 - CESSNA 177RG	Eng Make/Model - LYCOMING IO-360-A1B6D	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2800	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 200 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - IN PERSON	SANFORD,FL	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 300/008 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 6.0 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 - 25	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 501
SE LAND	Months Since - UNK/NR	Make/Model- 28
	Aircraft Type - UNK/NR	Instrument- 69
		Multi-Eng - 1
		Last 24 Hrs - 1
		Last 30 Days- 14
		Last 90 Days- 20

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE ON A COMMERCIAL PLT CHECK FLT, THE APPLICANT WAS GIVEN A SIMULATED ENG FAILURE. HE SELECTED A DIRT ROAD FOR A SIMULATED FORCED LANDING. AT AN ALT OF ABOUT 500 FT, AFTER THE EXAMINER WAS ASSURED THE APPLICANT COULD HAVE LANDED, THE APPLICANT WAS TOLD TO GO AROUND. THE APPLICANT APPLIED THROTTLE, BUT THE ENG DID NOT RESPOND. WHILE ATTEMPTING TO CORRECT THE PROBLEM, THE ACFT OVERFLEW MOST OF THE ROAD. UNABLE TO LAND ON THE ROAD, THE PLTS SELECTED A FIELD OF SAPLINGS & THE ACFT WAS DAMAGED DURING AN EMERGENCY LANDING. AN EXAM OF THE ENG REVEALED THE THROTTLE CONTROL ASSEMBLY WAS WORN & HAD FAILED, WHICH ALLOWED THE INNER CABLE TO EXIT ITS HOUSING.

Brief of Accident (Continued)

File No. - 1535

11/21/89

MIMS, FL

A/C Reg. No. N7628V

Time (Lcl) - 1200 EST

Occurrence #1 LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF
Phase of Operation GO-AROUND (VFR)

Finding(s)

1. THROTTLE/POWER LEVER - WORN
 2. THROTTLE/POWER LEVER - FAILURE, TOTAL
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

3. TERRAIN CONDITION - HIGH VEGETATION
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
A WORN THROTTLE CONTROL ASSEMBLY THAT HAD FAILED.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1513 11/27/89 COCOA, FL A/C Reg. No. N48472 Time (Lcl) - 1545 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 -LANDING					

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

Make/Model - CESSNA 152	Eng Make/Model - LYCOMING O-235-L2C	ELT Installed/Activated - UNK/NR
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1670	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 110 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	MERRITT ISLAND
Wind Dir/Speed- 030/007 KTS		Runway Ident - 11
Visibility - 7.0 SM	ATC/Airspace	Runway Lth/Wid - 3600/ 75
Lowest Sky/Clouds - 3000 FT SCATTERED	Type of Flight Plan - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type of Clearance - NONE	Runway Status - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - TRAFFIC PATTERN	
Precipitation - NONE	TOUCH AND GO	
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 - 40
	Months Since - N/A	Last 24 Hrs - UNK/NR
	Aircraft Type - N/A	Make/Model- 40
		Last 30 Days- UNK/NR
		Instrument- UNK/NR
		Last 90 Days- 40
		Multi-Eng - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DURING THE LANDING ROLL, ON THE 7TH TOUCH-&-GO LANDING, THE PLT LOST CONTROL OF THE AIRPLANE. IT THEN VEERED OFF THE LEFT SIDE OF THE RWY, ENCOUNTERED A DITCH & NOSED OVER. THE PLT STATED THE LEFT BRAKE LOCKED UP; HOWEVER, AN EXAM REVEALED NO EVIDENCE OF A FAILURE OR MALFUNCTION.

Brief of Accident (Continued)

File No. - 1513

11/27/89

COCOA,FL

A/C Reg. No. N48472

Time (Lcl) - 1545 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 ON GROUND COLLISION WITH TERRAIN/WATER
Phase of Operation LANDING - ROLL

Finding(s)

4. TERRAIN CONDITION - DITCH
-

Occurrence #3 NOSE OVER
Phase of Operation LANDING - ROLL

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO MAINTAIN DIRECTIONAL CONTROL DURING THE LANDING ROLL, WHICH RESULTED IN AN
INADVERTENT GROUND SWERVE. FACTORS RELATED TO THE ACCIDENT WERE THE CROSSWIND CONDITION AND DITCH.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1488 12/24/89 FORT LAUDERDALE, FL A/C Reg. No. N6879N Time (Lcl) - 1652 EST

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage					
	DESTROYED		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 - MOONEY M20	Eng Make/Model - LYCOMING O-360	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2575	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 180 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - UNK/NR	FREEPRT, BAHAMAS	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	FORT LAUDERDALE, FL	Runway Ident - N/A
Wind Dir/Speed- 310/016 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 15.0 SM	Type of Flight Plan - VFR	Runway Surface - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - VFR	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 28	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 1200
SE LAND, ME LAND	Months Since - UNK/NR	Last 24 Hrs - UNK/NR
	Aircraft Type - UNK/NR	Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT REPORTED THAT DURING AN OVERWATER FLIGHT, HE NOTED A PARTIAL LOSS OF MANIFOLD PRESSURE AND ENGINE POWER. HE INITIATED EMERGENCY PROCEDURES, BUT WAS UNABLE TO RESTORE POWER OR MAINTAIN ALTITUDE. SUBSEQUENTLY, THE AIRPLANE WAS DITCHED AT SEA AND WAS NOT RECOVERED. THE PILOT WAS RESCUED BY THE US COAST GUARD.

Brief of Accident (Continued)

File No. - 1488

12/24/89

FORT LAUDERDALE, FL

A/C Reg. No. N6879N

Time (Lcl) - 1652 EST

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

Finding(s)

1. REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

2. TERRAIN CONDITION - WATER, ROUGH

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
PARTIAL LOSS OF ENGINE POWER FOR AN UNKNOWN REASON.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1501 12/28/89 SARASOTA, FL A/C Reg. No. N831SR Time (Lcl) - 1450 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	0	0	0	1
Accident Occurred During -LANDING	Crew	0	0	0	1
	Pass	0	0	0	1

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

Make/Model - PIPER PA-34-200	Eng Make/Model - CONTINENTAL TSIO-360-E	ELT Installed/Activated - UNK/NR
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 4550	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 200 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - UNK/NR	SAVANNAH, GA	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	SARASOTA-BRADENTON
Wind Dir/Speed- 290/012 KTS	ATC/Airspace	Runway Ident - 22
Visibility - 20.0 SM	Type of Flight Plan - IFR	Runway Lth/Wid - 5004/ 150
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	FULL STOP	
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)
COMMERCIAL	Current - YES	Total - 387
SE LAND, ME LAND	Months Since - 12	Last 24 Hrs - 6
	Aircraft Type - PA-34	Make/Model- 110
		Last 30 Days- 6
		Instrument- 93
		Last 90 Days- 19
		Multi-Eng - 110

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT WAS INITIALLY CLEARED TO LAND ON RWY 32, BUT HIS CLEARANCE WAS CHANGED TO RWY 22. ALSO, THE PLT WAS ASKED TO KEEP HIS SPEED UP. HE STATED THAT AT 200 FT, HIS AIRSPEED WAS INDICATING 89 KTS & HE ELECTED TO LAND LONG. AFTER TOUCHDOWN, THE ACFT BEGAN PORPOISING. SUBSEQUENTLY, THE NOSE GEAR & PROPELLER WERE DAMAGED, BUT THE PILOT WAS ABLE TO TAXI THE ACFT TO THE FBO.

Brief of Accident (Continued)

File No. - 1501

12/28/89

SARASOTA, FL

A/C Reg. No. N831SR

Time (Lcl) - 1450 EST

Occurrence #1 HARD LANDING
Phase of Operation LANDING

Finding(s)

1. WEATHER CONDITION - CROSSWIND
 2. AIRSPEED - EXCESSIVE - PILOT IN COMMAND
 3. FLARE - IMPROPER - PILOT IN COMMAND
 4. PORPOISE - INADVERTENT -
 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:
EXCESSIVE AIRSPEED FOR LANDING AND IMPROPER FLARE BY THE PILOT, WHICH RESULTED IN AN INADVERTENT PORPOISE; AND
THE PILOT'S IMPROPER RECOVERY FROM A BOUNCED LANDING, WHICH RESULTED IN A HARD LANDING. A RELATED FACTOR WAS THE
CROSSWIND CONDITION.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1419 5/06/89 AUGUSTA, GA A/C Reg. No. N8693C Time (Lcl) - 1955 EDT

-----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	1	0	0
Accident Occurred During -DESCENT			1	0	0	0

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

Make/Model - PIPER PA-22-135	Eng Make/Model - LYCOMING O-290-D2	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1950	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 135 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	DANIEL FIELD
Wind Dir/Speed- 260/010 KTS	ATC/Airspace	Runway Ident - 28
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3447/ 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 - 31	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 200
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-----

ACCORDING TO WITNESSES, THE ACFT ENTERED A STEEP LEFT BANK WHILE CLIMBING AFTER LIFT-OFF, THEN IT DROPPED FROM VIEW. SUBSEQUENTLY, IT CRASHED IN A STEEP NOSE DOWN ATTITUDE. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE ACFT OR ENG WAS FOUND.

Brief of Accident (Continued)

File No. - 1419

5/06/89

AUGUSTA,GA

A/C Reg. No. N8693C

Time (Lcl) - 1955 EDT

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

Finding(s)

1. MANEUVER - INITIATED -
 2. AIRSPEED - INADEQUATE - PILOT IN COMMAND
 3. 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:
FAILURE OF THE PILOT TO MAINTAIN ADEQUATE AIRSPEED, WHILE MAKING A STEEP TURN AFTER TAKEOFF, WHICH RESULTED IN AN
INADVERTENT STALL AND SUBSEQUENT COLLISION WITH THE TERRAIN.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1475 6/26/89 ATLANTA, GA A/C Reg. No. N7375F Time (Lcl) - 1038 EDT

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

Type Operating Certificate	AIR CARRIER - FLAG/DOMESTIC	Aircraft Damage	Injuries			
Name of Carrier	-CONTINENTAL AIRLINES	NONE	Fatal	Serious	Minor	None
Type of Operation	-SCHEDULED, DOMESTIC, PASSENGER	Fire	Crew 0	0	0	5
Flight Conducted Under	-14 CFR 121	NONE	Pass 0	0	0	100
Accident Occurred During	-STANDING		Other 0	1	0	0

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

Make/Model	- BOEING 737-291	Eng Make/Model	- P&W JT8D	ELT Installed/Activated	- NO -N/A
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 2	Stall Warning System	- YES
Max Gross Wt	- 115500	Engine Type	- TURBOFAN		
No. of Seats	- 134	Rated Power	- 14500 LBS THRUST		

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

Weather Data		Itinerary		Airport Proximity	
Wx Briefing	- COMPANY	Last Departure Point		ON AIRPORT	
Method	- IN PERSON	NEWARK, NJ			
Completeness	- FULL	Destination		Airport Data	
Basic Weather	- VMC	SAME AS ACC/INC		HARTSFIELD	
Wind Dir/Speed	- UNK/NR			Runway Ident	- UNK/NR
Visibility	- UNK/NR	ATC/Airspace		Runway Lth/Wid	- UNK/NR
Lowest Sky/Clouds	- N/A	Type of Flight Plan	- IFR	Runway Surface	- UNK/NR
Lowest Ceiling	- UNK/NR	Type of Clearance	- IFR	Runway Status	- UNK/NR
Obstructions to Vision	- NONE	Type Apch/Lndg	- UNK/NR		
Precipitation	- UNK/NR				
Condition of Light	- DAYLIGHT				

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

Pilot-In-Command	Age - 52	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
ATP	Current - YES	Total - 14032	Last 24 Hrs - 2
ME LAND	Months Since - UNK/NR	Make/Model - UNK/NR	Last 30 Days - UNK/NR
	Aircraft Type - UNK/NR	Instrument - UNK/NR	Last 90 Days - 224
		Multi-Eng - UNK/NR	Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

JUST AS THE AIRCRAFT WAS BEING STOPPED ON CONCOURSE "C" TO DEPLANE PASSENGERS, A GROUND EMPLOYEE WALKED BEHIND THE #2 ENGINE TO CHOCK THE RIGHT MAIN GEAR. AS HE WENT BEHIND THE ENGINE, THE JET BLAST (EXHAUST) HURLED HIM ABOUT FIVE FEET TO THE GROUND. THE EMPLOYEE SUSTAINED A BROKEN JAW AND SEVERAL BRUISES AND LACERATIONS. HE HAD BEEN HIRED ON 6/9/89 (17 DAYS BEFORE THE ACNT). ACCORDING TO HIS TRAINING RECORD, HE HAD RECEIVED TRAINING IN RAMP SAFETY.

Brief of Accident (Continued)

File No. - 1475

6/26/89

ATLANTA, GA

A/C Reg. No. N7375F

Time (Lcl) - 1038 EDT

Occurrence #1 PROPELLER BLAST OR JET EXHAUST/SUCTION
Phase of Operation STANDING - ENGINE(S) OPERATING

Finding(s)

1. PROCEDURES/DIRECTIVES - NOT FOLLOWED - GROUND PERSONNEL
 2. LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - GROUND PERSONNEL
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE GROUND EMPLOYEE TO FOLLOW NORMAL SAFETY PROCEDURES. HIS LACK OF FAMILIARITY WITH THE
OPERATION WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1470 7/31/89 DAWSON,GA A/C Reg. No. N9755 Time (Lcl) - 1530 EDT

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

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

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

Make/Model - GRUMMAN G-164A	Eng Make/Model - P&W 985	ELT Installed/Activated - NO -N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 6075	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 1	Rated Power - 450 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	DAWSON,GA	
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 - 10.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - UNK/NR SCATTERED	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 59	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 14142
SE LAND, ME LAND, SE SEA	Months Since - 8	Make/Model- 4000
HELICOPTER	Aircraft Type - G-164B	Instrument- UNK/NR
		Multi-Eng - 550
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - 600

Instrument Rating(s) - NONE

-----Narrative-----

AS THE PILOT WAS MAKING A TURN-AROUND FOR ANOTHER SWATH RUN, THE ENGINE LOST POWER. SUBSEQUENTLY, THE AIRCRAFT WAS DAMAGED AS AN EMERGENCY LANDING WAS MADE IN AN ADJACENT COTTON FIELD. AN EXAMINATION OF THE ENGINE REVEALED THE #3 CYLINDER HEAD HAD FAILED.

Brief of Accident (Continued)

File No. - 1470

7/31/89

DAWSON, GA

A/C Reg. No. N9755

Time (Lcl) - 1530 EDT

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

Finding(s)

1. ENGINE ASSEMBLY, CYLINDER - 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. TERRAIN CONDITION - CROP

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE NUMBER THREE CYLINDER HEAD.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1506 9/15/89 LOUISVILLE, GA A/C Reg. No. N4556D Time (Lcl) - 1000 EDT

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

Type Operating Certificate-EXTERNAL LOAD		Aircraft Damage		Injuries			
Type of Operation	-OTHER WORK USE	DESTROYED		Fatal	Serious	Minor	None
Flight Conducted Under	-14 CFR 133	Fire	Crew	0	0	0	1
Accident Occurred During	-DESCENT	ON GROUND	Pass	0	0	0	0

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

Make/Model	- SIKORSKY H-34J	Eng Make/Model	- WRIGHT R-1820-84D	ELT Installed/Activated	- NO -N/A
Landing Gear	- TAILWHEEL-ALL FIXED	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 12500	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 2	Rated Power	- 1525 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	- 7.0 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 - 36	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL	Current - YES	Total - 3000	Last 24 Hrs - 3
SE LAND	Months Since - 14	Make/Model- 125	Last 30 Days- 3
HELICOPTER	Aircraft Type - C-150	Instrument- 2	Last 90 Days- 50
			Rotorcraft - 2300

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT REPORTED THAT DURING A LOGGING OPERATION, A JERKING MOTION WAS NOTED WHILE THE HELICOPTER WAS HOVERING AT 200 FEET. THE MOTION OCCURRED SEVERAL TIMES OVER A SHORT PERIOD OF TIME. THE PILOT EJECTED THE LONG LINE AND ATTEMPTED AN EMERGENCY LANDING, BUT THE HELICOPTER IMPACTED IN A SWAMPY AREA AND BURNED. IT WAS NOT RECOVERED, BUT THE ENGINE WAS REPORTED TO HAVE BEEN OPERATING PROPERLY THROUGHOUT THE EMERGENCY. THE PILOT SUSPECTED THAT THE FREE WHEELING UNIT HAD FAILED.

Brief of Accident (Continued)

File No. - 1506

9/15/89

LOUISVILLE, GA

A/C Reg. No. N4556D

Time (Lcl) - 1000 EDT

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

Finding(s)

1. ROTOR DRIVE SYSTEM - UNDETERMINED
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - UNCONTROLLED

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 UNDETERMINED MALFUNCTION OF THE MAIN ROTOR DRIVE SYSTEM.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1476 12/24/89 DANIELSVILLE,GA A/C Reg. No. N5556P Time (Lcl) - 1555 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	0	0	0	1
Accident Occurred During -LANDING		0	0	0	0

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

Make/Model - PIPER PA-24	Eng Make/Model - LYCOMING O-540	ELT Installed/Activated - NO -N/A
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2160	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 250 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	COLDWATER,MI	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	ATHENS,GA	Runway Ident - N/A
Wind Dir/Speed- 290/006 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 15000 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 - 53	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 671
SE LAND	Months Since - 9	Make/Model- 19
	Aircraft Type - PA-28	Instrument- 163
		Last 24 Hrs - 3
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT STATED THAT DRG FLT, HE NOTED A SLIGHT ODOR OF FUEL & OPENED THE VENTS TO ALLOW FRESH AIR IN THE CABIN. AS HE WAS ARRIVING TO LAND AT THE DESTN ARPT, THE ENG LOST POWER AT ABOUT 2200' AGL. HE SELECTED AN EMERG LANDING AREA. AFTER ASSURING CLNC OVER TREES, HE TRIED TO EXTND THE LNDG GEAR WITH THE NORMAL (ELEC) EXTN SYS, BUT WAS UNABLE. HE STARTED TO USE THE EMERG GEAR EXTN SYS, BUT THERE WAS INSUFFICIENT TIME, SO HE MADE A WHEELS UP LNDG. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE ACFT OR ENG WAS FOUND. ACCORDING TO THE PLT, HIS INSTRUMENTS SHOWED FUEL WAS STILL REMAINING WHEN THE ENG LOST POWER; HOWEVER, NO USABLE FUEL WAS FOUND IN THE ACFT AFTER THE ACNT. THE PLT STATED THAT THE ACFT WAS "TOPPED OFF" WITH FUEL BEFORE THE FLT & HE ESTIMATED 11.7 GAL OF FUEL OR MORE WOULD BE REMAINING WHEN HE ARRIVED AT THE DESTN. THE ACFT'S FUEL CAPACITY WAS 60 GAL WITH THE TANKS FILLED TO THE TOP OF THE FILLER NECKS. RPRTDLY, THE FUEL SYS WOULD HAVE HAD ABOUT 10 GAL LESS THAN A FULL LOAD, IF THE TANKS HAD BEEN FILLED TO THE BOTTOM OF THE FILLER NECKS.

Brief of Accident (Continued)

File No. - 1476

12/24/89

DANIELSVILLE,GA

A/C Reg. No. N5556P

Time (Lcl) - 1555 EST

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

Finding(s)

1. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
 2. ENGINE INSTRUMENTS,FUEL QUANTITY GAGE - FALSE INDICATION
 3. FLUID,FUEL - EXHAUSTION
 4. FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
-

Occurrence #2 FORCED LANDING
Phase of Operation APPROACH

Occurrence #3 GEAR NOT EXTENDED
Phase of Operation APPROACH

Finding(s)

5. TERRAIN CONDITION - HIGH OBSTRUCTION(S)
 6. GEAR EXTENSION - ATTEMPTED - PILOT IN COMMAND
 7. LANDING GEAR,NORMAL RETRACTION/EXTENSION ASSEMBLY - UNDETERMINED
-

Occurrence #4 IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

8. WHEELS UP LANDING
-

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
INADEQUATE PREFLIGHT PREPARATION/PLANNING BY THE PILOT, BY NOT ASSURING AN ADEQUATE SUPPLY OF FUEL, WHICH
RESULTED IN FUEL EXHAUSTION. RELATED FACTORS WERE: A FALSE FUEL QUANTITY INDICATION, TREES IN THE EMERGENCY
LANDING AREA, AND FAILURE OF THE LANDING GEAR TO EXTEND (FOR AN UNKNOWN REASON).

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1455 4/05/89 WEST CAMERON,GM A/C Reg. No. N5004L Time (Lcl) - 1327 CDT

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

Type Operating Certificate-ON-DEMAND AIR TAXI	Aircraft Damage SUBSTANTIAL	Injuries				
Type of Operation -TEST FLIGHT	Fire	Crew	Fatal	Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -LANDING			0	0	0	0

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

Make/Model - BELL 206B	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 - 235 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	WEST CAMERON, BLK 266
Wind Dir/Speed- 030/025 KTS	ATC/Airspace	Runway Ident - UNK/NR
Visibility - 7.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - UNK/NR
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - METAL/WOOD
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 - 50	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 7008
ME LAND	Months Since - 5	Make/Model- 4540
HELICOPTER	Aircraft Type - 206B	Instrument- 294
		Multi-Eng - 756
		Last 24 Hrs - 4
		Last 30 Days- 39
		Last 90 Days- 117
		Rotorcraft - 6195

Instrument Rating(s) - AIRPLANE,HELICOPTER

-----Narrative-----

THE HELICOPTER HAD SVRL INFLT ENG DECELERATIONS THAT MAINTENANCE EFFORTS DID NOT ISOLATE. AFTER REPLACING THE ENG FUEL CONTROLLER, A TEST FLT WAS MADE (FROM AN OIL DRILLING PLATFORM). DRG THE FLT, THE ENG SURGED, THEN DECELERATED. THE PLT WAS UNABLE TO REACH THE HELIPAD. HE ELECTED TO LAND ON THE PLATFORM, SHORT OF THE HELIPAD, RATHER THAN ACCEPT SEA CONDS OF 8 FT WAVES. DRG THE LANDING, THE HELICOPTER WAS DAMAGED. A POST-ACDNT EXAM REVEALED FUEL CONTAMINATION HAD OCCURRED. CONTAMINATION HAD BYPASSED FILTERS IN THE FUEL SYS & HAD CLOGGED & COLLAPSED THE ENG FUEL NOZZLE SCREEN. THE AIRFRAME FUEL FILTER CAP BYPASS VLV WAS FND STUCK OPEN IN THE BYPASS MODE. A PIN (CONNECTED TO THE FUEL FILTER CAP IMPENDING BYPASS TEST BUTTON) WAS FND BENT, HOLDING THE BYPASS VLV OPEN. AN OPEN BYPASS VLV SHOULD HAVE ILLUMINATED A RESPECTIVE ANNUNCIATOR LIGHT IN THE COCKPIT; HOWEVER, WHEN CHECKED, THE ANNUNCIATOR LIGHT OPERD ONLY INTERMITTENTLY DUE TO A FAULTY COMPONENT IN THE SYS. DRG TESTS, THE CLOGGED/COLLAPSED FUEL SCREEN PREVENTED SUFFICIENT FUEL FLOW TO SUSTAIN ENG POWER.

Brief of Accident (Continued)

File No. - 1455

4/05/89

WEST CAMERON,GM

A/C Reg. No. N5004L

Time (Lcl) - 1327 CDT

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

Finding(s)

1. MAINTENANCE, INSPECTION OF AIRCRAFT - INADEQUATE - COMPANY MAINTENANCE PSNL
2. FUEL SYSTEM - BINDING(MECHANICAL)
3. ANNUNCIATOR PANEL LIGHTS - FAILURE,PARTIAL
4. FLUID,FUEL - CONTAMINATION

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Finding(s)

5. AUTOROTATION

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

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
INADEQUATE MAINTENANCE/INSPECTION OF THE AIRCRAFT FUEL SYSTEM BY COMPANY MAINTENANCE PERSONNEL AND FUEL CONTAMINATION,
WHICH RESULTED IN A PARTIAL LOSS OF ENGINE POWER. RELATED FACTORS WERE: A BINDING (STUCK) FUEL FILTER CAP BYPASS
VALVE AND PARTIAL FAILURE (INTERMITTENT OPERATION) OF THE RESPECTIVE ANNUNCIATOR LIGHT SYSTEM.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1577 11/06/89 TOLEDO, IA A/C Reg. No. N6449M Time (Lcl) - 1830 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 -APPROACH			0	0	1	0

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

Make/Model - CESSNA 152	Eng Make/Model - LYCOMING O-235-L2C	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1670	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 110 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	AMES, IA	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	MARSHALTOWN, IA	TOLEDO
Wind Dir/Speed- 320/014 KTS	ATC/Airspace	Runway Ident - 35
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 1873/ 100
Lowest Sky/Clouds - N/A	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - 1900 FT OVERCAST	Type Apch/Lndg - FULL STOP	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - NIGHT (DARK)		

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

Pilot-In-Command	Age - 29	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 33
	Months Since - N/A	Make/Model- 26
	Aircraft Type - N/A	Instrument- 1
		Multi-Eng - 0
		Last 24 Hrs - 1
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

WHILE ON A SOLO, NIGHT CROSS COUNTRY FLIGHT, THE STUDENT PILOT ENCOUNTERED UNFAVORABLE WINDS AND MISTAKENLY ARRIVED AT THE WRONG AIRPORT. SHE TRIED TO ACTIVATE THE RUNWAY LIGHTS WITHOUT SUCCESS, THEN ATTEMPTED TO LAND ON WHAT SHE THOUGHT WAS THE RWY. SUBSEQUENTLY, THE ACFT STRUCK POWER LINES ABOUT ONE QUARTER MILE TO THE EAST OF THE APPROACH END OF RWY 35, THEN COLLIDED WITH THE TERRAIN. THE PILOT HAD LOGGED 1.3 HOURS OF NIGHT DUAL INSTRUCTION AND THIS WAS HER FIRST SOLO NIGHT CROSS COUNTRY FLIGHT.

Brief of Accident (Continued)

File No. - 1577

11/06/89

TOLEDO, IA

A/C Reg. No. N6449M

Time (Lcl) - 1830 CST

Occurrence #1 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. LIGHT CONDITION - DARK NIGHT
2. WEATHER CONDITION - CROSSWIND
3. OBJECT - WIRE, STATIC
4. AIRPORT FACILITIES, RUNWAY EDGE LIGHTS - NOT OPERATING
5. BECAME LOST/DISORIENTED - ENCOUNTERED - PILOT IN COMMAND
6. INADEQUATE TRAINING - PILOT IN COMMAND (CFI)
7. LANDED AT WRONG AIRPORT - ATTEMPTED - PILOT IN COMMAND
8. LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - 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 BECAME LOST/DISORIENTATED AND ATTEMPTED A LANDING AT THE WRONG AIRPORT. FACTORS RELATED TO THE ACCIDENT WERE:
DARKNESS, UNFAVORABLE WIND CONDITION, AND THE STUDENT PILOT'S LACK OF EXPERIENCE IN THE TYPE OF OPERATION.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1422 8/27/89 BLANCHARD, ID A/C Reg. No. N132SH Time (Lcl) - 2204 PDT

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

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage		Injuries			
Name of Carrier	-HEARTFLITE	DESTROYED		Fatal	Serious	Minor	None
Type of Operation	-NON SCHED, DOMESTIC, PASSENGER	Fire		Crew	3	0	0
Flight Conducted Under	-14 CFR 135	NONE		Pass	1	0	0
Accident Occurred During	-CRUISE						

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

Make/Model	- AEROSPATIALE AS-350D	Eng Make/Model	- LYCOMING LTS-101-600A2	ELT Installed/Activated	- YES/NO
Landing Gear	- SKID	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 4300	Engine Type	- TURBOSHAFT		
No. of Seats	- 6	Rated Power	- 531 HP		

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

Weather Data		Itinerary	Airport Proximity
Wx Briefing	- NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method	- N/A	EASTPORT, ID	
Completeness	- N/A	Destination	Airport Data
Basic Weather	- VMC	SPOKANE, WA	Runway Ident
Wind Dir/Speed	- CALM		- N/A
Visibility	- 20.0 SM	ATC/Airspace	Runway Lth/Wid
Lowest Sky/Clouds	- 7000 FT SCATTERED	Type of Flight Plan	- N/A
Lowest Ceiling	- NONE	Type of Clearance	- N/A
Obstructions to Vision	- NONE	Type Apch/Lndg	- NONE
Precipitation	- NONE		
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)	
PRIVATE, COMMERCIAL	Current - YES	Total	- 5000
SE LAND	Months Since - 4	Make/Model	- UNK/NR
HELICOPTER	Aircraft Type - AS-350D	Instrument	- UNK/NR
		Multi-Eng	- UNK/NR
		Rotorcraft	- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE EMERG MED SVC (EMS/MEDEVAC) HELICOPTER WAS EN ROUTE WITH A PLT, 2 MED PSNL & A PATIENT. THE PATIENT (A FUGITIVE WITH A GUNSHOT WOUND) WAS HANDCUFFED TO THE STRETCHER. DRG FLT, THE PLT RPRTD A PROBLEM WITH THE PATIENT & REQUESTED POLICE ASSISTANCE DRG ARRIVAL AT THE HOSPITAL. THE PLT THEN TRANSMITTED AN EXPLETIVE & RADAR CONTACT WAS LOST WITH THE ACFT. WRECKAGE WAS FOUND OVER A 1 MI AREA WITH EVIDENCE OF AN IN-FLT BREAKUP & MAIN ROTOR CONTACT WITH THE COCKPIT & TAIL CONE. INV SHOWED EVIDENCE OF SWASHPLATE BRG SEIZURE. THE PITCH CHG LINK RODS & ROTATIONAL SCISSORS WERE BRKN IN THE DRCTN OF MAIN ROTOR ROTATION & CTC MARKS WERE FND ON THE FWD EARS OF THE ROTATING SWASHPLATE LUGS. DISASSEMBLY REVEALED FAILURE OF THE INNER & OUTER RACE LOCKS & SPALLING OF THE BRG RACES. LACK OF GREASE WAS NOTED IN THE BRG & THE BALL BRGS WERE DISCOLORED BLUE. WEAR MARKS ON THE BALL BRGS INDCD SCUFFING; 1 BALL BRG WAS FLUTED. THE BRG ASSEMBLY HAD ACCRUED 1.23 HRS OF OPN SINCE THE LAST 100 HR INSPN. LUBE REQUIRED EACH 400 HRS, COMPANY POLICY WAS TO LUBE AT 100 HR INTERVALS.

Brief of Accident (Continued)

File No. - 1422

8/27/89

BLANCHARD, ID

A/C Reg. No. N132SH

Time (Lcl) - 2204 PDT

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

Finding(s)

1. DISTURBANCE - INTENTIONAL - PASSENGER
 2. ROTORCRAFT FLIGHT CONTROL, SWASHPLATE ASSEMBLY - OVERTEMPERATURE
 3. ROTORCRAFT FLIGHT CONTROL, SWASHPLATE ASSEMBLY - SEIZED
-

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:
OVERHEATING AND SEIZURE OF THE SWASHPLATE BEARING, WHICH RESULTED IN AN INFLIGHT BREAKUP OF THE HELICOPTER AND
SUBSEQUENT IMPACT WITH THE GROUND.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1521 6/25/89 KIRKLAND, IL A/C Reg. No. N11WR Time (Lcl) - 1205 CDT

-----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	ON GROUND	0	0	0	1
Accident Occurred During -MANEUVERING		0	0	0	0

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

Make/Model - RENNINGER MUSTANG II	Eng Make/Model - LYCOMING O-320-D	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 - 160 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	BUNGER AIRFIELD
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - 27
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2400/ 150
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 - 51	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 280
SE LAND	Months Since - 5	Make/Model- 71
	Aircraft Type - MUSTANG	Instrument- UNK/NR
		Multi-Eng - 0
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

ABOUT 25 MIN AFTER LNDG FROM A PREVIOUS FLT, THE PLT TOOK OFF TO PRACTICE TAKEOFFS & LNDGS ON RWY 18. HE CLIMBED ABOUT 1200' & TURNED ONTO A CROSSWIND LEG. AT ABOUT THAT TIME, THE ENG BEGAN TO LOSE POWER. THE PLT TRIED TO LAND ON RWY 27, BUT HE DID NOT HAVE SUFFICIENT ALT & SPEED. AS HE WAS COMPLETING A TURN TOWARD THE RWY, A WING TIP CONTACTED THE GRND & THE ACFT CRASH LANDED. THE ACFT SLID TO A STOP ON THE RWY. THE PLT SAID HE THEN TURNED THE FUEL SELECTOR OFF, BUT ABOUT 4 TO 5 MIN LATER, A FIRE ERUPTED, WHICH HE WAS UNABLE TO EXTINGUISH WITH A FIRE EXTINGUISHER. NO PREIMPACT PART FAILURE OR MALFUNCTION WAS FND. THE ACFT HAD BEEN SVCD WITH AUTO FUEL, WHICH CONTAINED A LOWER VAPOR PRESSURE THAN AVIATION FUEL & WAS MORE VULNERABLE TO VAPOR LOCK.

Brief of Accident (Continued)

File No. - 1521

6/25/89

KIRKLAND, IL

A/C Reg. No. N11WR

Time (Lcl) - 1205 CDT

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

Finding(s)
1. FLUID, FUEL - STARVATION

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Finding(s)
2. TERRAIN CONDITION - GROUND
3. CLEARANCE - MISJUDGED - PILOT IN COMMAND

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FUEL STARVATION (POSSIBLY FROM VAPOR LOCK), WHICH RESULTED IN LOSS OF ENGINE POWER, AND THE PILOT'S MISJUDGEMENT OF
GROUND CLEARANCE DURING A FINAL TURN TO LAND.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1511 9/10/89 NEWARK, IL A/C Reg. No. N4841P Time (Lcl) - 1930 CDT

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

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

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

Make/Model - CESSNA 152	Eng Make/Model - LYCOMING O-235-L2C	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1670	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 110 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	AURORA, IL	CUSHING FIELD
Wind Dir/Speed- 070/006 KTS	ATC/Airspace	Runway Ident - 36
Visibility - 30.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2800/ 180
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - 4000 FT BROKEN	Type Apch/Lndg - NONE	Runway Status - WET
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DUSK		

-----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 - 905
SE LAND, ME LAND	Months Since - 1	Make/Model- 350
	Aircraft Type - C-172RG	Instrument- 67
		Multi-Eng - 40
		Last 24 Hrs - 7
		Last 30 Days- 137
		Last 90 Days- 588
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE STUDENT PILOT AND HIS INSTRUCTOR (CFI) WERE REVIEWING & PREPARING FOR THE STUDENT'S PRIVATE PILOT FLIGHT CHECK. THEY PERFORMED A SIMULATED ENGINE FAILURE TO A FULL STOP LANDING AT A NEARBY GRASS STRIP AT DUSK. THE RUNWAY WAS SOFT AND DAMP WITH 1000 FT UNUSABLE DUE TO THE WET CONDITIONS. THE WINDS WERE CALM. THE STUDENT PILOT STATED THAT HE PREPARED THE AIRCRAFT FOR A SOFT FIELD TAKEOFF; HE MOVED THE FLAP SELECTOR TO THE 10 DEGREE POSITION, AND ALL OF THE AVAILABLE RUNWAY WAS USED FOR HIS TAKEOFF. HE REPORTED THAT THE AIRCRAFT LIFTED OFF, BUT IT WOULD NOT ACCELERATE OR CLIMB RAPIDLY ENOUGH TO CLEAR POWER LINES BEYOND THE DEPARTURE END OF THE RUNWAY. THE CFI TOOK THE CONTROLS AND ABORTED THE TAKEOFF. SUBSEQUENTLY, THE AIRCRAFT IMPACTED AN EMBANKMENT AND SKIDDED TO A STOP ON A HIGHWAY. AN EXAM REVEALED THE FLAPS SELECTOR WAS IN THE FULLY RETRACTED POSITION, BUT THE FLAPS WERE FULLY EXTENDED.

Brief of Accident (Continued)

File No. - 1511

9/10/89

NEWARK, IL

A/C Reg. No. N4841P

Time (Lcl) - 1930 CDT

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

Finding(s)

1. FLIGHT CONTROL, FLAP - FAILURE, PARTIAL
2. RAISING OF FLAPS - NOT ATTAINED - DUAL STUDENT

Occurrence #2 OVERRUN
Phase of Operation TAKEOFF - ABORTED

Finding(s)

3. SUPERVISION - INADEQUATE - PILOT IN COMMAND (CFI)
4. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - SOFT
5. AIRSPEED - NOT ATTAINED -
6. TERRAIN CONDITION - HIGH OBSTRUCTION(S)
7. ABORTED TAKEOFF - DELAYED - PILOT IN COMMAND (CFI)

Occurrence #3 IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation TAKEOFF - ABORTED

Finding(s)

8. TERRAIN CONDITION - DIRT BANK

----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
INADEQUATE SUPERVISION BY THE FLIGHT INSTRUCTOR (CFI) AND HIS DELAY IN ABORTING THE TAKEOFF. FACTORS RELATED TO THE
ACCIDENT WERE: MALFUNCTION OF THE FLAP SYSTEM, WHICH RESULTED IN AN IMPROPER FLAP SETTING FOR TAKEOFF, AND THE SOFT
RUNWAY CONDITION.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1530 9/29/89 GREENCASTLE, IN A/C Reg. No. N2YS Time (Lcl) - 1901 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	ON GROUND	Crew 1	0	0	0
Accident Occurred During -APPROACH		Pass 2	1	0	0

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

Make/Model - BEECH A36TC	Eng Make/Model - CONTINENTAL TS10-520-UB	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3650	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	LEBANON, OH	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	PUTNAM CITY
Wind Dir/Speed- 220/005 KTS	ATC/Airspace	Runway Ident - 36
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3200/ 60
Lowest Sky/Clouds - 15000 FT SCATTERED	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 - DUSK		

-----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 - 1500
SE LAND	Months Since - 8	Make/Model- 100
	Aircraft Type - BE-36TC	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT WAS MAKING A VISUAL APPROACH AT DUSK TO RUNWAY 36, WHICH SLOPED UPWARD FROM THE APPROACH END. IT WAS LIGHTED WITH LOW INTENSITY LIGHTS. AS THE AIRCRAFT WAS PROCEEDING IN THE VICINITY OF A LEFT BASE LEG, IT COLLIDED WITH TREES ABOUT 50' ABOVE THE GROUND. IT THEN CRASHED TO THE GROUND & BEGAN BURNING. ONE PASSENGER EGRESSED FROM THE AIRCRAFT WITH INJURIES FROM IMPACT & FIRE. NO PREIMPACT PART FAILURE OR MALFUNCTION WAS FOUND DURING THE INVESTIGATION.

Brief of Accident (Continued)

File No. - 1530

9/29/89

GREENCASTLE, IN

A/C Reg. No. N2YS

Time (Lcl) - 1901 EST

Occurrence #1 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation APPROACH - VFR PATTERN - BASE LEG/BASE TO FINAL

Finding(s)

1. LIGHT CONDITION - DUSK
 2. VISUAL/AURAL PERCEPTION - PILOT IN COMMAND
 3. OBJECT - TREE(S)
 4. PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
-

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

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO MAINTAIN PROPER ALTITUDE DURING A VISUAL APPROACH AT DUSK. FACTORS RELATED
TO THE ACCIDENT WERE: LIGHT CONDITIONS AT DUSK, THE PILOT'S VISUAL PERCEPTION, AND THE TREES.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1517 11/08/89 ANGOLA, IN A/C Reg. No. N951V Time (Lcl) - 1940 EST

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

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

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

Make/Model - BEECH A36	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 - 3800	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 285 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	WHEELING, IL	
Completeness - FULL	Destination	Airport Data
Basic Weather - IMC	SAME AS ACC/INC	TRI-STATE STEUBEN COUNTY
Wind Dir/Speed- 280/012 KTS	ATC/Airspace	Runway Ident - 05
Visibility - UNK/NR	Type of Flight Plan - IFR	Runway Lth/Wid - 4000/ 75
Lowest Sky/Clouds - UNK/NR	Type of Clearance - IFR	Runway Surface - ASPHALT
Lowest Ceiling - OVERCAST	Type Apch/Lndg - ADF/NDB	Runway Status - WET
Obstructions to Vision- FOG	FULL STOP	
Precipitation - DRIZZLE		
Condition of Light - NIGHT(DARK)		

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

Pilot-In-Command	Age - 50	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 3000
SE LAND	Months Since - 5	Make/Model- 50
	Aircraft Type - A36	Instrument- 865
		Last 24 Hrs - 2
		Last 30 Days- 35
		Last 90 Days- 60

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING ARRIVAL AT NGT, THE PLT WAS CLRD FOR AN NDB RWY 5 APCH. THE NDB WAS LOCATED AT THE ARPT, JUST SW OF THE RWY. THE PLT STATED THAT HE "COMPLETED (THE) NDB APPROACH, WHICH FAILED AT MINIMUMS. ENTERED CLEAR AIR ALMOST IMMEDIATELY AFTER ADF REVERSAL . . ." HE SAID HE THEN MADE A 180 DEG REVERSAL (LEFT TURN) AND MANEUVERED TO GET REESTABLISHED ON THE NDB COURSE ABT 3.9 MI FM THE ARPT, BUT HE COULD NOT RECALL ANYTHING BEYOND THAT POINT. AN INVESTIGATION REVEALED THE ACFT HAD DSCNDD & CRASHED IN AN OPEN FIELD IN THAT AREA. MDA FOR THE APCH WAS 1540 FT. THE ARPT ELEV WAS 995 FT. THE ARPT MANAGER ESTIMATED THE CEILING AT THE ARPT WAS BELOW MINIMUMS. NO PREIMPACT MALFUNCTION OF THE ACFT OR NDB WAS FOUND.

Brief of Accident (Continued)

File No. - 1517

11/08/89

ANGOLA, IN

A/C Reg. No. N951V

Time (Lcl) - 1940 EST

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

Finding(s)

1. LIGHT CONDITION - DARK NIGHT
 2. WEATHER CONDITION - LOW CEILING
 3. WEATHER CONDITION - FOG
 4. WEATHER CONDITION - DRIZZLE
 5. WEATHER CONDITION - BELOW APPROACH MINIMUMS
 6. IFR PROCEDURE - NOT FOLLOWED - PILOT IN COMMAND
 7. TERRAIN CONDITION - OPEN FIELD
 8. MINIMUM DESCENT ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO FOLLOW IFR PROCEDURES AND MAINTAIN THE MINIMUM DESCENT ALTITUDE (MDA). FACTORS RELATED TO THE
ACCIDENT WERE: DARKNESS AND ADVERSE WEATHER CONDITIONS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1438 12/28/89 GRIFFITH, IN A/C Reg. No. N2605P Time (Lcl) - 0830 EST

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL		Injuries			
Type of Operation -INSTRUCTIONAL	Fire	Crew	Fatal	Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0	1
Accident Occurred During -TAKEOFF			0	0	0	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 - 112 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- 160/005 KTS</p> <p>Visibility - 7.0 SM</p> <p>Lowest Sky/Clouds - N/A</p> <p>Lowest Ceiling - 3000 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 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 GRIFFITH</p> <p>Runway Ident - 26</p> <p>Runway Lth/Wid - 4013/ 50</p> <p>Runway Surface - ASPHALT</p> <p>Runway Status - DRY</p>
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-----Personnel Information-----

<p>Pilot-In-Command</p> <p>Certificate(s)/Rating(s) STUDENT</p>	<p>Age - 33</p> <p>Biennial Flight Review</p> <p>Current - N/A</p> <p>Months Since - N/A</p> <p>Aircraft Type - N/A</p>	<p>Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT</p> <p>Flight Time (Hours)</p> <p>Total - 18 Last 24 Hrs - 1</p> <p>Make/Model- 18 Last 30 Days- 4</p> <p>Instrument- 1 Last 90 Days- 13</p>
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Instrument Rating(s) - NONE

-----Narrative-----

AFTER THE STUDENT PILOT PERFORMED UNEVENTFUL TOUCH-&-GO LANDINGS, HIS FLT INSTRUCTOR (CFI) EXITED THE ACFT TO ALLOW THE STUDENT TO FLY SOLO. THE STUDENT TAXIED BACK TO THE RWY. HE STATED HE "ROLLED OUT ONTO THE RUNWAY WITHOUT STOPPING, CENTERED THE PLANE ON THE RUNWAY, AND APPLIED FULL THROTTLE," BUT THE PLANE GOT OUT OF CONTROL. HE CLOSED THE THROTTLE & "LOCKED UP" THE BRAKES. SUBSEQUENTLY, THE ACFT COLLIDED WITH A PILE OF PLOWED SNOW & CAME TO REST APRX 20 FT OFF THE LEFT SIDE OF THE RWY. THE STUDENT HAD NEARLY 18 HRS OF FLT TIME, OF WHICH, 1/2 HR WAS SOLO TIME.

Brief of Accident (Continued)

File No. - 1438

12/28/89

GRIFFITH, IN

A/C Reg. No. N2605P

Time (Lcl) - 0830 EST

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

Finding(s)

1. RUNNING TAKEOFF - INITIATED - PILOT IN COMMAND
 2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
 3. ABORTED TAKEOFF - PERFORMED - PILOT IN COMMAND
 4. BRAKES (NORMAL) - IMPROPER USE OF - PILOT IN COMMAND
 5. LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
-

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

Finding(s)

6. TERRAIN CONDITION - SNOWBANK
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE STUDENT PILOT TO MAINTAIN DIRECTIONAL CONTROL AND HIS IMPROPER USE OF (NORMAL) BRAKES. HIS DECISION
TO MAKE A RUNNING TAKEOFF, HIS LACK OF TOTAL EXPERIENCE, AND THE SNOWBANK WERE CONTRIBUTING FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1491 7/09/89 MEDICINE LODGE,KS A/C Reg. No. N5379P Time (Lcl) - 0845 CDT

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

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

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

Make/Model - PIPER PA-24-250	Eng Make/Model - LYCOMING O-540-A1C5	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2800	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 250 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	MEDICINE LODGE,KS	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 190/012 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 5.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
Obstructions to Vision- HAZE		
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 - 359
SE LAND	Months Since - 1	Make/Model- UNK/NR
	Aircraft Type - PA-24	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

A WITNESS RPRTD THAT HE HEARD THE ACFT FLY OVER HIS HOUSE FROM WEST TO EAST, SO HE & HIS FAMILY WENT OUT ONTO THE DECK ON THE EAST SIDE OF THE HOUSE. THE ACFT THEN APCHD THE HOUSE FROM THE EAST AT LOW ALTITUDE. AS THE ACFT WENT OVER THE HOUSE AGAIN, ITS RIGHT WING HIT THE TOP OF AN ATTACHED TV ANTENNA, APRX 48 FT ABOVE THE GROUND. THE ACFT THEN CRASHED ABOUT 1650 FT FROM THE HOUSE.

Brief of Accident (Continued)

File No. - 1491

7/09/89

MEDICINE LODGE,KS

A/C Reg. No. N5379P

Time (Lcl) - 0845 CDT

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

Finding(s)

1. BUZZING - PERFORMED - PILOT IN COMMAND
 2. OBJECT - RESIDENCE
 3. CLEARANCE + MISJUDGED - 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 MISJUDGED CLEARANCE ABOVE A HOUSE (RESIDENCE) THAT HE WAS BUZZING AND ALLOWED THE AIRCRAFT TO
COLLIDE WITH THE ATTACHED ANTENNA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1522 11/17/89 OSAGE CITY,KS A/C Reg. No. N20428 Time (Lcl) - 1930 CST

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

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

-----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 - TV WX	Last Departure Point	OFF AIRPORT/STRIP
Method - TV/RADIO	OSAGE CITY,KS	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	OSAGE CITY
Wind Dir/Speed- 360/008 KTS	ATC/Airspace	Runway Ident - 35
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2560/ 40
Lowest Sky/Clouds - N/A	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 3000 FT OVERCAST	Type Apch/Lndg - FULL STOP	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - NIGHT (DARK)		

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

Pilot-In-Command	Age - 24	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 111
SE LAND	Months Since - 13	Make/Model- 111
	Aircraft Type - C-172	Instrument- 3
		Multi-Eng - UNK/NR
		Last 24 Hrs - 1
		Last 30 Days- 2
		Last 90 Days- 11
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT SAID THAT HE HAD JUST COMPLETED A NIGHT TOUCH-AND-GO LANDING AND WAS ON AN APPROACH FOR A FULL STOP LNDG. DURING THE FINAL APPROACH, THE PAX, WHO WAS ALSO A PVT PILOT, SHOUTED "WATCH THE WIRES" AND PULLED BACK ON THE CONTROL WHEEL. THE PLT APPLIED FULL THROTTLE, BUT THE ACFT COLLIDED WITH THE WIRES, THEN THE TERRAIN. THE WIRES WERE ABOUT ONE HALF MILE FROM THE APPROACH END OF THE RUNWAY.

Brief of Accident (Continued)

File No. - 1522

11/17/89

OSAGE CITY,KS

A/C Reg. No. N20428

Time (Lcl) - 1930 CST

Occurrence #1 UNDERSHOOT
Phase of Operation APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

1. LIGHT CONDITION - DARK NIGHT
 2. DISTANCE - MISJUDGED - PILOT IN COMMAND
 3. ALTITUDE - MISJUDGED - PILOT IN COMMAND
-

Occurrence #2 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

4. OBJECT - WIRE, STATIC
-

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

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT MISJUDGED DISTANCE AND ALTITUDE TO THE RUNWAY WHILE ON FINAL APPROACH TO LAND. FACTORS RELATED
TO THE ACCIDENT WERE: DARK NIGHT AND STATIC WIRES.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1430 11/22/89 ASHLAND, KS A/C Reg. No. N99615 Time (Lcl) - 1730 CST

----Basic Information----

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

----Aircraft Information----

Make/Model - BURDETTE CUBY PA-11	Eng Make/Model - CONTINENTAL O-200-A	ELT Installed/Activated - NO	-N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 1400	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		ASHLAND, KS	
Completeness - N/A		Destination	Airport Data
Basic Weather - VMC		LOCAL	
Wind Dir/Speed- 010/006 KTS		ATC/Airspace	Runway Ident - N/A
Visibility - 20.0 SM		Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - CLEAR		Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - NONE		Type Apch/Lndg - FORCED LANDING	Runway Status - N/A
Obstructions to Vision- NONE			
Precipitation - NONE			
Condition of Light - DUSK			

----Personnel Information----

Pilot-In-Command	Age - 30	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 148
SE LAND	Months Since - UNK/NR	Make/Model- 115
	Aircraft Type - UNK/NR	Instrument- 8
		Last 24 Hrs - 1
		Last 30 Days- 20
		Last 90 Days- 30

Instrument Rating(s) - NONE

----Narrative----

AS THE PLT OF THE HOME-BUILT ACFT WAS RTRNG TO THE ARPT FROM A LOCAL FLT, THE ENG LOST POWER. SUBSEQUENTLY, THE ACFT WAS DAMAGED DURING AN EMERGENCY LANDING ON A TERRACED WHEAT FIELD SHORT OF THE ARPT. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE ACFT OR ENG WAS FOUND DURING THE INVESTIGATION. CONDITIONS WERE NOT CONDUCTIVE TO CARB ICING. THE PLT RPRTD THE ACFT HAD A HISTORY OF FUEL FLOW PROBLEMS; HE BELIEVED THIS MAY HAVE BEEN RELATED TO THE OCCURRENCE.

Brief of Accident (Continued)

File No. - 1430

11/22/89

ASHLAND,KS

A/C Reg. No. N99615

Time (Lcl) - 1730 CST

Occurrence #1 LOSS OF ENGINE POWER
Phase of Operation CRUISE

Finding(s)

1. FUEL SYSTEM - UNDETERMINED
 2. OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - PERFORMED - PILOT IN COMMAND
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

3. TERRAIN CONDITION - ROUGH/UNEVEN
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
AN UNDETERMINED PROBLEM WITH THE FUEL SYSTEM, WHICH RESULTED IN A LOSS OF ENGINE POWER, AND OPERATION OF THE
AIRCRAFT BY THE PILOT WITH THE KNOWN DEFICIENCY. THE UNEVEN (TERRACED) TERRAIN WAS A CONTRIBUTING FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1502 11/30/89 COVINGTON, KY A/C Reg. No. N171LE Time (Lcl) - 1150 EST

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

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

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

Make/Model - CESSNA 550	Eng Make/Model - P&W JT15D-4	ELT Installed/Activated - UNK/NR
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 13300	Engine Type - TURBOFAN	
No. of Seats - 12	Rated Power - 2500 LBS THRUST	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	CINCINNATI, OH	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	CINCINNATI, OH	GREATER CINCINNATI
Wind Dir/Speed- 260/010 KTS	ATC/Airspace	Runway Ident - 18
Visibility - 15.0 SM	Type of Flight Plan - COMPANY (VFR)	Runway Lth/Wid - 9501/ 150
Lowest Sky/Clouds - CLEAR	Type of Clearance - VFR	Runway Surface - CONCRETE
Lowest Ceiling - NONE	Type Apch/Lndg - ADF/NDB	Runway Status - DRY
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)
ATP	Current - YES	Total - 9509
SE LAND, ME LAND	Months Since - 6	Make/Model- 560
	Aircraft Type - C-550	Instrument- 729
		Multi-Eng - 4844
		Last 24 Hrs - 1
		Last 30 Days- 12
		Last 90 Days- 35

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE CONDUCTING A FLIGHT CHECK, THE PILOTS FORGOT TO EXTEND THE LANDING GEAR PRIOR TO LANDING. THERE WERE NO REPORTED MECHANICAL PROBLEMS WITH THE AIRPLANE THAT WOULD HAVE INTERFERRED WITH THE GEAR OPERATION.

Brief of Accident (Continued)

File No. - 1502

11/30/89

COVINGTON, KY

A/C Reg. No. N171LE

Time (Lcl) - 1150 EST

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

Finding(s)

1. GEAR EXTENSION - NOT PERFORMED - PILOT IN COMMAND
 2. MONITORING - INADEQUATE - CHECK PILOT
 3. WHEELS UP LANDING - INADVERTENT -
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT-IN-COMMAND (PIC) TO EXTEND THE LANDING GEAR AND INADEQUATE MONITORING BY THE CHECK PILOT, WHICH
RESULTED IN A WHEELS-UP LANDING.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1508 2/11/89 YARMOUTH, MA A/C Reg. No. N38529 Time (Lcl) - 0740 EST

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

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

-----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 - 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	TAUNTON, MA	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	HYANNIS, MA	Runway Ident - N/A
Wind Dir/Speed- 240/015 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 11.0 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 - 25000 FT BROKEN	Type Apch/Lndg - FORCED LANDING	
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)
PRIVATE	Current - YES	Total - 80
SE LAND	Months Since - 13	Make/Model- 9
	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 OF THE PIPER PA-28, WAS ON A 2 MILE RIGHT BASE LEG TO RUNWAY 24 AT HYANNIS AIRPORT, MA, AND HAD JUST REDUCED POWER WHEN THE THROTTLE GOT STUCK IN THE CLOSED POSITION. THE PILOT FELT THAT HE COULD NOT MAKE IT TO THE AIRPORT, SO HE ATTEMPTED A LANDING ON A HIGHWAY. AS THE AIRCRAFT WAS ABOUT TO TOUCH DOWN ON THE HIGHWAY THE LANDING GEAR HIT A CAR, KILLING A PASSENGER RIDING IN THE CAR. EXAM OF THE ENGINE REVEALED THAT THE THROTTLE SHAFT HAD SEIZED WITH THE THROTTLE PLATE IN THE CLOSED POSITION. EXAM OF SHAFT SCRATCHING AND GALLING AT THE BUSHING. TESTING OF THE BUSHING AND SHAFT REVEALED BOTH WERE MANUFACTURED OF THE SAME MATERIAL AND WERE BELOW THE HARDNESS SPECIFICATION OF THE CARBURETOR MANUFACTURER. THE CARBURETOR HAD BEEN MANUFACTURED APPROXIMATELY 10 FLIGHT HOURS PRIOR TO THE ACCIDENT.

Brief of Accident (Continued)

File No. - 1508

2/11/89

YARMOUTH, MA

A/C Reg. No. N38529

Time (Lcl) - 0740 EST

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation APPROACH - VFR PATTERN - BASE LEG/BASE TO FINAL

Finding(s)

1. FUEL SYSTEM, CARBURETOR - JAMMED
 2. FUEL SYSTEM - RESTRICTED -
 3. MAINTENANCE, OVERHAUL - IMPROPER - OTHER MAINTENANCE PSNL
-

Occurrence #2 FORCED LANDING
Phase of Operation APPROACH - VFR PATTERN - BASE LEG/BASE TO FINAL

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

Finding(s)

4. OBJECT - VEHICLE
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
A LOSS OF ENGINE POWER AND SUBSEQUENT FORCED LANDING WHICH RESULTED FROM BINDING OF THE CARBUERATOR THROTTLE SHAFT.
THE BINDING RESULTED FROM AN IMPROPER OVERHAUL OF THE CARBUERTOR APPROXIMATELY 10 FLIGHT HOURS PRIOR TO THE ACCIDENT.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1494 9/08/89 BOSTON, MA A/C Reg. No. N203Q Time (Lcl) - 1515 EDT

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

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

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

Make/Model - ENSTROM F28A	Eng Make/Model - LYCOMING H10-360-C1A	ELT Installed/Activated - NO	-N/A
Landing Gear - SKID	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 2150	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	LOCAL	BOSTON HELIPOINT
Wind Dir/Speed- 110/004 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 5.0 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 - 46	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - UNK/NR	Total - 6500
SE LAND, SE SEA	Months Since - UNK/NR	Make/Model- 3000
HELICOPTER	Aircraft Type - UNK/NR	Instrument- 70
		Last 24 Hrs - 3
		Last 30 Days- 60
		Last 90 Days- 200
		Rotorcraft - 4000

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DRG LIFT-OFF TO A HOVER AT THE BEGINNING OF A FLT, A PASSENGER (SEATED IN THE MIDDLE SEAT OF THE HELICOPTER) INADVERTENTLY PUSHED THE CYCLIC CONTROL WITH HIS LEG. THE PLT STATED THAT THIS CAUSED THE HELICOPTER TO DRIFT LEFT & REARWARD. SUBSEQUENTLY, A SKID CAUGHT ON A BARBED WIRE FENCE NEAR THE HELIPAD. SINCE THE PLT DID NOT KNOW WHAT DAMAGE MIGHT HAVE OCCURRED, HE ELECTED TO LAND IMMEDIATELY. AS THE HELICOPTER WAS LANDED, THE MAIN ROTOR BLADE(S) STRUCK A FENCE POST.

Brief of Accident (Continued)

File No. - 1494

9/08/89

BOSTON,MA

A/C Reg. No. N203Q

Time (Lcl) - 1515 EDT

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

Finding(s)

1. CONTROL INTERFERENCE - INADVERTENT - PASSENGER
 2. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
-

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

Finding(s)

3. OBJECT - FENCE
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF PILOT TO MAINTAIN CONTROL OF THE HELICOPTER WHEN A PASSENGER INADVERTENTLY PUSHED THE CYCLIC
CONTROL. THE FENCE (NEAR THE HELIPAD) WAS CONSIDERED TO BE A FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1480 8/27/89 LEONARDTOWN,MD A/C Reg. No. N24463 Time (Lcl) - 1800 EDT

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

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

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

Make/Model - TAYLORCRAFT BC-65	Eng Make/Model - CONTINENTAL A-65-8F	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1100	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	ON AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	ST MARYS COUNTY
Wind Dir/Speed- LIGHT AND VARIABLE	ATC/Airspace	Runway Ident - UNK/NR
Visibility - 7.0 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 - 45	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 308
SE LAND	Months Since - 22	Make/Model- 33
	Aircraft Type - C-172RG	Instrument- 20
		Multi-Eng - 0
		Last 24 Hrs - UNK/NR
		Last 30 Days- 6
		Last 90 Days- 18

Instrument Rating(s) - NONE

-----Narrative-----

TO START THE ENG, THE PLT CHOCKED THE LEFT WHEEL & HAND PROPPED THE ACFT WITH THE THROTTLE SET AT IDLE. HOWEVER, AFTER THE ENG STARTED, ITS RPM WENT ABOVE IDLE & THE ACFT JUMPED THE CHOCK. SUBSEQUENTLY, IT COLLIDED WITH A PARKED ACFT & A RWY LIGHT BEFORE THE PLT CAUGHT THE PLANE & SHUT DOWN THE ENG. HE HAD PERFORMED MAINTENANCE ON THE ENG EARLIER THAT DAY & HAD IMPROPERLY SECURED THE THROTTLE CLAMP, WHICH ALLOWED THE THROTTLE CABLE TO SLIP TO A HIGHER RPM SETTING.

Brief of Accident (Continued)

File No. - 1480

8/27/89

LEONARDTOWN, MD

A/C Reg. No. N24463

Time (Lcl) - 1800 EDT

Occurrence #1 MISCELLANEOUS/OTHER
Phase of Operation STANDING - STARTING ENGINE(S)

Finding(s)

1. THROTTLE/POWER LEVER, CABLE -
2. MAINTENANCE, ADJUSTMENT - IMPROPER - PILOT IN COMMAND
3. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
4. TIE DOWN - NOT USED - PILOT IN COMMAND
5. PROPER ASSISTANCE - NOT OBTAINED - PILOT IN COMMAND

Occurrence #2 ON GROUND COLLISION WITH OBJECT
Phase of Operation TAXI

Finding(s)

6. OBJECT - AIRCRAFT PARKED
7. OBJECT - RUNWAY LIGHT

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
INADEQUATE PREFLIGHT PLANNING/PREPARATION BY THE PILOT BY NOT ASSURING THAT THE ACFT WAS PROPERLY SECURED,
OR THAT SOMEONE WAS AT THE CONTROLS WHILE HE WAS HAND PROPPING THE ENGINE. A RELATED FACTOR WAS THE PILOT'S
IMPROPER ADJUSTMENT OF THE THROTTLE CABLE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1478 11/19/89 MITCHELLVILLE, MD A/C Reg. No. N52491 Time (Lcl) - 1430 EST

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

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

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

Make/Model - CESSNA 172	Eng Make/Model - LYCOMING O-320-H2AD	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 - 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	FREEWAY
Wind Dir/Speed- 270/005 KTS	ATC/Airspace	Runway Ident - 18
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2420/ 30
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 25000 FT OVERCAST	Type Apch/Lndg - NONE	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 31	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 130
SE LAND	Months Since - 0	Make/Model- UNK/NR
	Aircraft Type - C-182	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 0
		Last 30 Days- 3
		Last 90 Days- 7
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

AFTER FLYING ABOUT 1/2 HR IN THE LOCAL AREA, THE PLT RETURNED TO THE ARPT & LANDED. HE THEN TAXIED BACK TO THE APCH END OF THE RWY & INITIATED ANOTHER TAKEOFF. HE STATED THAT HE APPLIED FULL POWER & FULL RPM WAS OBTAINED. ALSO, HE STATED THE ACFT LIFTED OFF AT 60 TO 65 KTS, BUT WOULD ONLY CLIMB ABOUT 10 FT. HE WAS UNSURE OF WHETHER OR NOT, THE ACFT WOULD CLEAR TREES AT THE END OF THE RWY, SO HE ELECTED TO ABORT THE TAKEOFF (ABOUT 1/2 TO 3/4 OF THE WAY DOWN THE RWY). DRG THE ABORTED TAKEOFF, THE ACFT BEGAN TO PORPOISE. SUBSEQUENTLY, ITS NOSE GEAR COLLAPSED. NO PRE-ACDNT PART FAILURE OR MALFUNCTION OF THE ACFT OR ENG WAS RPRTD.

Brief of Accident (Continued)

File No. - 1478

11/19/89

MITCHELLVILLE,MD

A/C Reg. No. N52491

Time (Lcl) - 1430 EST

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

Finding(s)

1. ABORTED TAKEOFF - PERFORMED -
 2. PORPOISE - INADVERTENT - PILOT IN COMMAND
-

Occurrence #2 NOSE GEAR COLLAPSED
Phase of Operation TAKEOFF - ABORTED

Finding(s)

3. LANDING GEAR, NOSE GEAR - OVERLOAD
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT ALLOWED THE AIRCRAFT TO ENTER AN INADVERTENT PORPOISE DURING AN ABORTED TAKEOFF.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1495 4/09/89 GORHAM, ME A/C Reg. No. N43561 Time (Lcl) - 1715 EDT

-----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	1	0	0
Accident Occurred During -DESCENT		0	1	0	0

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

Make/Model - TAYLORCRAFT BC12-D	Eng Make/Model - CONTINENTAL A-65-8	ELT Installed/Activated - YES/NO
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	LIMINGTON, ME	
Completeness - N/A	Destination	Airport Data
Basic Weather - UNK/NR	LOCAL	WEBSTER AIRSTRIP
Wind Dir/Speed- 290/017 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 - 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 - 45	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 420
SE LAND	Months Since - 2	Last 24 Hrs - 5
	Aircraft Type - UNK/NR	Make/Model- UNK/NR
		Last 30 Days- 20
		Instrument- UNK/NR
		Last 90 Days- 35
		Multi-Eng - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD HE FLEW TO A NEARBY AIRSTRIP TO WATCH ANOTHER ACFT LAND; HOWEVER, HE (PLT OF N43561) DID NOT PLAN TO LAND. HE SAID HE FLEW AN UPWIND PASS OVER THE STRIP AT APRX 600 TO 700 FT AGL AS HE WATCHED THE OTHER ACFT LAND. THE LOW PASS WAS MADE IN A RIGHT WING LOW ATTITUDE WHILE USING RUDDER TO MAINTAIN DIRECTIONAL CONTROL. THE PLT RPRTD THAT AS HE FLEW OVER A GRAVEL PIT NEAR THE STRIP, THE ACFT ENCTRD UNFAVORABLE WIND & NOSED UP. HE PUSHED THE YOKE FOWARD & APPLIED FULL POWER; HOWEVER, THE ACFT BEGAN TO ROTATE (SPIN), THEN IT CRASHED IN A STEEP DSCNT. NO PREIMPACT MECHANICAL PROBLEM WAS FOUND.

Brief of Accident (Continued)

File No. - 1495

4/09/89

GORHAM, ME

A/C Reg. No. N43561

Time (Lcl) - 1715 EDT

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

Finding(s)

1. LOW PASS - PERFORMED - PILOT IN COMMAND
 2. WEATHER CONDITION - UNFAVORABLE WIND
 3. AIRSPEED - INADEQUATE - PILOT IN COMMAND
 4. STALL/SPIN - INADVERTENT - PILOT IN COMMAND
 5. DIVERTED ATTENTION - 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 OF THE PILOT TO MAINTAIN ADEQUATE AIRSPEED WHEN HE DIVERTED HIS ATTENTION DURING A LOW PASS AND
ALLOWED THE AIRCRAFT TO ENTER A STALL/SPIN. THE UNFAVORABLE WIND WAS A FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1598 8/16/89 MILBRIDGE, ME A/C Reg. No. N89JD Time (Lcl) - 1430 EDT

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

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

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

Make/Model - ENSTROM 280C	Eng Make/Model - LYCOMING HIO-360	ELT Installed/Activated - YES/NO
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 - 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	Runway Ident - N/A
Wind Dir/Speed- 015 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 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 - 32	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 950
SE LAND, SE SEA	Months Since - 15	Make/Model- 350
HELICOPTER	Aircraft Type - 182RG	Instrument- 61
		Multi-Eng - 7
		Last 24 Hrs - UNK/NR
		Last 30 Days- 20
		Last 90 Days- 40

Instrument Rating(s) - AIRPLANE

-----Narrative-----

SHORTLY AFTER DEPARTING THE PILOT'S PRIVATE HELIPORT IN MILBRIDGE, MAINE, THE HELICOPTER HAD A PARTIAL LOSS OF POWER. IT WAS THEN AUTOROTATED INTO THE NARRAGUAGUS RIVER AND WAS SUBSTANTIALLY DAMAGED. THE NUMBER 3 INTAKE VALVE OUTER SPRING, P/N LW11796, HAD BROKEN NEAR THE TOP OF THE VALVE STEM.

Brief of Accident (Continued)

File No. - 1598

8/16/89

MILBRIDGE, ME

A/C Reg. No. N89JD

Time (Lcl) - 1430 EDT

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

Finding(s)

1. ENGINE ASSEMBLY, VALVE, INTAKE - FAILURE, PARTIAL
-

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

Finding(s)

2. TERRAIN CONDITION - WATER
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE NUMBER 3 INTAKE VALVE OUTER SPRING. THE WATER (RIVER) IN THE EMERGENCY LANDING AREA WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1493 9/04/89 SOUTH HARPSWELL, ME A/C Reg. No. N4554L Time (Lcl) - 1930 EDT

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

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

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

Make/Model - GRUMMAN AA-5B	Eng Make/Model - LYCOMING O-360-A4K	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
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point SAME AS ACC/INC	ON AIRSTRIP
Method - N/A	Destination LOCAL	Airport Data
Completeness - N/A	ATC/Airspace	FARR FIELD
Basic Weather - VMC	Type of Flight Plan - NONE	Runway Ident - 13
Wind Dir/Speed- 350/008 KTS	Type of Clearance - NONE	Runway Lth/Wid - 2000/ 150
Visibility - 50.0 SM	Type Apch/Lndg - TRAFFIC PATTERN	Runway Surface - GRASS/TURF
Lowest Sky/Clouds - CLEAR		Runway Status - DRY
Lowest Ceiling - NONE		
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 20	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 203
SE LAND	Months Since - 14	Make/Model- 15
	Aircraft Type - PA-28	Instrument- 36
		Last 24 Hrs - 2
		Last 30 Days- 18
		Last 90 Days- 28

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPTD THAT DURING A LANDING, THE AIRCRAFT BOUNCED A FEW TIMES, THEN HE ADDED POWER TO GO AROUND AFTER TRAVELING ABOUT 1/3 OF THE WAY DOWN THE RWY. HE STATED THAT AFTER THE ACFT HAD CONTINUED ABOUT 2/3 OF THE WAY DOWN THE RWY, HE SAW THAT IT "WAS NOT REACTING TO THE GO-AROUND AS NEEDED." THEREFORE, HE "CUT (THE) POWER, GOT (THE) AIRCRAFT ON THE GROUND & STEERED TO THE OVERRUN." SUBSEQUENTLY, THE ACFT WAS DAMAGED WHEN IT HIT A TREE & CROSSED A ROADWAY BEFORE STOPPING.

Brief of Accident (Continued)

File No. - 1493

9/04/89

SOUTH HARPSWELL, ME

A/C Reg. No. N4554L

Time (Lcl) - 1930 EDT

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

Finding(s)

1. FLARE - IMPROPER - PILOT IN COMMAND
 2. RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND
-

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

Finding(s)

3. GO-AROUND - DELAYED - PILOT IN COMMAND
 4. ABORT - DELAYED - PILOT IN COMMAND
 5. OBJECT - TREE(S)
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
A DELAY BY THE PILOT IN ABORTING A LATE GO-AROUND. FACTORS RELATED TO THE ACCIDENT WERE: THE PILOT'S IMPROPER FLARE
FOR LANDING, HIS IMPROPER RECOVERY FROM THE SUBSEQUENT BOUNCED LANDING, AND TREE(S) NEAR THE RUNWAY.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1526 7/14/89 PONTIAC,MI A/C Reg. No. N2706T Time (Lcl) - 1445 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 -LANDING					

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

Make/Model - CESSNA 335	Eng Make/Model - CONTINENTAL TSIO-520-EB	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 7912	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 8	Rated Power - 300 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	ON AIRPORT
Method - UNK/NR	DETROIT,MI	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	OAKLAND PONTIAC
Wind Dir/Speed- 360/010 KTS		Runway Ident - 27L
Visibility - 7.0 SM	ATC/Airspace	Runway Lth/Wid - 6250/ 150
Lowest Sky/Clouds - N/A	Type of Flight Plan - VFR	Runway Surface - ASPHALT
Lowest Ceiling - 6000 FT BROKEN	Type of Clearance - VFR	Runway Status - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - STRAIGHT-IN	
Precipitation - NONE	FULL STOP	
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 67	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 4000
SE LAND,ME LAND	Months Since - 5	Make/Model- 1052
	Aircraft Type - AT-6	Instrument- 15
		Multi-Eng - 1100
		Last 24 Hrs - 1
		Last 30 Days- 6
		Last 90 Days- 30

Instrument Rating(s) - NONE

-----Narrative-----

THE AIRCRAFT WAS ON LANDING ROLL-OUT WHEN THE RIGHT MAIN GEAR COLLAPSED. THE PILOT STATED HE HAD A GEAR DOWN AND LOCKED INDICATOR IN THE COCKPIT. THIS WAS THE FIRST FLIGHT AFTER MAINTENANCE WAS PERFORMED ON THE LANDING GEAR ACTUATOR TO CORRECT AN UNSAFE "DOWN" INDICATION. AN INVESTIGATION REVEALED THERE WAS A LOOSE JAMB NUT IN ACTUATOR ADJUSTMENT LINKAGE AND THAT THE INNER GEAR DOOR WAS NOT FULLY CLOSED. THE END FITTING ON THE LOWER SIDE LINK HAD FAILED WHERE THERE WAS EXCESSIVE SIDE PLAY.

Brief of Accident (Continued)

File No. - 1526

7/14/89

PONTIAC,MI

A/C Reg. No. N2706T

Time (Lcl) - 1445 EDT

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

Finding(s)

1. LANDING GEAR,NORMAL RETRACTION/EXTENSION ASSEMBLY - FAILURE,TOTAL
 2. MAINTENANCE,ADJUSTMENT - IMPROPER - OTHER MAINTENANCE PSNL
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE RIGHT MAIN LANDING GEAR EXTENSION/RETRACTION COMPONENT RESULTING FROM UNACCEPTABLE LOADS INCURRED DUE TO
IMPROPER ADJUSTMENT.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1524 11/20/89 PLAINWELL,MI A/C Reg. No. N8750R Time (Lcl) - 1300 EST

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

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

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

Make/Model - HELIO H-391B	Eng Make/Model - LYCOMING GO-435-C2B	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 2900	Engine Type - RECIPROCATING-CARBURETOR	
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 DAVENPORT,IA	ON AIRPORT
Method - N/A	Destination SAME AS ACC/INC	Airport Data
Completeness - N/A	ATC/Airspace	OTSEGO-PLAINWELL MUNI
Basic Weather - VMC	Type of Flight Plan - NONE	Runway Ident - 27
Wind Dir/Speed- 300/020 KTS	Type of Clearance - NONE	Runway Lth/Wid - 2650/ 50
Visibility - 20.0 SM	Type Apch/Lndg - FULL STOP	Runway Surface - ASPHALT
Lowest Sky/Clouds - 3000 FT SCATTERED		Runway Status - DRY
Lowest Ceiling - 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)
PRIVATE	Current - YES	Total - 175
SE LAND	Months Since - 1	Make/Model- 17
	Aircraft Type - PA-18	Instrument- 0
		Last 24 Hrs - 7
		Last 30 Days- UNK/NR
		Last 90 Days- 25

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT STATED THAT DURING TOUCHDOWN, HE LOST DIRECTIONAL CONTROL OF THE AIRCRAFT AND IT SWERVED OFF THE LEFT SIDE OF THE RUNWAY. THE AIRCRAFT'S LEFT MAIN LANDING GEAR COLLAPSED WHEN IT RAN THROUGH SOFT TERRAIN IN A DITCH. THE AIRCRAFT CAME TO A STOP ABOUT 200 FEET FROM THE EDGE OF THE RUNWAY. A POST-ACCIDENT EXAMINATION OF THE AIRCRAFT REVEALED THAT THE CROSS-WIND LANDING GEAR LOCK SYSTEM WAS IMPROPERLY RIGGED. THE LEFT MAIN LANDING GEAR LOCK PIN FAILED TO ENGAGE AND THE LEFT MAIN GEAR WAS FREE TO "CASTER" DURING TOUCHDOWN AND ON THE LANDING ROLL, WHILE THE RIGHT MAIN GEAR REMAINED LOCKED. THE PILOT HAD RECENTLY PURCHASED THE AIRCRAFT. HE STATED THAT HE SHOULD HAVE PERFORMED A MORE THOROUGH PRE-PURCHASE INSPECTION. HE HAD 175 HOURS TOTAL FLIGHT TIME, WITH 17 HOURS IN THIS MAKE AND MODEL OF AIRCRAFT. HE HAD RECEIVED SPECIFIC INSTRUCTION IN THE AIRCRAFT, BECAUSE OF ITS UNCOMMON DESIGN AND CHARACTERISTICS.

Brief of Accident (Continued)

File No. - 1524

11/20/89

PLAINWELL,MI

A/C Reg. No. N8750R

Time (Lcl) - 1300 EST

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

Finding(s)

1. LANDING GEAR, GEAR LOCKING MECHANISM - IMPROPER
 2. MAINTENANCE, ADJUSTMENT - IMPROPER - OTHER MAINTENANCE PSNL
-

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

Finding(s)

3. WEATHER CONDITION - CROSSWIND
 4. WEATHER CONDITION - GUSTS
 5. DIRECTIONAL CONTROL - NOT POSSIBLE -
 6. GROUND LOOP/SWERVE - UNCONTROLLED -
-

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

Finding(s)

7. TERRAIN CONDITION - DITCH
 8. TERRAIN CONDITION - SOFT
-

Occurrence #4 MAIN GEAR COLLAPSED
Phase of Operation LANDING

Finding(s)

9. LANDING GEAR, MAIN GEAR - OVERLOAD
-

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE CROSSWIND LANDING GEAR SYSTEM TO ENGAGE ON THE LEFT MAIN GEAR DUE TO IMPROPER RIGGING
ADJUSTMENT BY MAINTENANCE PERSONNEL. FACTORS RELATED TO THE ACCIDENT WERE: UNFAVORABLE WIND CONDITIONS
(GUSTS AND QUARTERING CROSSWIND) AND SOFT TERRAIN IN THE DITCH.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1492 8/29/89 MOOSE LAKE, MN A/C Reg. No. N2841P Time (Lcl) - 1945 CDT

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

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

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

Make/Model - PIPER PA-20	Eng Make/Model - LYCOMING O-360-A4A	ELT Installed/Activated - NO -N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2000	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		MOOSE LAKE, MN	
Completeness - N/A		Destination	Airport Data
Basic Weather - VMC		LOCAL	
Wind Dir/Speed- 360/019 KTS		ATC/Airspace	Runway Ident - N/A
Visibility - 15.0 SM		Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 3500 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 - 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 - UNK/NR	Total - 246
SE LAND	Months Since - UNK/NR	Make/Model- 218
	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-----

THE ACFT (PIPER PA-22, CONVERTED TO A PA-20, IAW STC SA45AM) WAS BEING USED TO PROVIDE A BIENNIAL FLT REVIEW FOR THE OWNER/PLT (CONSIDERED AS PIC ON THIS FLT). DRG FLT, THE RGT WING FOLDED BACK OVER THE FUSELAGE & THE ACFT CRASHED. AN EXAM OF THE WRECKAGE REVEALED THE FWD LIFT STRUT FOR THE RGT WING HAD FAILED IN AN AREA OF SEVERE CORROSION. THE FAILURE OCCURRED AT THE LOWER PART OF THE LIFT STRUT NEAR THE FUSELAGE ATTACHMENT POINT. AN EXAM OF THE ANNUAL INSPN CHECKLIST INDCD ALL APPLICABLE AIRWORTHINESS DIRECTIVES (AD'S) WERE COMPLIED WITH AS OF 7/21/89 & THAT THE LIFT STRUTS WERE VISUALLY INSPD AT THE ANNUAL INSPN. THE ACFT LOGBOOK SHOWED THAT AD 77-03-08 (REQUIRING MECHANICAL TESTING OF THE LIFT STRUT FOR EVIDENCE OF CORROSION AT 5 YR INTERVALS) HAD BEEN COMPLIED WITH IN JULY 1988. THE AROMA OF LINSEED OIL WAS NOTED IN ALL LIFT STRUTS, BUT POLYMERIZED LINSEED OIL WAS FOUND IN THE RGT & LEFT REAR STRUTS. INTERNAL CORROSION HAD PERFORATED THE RGT FWD LIFT STRUT PRIOR TO ITS FAILURE.

Brief of Accident (Continued)

File No. - 1492

8/29/89

MOOSE LAKE, MN

A/C Reg. No. N2841P

Time (Lcl) - 1945 CDT

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

Finding(s)

1. WING, BRACING STRUT - CORRODED
 2. MAINTENANCE, INSPECTION OF AIRCRAFT - INADEQUATE - OTHER MAINTENANCE PSNL
 3. PROCEDURE INADEQUATE - MANUFACTURER
 4. INADEQUATE SURVEILLANCE OF OPERATION - FAA (ORGANIZATION)
 5. WING, BRACING STRUT - FAILURE, TOTAL
 6. WING - OVERLOAD
-

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 LOWER FORWARD LIFT STRUT FOR THE RIGHT WING, INADEQUATE INSPECTION OF THE LIFT STRUT BY MAINTENANCE PERSONNEL, AND SUBSEQUENT FAILURE OF THE LIFT STRUT, WHICH RESULTED IN AN OVERLOAD FAILURE (FOLDING BACK) OF THE WING. RELATED FACTORS WERE: INADEQUATE INSPECTION PROCEDURES PROVIDED BY THE MANUFACTURER & INADEQUATE SURVEILLANCE BY THE FAA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1523 10/22/89 OGILVIE, MN A/C Reg. No. N3961H Time (Lcl) - 1327 CST

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

Type Operating Certificate-EXTERNAL LOAD	Aircraft Damage	Injuries			
	SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation - OTHER WORK USE	Fire	Crew	0	0	0
Flight Conducted Under -14 CFR 133	NONE	Pass	0	0	0
Accident Occurred During -LANDING					

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

Make/Model - HUGHES 369HS	Eng Make/Model - ALLISON 250-C20	ELT Installed/Activated - YES/NO
Landing Gear - SKID	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 2550	Engine Type - TURBOSHAFT	
No. of Seats - 5	Rated Power - 400 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	BRAINERD, MN	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 180	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 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 - 40	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, CFI	Current - YES	Total - 3440
SE LAND	Months Since - 12	Make/Model- 175
HELICOPTER	Aircraft Type - 58T	Instrument- 343
		Multi-Eng - UNK/NR
		Last 24 Hrs - 2
		Last 30 Days- 25
		Last 90 Days- 25
		Rotorcraft - 3175

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT SAID THAT AFTER DROPPING HIS SLING LOAD, DURING A HELICOPTER FIRE CONTROL OPERATION, HE NOTED A LOSS OF ENGINE RPM. THE ENGINE OUT LIGHT ILLUMINATED FOLLOWED BY THE LOW RPM WARNING AUDIO. AN EMERGENCY AUTOROATION WAS MADE IN A BURNED OUT SWAMPY AREA. AFTER TOUCHDOWN, THE AIRCRAFT ROLLED OVER & WAS DAMAGED. NO PRE-ACCIDENT PART FAILURE OR MALFUNCTION OF THE ENGINE OR SYSTEMS WAS FOUND AND THERE WAS NO EVIDENCE OF A FUEL SUPPLY SHORTAGE.

Brief of Accident (Continued)

File No. - 1523

10/22/89

OGILVIE,MN

A/C Reg. No. N3961H

Time (Lcl) - 1327 CST

Occurrence #1 LOSS OF ENGINE POWER
Phase of Operation MANEUVERING - AERIAL APPLICATION

Finding(s)

1. REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Finding(s)

2. AUTOROTATION

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

Finding(s)

3. TERRAIN CONDITION - NONE SUITABLE
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:
LOSS OF ENGINE POWER FOR AN UNDETERMINED REASON. FACTORS RELATED TO THE ACCIDENT WERE: THE UNSUITABLE
TERRAIN CONDITIONS IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1578 11/02/89 SAINT PAUL, MN A/C Reg. No. N3174S Time (Lcl) - 0436 CST

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

Type Operating Certificate	ON-DEMAND AIR TAXI	Aircraft Damage		Injuries			
Name of Carrier	-AIR METHODS, INC.	SUBSTANTIAL		Fatal	Serious	Minor	None
Type of Operation	-NON SCHED, DOMESTIC, PASSENGER	Fire	Crew	0	0	0	1
Flight Conducted Under	-14 CFR 135	NONE	Pass	0	0	0	2
Accident Occurred During	-LANDING						

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

Make/Model	- BELL 206L-3	Eng Make/Model	- ALLISON 250-C30B	ELT Installed/Activated	- YES/NO
Landing Gear	- SKID	Number Engines	- 1	Stall Warning System	- NO
Max Gross Wt	- 4150	Engine Type	- TURBOSHAFT		
No. of Seats	- 4	Rated Power	- 650 HP		

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

Weather Data		Itinerary	Airport Proximity
Wx Briefing	- COMMERCIAL WX SERVICE	Last Departure Point	ON AIRPORT
Method	- TV/RADIO	MINNEAPOLIS, MN	
Completeness	- WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather	- VMC	SAME AS ACC/INC	HOLMAN FLD
Wind Dir/Speed	- 300/004 KTS	ATC/Airspace	Runway Ident - 27
Visibility	- 4.000 SM	Type of Flight Plan	Runway Lth/Wid - 200/ 300
Lowest Sky/Clouds	- N/A	- COMPANY (VFR)	Runway Surface - ASPHALT
Lowest Ceiling	- 1100 FT OVERCAST	Type of Clearance	Runway Status - DRY
Obstructions to Vision	- NONE	- NONE	
Precipitation	- SNOW	Type Apch/Lndg	
Condition of Light	- NIGHT (DARK)	- FULL STOP	
		FORCED LANDING	

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

Pilot-In-Command	Age - 40	Medical Certificate	- VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL, ATP, CFI	Current - YES	Total - 4436	Last 24 Hrs - 2
SE LAND, ME LAND, SE SEA	Months Since - 6	Make/Model- 1435	Last 30 Days- 26
HELICOPTER	Aircraft Type - S76A	Instrument- 176	Last 90 Days- 74
		Multi-Eng - 9	Rotorcraft - 4063

Instrument Rating(s) - AIRPLANE, HELICOPTER

-----Narrative-----

DRG AN EMERGENCY MEDICAL SVC (EMS/MEDEVAC) FLT, THE PLT ENCTR'D STRONGER HEADWINDS THAN EXPECTED. AFTER DELIVERING A PATIENT, HE ESTIMATED 12 MIN OF FUEL WAS REMAINING. SINCE THE FLT TO HIS HOME BASE WOULD TAKE ABOUT 6 MIN, HE ELECTED TO RETURN WITHOUT REFUELING. WHILE ARRIVING ABEAM OF HIS DESTN, A FUEL BOOST PUMP LIGHT ILLUMINATED. THE PLT SAID HE EXPEDITED HIS APCH, BUT AT ABOUT 50' AGL, A 2ND BOOST PUMP LIGHT ILLUMINATED. THE ENG THEN LOST POWER FROM FUEL EXHAUSTION. SUBSEQUENTLY, THE HELICOPTER WAS DAMAGED DRG AN EMERGENCY AUTOROTATION (AT NIGHT).

Brief of Accident (Continued)

File No. - 1578

11/02/89

SAINT PAUL, MN

A/C Reg. No. N3174S

Time (Lcl) - 0436 CST

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

Finding(s)

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

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Finding(s)

4. AUTOROTATION

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

Finding(s)

5. LIGHT CONDITION - DARK NIGHT

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER PLANNING/DECISION BY THE PILOT, WHICH RESULTED IN FUEL EXHAUSTION DUE TO AN INADEQUATE SUPPLY OF FUEL.
DARKNESS WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1429 11/22/89 RICHMOND, MN A/C Reg. No. N8074R Time (Lcl) - 1750 CST

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

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

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

Make/Model - BEECH A24R	Eng Make/Model - LYCOMING IO-360-A1B	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-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SPEARFISH, SD	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	ST CLOUD, MN	
Wind Dir/Speed- 330/004 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 - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - NIGHT (DARK)		

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

Pilot-In-Command	Age - 21	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 110
SE LAND	Months Since - 1	Make/Model- 7
	Aircraft Type - UNK/NR	Instrument- 2
		Multi-Eng - 0
		Last 24 Hrs - 7
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

WHEN THE X-COUNTRY BEGAN, THE VACUUM SYS & COMM RADIOS WERE INOP, BUT OTHERWISE, THE INITIAL LEG OF THE FLT WAS NORMAL. THE PLT CHECKED THAT THE ACFT LGTS WERE OPERG FOR THE RTRN FLT, BUT HE NOTED THE FUEL GAUGES INDCD EMPTY (ALTHOUGH THE ACFT HAD BEEN FULLY SVCD WITH FUEL). AT ABT SUNSET ON THE RTRN FLT, THE ELECTRICAL SYS BCM INOP & THE NORMAL LNDG GEAR EXTN SYS & FLAPS WOULD NOT OPERATE. ABOUT 15 MIN LATER, AS THE ACFT WAS NEARING ITS DESTN, THE ENG LOST POWER & THE PLT MANUALLY EXTENDED THE LNDG GEAR, USING HIS FLASHLIGHT TO MONITOR THE AIRSPEED. THE PLT STATED THAT HE SWITCHED THE FUEL SELECTOR & TRIED TO RESTART THE ENG, BUT WAS UNABLE. SUBSEQUENTLY, A CRASH LNDG WAS MADE AT THE TOP OF A RIVER BANK AT NIGHT. DRG AN INVESTIGATION, THE FUEL SELECTOR WAS FOUND POSITIONED TO AN EMPTY TANK & THE OTHER TANK STILL CONTAINED USABLE FUEL. THE PLT HAD ACCUMULATED ABT 7 HRS OF FLT TIME IN THIS MAKE & MODEL OF ACFT, ALL ON THE DAY OF THE ACDNT.

Brief of Accident (Continued)

File No. - 1429

11/22/89

RICHMOND, MN

A/C Reg. No. N8074R

Time (Lcl) - 1750 CST

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

Finding(s)

1. ENGINE INSTRUMENTS, FUEL QUANTITY GAGE - INOPERATIVE
2. OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - PERFORMED - PILOT IN COMMAND
3. LIGHT CONDITION - DARK NIGHT
4. ELECTRICAL SYSTEM - INOPERATIVE
5. FLUID, FUEL - STARVATION
6. FUEL TANK SELECTOR POSITION - IMPROPER USE OF - PILOT IN COMMAND

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Finding(s)

7. EMERGENCY PROCEDURE - IMPROPER - PILOT IN COMMAND

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

Finding(s)

8. TERRAIN CONDITION - NONE SUITABLE

----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER USE OF THE FUEL TANK SELECTOR BY THE PILOT AND HIS IMPROPER USE OF EMERGENCY PROCEDURES, WHICH RESULTED
IN FUEL STARVATION AFTER A FUEL TANK HAD EMPTIED. CONTRIBUTING FACTORS WERE: INOPERATIVE FUEL QUANTITY GAUGES,
PILOT'S OPERATION WITH KNOWN DEFICIENCIES IN THE AIRCRAFT, DARK NIGHT, TOTAL LOSS OF ELECTRICAL POWER, AND LACK
OF SUITABLE TERRAIN FOR A FORCED LANDING.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1510 12/13/89 CAPE GIRARDEAU, MO A/C Reg. No. N525GT Time (Lcl) - 1230 CST

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

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

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

Make/Model - BEECH 80	Eng Make/Model - LYCOMING IGSO-540-A1D	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 8800	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 380 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	ATLANTA, GA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	CAPE GIRARDEAU
Wind Dir/Speed- 190/012 KTS	ATC/Airspace	Runway Ident - 20
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3996/ 100
Lowest Sky/Clouds - 5000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 12000 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 - 58	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 3500
ME LAND, SE LAND	Months Since - 16	Make/Model- UNK/NR
	Aircraft Type - UNK/NR	Instrument- 2000
		Multi-Eng - 3000
		Last 24 Hrs - 2
		Last 30 Days- 8
		Last 90 Days- 20
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT SAID THAT WHEN HE DEPARTED ON A PERSONAL CROSS COUNTRY TRIP, THE LANDING GEAR FAILED TO RETRACT COMPLETELY. HE CONTINUED HIS TRIP. AFTER ARRIVING AT HIS DESTINATION, HE WAS UNABLE TO GET A SAFE GEAR INDICATION AND WAS UNABLE TO LOWER THE GEAR BY EMERGENCY PROCEDURES. LOW PASSES PAST THE TOWER CONFIRMED ALL THREE WHEELS WERE DOWN, BUT THE NOSE GEAR APPEARED NOT TO BE IN POSITION. A LANDING WAS MADE. DURING THE ROLL-OUT, ALL THREE GEAR LEGS COLLAPSED. A POST-ACCIDENT INVESTIGATION REVEALED THE GEAR MOTOR WAS BURNED OUT AND THE LANDING GEAR EMERGENCY PUMP WAS INOPERATIVE DUE TO A MISPLACED CRANK HANDLE.

Brief of Accident (Continued)

File No. - 1510

12/13/89

CAPE GIRARDEAU,MO

A/C Reg. No. N525GT

Time (Lcl) - 1230 CST

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation TAKEOFF - INITIAL CLIMB

Finding(s)

1. ELECTRICAL SYSTEM,ELECTRIC MOTOR - FAILURE,TOTAL
 2. LANDING GEAR,NORMAL RETRACTION/EXTENSION ASSEMBLY - INOPERATIVE
 3. LANDING GEAR,EMERGENCY EXTENSION ASSEMBLY - INOPERATIVE
-

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

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
AN INOPERATIVE LANDING GEAR EXTENSION SYSTEM DUE TO FAILURE OF AN ELECTRIC MOTOR AND A MISPLACED EMERGENCY CRANK HANDLE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1435 6/04/89 GULFPORT, MS A/C Reg. No. N9700Q Time (Lcl) - 1043 CDT

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

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

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

Make/Model - BEECH A24R	Eng Make/Model - LYCOMING IO-360-A1B	ELT Installed/Activated - YES/NO
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-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	OFF AIRPORT/STRIP
Method - UNK/NR	PENSACOLA, FL	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	BATON ROUGE, LA	Runway Ident - N/A
Wind Dir/Speed- 160/008 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 SM	Type of Flight Plan - IFR	Runway Surface - N/A
Lowest Sky/Clouds - 3000 FT SCATTERED	Type of Clearance - IFR	Runway Status - N/A
Lowest Ceiling - 25000 FT BROKEN	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 26	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 451
SE LAND	Months Since - 10	Make/Model- 31
	Aircraft Type - A24R	Instrument- 111
		Multi-Eng - 5
		Last 24 Hrs - 1
		Last 30 Days- 25
		Last 90 Days- 57

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE CRUISING IN VFR CONDS ON AN IFR FLT PLAN, THE ENG FAILED & THE PLT ELECTED TO LAND ON A ROAD. AS HE WAS MAKING AN APCH TO LAND, THE ACFT COLLIDED WITH A POWER LINE & A TREE. AN EXAM OF THE ENG REVEALED THE #2 CONNECTING ROD ASSEMBLY HAD FAILED & THE #2 CYLINDER HAD SUBSEQUENTLY SEPARATED. ACCORDING TO THE ACFT OWNER, THE ACFT HAD PREVIOUSLY BEEN INVOLVED IN A SUDDEN ENG STOPPAGE AFTER THE NOSE GEAR HAD COLLAPSED. THE ENG WAS THEN OVERHAULED. AFTER ABOUT ANOTHER 15 HRS OF OPN, THE NOSE GEAR COLLAPSED AGAIN. SUBSEQUENTLY, A DIE PENETRANT CHECK & RUNOUT OF THE CRANKSHAFT FLANGE WAS MADE. ACCORDING TO THE ENG MANUFACTURER, THE INSTALLED CONNECTING RODS & BEARINGS DID NOT CONFORM TO LYCOMING SVC BULLETING #439, DATED 2/17/79. THE ACFT HAD BEEN OPERATED SOME 200 TO 300 HRS SINCE THE LAST ENG OVERHAUL (FOLLOWING THE 1ST GEAR COLLAPSE).

Brief of Accident (Continued)

File No. - 1435

6/04/89

GULFPORT, MS

A/C Reg. No. N9700Q

Time (Lcl) - 1043 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
2. MAINTENANCE - INADEQUATE -

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

3. OBJECT - WIRE, TRANSMISSION
4. 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:
FAILURE OF A #2 CONNECTING ROD ASSEMBLY, WHICH RESULTED IN SEPARATION OF THE #2 CYLINDER AND SUBSEQUENT LOSS OF ENGINE
POWER. CONTRIBUTING FACTORS WERE: INADEQUATE MAINTENANCE, THE TRANSMISSION (POWER) LINE, AND TREES.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1427 7/02/89 HOLLANDALE, MS A/C Reg. No. N3775J Time (Lcl) - 1700 CDT

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

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

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

Make/Model - CESSNA T188C	Eng Make/Model - CONTINENTAL TS10-520	ELT Installed/Activated - UNK/NR
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2500	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 1	Rated Power - 310 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	HOLLENDALE, MS	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 110/007 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 30.0 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 - 15000 FT BROKEN	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 33	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 2742
SE LAND	Months Since - 7	Make/Model- 1500
	Aircraft Type - C-182	Instrument- 10
		Last 24 Hrs - 5
		Last 30 Days- 75
		Last 90 Days- 125

Instrument Rating(s) - NONE

-----Narrative-----

WHILE RETURNING TO THE ARPT AFTER A SPRAYING OPN, A REDUCTION OF ENG POWER OCCURRED. SUBSEQUENTLY, THE PLT LANDED THE ACFT IN A RICE PADDY AND IT NOSED OVER. AN EXAM OF THE ENG REVEALED THAT THE TURBOCHARGER IMPELLER RETAINING NUT HAD COME LOOSE, WHICH RESULTED IN DAMAGE TO THE TURBOCHARGER. THE PLT STATED THE ENG QUIT PRODUCING POWER & HE WAS FORCED TO LAND IN A FLOODED RICE FIELD.

Brief of Accident (Continued)

File No. - 1427

7/02/89

HOLLANDALE, MS

A/C Reg. No. N3775J

Time (Lcl) - 1700 CDT

Occurrence #1 LOSS OF ENGINE POWER
Phase of Operation CRUISE

Finding(s)

1. EXHAUST SYSTEM, TURBOCHARGER - FAILURE, TOTAL
 2. MAINTENANCE, INSTALLATION - IMPROPER - OTHER MAINTENANCE PSNL
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 NOSE OVER
Phase of Operation LANDING

Finding(s)

3. TERRAIN CONDITION - WET
 4. TERRAIN CONDITION - SOFT
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE FAILURE OF THE TURBOCHARGER DUE TO AN IMPROPERLY INSTALLED RETAINING NUT. THE SOFT/WET TERRAIN
WAS A CONTRIBUTING FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1447 8/13/89 JANICE,MS A/C Reg. No. N1976Q Time (Lcl) - 2126 CDT

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

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

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

Make/Model - CESSNA 177RG	Eng Make/Model - LYCOMING IO-360-A1B6D	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2800	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 200 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	HATTIESBURG,MS	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	GULFPORT,MS	Runway Ident - N/A
Wind Dir/Speed- CALM	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 6.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 15000 FT SCATTERED	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
Obstructions to Vision- HAZE		
Precipitation - NONE		
Condition of Light - NIGHT(DARK)		

-----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 - 1200
SE LAND	Months Since - 1	Last 24 Hrs - 2
	Aircraft Type - C-177RG	Make/Model- UNK/NR
		Last 30 Days- UNK/NR
		Instrument- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR
		Multi-Eng - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE FLT WAS OPERATING IN AN AREA OF REDUCED VISIBILITY DUE TO HAZE, OVER AN UNPOPULATED AREA, AT NIGHT. REVIEW OF RADAR DATA INDICATES THE NON-INSTRUMENT RATED PLT HAD DIFFICULTY MAINTAINING A CONSTANT HEADING AND ALTITUDE DURING THE 15 MINUTE FLT. AS THE PLT RECEIVED THE CURRENT RUNWAY AND ALTIMETER SETTING AT THE DESTINATION AIRPORT, THE AIRPLANE WAS OBSERVED TO MAKE A DESCENDING RIGHT TURN TO IMPACT WITH TREES AND THE TERRAIN. THE PLT HAD VOICED CONCERNS REGARDING THE HAZY CONDITIONS TO SEVERAL PEOPLE PRIOR TO THE FLT. THE PLT'S NIGHT CURRENCY AND TOTAL FLT EXPERIENCE COULD NOT BE DETERMINED FROM RECORDS. WEATHER INFORMATION LISTED ABOVE WAS AT A LOCATION 36 MILES FROM THE ACCIDENT SITE. PLTS FLYING IN THE VICINITY OF THE ACCIDENT SITE ESTIMATED VISIBILITY TO VARY BETWEEN 1 AND 2 MILES WITH FOG.

Brief of Accident (Continued)

File No. - 1447

8/13/89

JANICE,MS

A/C Reg. No. N1976Q

Time (Lcl) - 2126 CDT

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

Finding(s)

1. LIGHT CONDITION - NIGHT
2. WEATHER CONDITION - HAZE/SMOKE
3. VFR FLIGHT INTO IMC - INADVERTENT - PILOT IN COMMAND
4. SELF-INDUCED PRESSURE - PILOT IN COMMAND
5. LACK OF TOTAL INSTRUMENT TIME - PILOT IN COMMAND
6. SPIRAL - INADVERTENT - PILOT IN COMMAND

Occurrence #2 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation DESCENT - UNCONTROLLED

Finding(s)

7. OBJECT - TREE(S)

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

Finding(s)

8. TERRAIN CONDITION - GROUND

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE IN FLIGHT LOSS OF CONTROL BY THE NON INSTRUMENT RATED PILOT AFTER ENCOUNTERING INSTRUMENT METEOROLOGICAL
CONDITIONS RESULTING IN THE AIRPLANE SPIRALING INTO A WOODED AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1576 8/14/89 QUITMAN, MS A/C Reg. No. N9085T Time (Lcl) - 1240 CDT

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

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

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

Make/Model - CONTINENTAL COPTER TOMCAT MK6C	Eng Make/Model - LYCOMING VO-435-A1F	ELT Installed/Activated - NO	-N/A
Landing Gear - SKID	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 2850	Engine Type - RECIPROCATING-CARBURETOR		
No. of Seats - 1	Rated Power - 265 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- 070/006 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 6.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 4500 FT SCATTERED	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
Obstructions to Vision- HAZE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 44	Medical Certificate - VALID	MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL, CFI	Current - YES	Total - 11800	Last 24 Hrs - 3
SE LAND, ME LAND	Months Since - 8	Make/Model- 1260	Last 30 Days- 100
HELICOPTER	Aircraft Type - BH-47G2	Instrument- 350	Last 90 Days- 520
		Multi-Eng - 1500	

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE MANEUVERING TO BEGIN SPRAYING OPERATIONS, THE HELICOPTER ROLLED TO THE RGT, DESCENDED NOSE LOW & COLLIDED WITH TERRAIN. AN EXAM OF THE HELICOPTER REVEALED EVIDENCE THAT THE LOWER TAIL BOOM ATTACHMENT BOLT WAS ELONGATED AND THAT THE ATTACHING BOLT HAD FAILED. THIS ALLOWED THE TAIL BOOM TO BEND UPWARD UNTIL THE MAIN ROTOR BLADES CONTACTED THE TAIL ROTOR. OPERATOR PSNL BELIEVED THE ELONGATED HOLE WAS DUE TO MOVEMENT OF THE TAIL BOOM, WHILE BEING TRAIERED TO DIFFERENT SPRAYING LOCATIONS.

Brief of Accident (Continued)

File No. - 1576

8/14/89

QUITMAN,MS

A/C Reg. No. N9085T

Time (Lcl) - 1240 CDT

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

Finding(s)

1. MISC ROTORCRAFT, TAIL BOOM - FAILURE, TOTAL
-

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 THE TAIL BOOM ATTACHMENT.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1519 10/25/89 COLUMBIA,MS A/C Reg. No. N19007 Time (Lcl) - 1250 CDT

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

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

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

Make/Model - CESSNA 150L	Eng Make/Model - CONTINENTAL O-200-A	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1600	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 100 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	COLUMBIA,MS	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	COLUMBIA
Wind Dir/Speed- CALM		Runway Ident - N/A
Visibility - 8.0 SM	ATC/Airspace	Runway Lth/Wid - N/A
Lowest Sky/Clouds - CLEAR	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Ceiling - NONE	Type of Clearance - NONE	Runway Status - N/A
Obstructions to Vision- NONE	Type Apch/Lndg - NONE	
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)
COMMERCIAL,CFI	Current - UNK/NR	Total - 5000
SE LAND,ME LAND	Months Since - UNK/NR	Make/Model- 500
	Aircraft Type - UNK/NR	Instrument- 750
		Multi-Eng - 500
		Last 24 Hrs - 1
		Last 30 Days- 10
		Last 90 Days- 25

Instrument Rating(s) - AIRPLANE

-----Narrative-----

AFTER THE PLT TOOK OFF, THE ACFT WAS OBSERVED TO ENTER A CLIMB, WHICH CONTINUED UNTIL THE ACFT WAS OUT OF SIGHT. ABOUT 3 TO 5 MIN LATER, THE ACFT WAS OBSERVED IN AN UNUSUALLY HIGH RATE OF DESCENT & IN A STEEP NOSE DOWN ATTITUDE UNTIL IMPACT. NO PRE-ACDNT PART FAILURE OR MALFUNCTION WAS FOUND. THE PLT WAS RPRTD TO BE DISTRESSED BY ALLEGATION OF A RECENT ILLEGAL ACTIVITY. IN A LETTER TO HIS PARENTS, HE ALLUDED TO TAKING HIS LIFE.

Brief of Accident (Continued)

File No. - 1519

10/25/89

COLUMBIA,MS

A/C Reg. No. N19007

Time (Lcl) - 1250 CDT

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

Finding(s)

1. SUICIDE - INTENTIONAL - PILOT IN COMMAND
 2. EMOTIONAL REACTION - 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:
SUICIDE. THE PILOT'S EMOTIONAL STATE OF DISTRESS WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1559 9/18/89 NEIHART, MT A/C Reg. No. N3456X Time (Lcl) - 0722 MDT

-----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	1	0	0
Accident Occurred During	-DESCENT	NONE	Pass 0	0	0	0

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

Make/Model - MOONEY M20C	Eng Make/Model - LYCOMING O-360-A1D	ELT Installed/Activated - UNK/NR
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2575	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 - IMC</p> <p>Wind Dir/Speed- 310/009 KTS</p> <p>Visibility - UNK/NR</p> <p>Lowest Sky/Clouds - UNK/NR</p> <p>Lowest Ceiling - OVERCAST</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;">HARDIN, MT</p> <p>Destination</p> <p style="padding-left: 20px;">LEWISTON, ID</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;">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</p>	<p>Age - 39</p> <p>Biennial Flight Review</p> <p>Current - UNK/NR</p> <p>Months Since - UNK/NR</p> <p>Aircraft Type - UNK/NR</p>	<p>Medical Certificate - EXPIRED</p> <p>Flight Time (Hours)</p> <p>Total - 1632</p> <p>Make/Model- UNK/NR</p> <p>Instrument- UNK/NR</p> <p>Multi-Eng - UNK/NR</p> <p>Last 24 Hrs - UNK/NR</p> <p>Last 30 Days- UNK/NR</p> <p>Last 90 Days- UNK/NR</p> <p>Rotorcraft - UNK/NR</p>
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Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE INSTRUMENT RATED COMMERCIAL PILOT REPORTED THAT HE WAS CRUISING AT 14,500 FEET WHEN HE ENCOUNTERED CLOUDS. HE DESCENDED TO 12,500 FEET AND THEN TO 11,000 FEET IN AN EFFORT TO AVOID THE WEATHER. HE STATED "I DESCENDED DOWN TO ELEVEN THOUSAND AND THE TREES CAME RIGHT UP ON ME. I WAS VFR, DIDN'T FILE A FLIGHT PLAN . . ." ELEVATION OF THE CRASH SITE WAS 9175 FEET.

Brief of Accident (Continued)

File No. - 1559

9/18/89

NEIHART,MT

A/C Reg. No. N3456X

Time (Lcl) - 0722 MDT

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

Finding(s)

1. WEATHER CONDITION - CLOUDS
2. WEATHER CONDITION - LOW CEILING
3. WEATHER CONDITION - FOG
4. WEATHER CONDITION - RAIN
5. VFR FLIGHT INTO IMC - CONTINUED - PILOT IN COMMAND

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

Finding(s)

6. TERRAIN CONDITION - HIGH TERRAIN
7. TERRAIN CONDITION - TREE(S)
8. PROPER ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
VFR FLIGHT BY THE PILOT INTO INSTRUMENT METEOROLOGICAL CONDITIONS (IMC) AND HIS FAILURE TO MAINTAIN
SUFFICIENT ALTITUDE. RELATED FACTORS WERE: THE HIGH TERRAIN AND ADVERSE WEATHER CONDITIONS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1531 5/13/89 TROY, NC A/C Reg. No. N99766 Time (Lcl) - 1920 EDT

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

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

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

Make/Model - ERCOUPE 415-C	Eng Make/Model - CONTINENTAL C-75-12	ELT Installed/Activated - UNK/NR
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - UNK/NR
Max Gross Wt - 1260	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 75 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	ROBBINS, NC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	WADESBORO, NC	
Wind Dir/Speed- 240/008 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 - NONE	Type Apch/Lndg - PRECAUTIONARY LANDING	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 33	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 321
SE 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

Instrument Rating(s) - NONE

-----Narrative-----

AFTER A LOW PASS OVER AN OPEN FIELD, THE ACFT COLLIDED WITH TREES, CRASHED & BEGAN BURNING. ONE WITNESS NOTED THE ACFT HAD CIRCLED THE AREA 2 OR 3 TIMES AT LOW ALT BEFORE THE ACDNT & THAT THE ENG WAS RUNNING ERRATICALLY. THE WITNESS ALSO NOTED THAT THERE WERE SVRL OPEN FIELDS IN THE VICINITY. AN EXAM REVEALED THE IGNITION SYS WIRES TO THE SPARK PLUGS WERE DETERIORATED. NO OTHER PREIMPACT PART FAILURE OR MALFUNCTION WAS FOUND THAT WOULD HAVE RESULTED IN THE ACDNT; HOWEVER, THE ENG WAS DAMAGED BY FIRE. THE LAST ANNUAL INSPN WAS ON 11/14/83; FLT TIME SINCE THEN WAS ABOUT 13 HRS. THE PLT WAS AN IA-RATED MECHANIC, WHO HAD BEEN HIRED BY THE NEW OWNER TO RETURN THE ACFT TO AN AIRWORTHY STATUS AND FERRY IT TO ANOTHER ARPT.

Brief of Accident (Continued)

File No. - 1531

5/13/89

TROY, NC

A/C Reg. No. N99766

Time (Lcl) - 1920 EDT

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

Finding(s)

1. POWERPLANT - UNDETERMINED
 2. MAINTENANCE, INSPECTION OF AIRCRAFT - INADEQUATE - PILOT IN COMMAND
-

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

Finding(s)

3. PRECAUTIONARY LANDING - DELAYED - PILOT IN COMMAND
 4. OBJECT - TREE(S)
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
AN UNDETERMINED POWERPLANT PROBLEM, WHICH RESULTED IN A LOSS OF ENGINE POWER, AND THE PILOT/MECHANIC'S FAILURE TO
ASSURE THE AIRCRAFT WAS PROPERLY INSPECTED BEFORE FLIGHT. FACTORS RELATED TO THE ACCIDENT WERE: THE PILOT'S DELAY IN
MAKING A PRECAUTIONARY LANDING, AND OBSTRUCTIONS (TREES) IN THE PRECAUTIONARY LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1440 5/13/89 FUQUAY, NC A/C Reg. No. N733VS Time (Lcl) - 1530 EDT

-----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	1
Accident Occurred During -LANDING		0	0	0	0

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

Make/Model - CESSNA 172N	Eng Make/Model - LYCOMING O-320-H2AD	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2300	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 160 HP	

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

Weather Data		Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING		Last Departure Point	ON AIRPORT
Method - N/A		SAME AS ACC/INC	
Completeness - N/A		Destination	Airport Data
Basic Weather - VMC		LOCAL	TRIPLE W AIR PARK
Wind Dir/Speed- 120/005 KTS			Runway Ident - 16
Visibility - 15.0 SM	ATC/Airspace		Runway Lth/Wid - 3004/ 70
Lowest Sky/Clouds - UNK/NR SCATTERED	Type of Flight Plan - NONE		Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type of Clearance - NONE		Runway Status - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - TRAFFIC PATTERN		
Precipitation - NONE	TOUCH AND GO		
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)
STUDENT	Current - N/A	Total - 47
	Months Since - N/A	Make/Model- 45
	Aircraft Type - N/A	Instrument- 0
		Multi-Eng - 0
		Last 24 Hrs - 1
		Last 30 Days- 5
		Last 90 Days- 9
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

DURING A SOLO-INSTRUCTIONAL FLIGHT, THE STUDENT PILOT LANDED HARD DURING HER FOURTH TOUCH-&-GO LANDING. SHE REPORTED THAT SHE DID NOT ADEQUATELY FLARE THE AIRPLANE AND SHE WAS UNABLE TO MAINTAIN DIRECTIONAL CONTROL ON THE RUNWAY. SUBSEQUENTLY, THE AIRPLANE WENT INTO A SWAMPY AREA BESIDE THE RUNWAY AND WAS DAMAGED.

Brief of Accident (Continued)

File No. - 1440

5/13/89

FUQUAY, NC

A/C Reg. No. N733VS

Time (Lcl) - 1530 EDT

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

Finding(s)
1. FLARE - IMPROPER - PILOT IN COMMAND

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

Finding(s)
2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
3. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Occurrence #3 ON GROUND COLLISION WITH TERRAIN/WATER
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 STUDENT PILOT TO MAINTAIN DIRECTIONAL CONTROL OF THE AIRCRAFT DURING THE LANDING, WHICH RESULTED
IN AN INADVERTENT GROUND SWERVE. CONTRIBUTING FACTORS WERE: IMPROPER FLARE BY THE STUDENT DURING THE LANDING, WHICH
RESULTED IN A HARD LANDING, AND THE SOFT/WET (SWAMPY) TERRAIN CONDITIONS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1507 9/29/89 HATTERAS, NC A/C Reg. No. N2333L Time (Lcl) - 1320 EDT

-----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	1	0
			0	0	1	0

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

Make/Model - BEECH B23	Eng Make/Model - LYCOMING O-320-D2B	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2300	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 160 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	MANTEO, NC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	OCRACOCKE, NC	Runway Ident - N/A
Wind Dir/Speed- 070/004 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 10000 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 - 38	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 700
SE LAND	Months Since - 22	Last 24 Hrs - 1
	Aircraft Type - B23	Make/Model- 250
		Last 30 Days- 3
		Instrument- 20
		Last 90 Days- 3
		Multi-Eng - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT REPORTED EXPERIENCING ENGINE PROBLEMS WHILE EN ROUTE TO OCRACOCKE, NC. HE DESCRIBED A GRADUAL REDUCTION IN ENGINE RPM UNTIL IT STABILIZED AT 1500 RPM. THROUGHOUT THE EMERGENCY, THE PILOT APPLIED CARBURETOR HEAT WHICH FURTHER REDUCED THE RPM. THE TEMP/DEW POINT WERE 79/63 DEGREES, RESPECTIVELY. THE CONDITIONS WERE CONDUCIVE FOR THE FORMATION OF INDUCTION ICING. THE AIRCRAFT WAS DAMAGED WHEN IT HIT BUSHES DURING A FORCED LANDING. SUBSEQUENT WRECKAGE EXAMINATION FAILED TO INDICATE ANY TYPE OF SYSTEM PROBLEM. THE PILOT REPORTED THAT HE DRAINED WATER FROM THE FUEL SYSTEM DURING THE PRE-FLIGHT INSPECTION OF THE AIRPLANE.

Brief of Accident (Continued)

File No. - 1507

9/29/89

HATTERAS, NC

A/C Reg. No. N2333L

Time (Lcl) - 1320 EDT

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

Finding(s)

1. REASON FOR OCCURRENCE UNDETERMINED
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

2. TERRAIN CONDITION - HIGH VEGETATION
-

----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.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1504 10/18/89 KERNERSVILLE, NC A/C Reg. No. N1155M Time (Lcl) - 2030 EDT

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

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

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

Make/Model - CESSNA 210	Eng Make/Model - CONTINENTAL TS10-520-A	ELT Installed/Activated - UNK/NR
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3300	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 285 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - UNK/NR	ADDISON, TX	
Completeness - FULL	Destination	Airport Data
Basic Weather - IMC	ELKIN, NC	PIEDMONT TRIAD INTL
Wind Dir/Speed- 050	ATC/Airspace	Runway Ident - 05
Visibility - UNK/NR	Type of Flight Plan - IFR	Runway Lth/Wid - 10000/ 150
Lowest Sky/Clouds - UNK/NR	Type of Clearance - IFR	Runway Surface - ASPHALT
Lowest Ceiling - 700 FT BROKEN	Type Apch/Lndg - ILS-COMPLETE	Runway Status - WET
Obstructions to Vision- FOG	FORCED LANDING	
Precipitation - RAIN		
Condition of Light - DUSK		

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

Pilot-In-Command	Age - 24	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 500
SE LAND, ME LAND	Months Since - 5	Make/Model- 50
	Aircraft Type - UNK/NR	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- 150
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT HAD PLANNED A 5 HR FLT TO ELKIN, NC. HE ESTD THE ACFT HAD 6.5 HRS OF FUEL ON BOARD. AT ELKIN, HE ATTEMPTED TO LAND FROM AN NDB APCH, BUT MADE A MISSED APCH & DIVERTED TO GREENSBORO, NC. HE OBTAINED VECTORS FOR AN ILS 5 APCH AT GREENSBORO, BUT THE ENG BEGAN LOSING POWER FROM FUEL EXHAUSTION ABOUT 8 MI FROM THE ARPT. SUBSEQUENTLY, IT CRASHED INTO TREES DURING A FORCED LANDING AFTER ABOUT 5.5 HRS OF FLT.

Brief of Accident (Continued)

File No. - 1504

10/18/89

KERNERSVILLE, NC

A/C Reg. No. N1155M

Time (Lcl) - 2030 EDT

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

Finding(s)

1. WEATHER CONDITION - LOW CEILING
 2. WEATHER CONDITION - FOG
 3. WEATHER CONDITION - RAIN
 4. FLIGHT TO ALTERNATE DESTINATION
-

Occurrence #2 LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL
Phase of Operation APPROACH

Finding(s)

5. FUEL CONSUMPTION CALCULATIONS - IMPROPER - PILOT IN COMMAND
 6. FLUID, FUEL - EXHAUSTION
 7. FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
-

Occurrence #3 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

8. LIGHT CONDITION - DUSK
 9. OBJECT - TREE(S)
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER FUEL CONSUMPTION CALCULATIONS BY THE PILOT, WHICH RESULTED IN FUEL EXHAUSTION FROM LACK OF FUEL. ADVERSE
WEATHER CONDITIONS WERE RELATED TO THE ACCIDENT.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1486 11/19/89 BURLINGTON, NC A/C Reg. No. N89212 Time (Lcl) - 1130 EST

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

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

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

Make/Model - CESSNA 152	Eng Make/Model - LYCOMING O-235-L2C	ELT Installed/Activated - YES-UNK/NR
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 BURLINGTON, NC	OFF AIRPORT/STRIP
Method - N/A	Destination LOCAL	Airport Data
Completeness - N/A	ATC/Airspace	Runway Ident - N/A
Basic Weather - VMC	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Wind Dir/Speed- 120/007 KTS	Type of Clearance - NONE	Runway Surface - N/A
Visibility - 15.0 SM	Type Apch/Lndg - FORCED LANDING	Runway Status - N/A
Lowest Sky/Clouds - UNK/NR THIN BKN		
Lowest Ceiling - NONE		
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 18	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 70
SE LAND	Months Since - 17	Last 24 Hrs - UNK/NR
	Aircraft Type - C-152	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 & PASSENGER TOOK OFF ON A FLT TO TAKE PHOTOS. DRG THE FLT, THE PLT SLOWED THE ACFT TO ABOUT 50 KTS TO ACCOMMODATE THE PASSENGER'S PHOTO PROCESS. HE THEN INCREASED POWER & LOWERED THE NOSE TO GAIN AIRSPEED. AS HE ACCELERATED TO 75 KTS & BEGAN TO CLIMB, THE ENG LOST POWER. ALTITUDE AT ABOUT THAT TIME WAS ABOUT 800' AGL. THE PLT TRIED TO MANEUVER AROUND A BARN TO LAND IN A FIELD; HOWEVER, THE ACFT HIT THE BARN & CRASHED IN AN INVERTED ATTITUDE. A POST-ACDNT EXAM OF THE ACFT FAILED TO REVEAL ANY PREIMPACT MECHANICAL PROBLEMS. THE TEMP & DEW POINT WERE RPRTD TO BE 41 & 15 DEG. ACCORDING TO CARB ICE CHARTS, CONDS WERE NOT CONDUCIVE TO CARB ICE.

Brief of Accident (Continued)

File No. - 1486

11/19/89

BURLINGTON, NC

A/C Reg. No. N89212

Time (Lcl) - 1130 EST

Occurrence #1 LOSS OF ENGINE POWER
Phase of Operation MANEUVERING

Finding(s)

1. REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

2. OBJECT - BUILDING (NONRESIDENTIAL)

-----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. THE BARN WAS CONSIDERED TO BE A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1553 12/29/89 WINSTON SALEM, NC A/C Reg. No. N5145V Time (Lcl) - 1545 EST

-----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	1	0	0
Accident Occurred During -LANDING			0	0	1	0

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

Make/Model - MORRISEY 2150A	Eng Make/Model - LYCOMING O-320	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1817	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		WILKSBORO, NC	
Completeness - N/A		Destination	Airport Data
Basic Weather - VMC		TRINITY, NC	
Wind Dir/Speed- 250/005 KTS		ATC/Airspace	Runway Ident - N/A
Visibility - 15.0 SM		Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 12000 FT SCATTERED		Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - NONE		Type Apch/Lndg - FORCED LANDING	Runway Status - N/A
Obstructions to Vision- NONE			
Precipitation - NONE			
Condition of Light - DAYLIGHT			

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

Pilot-In-Command	Age - 64	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 223
SE LAND	Months Since - UNK/NR	Last 24 Hrs - 2
	Aircraft Type - UNK/NR	Make/Model- UNK/NR
		Last 30 Days- 3
		Instrument- UNK/NR
		Last 90 Days- 20
		Multi-Eng - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

ABOUT 15 MINUTES AFTER TAKEOFF, THE PILOT EXPERIENCED A COMPLETE POWER LOSS. HIS ATTEMPTS TO RESTART THE ENGINE FAILED & THE AIRPLANE CRASHED IN A WOODED AREA. A WRECKAGE EXAMINATION DISCLOSED THAT THE LEFT FUEL VENT WAS BLOCKED, WHICH RESTRICTED AND TERMINATED THE GRAVITY FLOW OF FUEL TO THE ENGINE. THIS BLOCKAGE WAS LOCATED WITHIN THE WING STRUCTURE. THE PILOT WAS OPERATING FROM THE LEFT FUEL TANK WHEN THE ENGINE QUIT.

Brief of Accident (Continued)

File No. - 1553

12/29/89

WINSTON SALEM, NC

A/C Reg. No. N5145V

Time (Lcl) - 1545 EST

Occurrence #1 LOSS OF ENGINE POWER
Phase of Operation CRUISE

Finding(s)

1. FUEL SYSTEM, VENT - BLOCKED (TOTAL)
 2. FLUID, FUEL - STARVATION
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

3. OBJECT - TREE(S)
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
A BLOCKED FUEL VENT LINE, WHICH PREVENTED NORMAL FUEL FLOW TO THE ENGINE AND SUBSEQUENT LOSS OF POWER.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1545 7/04/89 BROKEN BOW,NE A/C Reg. No. N8636V Time (Lcl) - 1150 CDT

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

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

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

Make/Model - BELLANCA 8KCAB	Eng Make/Model - LYCOMING AEIO-320-E1B	ELT Installed/Activated - UNK/NR
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1800	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 2	Rated Power - 150 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	DENVER, CO	BROKEN BOW
Wind Dir/Speed- 120/014 KTS		Runway Ident - N/A
Visibility - 10.0 SM	ATC/Airspace	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 8000 FT SCATTERED	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Ceiling - NONE	Type of Clearance - NONE	Runway Status - N/A
Obstructions to Vision- NONE	Type Apch/Lndg - 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,CFI	Current - YES	Total - 1200
SE LAND,ME LAND	Months Since - 14	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

Instrument Rating(s) - AIRPLANE

-----Narrative-----

BEFORE TAKEOFF, SOMEONE ASKED THE PLT TO PERFORM A ROLL. DURING DEPARTURE, THE ACFT PROCEEDED OUTBOUND ABOUT 3 MI, THEN WAS TURNED BACK TOWARD THE ARPT. A ROLL WAS PERFORMED, BUT SOON THEREAFTER, THE ACFT ENTERED A DSCNT & BEGAN SPINNING. WITNESSES RPRTD THE ACFT MADE ABOUT 2 TURNS OF A SPIN BEFORE DISAPPEARING FROM THEIR VIEW. SUBSEQUENTLY, IT IMPACTED IN A STEEP DESCENT & WAS EXTENSIVELY DAMAGED. AN INVESTIGATION REVEALED THAT 2 BACK PACKS, A BAG OF CLOTHING & A FOLDING CHAIR HAD BEEN STOWED IN THE REAR SEAT AS BAGGAGE. THE PILOT HANDBOOK STATED THAT "BAGGAGE IS NOT ALLOWED DURING ACROBATIC FLIGHT."

Brief of Accident (Continued)

File No. - 1545

7/04/89

BROKEN BOW, NE

A/C Reg. No. N8636V

Time (Lcl) - 1150 CDT

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

Finding(s)

1. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
 2. AEROBATICS - PERFORMED - PILOT IN COMMAND
 3. FLIGHT CONTROL SYSTEM - MOVEMENT RESTRICTED
 4. AIRCRAFT CONTROL - NOT POSSIBLE -
 5. STALL - UNCONTROLLED -
-

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

Finding(s)

6. TERRAIN CONDITION - GROUND
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER PLANNING/DECISION BY THE PILOT BY PERFORMING ACROBATIC FLIGHT WITH BAGGAGE IN THE REAR COCKPIT
OF THE AIRCRAFT, WHICH PROBABLY RESTRICTED MOVEMENT OF THE FLIGHT CONTROLS AND RESULTED IN UNCONTROLLED
FLIGHT AND A SPIN.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1544 7/23/89 NELIGH, NE A/C Reg. No. N66295 Time (Lcl) - 1515 CDT

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

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

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

Make/Model - BEECH C23	Eng Make/Model - LYCOMING O-360-A4K	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2450	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 180 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	SPENCER, IA	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	KEARNEY, NE	
Wind Dir/Speed- 210/008 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 10.0 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 - 6000 FT BROKEN	Type Apch/Lndg - NONE	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - RAIN		
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 - UNK/NR	Total - 100
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-----

THE ACFT CRASHED NEAR NELIGH, NE, AS IT WAS ON A X-COUNTRY FLT FROM SPENCER, IA, TO KEARNEY, NE. A WITNESS, WHO HEARD THE ACFT, SAID IT WAS PROCEEDING ON A SOUTHWESTERLY HEADING AT LOW ALTITUDE BEFORE IT CRASHED. AN EYE WITNESS RPRTD THAT JUST BEFORE THE ACDNT, THE ACFT ENTERED A STEEP CLIMB (TO AN ESTIMATED 500 TO 600 FT), THEN IT ENTERED A STEEP DESCENT & DISAPPEARED FROM HIS VIEW. AN EXAM OF THE WRECKAGE REVEALED IT HAD IMPACTED IN A NEAR VERTICAL DESCENT. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE ACFT WAS FOUND. THE PLT HAD RECEIVED HIS PRIVATE PLT CERTIFICATE ABOUT 2 WKS BEFORE THE ACDNT.

Brief of Accident (Continued)

File No. - 1544

7/23/89

NELIGH,NE

A/C Reg. No. N66295

Time (Lcl) - 1515 CDT

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

Finding(s)

1. MANEUVER - INITIATED - PILOT IN COMMAND
 2. ALTITUDE - INADEQUATE - PILOT IN COMMAND
 3. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
 4. STALL - INADVERTENT - PILOT IN COMMAND
 5. LACK OF TOTAL EXPERIENCE - 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 OF THE PILOT TO MAINTAIN ADEQUATE AIRSPEED AFTER INITIATING A STEEP CLIMBING MANEUVER FROM
LOW ALTITUDE. FACTORS RELATED TO THE ACCIDENT WERE: THE PILOT'S LACK OF TOTAL FLYING EXPERIENCE
AND LACK OF SUFFICIENT ALTITUDE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1546 9/20/89 HYANNIS, NE A/C Reg. No. N733FY Time (Lcl) - 2030 MST

----Basic Information----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage	Injuries			
	SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation -NON SCHED, DOMESTIC, PASSENGER	Fire	Crew	0	1	0
Flight Conducted Under -14 CFR 135	NONE	Pass	0	1	1
Accident Occurred During -DESCENT					0

----Aircraft Information----

Make/Model - CESSNA 172N	Eng Make/Model - LYCOMING O-320-H2AD	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2300	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 160 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELETYPE	COLUMBUS, NE	
Completeness - FULL	Destination	Airport Data
Basic Weather - IMC	ALLIANCE, NE	Runway Ident - N/A
Wind Dir/Speed- 340/012 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - UNK/NR	Type of Flight Plan - VFR	Runway Surface - N/A
Lowest Sky/Clouds - UNK/NR	Type of Clearance - VFR	Runway Status - N/A
Lowest Ceiling - OVERCAST	Type Apch/Lndg - NONE	
Obstructions to Vision- UNK/NR		
Precipitation - RAIN		
Condition of Light - NIGHT (DARK)		

----Personnel Information----

Pilot-In-Command	Age - 54	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 2000
SE LAND	Months Since - 12	Make/Model- 300
	Aircraft Type - C-172	Instrument- 56
		Multi-Eng - UNK/NR
		Last 24 Hrs - 8
		Last 30 Days- 33
		Last 90 Days- 98
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

----Narrative----

THE PILOT RECEIVED A COMPLETE WEATHER BRIEFING FOR HIS INTENDED ROUTE OF FLIGHT. THE BRIEFING INCLUDED WARNING ADVISORIES AFFECTING HIS INTENDED ROUTE. THE PILOT FILED A VFR FLIGHT PLAN; HOWEVER, HE ENCOUNTERED MARGINAL WX CONDITIONS AT NIGHT WITH HEAVY RAIN. HE ELECTED TO MAKE A 180 DEGREE TURN AND LAND AT A NEARBY AIRPORT. HE SAID HE LEANED FORWARD TO LOOK AT THE MAGNETIC COMPASS, BUT COULD NOT REMEMBER ANYTHING FURTHER ABOUT THE FLIGHT. AN INVESTIGATION REVEALED THE AIRCRAFT HAD DESCENDED & COLLIDED WITH THE TERRAIN.

Brief of Accident (Continued)

File No. - 1546

9/20/89

HYANNIS, NE

A/C Reg. No. N733FY

Time (Lcl) - 2030 MST

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

Finding(s)

1. LIGHT CONDITION - DARK NIGHT
 2. WEATHER CONDITION - LOW CEILING
 3. WEATHER CONDITION - RAIN
 4. FLIGHT TO ALTERNATE DESTINATION - INITIATED - PILOT IN COMMAND
 5. ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO MAINTAIN SUFFICIENT ALTITUDE. DARKNESS AND ADVERSE WEATHER CONDITIONS WERE RELATED FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1594 7/31/89 WOLFEBORO, NH A/C Reg. No. N1526F Time (Lcl) - 1730 EDT

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

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

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

Make/Model - CESSNA 185D	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 - 3350	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 300 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	OFF AIRPORT/STRIP
Method - UNK/NR	LACONIA, NH	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 320/008 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 40.0 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 - 42	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 365
SE LAND, SE SEA	Months Since - 15	Make/Model- 35
	Aircraft Type - J-3	Instrument- 0
		Last 24 Hrs - 14
		Last 30 Days- 22
		Last 90 Days- 25

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT DURING CRUISE FLT, THE ENG POWER DROPPED TO 900 RPM. AS HE APCHD A LAKE TO LAND, THERE WERE BOATS AHEAD & A WOODED AREA TO HIS LEFT, SO HE MANEUVERED TO THE RIGHT TO LAND. SUBSEQUENTLY, THE ACFT TOUCHED DOWN LEFT FLOAT 1ST & WAS DAMAGED. NO REASON WAS FOUND FOR THE POWER LOSS.

Brief of Accident (Continued)

File No. - 1594

7/31/89

WOLFEBORO, NH

A/C Reg. No. N1526F

Time (Lcl) - 1730 EDT

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

Finding(s)

1. REASON FOR OCCURRENCE UNDETERMINED
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 HARD LANDING
Phase of Operation LANDING

Finding(s)

2. TERRAIN CONDITION - WATER
 3. AIRPORT FACILITIES - HIGH OBSTRUCTION(S)
 4. MANEUVER - PERFORMED - PILOT IN COMMAND
 5. FLARE - NOT ATTAINED - PILOT IN COMMAND
 6. TERRAIN CONDITION - WATER
-

-----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. FACTORS RELATED TO THE ACCIDENT WERE: THE OBSTRUCTIONS (TREES & BOATS)
IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1587 8/02/89 PLYMOUTH, NH A/C Reg. No. N39752 Time (Lcl) - 1930 EDT

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

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

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

Make/Model - WACO UPF-7	Eng Make/Model - CONTINENTAL W-670-64	ELT Installed/Activated - YES/NO
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 2650	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 3	Rated Power - 220 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	PLYMOUTH
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - 30
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2340/ 120
Lowest Sky/Clouds - 10000 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 - 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)
COMMERCIAL,CFI	Current - YES	Total - 1667
SE LAND,ME LAND	Months Since - 21	Make/Model- 45
	Aircraft Type - C-172RC	Instrument- 42
		Multi-Eng - 246
		Last 24 Hrs - 1
		Last 30 Days- 85
		Last 90 Days- 250
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT PERFORMED A PREFLIGHT AND A THOROUGH INSPECTION OF THE AIRCRAFT PRIOR TO TAKEOFF. DURING TAKEOFF, THE AIRCRAFT ACCELERATED NORMALLY, BUT THE PILOT STATED THAT IT FELT SLUGGISH AFTER LIFT OFF, SO HE IMMEDIATELY CUT THE POWER AND ABORTED THE TAKEOFF. AFTER TOUCHDOWN, THE AIRCRAFT VEERED OFF THE LEFT SIDE OF THE RUNWAY, STRUCK A DRAINAGE DITCH AND NOSED OVER.

Brief of Accident (Continued)

File No. - 1587

8/02/89

PLYMOUTH, NH

A/C Reg. No. N39752

Time (Lcl) - 1930 EDT

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

Finding(s)

1. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
 2. GROUND LOOP/SWERVE - UNCONTROLLED - PILOT IN COMMAND
-

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

Finding(s)

3. 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:
LOSS OF DIRECTIONAL CONTROL DURING AN ABORTED TAKEOFF. THE DITCH WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1498 1/19/89 LUMBERTON,NJ A/C Reg. No. N201MQ Time (Lcl) - 2150 EST

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

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

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

Make/Model - MOONEY M20J	Eng Make/Model - LYCOMING IO-360-A1B6D	ELT Installed/Activated - UNK/NR
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
Wx Briefing - NO RECORD OF BRIEFING		Last Departure Point	ON AIRPORT
Method - N/A		NEW HAVEN,CT	
Completeness - N/A		Destination	Airport Data
Basic Weather - VMC		SAME AS ACC/INC	FLYING W
Wind Dir/Speed- 050/003 KTS			Runway Ident - 01
Visibility - 15.0 SM	ATC/Airspace		Runway Lth/Wid - 3496/ 60
Lowest Sky/Clouds - CLEAR	Type of Flight Plan - NONE		Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type of Clearance - NONE		Runway Status - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - TOUCH AND GO		
Precipitation - NONE			
Condition of Light - NIGHT(BRIGHT)			

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

Pilot-In-Command	Age - 43	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 270
SE LAND	Months Since - UNK/NR	Last 24 Hrs - UNK/NR
	Aircraft Type - UNK/NR	Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

AFTER ARRIVING FROM A X-COUNTRY TRIP, THE PILOT DECIDED TO MAKE A TOUCH-&-GO LANDING. DRG THE TOUCH-&-GO, THE ACFT WENT OFF THE RIGHT SIDE OF THE RWY & STRUCK TREES. NO PREIMPACT MECHANICAL PROBLEMS WERE FOUND.

Brief of Accident (Continued)

File No. - 1498

1/19/89

LUMBERTON, NJ

A/C Reg. No. N201MQ

Time (Lcl) - 2150 EST

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

Finding(s)

1. TOUCH-AND-GO - INITIATED -
 2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
 3. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
-

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

Finding(s)

4. OBJECT - TREE(S)
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO MAINTAIN DIRECTIONAL CONTROL DURING A TOUCH-AND-GO, WHICH RESULTED IN AN INADVERTENT
GROUND SWERVE. THE PRESENCE OF TREES NEAR THE RUNWAY WAS CONSIDERED TO BE A FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1465 1/28/89 BLAIRSTOWN, NJ A/C Reg. No. N5300G Time (Lcl) - 1500 EST

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

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

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

Make/Model - CESSNA 305A	Eng Make/Model - CONTINENTAL O-470-11B	ELT Installed/Activated - NO -N/A
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2300	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 213 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NWS	Last Departure Point	ON AIRPORT
Method - TV/RADIO	SAME AS ACC/INC	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LOCAL	BLAIRSTOWN
Wind Dir/Speed- 240/016 KTS	ATC/Airspace	Runway Ident - 25
Visibility - 12.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3102/ 70
Lowest Sky/Clouds - 25000 FT THIN BKN	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 - 32	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - UNK/NR	Total - 4766
SE LAND, ME LAND	Months Since - UNK/NR	Make/Model- 1217
GLIDER	Aircraft Type - UNK/NR	Instrument- 224
		Multi-Eng - 11
		Last 24 Hrs - 3
		Last 30 Days- 25
		Last 90 Days- 93

Instrument Rating(s) - AIRPLANE

-----Narrative-----

CESSNA 305A, N5300G, WAS BEING USED TO TOW A GLIDER (SCHWEIZER SGS-1-26C, N8612R) FROM A 3102 FT GRASS RWY. THE GLIDER PLT ESTIMATED THE TOW LINE WAS LESS THAN 150 FT IN LENGTH. HE RPRTD THE SCHWEIZER WAS VERY SENSITIVE ON TOW & THAT THE MANUFACTURER'S RECOMMENDED TOWING SPEED WAS 50 TO 60 MPH, BUT THE TOW PLT PREFERRED A HIGHER TOW SPEED. ON SVRL PREVIOUS OCCASIONS, THE GLIDER PLT HAD REQUESTED A "CONSERVATIVE" SPEED. RPRTDLY, THEY COMPROMISED ON A SLOW TOW TO 1000' AGL, THEN A SPEED OF 80 MPH TO THE RELEASE POINT. THE GLIDER PLT STATED THE WIND WAS GUSTY, BUT THE INITIAL CLIMB AFTER TAKEOFF WAS NORMAL TO ABOUT 150' AGL, THEN THE GLIDER ENCOUNTERED TURBULENCE. SLACK DEVELOPED IN THE TOW LINE & THE GLIDER PLT CORRECTED BY USING YAW. WITNESSES RPRTD THE GLIDER MOVED OUT OF PSN TO THE LEFT, THEN RIGHT, THEN BACK LEFT & HIGH, RAISING THE TAIL OF THE TOW PLANE. SUBSEQUENTLY, THE TOW PLANE ENTERED A STEEP DSCNT & CRASHED, THOUGH BOTH PLTS HAD RELEASED THE TOW LINE. THE GLIDER LNDD SAFELY. NO PREIMPACT MECHANICAL PROBLEMS WERE FOUND.

Brief of Accident (Continued)

File No. - 1465

1/28/89

BLAIRSTOWN, NJ

A/C Reg. No. N5300G

Time (Lcl) - 1500 EST

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

Finding(s)

1. WEATHER CONDITION - GUSTS
 2. WEATHER CONDITION - TURBULENCE
 3. CLIMB - EXCESSIVE - PILOT OF OTHER AIRCRAFT
 4. GLIDER TOW RELEASE - DELAYED - PILOT OF OTHER AIRCRAFT
 5. GLIDER TOW RELEASE - 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:
DELAYS BY BOTH PILOTS IN RELEASING THE GLIDER TOW LINE AFTER THE GLIDER PILOT ALLOWED THE GLIDER TO MANEUVER
EXCESSIVELY ABOVE THE TOW AIRCRAFT. THE WEATHER CONDITIONS WERE FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1593 2/27/89 DELMONT, NJ A/C Reg. No. N8471P Time (Lcl) - 1633 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 -LANDING					

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

Make/Model - PIPER PA-24-400	Eng Make/Model - LYCOMING IO-720-A1A	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3600	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 400 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	WILMINGTON, DE	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	CAPE MAY, NJ	
Wind Dir/Speed- UNK/NR	ATC/Airspace	Runway Ident - N/A
Visibility - 7.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - 3500 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 - 50	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 2338
SE LAND, SE SEA	Months Since - 11	Make/Model- 41
	Aircraft Type - SNJ-5	Instrument- 144
		Last 24 Hrs - 1
		Last 30 Days- 30
		Last 90 Days- 39

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PIPER PA-24-400 WAS CRUISING AT 2000 FT WHEN THE PILOT HEARD A LOUD BANG. THE ENGINE STARTED TO VIBRATE & IT LOST OIL PRESSURE. AN OFF AIRPORT LANDING WAS MADE IN A FIELD & THE AIRCRAFT STRUCK TREES. A POST-CRASH EXAMINATION OF THE ENGINE REVEALED A FAILURE OF THE NUMBER 6 CONNECTING ROD. IN ADDITION, THE PISTONS WERE FOUND TO BE LARGER THAN THE MANUFACTURER'S SPECIFICATIONS. THE ENGINE HAD A TOTAL TIME OF 1400 HRS WITH 40.5 HRS SINCE OVERHAUL.

Brief of Accident (Continued)

File No. - 1593

2/27/89

DELMONT, NJ

A/C Reg. No. N8471P

Time (Lcl) - 1633 EDT

Occurrence #1 AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
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 ON GROUND COLLISION WITH OBJECT
Phase of Operation LANDING - ROLL

Finding(s)

2. OBJECT - FENCE
 3. OBJECT - TREE(S)
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE #6 CONNECTING ROD.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1592 7/23/89 ATLANTIC CITY, NJ A/C Reg. No. N8061C Time (Lcl) - 1045 EDT

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

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

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

Make/Model - PIPER PA-18A	Eng Make/Model - LYCOMING O-320-A2B	ELT Installed/Activated - UNK/NR
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1500	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 1	Rated Power - 150 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	RIO GRANDE, NJ	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- UNK/NR	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 4.000 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- HAZE		
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	Current - YES	Total - 1768
SE LAND	Months Since - 17	Last 24 Hrs - 5
	Aircraft Type - C-172RG	Make/Model- 123
		Instrument- 104
		Last 30 Days- 126
		Last 90 Days- 208

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT WAS ATTEMPTING TO PICK UP A BANNER LOCATED ADJACENT TO GARDEN STATE PARKWAY. THE BANNER WAS SUCCESSFULLY PICKED UP, BUT THE PILOT STATED THAT IT FELT HEAVY EVEN WITH FULL POWER BEING APPLIED. HE APPLIED RIGHT RUDDER PRESSURE TO CORRECT A WING LOW ATTITUDE & FORWARD PRESSURE TO LOWER THE AIRCRAFT NOSE. THE AIRCRAFT DID NOT ACCELERATE. AS THE PILOT REACHED FOR THE BANNER RELEASE, THE LEFT WING CLIPPED A 20 FT PINE TREE & THE AIRCRAFT CARTWHEELED COUNTERCLOCKWISE, IMPACTING THE GROUND IN A NOSE DOWN ATTITUDE.

Brief of Accident (Continued)

File No. - 1592

7/23/89

ATLANTIC CITY, NJ

A/C Reg. No. N8061C

Time (Lcl) - 1045 EDT

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

Finding(s)

1. AIRSPEED - INADEQUATE - PILOT IN COMMAND
 2. LOAD JETTISON - DELAYED - 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 PILOT'S FAILURE TO MAINTAIN ADEQUATE FLYING SPEED, AND HIS DELAY TO JETTISON THE BANNER. A FACTOR RELATED TO THE
ACCIDENT WAS: THE LOCATION OF THE TREES.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1568 10/21/89 TETERBORO, NJ A/C Reg. No. N244MB Time (Lcl) - 1030 EDT

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

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

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

Make/Model - CESSNA T210N	Eng Make/Model - CONTINENTAL TS10-520	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3800	Engine Type - RECIPI-FUEL INJECTED	
No. of Seats - 6	Rated Power - 316 HP	

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

Weather Data		Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING		Last Departure Point	ON AIRPORT
Method - N/A		NORFORK, VA	
Completeness - N/A		Destination	Airport Data
Basic Weather - VMC		TETERBORO, NJ	TETERBORO
Wind Dir/Speed- 260/010 KTS		ATC/Airspace	Runway Ident - 24
Visibility - 10.0 SM		Type of Flight Plan - NONE	Runway Lth/Wid - 6015/ 150
Lowest Sky/Clouds - 7000 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 - 42	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 3750
SE LAND	Months Since - 10	Make/Model- 1500
	Aircraft Type - UNK/NR	Instrument- 400
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE LANDING, THE MAIN LANDING GEAR COLLAPSED, BUT THE NOSE GEAR REMAINED DOWN AND LOCKED. THE AIRCRAFT THEN VEERED TO THE RIGHT AND CAME TO REST OFF THE SIDE OF THE RUNWAY. AN INSPECTION OF THE AIRCRAFT REVEALED A LOSS OF FLUID FROM THE HYDRAULIC SYSTEM.

Brief of Accident (Continued)

File No. - 1568

10/21/89

TETERBORO, NJ

A/C Reg. No. N244MB

Time (Lcl) - 1030 EDT

Occurrence #1 GEAR COLLAPSED
Phase of Operation LANDING

Finding(s)

1. FLUID, HYDRAULIC - LACK OF
 2. LANDING GEAR, GEAR LOCKING MECHANISM - NOT ENGAGED
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
LACK OF HYDRAULIC FLUID IN THE HYDRAULIC SYSTEM.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1571 9/10/89 SUNLAND PARK, NM A/C Reg. No. N9342R Time (Lcl) - 1130 MDT

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

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

-----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	SANTA TERESA, NM	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 150/003 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	
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)
COMMERCIAL	Current - YES	Total - 5247
SE LAND, ME LAND	Months Since - 10	Make/Model- 1700
	Aircraft Type - C-172	Instrument- 80
		Multi-Eng - 11
		Last 24 Hrs - 8
		Last 30 Days- 102
		Last 90 Days- 299

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE COMMERCIAL PLT WAS APPLYING FERTILIZER TO A COTTON FIELD. HE REPORTED THAT DURING A TURN FROM A SWATH RUN, "THE ENGINE GAVE A SLIGHT RPM INCREASE THEN IT LOST POWER THROUGH THE PROPELLER." THE PLT SAID HE "... PUSHED THE THROTTLE, MIXTURE AND PROPELLER CONTROLS FULL FORWARD, BUT THE ACFT DID NOT RESPOND." HE SAID THE ENGINE CONTINUED TO RUN, BUT THE PLANE LOST AIRSPEED. THE PLT WAS ABLE TO DUMP THE REMAINING FERTILIZER BEFORE IMPACT. AT TOUCHDOWN, THE PLANE NOSED OVER, THE PROPELLER SEPARATED FROM THE ENGINE, THE RIGHT WING WAS SEVERED AND THE FUSELAGE WAS DAMAGED. THE PLANE CAME TO REST INVERTED. AN INVESTIGATION FAILED TO REVEAL ANY EVIDENCE TO EXPLAIN THE REPORTED LOSS OF PROPELLER THRUST.

Brief of Accident (Continued)

File No. - 1571

9/10/89

SUNLAND PARK,NM

A/C Reg. No. N9342R

Time (Lcl) - 1130 MDT

Occurrence #1 LOSS OF ENGINE POWER
Phase of Operation MANEUVERING - AERIAL APPLICATION

Finding(s)

1. REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

2. TERRAIN CONDITION - CROP

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
UNDETERMINED. A FACTOR RELATED TO THE ACCIDENT WAS THE CROP IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1558 9/11/89 WINSTON, NM A/C Reg. No. N9496D Time (Lcl) - 1815 MDT

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

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

Make/Model - PIPER PA-18A-150	Eng Make/Model - LYCOMING O-320-A2B	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1750	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 150 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	EDGEWOOD, NM	BEAVERHEAD
Wind Dir/Speed- 325/014 KTS	ATC/Airspace	Runway Ident - 30
Visibility - 100.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3840/ 60
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - DIRT
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 - 35	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, ATP, CFI	Current - YES	Total - 7914
SE LAND, ME LAND, SE SEA	Months Since - 0	Make/Model- 25
	Aircraft Type - B737	Instrument- 1063
		Multi-Eng - 6294
		Last 24 Hrs - 2
		Last 30 Days- 98
		Last 90 Days- 258
		Rotorcraft - 5

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT LEANED THE MIXTURE & TOOK OFF ON RWY 30, A HIGH ALT DIRT STRIP WITH A 3.8% UPHILL GRADIENT. WINDS WERE FROM THE NNW AT ABT 14 KTS. AT APRX 200' TO 300' AGL, THE ENG BEGAN TO LOSE POWER. THE ACFT SETTLED & CRASHED ON ROCKY TERRAIN AS THE PLT WAS AVOIDING TREES. FIRE CONSUMED THE ACFT. A TEARDOWN OF THE MARVEL-SCHEBLER MA4-SPA CARB REVEALED IT CONTAINED A COMPOSITE FLOAT (WHICH WAS DETERIORATED), PART OF THE FLOAT TOE WAS MISSING & THE NEEDLE VALVE WAS STUCK. THE VALVE & SEAT WERE COVERED WITH A SOFT/STICKY SUBSTANCE & THE INLET FILTER SCREEN WAS ALMOST ENTIRELY BLOCKED BY FOREIGN DEBRIS. AN STC HAD BEEN ISSUED FOR N9496D, WHICH ALLOWED USE OF AUTO FUEL.

Brief of Accident (Continued)

File No. - 1558

9/11/89

WINSTON, NM

A/C Reg. No. N9496D

Time (Lcl) - 1815 MDT

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

Finding(s)

1. FUEL SYSTEM, CARBURETOR FLOAT - DETERIORATED
 2. FUEL SYSTEM, SCREEN - BLOCKED (PARTIAL)
 3. WEATHER CONDITION - HIGH DENSITY ALTITUDE
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

4. TERRAIN CONDITION - HIGH OBSTRUCTION(S)
 5. TERRAIN CONDITION - ROUGH/UNEVEN
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
DETERIORATED CARBURETOR FLOAT. FACTORS RELATED TO THE ACCIDENT WERE: HIGH DENSITY ALTITUDE AND THE TERRAIN CONDITIONS
IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1557 10/09/89 LAS VEGAS, NM A/C Reg. No. N6029S Time (Lcl) - 1440 MDT

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

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

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

Make/Model - BEECH A36	Eng Make/Model - CONTINENTAL IO-520-BB	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3600	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 285 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - UNK/NR	SAME AS ACC/INC	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LONGMONT, CO	LAS VEGAS
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - 20
Visibility - 30.0 SM	Type of Flight Plan - IFR	Runway Lth/Wid - 5000/ 75
Lowest Sky/Clouds - 5000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 65	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 1698
SE LAND, ME LAND	Months Since - 8	Make/Model- 1200
	Aircraft Type - A36	Instrument- 40
		Multi-Eng - 100
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE ACCIDENT OCCURRED DURING TAKEOFF FROM A 5000 FT LONG ASPHALT RUNWAY WITH CALM WIND AND 8800 FT DENSITY ALTITUDE. THE PILOT ATTEMPTED TWO TAKEOFFS BUT ABORTED BOTH WHEN THE AIRCRAFT DID NOT REACH TAKEOFF SPEED. THE PILOT SAID THAT PRIOR TO THE FIRST ATTEMPT "DURING RUNUP DETONATION OCCURRED SO I ENRICHED THE MIXTURE. THEN I APPLIED POWER FOR TAKEOFF - FULL POWER - MIXTURE CONTROL OUT ABOUT 2 INCHES." THE AIRCRAFT DID NOT ACCELERATE PROPERLY SO SHE ABORTED. DURING THE SECOND TAKEOFF THE PILOT SAID SHE DID NOT ADVANCE THE THROTTLE ALL THE WAY. DESCRIBING THE THIRD ATTEMPT, THE PILOT SAID "SPEED ON TAKE OFF ROLL IMPROVED - GOT UP TO 65 IAS - END OF RUNWAY CAME. PULLED OFF, STALL WARNING HORN, DROPPED NOSE - NO ADDED POWER - HIT THE GROUND & ROLLED THROUGH GRASS..." ACCORDING TO THE TAKEOFF CHART FOR THIS AIRCRAFT, THE TAKEOFF DISTANCE SHOULD HAVE BEEN ABOUT 2000 FEET.

Brief of Accident (Continued)

File No. - 1557

10/09/89

LAS VEGAS, NM

A/C Reg. No. N6029S

Time (Lcl) - 1440 MDT

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

Finding(s)

1. WEATHER CONDITION - HIGH DENSITY ALTITUDE
 2. AIRSPEED (VLOF) - NOT ATTAINED - PILOT IN COMMAND
 3. ABORTED TAKEOFF - NOT PERFORMED - PILOT IN COMMAND
 4. CLIMB - NOT POSSIBLE -
 5. STALL/MUSH
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO ABORT THE TAKEOFF, WHEN SHE FAILED TO ATTAIN SUFFICIENT SPEED WITHIN THE APPROPRIATE TAKEOFF
DISTANCE. A FACTOR RELATED TO THE ACCIDENT WAS: HIGH DENSITY ALTITUDE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1459 10/25/89 PENASCO, NM A/C Reg. No. N93110 Time (Lcl) - 0730 MDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage DESTROYED	Fatal	Injuries		
Type of Operation -PERSONAL	Fire	Crew	0	1	0
Flight Conducted Under -14 CFR 91	ON GROUND	Pass	2	2	0
Accident Occurred During -MANEUVERING				0	0

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

Make/Model - CESSNA T210L	Eng Make/Model - CONTINENTAL TSIO-520	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3800	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 285 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	LOS ALAMOS, NM	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 160/005 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 30.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - 15000 FT BROKEN	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 46	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 990
SE LAND	Months Since - 1	Last 24 Hrs - UNK/NR
	Aircraft Type - UNK/NR	Last 30 Days- UNK/NR
		Last 90 Days- 50
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT & PASSENGERS WERE ON A PERSONAL SIGHTSEEING FLT OVER MOUNTAINOUS TERRAIN. NO RECORD WAS FOUND OF THE PLT RECEIVING A WX BRIEFING OR A FORECAST OF WINDS ALOFT. THE WINDS AT 9000 & 12,000 FT WERE FORECAST TO VARY BETWEEN 200 & 210 DEG AT 25 KTS. THE PLT SAID HE HAD NOT FLOWN IN MTNS AROUND PENASCO, EXCEPT TO FLY OVER THEM AT HIGH ALTITUDE. WHILE FLYING ON AN EAST-SOUTHEASTERLY HEADING, NORTH OF JICARITA PEAK, THE ACFT HIT TREES, CRASHED & BURNED ON RISING TERRAIN AT AN ELEV OF ABOUT 11,500 FT. NO PREIMPACT PART FAILURE/MALFUNCTION OF THE ACFT WAS FOUND. TWO WITNESSES SAW THE ACFT BEFORE IT CRASHED. ONE SAID IT WAS FLYING SVRL HUNDRED FT ABOVE THE TREELINE, THE OTHER ESTIMATED IT WAS AT ABOUT 500 FT AGL. BOTH HEARD THE ENG "REV UP" BEFORE THE ACNT. ONE WITNESS NOTED A STORM WAS APCHG IN THE DISTANCE. THE PLT RPRTD THE ACFT WAS IN A CLIMB AT 130 TO 140 KTS, WHEN IT BEGAN DSCNDG. HE COULD NOT RECALL THE ACNT, BUT AN INVESTIGATION REVEALED THE ACFT WAS LEVELED BEFORE IT HIT TREES ON ABOUT 5 DEG RISING TERRAIN.

Brief of Accident (Continued)

File No. - 1459

10/25/89

PENASCO, NM

A/C Reg. No. N93110

Time (Lcl) - 0730 MDT

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

Finding(s)

1. WIND INFORMATION - NOT OBTAINED - PILOT IN COMMAND
 2. TERRAIN CONDITION - MOUNTAINOUS/HILLY
 3. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
 4. LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND
 5. TERRAIN CONDITION - RISING
 6. WEATHER CONDITION - DOWNDRAFT
 7. ALTITUDE - INADEQUATE - PILOT IN COMMAND
 8. OBJECT - TREE(S)
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was: IMPROPER INFLIGHT PLANNING/DECISION BY THE PILOT, AND HIS FAILURE TO MAINTAIN SUFFICIENT ALTITUDE OVER MOUNTAINOUS TERRAIN. FACTORS RELATED TO THE ACCIDENT WERE: FAILURE OF THE PILOT TO OBTAIN (AND/OR UNDERSTAND) WIND ALOFT INFORMATION, HIS LACK OF FAMILIARITY WITH THE TYPE OF OPERATION (MOUNTAIN FLYING), A DOWNDRAFT, AND THE TERRAIN CONDITIONS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1454 10/02/89 NIXON,NV A/C Reg. No. N2155G Time (Lcl) - 0530 PDT

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

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

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

Make/Model	- CESSNA 182A	Eng Make/Model	- CONTINENTAL O-470-L	ELT Installed/Activated	- YES/NO
Landing Gear	- TRICYCLE-FIXED	Number Engines	- 1	Stall Warning System	- YES
Max Gross Wt	- 2650	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 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	CAMERON PARK,CA	
Completeness	- N/A	Destination	Airport Data
Basic Weather	- IMC	ELKO,NV	
Wind Dir/Speed	- 290/006 KTS	ATC/Airspace	Runway Ident
Visibility	- UNK/NR	Type of Flight Plan	- N/A
Lowest Sky/Clouds	- UNK/NR	Type of Clearance	- N/A
Lowest Ceiling	- UNK/NR	Type Apch/Lndg	- N/A
Obstructions to Vision	- UNK/NR		
Precipitation	- UNK/NR		
Condition of Light	- DAWN		

-----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 - 305	Last 24 Hrs - 1
SE LAND	Months Since - 20	Make/Model- 146	Last 30 Days- UNK/NR
	Aircraft Type - C-152	Instrument- 3	Last 90 Days- 28
		Multi-Eng - 0	Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

AT ABOUT 0430 PDT, THE NON-INSTRUMENT RATED PLT DEPD CAMERON PARK, CA, ON A FLT TO ELKO, NV, WHERE HE WAS TO RPRT TO WORK BETWEEN 0700 & 0730. WHILE EN ROUTE, THE ACFT CRASHED ON NEARLY LEVEL TERRAIN, NEAR THE BASE OF A MTN, AT AN ELEVATION OF ABOUT 4800'. IMPACT OCCURRED AT DAWN. AN EXAM OF THE WRECKAGE REVEALED THE ACFT CRASHED AT HIGH SPEED, WHILE IN A LEFT WING LOW, NOSE LOW ATTITUDE. A WX STUDY SHOWED CLOUDS EXISTED IN THE AREA FROM 6000' TO 15,000' MSL WITH WX CELLS MOVING FROM SOUTHWEST TO NORTHEAST. APRX 35 MI WEST-SOUTHWEST AT RENO (ELEV 4412'), THE WX WAS (IN PART) 1000' SCATTERED, 3200' OVERCAST, VISIBILITY 8 MI, WIND FROM 290 DEG AT 6 KTS. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE ACFT OR ENG WAS FOUND. RADAR DATA SHOWED THAT JUST BEFORE IMPACT, THE ACFT'S ALTITUDE VARIED FROM 12,500' TO 8,300' MSL, WITH A DESCENT RATE OF UP TO 2900'/MIN. NO RECORD OF A WX BRIEFING WAS FOUND.

Brief of Accident (Continued)

File No. - 1454

10/02/89

NIXON,NV

A/C Reg. No. N2155G

Time (Lcl) - 0530 PDT

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

Finding(s)

1. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
 2. LIGHT CONDITION - DAWN
 3. WEATHER CONDITION - CLOUDS
 4. WEATHER CONDITION - LOW CEILING
 5. VFR FLIGHT INTO IMC - CONTINUED - PILOT IN COMMAND
-

Occurrence #2 LOSS OF CONTROL - IN FLIGHT
Phase of Operation CRUISE - NORMAL

Finding(s)

6. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
 7. SPATIAL DISORIENTATION - PILOT IN COMMAND
-

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

Finding(s)

8. TERRAIN CONDITION - HIGH TERRAIN
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
CONTINUED FLIGHT BY THE NON-INSTRUMENT RATED PILOT INTO INSTRUMENT METEOROLOGICAL CONDITIONS (IMC), AND
HIS FAILURE TO MAINTAIN CONTROL OF THE AIRCRAFT, DUE TO SPATIAL DISORIENTATION. INADEQUATE PREFLIGHT
PREFLIGHT PLANNING/PREPARATION BY THE PILOT, AND THE WEATHER AND LIGHT CONDITIONS AT EARLY DAWN WERE
FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1585 2/10/89 BALLSTON SPA, NY A/C Reg. No. N758PW Time (Lcl) - 1720 EST

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

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

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

Make/Model - CESSNA R172K	Eng Make/Model - CONTINENTAL IO-360-KB	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2550	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 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	SCOTIA, NY	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	BALLSTON SPA, NY	Runway Ident - N/A
Wind Dir/Speed-	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 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 - 50	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
ATP, CFI	Current - YES	Total - 6800
SE LAND, ME LAND	Months Since - 2	Make/Model- 2000
	Aircraft Type - C-182	Instrument- 520
		Multi-Eng - 100
		Last 24 Hrs - 3
		Last 30 Days- 15
		Last 90 Days- 30
		Rotorcraft - 6

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE CESSNA R172K WAS IN A SLOW DESCENT OUT OF 2500 FT MSL, WHEN THE ENGINE LOST POWER. SUBSEQUENTLY, THE PILOT MADE AN EMERGENCY LANDING IN A FIELD AND THE AIRCRAFT WAS SUBSTANTIALY DAMAGED. A TEAR DOWN OF THE ENGINE REVEALED A BROKEN #1 CONNECTING ROD AND SEVERAL WORN CONNECTING ROD BEARINGS.

Brief of Accident (Continued)

File No. - 1585

2/10/89

BALLSTON SPA, NY

A/C Reg. No. N758PW

Time (Lcl) - 1720 EST

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

Finding(s)

1. ENGINE ASSEMBLY, BEARING - WORN
 2. ENGINE ASSEMBLY, CONNECTING ROD - FAILURE, TOTAL
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

3. TERRAIN CONDITION - NONE SUITABLE
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
WORN CONNECTING ROD BEARING(S), AND FAILURE OF THE #1 CONNECTING ROD. A FACTOR RELATED TO THE ACCIDENT WAS: THE LACK OF
SUITABLE TERRAIN FOR AN EMERGENCY LANDING.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1542 2/22/89 SPRING VALLEY, NY A/C Reg. No. N5793P Time (Lcl) - 1140 EST

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage				
	DESTROYED	Fatal	Serious	Minor	None
Type of Operation -INSTRUCTIONAL	Fire	0	0	2	0
Flight Conducted Under -14 CFR 91	NONE	0	0	0	0
Accident Occurred During -LANDING					

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

Make/Model - AEROSPATIALE AS-350D	Eng Make/Model - LYCOMING LTS-101	ELT Installed/Activated - YES/NO
Landing Gear - HIGH SKID	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 4300	Engine Type - TURBOSHAFT	
No. of Seats - 5	Rated Power - 235 LBS THRUST	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	TETERBORO, NJ	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	SPRING VALLEY HELIPORT
Wind Dir/Speed- CALM		Runway Ident - N/A
Visibility - 3.000 SM	ATC/Airspace	Runway Lth/Wid - N/A
Lowest Sky/Clouds - N/A	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Ceiling - 1700 FT OVERCAST	Type of Clearance - VFR	Runway Status - N/A
Obstructions to Vision- NONE	Type Apch/Lndg - SIMULATED FORCED LANDING	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 42	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 6194
SE LAND,ME LAND	Months Since - 19	Make/Model- 1538
HELICOPTER	Aircraft Type - AS-350D	Instrument- 335
		Multi-Eng - 120
		Last 24 Hrs - 1
		Last 30 Days- 17
		Last 90 Days- 67
		Rotorcraft - 6003

Instrument Rating(s) - AIRPLANE,HELICOPTER

-----Narrative-----

THE PIC & AN FAA EXAMINER (F/E) WERE ON A PART 135 CHECK FLT. AT ABOUT 900' TO 1000' AGL, AN AUTOROTATION (A/R) WITH INTENTIONS OF A PWR RECOVERY WAS INITIATED BY THE F/E. THE F/E INITIATED THE A/R BY MOVG THE PWR LEVER (FUEL FLOW CTL) OUT OF THE FULL PWR DETENT, THEN THE PIC LWRD THE COLLECTIVE & BGN THE A/R (REVERSE ORDER OF FLT MAN PROC). AT ABT 400' AGL & 65 KTS, THE PWR LEVER WAS PSND BACK TO THE FULL FWD (PWR LOCKED) DETENT PSN. AT ABT 65' AGL, THE PIC INITIATED A FLARE WITH COLLECTIVE PITCH CTL, BUT THE ENG LACKED RESPONSE. THE PIC CONTD THE A/R TO TOUCHDOWN. DRG THE LNDG, THE TAIL ROTOR STRUCK A MOUND OF DIRT, BOTH TAIL ROTOR BLADES SEPD, THEN THE HELICOPTER ROLLED ON ITS RGT SIDE & CAME TO REST. INV REVEALED THE GOVERNOR ANTICIPATOR WOULD NOT HAVE ACTIVATED UNTIL COLLECTIVE PITCH WAS APPLIED. ALSO, THE ENG COULD TAKE 9 SEC TO SPOOL UP. FLT MANUAL ADDRESSED ONLY FULL STOP (A/R) LNDGS. MANUAL FOR AEROSPATIAL INSTRUCTORS RESTRICTED PWR RCVR TO 200' AGL. NO MECH STOP WAS PROVIDED TO KEEP ENG FM GOING BLO 50% DRG PWR RDCN FOR A/R.

Brief of Accident (Continued)

File No. - 1542

2/22/89

SPRING VALLEY, NY

A/C Reg. No. N5793P

Time (Lcl) - 1140 EST

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

Finding(s)

1. FLIGHT MANUALS - INFORMATION INSUFFICIENT - MANUFACTURER
2. AUTOROTATION - INITIATED -
3. PROCEDURES/DIRECTIVES - NOT FOLLOWED - CHECK PILOT
4. LACK OF FAMILIARITY WITH AIRCRAFT - CHECK PILOT
5. REMEDIAL ACTION - IMPROPER - PILOT IN COMMAND
6. LACK OF FAMILIARITY WITH AIRCRAFT - PILOT IN COMMAND
7. TERRAIN CONDITION - DIRT BANK

----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE FAA FLIGHT EXAMINER (F/E) TO FOLLOW THE FLIGHT MANUAL PROCEDURE CONCERNING AUTOROTATIONS, AND IMPROPER
REMEDIAL ACTION BY THE PILOT-IN-COMMAND (PIC). FACTORS RELATED TO THE ACCIDENT WERE: LACK OF INFORMATION IN THE FLIGHT
MANUAL CONCERNING AUTOROTATIONS, BOTH PILOT'S LACK OF FAMILIARITY WITH THE AIRCRAFT, AND THE MOUND OF DIRT (DIRT BANK)
IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1496

3/09/89

BETHEL, NY

A/C Reg. No. N2265X

Time (Lcl) - 2045 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
DESTROYED
Fire NONE

Crew 0
Pass 0

Fatal 0

Injuries

Serious 0
Minor 0

None 1
3

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

Make/Model - CESSNA 337
Landing Gear - TRICYCLE-RETRACTABLE
Max Gross Wt - 4200
No. of Seats - 6

Eng Make/Model - CONTINENTAL IO-360-C
Number Engines - 2
Engine Type - RECIP-FUEL INJECTED
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- UNK/NR
Visibility - 20.0 SM
Lowest Sky/Clouds - CLEAR
Lowest Ceiling - NONE
Obstructions to Vision- NONE
Precipitation - NONE
Condition of Light - NIGHT (DARK)

Itinerary

Last Departure Point
ANOKA, MN
Destination
NEWBURGH, NY

ATC/Airspace

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

Airport Proximity

OFF AIRPORT/STRIP

Airport Data

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

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

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

Age - 26
Biennial Flight Review
Current - YES
Months Since - 1
Aircraft Type - C-172

Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Flight Time (Hours)
Total - 875
Make/Model- 5
Instrument- 90
Multi-Eng - 45
Last 24 Hrs - 7
Last 30 Days- 50
Last 90 Days- 150

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING A NIGHT CROSS COUNTRY FLIGHT FROM MINNEAPOLIS, MINNESOTA TO NEWBURGH, NEW YORK, THE AIRCRAFT RAN OUT OF FUEL AND BOTH ENGINES STOPPED RUNNING. SUBSEQUENTLY, THE AIRCRAFT CRASHED INTO TREES AS THE PILOT WAS MAKING AN EMERGENCY LANDING AT NIGHT. HE RPRTED THAT WHEN THE ENGINES STOPPED RUNNING, THE FUEL GAGES SHOWED THE AIRCRAFT STILL HAD FUEL REMAINING.

Brief of Accident (Continued)

File No. - 1496

3/09/89

BETHEL, NY

A/C Reg. No. N2265X

Time (Lcl) - 2045 EST

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

Finding(s)

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

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation LANDING

Finding(s)

5. LIGHT CONDITION - DARK NIGHT
 6. 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 CONCERNING HIS FUEL MANAGEMENT, WHICH RESULTED IN FUEL EXHAUSTION
DUE TO AN INADEQUATE SUPPLY OF FUEL. THE FALSE INDICATION FROM THE FUEL QUANTITY GAGE(S), DARK NIGHT, AND
TREES WERE CONSIDERED TO BE FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1569 4/06/89 UTICA, NY A/C Reg. No. N90437 Time (Lcl) - 0240 EDT

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

Type Operating Certificate	-ON-DEMAND AIR TAXI	Aircraft Damage	Injuries			
Name of Carrier	-U.S. CHECK, INC.	SUBSTANTIAL	Fatal	Serious	Minor	None
Type of Operation	-NON SCHED, DOMESTIC, CARGO	Fire	Crew 0	0	0	1
Flight Conducted Under	-14 CFR 135	IN FLIGHT	Pass 0	0	0	0
Accident Occurred During	-LANDING					

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

Make/Model	- SMITH AEROSTAR 600	Eng Make/Model	- LYCOMING IO-540-K1F5	ELT Installed/Activated	- YES/YES
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 2	Stall Warning System	- UNK/NR
Max Gross Wt	- 5500	Engine Type	- RECIP-FUEL INJECTED		
No. of Seats	- 6	Rated Power	- 290 HP		

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

Weather Data		Itinerary	Airport Proximity	
Wx Briefing	- UNK/NR	Last Departure Point	ON AIRPORT	
Method	- UNK/NR	TETERBORO, NJ		
Completeness	- UNK/NR	Destination	Airport Data	
Basic Weather	- VMC	UNK/NR	ONIEDA COUNTY	
Wind Dir/Speed	- UNK/NR		Runway Ident	- UNK/NR
Visibility	- UNK/NR	ATC/Airspace	Runway Lth/Wid	- UNK/NR
Lowest Sky/Clouds	- UNK/NR	Type of Flight Plan	Runway Surface	- UNK/NR
Lowest Ceiling	-	Type of Clearance	Runway Status	- UNK/NR
Obstructions to Vision	- UNK/NR	Type Apch/Lndg		
Precipitation	- UNK/NR			
Condition of Light	- NIGHT (DARK)			

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

Pilot-In-Command	Age - 27	Medical Certificate	- VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)	
COMMERCIAL	Current - YES	Total - 2840	Last 24 Hrs - UNK/NR
SE LAND	Months Since - 6	Make/Model - UNK/NR	Last 30 Days - UNK/NR
	Aircraft Type - UNK/NR	Instrument - UNK/NR	Last 90 Days - UNK/NR
		Multi-Eng - UNK/NR	Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE ACFT WAS APRX 40 MI SOUTH OF UTICA, NY, WHEN THE PLT NOTIFIED ATC THAT HE WAS GETTING SMOKE IN THE COCKPIT. AS A LANDING WAS MADE AT UTICA, A FIRE ERUPTED IN THE COCKPIT. SUBSEQUENTLY, THE COCKPIT WAS EXTENSIVELY DAMAGED BY FIRE. DUE TO THE EXTENSIVE DAMAGE, THE SOURCE OF THE FIRE WAS NOT DETERMINED. NO DISCREPANCIES WERE FOUND WITH THE ENG OR PROPELLER.

Brief of Accident (Continued)

File No. - 1569

4/06/89

UTICA, NY

A/C Reg. No. N90437

Time (Lcl) - 0240 EDT

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

Finding(s)

1. REASON FOR OCCURRENCE UNDETERMINED
 2. FUSELAGE, CREW COMPARTMENT - SMOKE
-

Occurrence #2 FIRE
Phase of Operation LANDING

Finding(s)

3. FUSELAGE, CREW COMPARTMENT - FIRE
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
A FIRE IN THE COCKPIT FROM AN UNKNOWN SOURCE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1590 7/02/89 GASPORT, NY A/C Reg. No. N5266T Time (Lcl) - 1040 EDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage DESTROYED				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 -LANDING			0	0	0	0		

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

Make/Model - PIPER PA-28-140	Eng Make/Model - LYCOMING O-320-E3	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2050	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 140 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	LAUREL, MD	ROYALTON
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - 25
Visibility - UNK/NR	Type of Flight Plan - NONE	Runway Lth/Wid - 2530/ 35
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 - 59	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 776
SE LAND	Months Since - 15	Last 24 Hrs - 0
	Aircraft Type - PA-28	Make/Model- 566
		Instrument- 13
		Multi-Eng - 12
		Last 30 Days- 4
		Last 90 Days- 11

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT SAID THAT HE PERFORMED A PREFLIGHT AND RUNUP BEFORE TAKEOFF. DURING CLIMB OUT AT ABOUT 450 FEET, THE ENGINE QUIT RUNNING AND THE AIRCRAFT FLEW INTO TREES. AN INSPECTION REVEALED THAT THE CARBURETOR AND GASCOLATOR WERE MORE THAN HALF FULL OF WATER. THE FUEL PUMPS AND FILTERS AT THE AIRPORT WERE FOUND TO BE SATISFACTORY.

Brief of Accident (Continued)

File No. - 1590

7/02/89

GASPORT,NY

A/C Reg. No. N5266T

Time (Lcl) - 1040 EDT

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

Finding(s)

1. FLUID,FUEL - WATER
 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:
FUEL CONTAMINATION (WATER) AND AN INADEQUATE PREFLIGHT BY THE PILOT, WHICH RESULTED IN THE LOSS OF ENGINE POWER.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1599 7/03/89 PLATTSBURGH, NY A/C Reg. No. N48683 Time (Lcl) - 1230 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
Accident Occurred During -LANDING	NONE	Pass	0	0	0

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

Make/Model - CESSNA 152	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	ON AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	CLINTON COUNTY
Wind Dir/Speed- 140/005 KTS	ATC/Airspace	Runway Ident - 14
Visibility - UNK/NR	Type of Flight Plan - NONE	Runway Lth/Wid - 5000/ 100
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 - 34	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 12
	Months Since - N/A	Make/Model- 12
	Aircraft Type - N/A	Instrument- UNK/NR
		Multi-Eng - 0
		Last 24 Hrs - 0
		Last 30 Days- 7
		Last 90 Days- 12
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PILOT BOUNCED THE AIRCRAFT DURING A LANDING AND ATTEMPTED A GO-AROUND. HE REDUCED POWER AFTER THE SECOND BOUNCE AND THE AIRCRAFT STARTED DRIFTING TO THE RIGHT, SO HE APPLIED LEFT RUDDER. THE AIRCRAFT THEN VEERED TO THE LEFT. SUBSEQUENTLY, THE NOSE GEAR PARTIALLY COLLAPSED, ALLOWING THE PROPELLER AND LEFT WING TIP TO HIT THE GROUND.

Brief of Accident (Continued)

File No. - 1599

7/03/89

PLATTSBURGH, NY

A/C Reg. No. N48683

Time (Lcl) - 1230 EDT

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

Finding(s)

1. FLARE - IMPROPER - PILOT IN COMMAND
 2. RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND
-

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

Finding(s)

3. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
 4. GROUND LOOP/SWERVE - UNCONTROLLED - PILOT IN COMMAND
-

Occurrence #3 NOSE GEAR COLLAPSED
Phase of Operation LANDING

Finding(s)

5. LANDING GEAR, NOSE GEAR - OVERLOAD
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT'S IMPROPER FLARE, IMPROPER RECOVERY FROM A BOUNCED LANDING, AND FAILURE TO MAINTAIN DIRECTIONAL CONTROL.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1600 7/09/89 AKRON, NY A/C Reg. No. N3154T Time (Lcl) - 1954 EDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage DESTROYED	Fatal	Injuries			None
Type of Operation -PERSONAL	Fire	Crew 0	Serious 0	Minor 1	None 0	
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	0	4	
Accident Occurred During -LANDING						

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

Make/Model - CESSNA 177A	Eng Make/Model - LYCOMING O-360	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2500	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 180 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	OFF AIRPORT/STRIP
Method - UNK/NR	ONEONTA, NY	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - UNK/NR	LOCKPORT, NY	Runway Ident - N/A
Wind Dir/Speed- 250/012 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling -	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- HAZE		
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)
PRIVATE	Current - YES	Total - 302
SE LAND	Months Since - 10	Make/Model- 99
	Aircraft Type - C-177	Instrument- 69
		Multi-Eng - UNK/NR
		Last 24 Hrs - 4
		Last 30 Days- 25
		Last 90 Days- 25
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT WAS ON A RETURN FLIGHT TO NORTH BUFFALO SUBURBAN AIRPORT IN LOCKPORT, NEW YORK AFTER STAYING OVER NIGHT IN ONEONTA, NEW YORK. THE FUEL SELECTOR WAS IN THE LEFT TANK POSITION, WHEN THE ENGINE STARTED TO RUN ROUGH. THE PILOT SWITCHED TO THE RIGHT TANK AND CONTACTED BUFFALO APPROACH FOR VECTORS TO NEAREST AIRPORT. THE AIRCRAFT DID NOT REACH THE AIRPORT. WHEN IT WAS LANDED IN A CULTIVATED FIELD, THE NOSE WHEEL DUG INTO DIRT AND THE AIRCRAFT NOSED OVER. AN EXAM REVEALED THERE WAS LESS THAN A CUP OF FUEL REMAINING IN THE FUEL SYSTEM.

Brief of Accident (Continued)

File No. - 1600

7/09/89

AKRON, NY

A/C Reg. No. N3154T

Time (Lcl) - 1954 EDT

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

Finding(s)

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

Occurrence #2 FORCED LANDING
Phase of Operation LANDING

Occurrence #3 NOSE OVER
Phase of Operation LANDING

Finding(s)

4. TERRAIN CONDITION - SOFT
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER PLANNING/DECISION BY THE PILOT, WHICH RESULTED IN FUEL EXHAUSTION, DUE TO AN INADEQUATE SUPPLY OF FUEL. A
FACTOR RELATED TO THE ACCIDENT WAS: SOFT TERRAIN IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1586 8/03/89 MATTITUCK,NY A/C Reg. No. N1707H Time (Lcl) - 1430 EDT

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

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

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

Make/Model - PIPER PA-28R-201	Eng Make/Model - LYCOMING IO-360-C1C6	ELT Installed/Activated - YES/NO
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-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	ON AIRPORT
Method - UNK/NR	EAST HADDAM,CT	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	MATTILUCK
Wind Dir/Speed- 300/005 KTS	ATC/Airspace	Runway Ident - 01
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2200/ 130
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling -	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 67	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 2596
SE LAND	Months Since - 1	Last 24 Hrs - 1
	Aircraft Type - PA-28R	Make/Model- 819
		Instrument- 23
		Last 30 Days- 13
		Last 90 Days- 29

Instrument Rating(s) - NONE

-----Narrative-----

DURING THE ROLL-OUT AFTER LANDING, THE RIGHT BRAKE MALFUNCTIONED. THE PILOT TURNED OFF ONTO A TAXIWAY AT THE END OF THE RUNWAY & THE PLANE COLLIDED WITH TWO PARKED AIRPLANES. EXAMINATION OF THE BRAKES REVEALED A HYDRAULIC LEAK AT THE RIGHT WHEEL.

Brief of Accident (Continued)

File No. - 1586

8/03/89

MATTITUCK, NY

A/C Reg. No. N1707H

Time (Lcl) - 1430 EDT

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

Finding(s)

1. LANDING GEAR, NORMAL BRAKE SYSTEM - FAILURE, PARTIAL
 2. FLUID, HYDRAULIC - LEAK
 3. DIRECTIONAL CONTROL - NOT POSSIBLE -
 4. GROUND LOOP/SWERVE - UNCONTROLLED -
-

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

Finding(s)

5. OBJECT - AIRCRAFT PARKED
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF RIGHT BRAKING ACTION DUE TO A HYDRAULIC LEAK.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1595 8/05/89 SHIRLEY,NY A/C Reg. No. N5084X Time (Lcl) - 1015 EDT

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

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

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

Make/Model - CHAMPION 7KCAB	Eng Make/Model - LYCOMING IO-320-E2A	ELT Installed/Activated - YES/YES
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1650	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 2	Rated Power - 150 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	BROOKHAVENS
Wind Dir/Speed- 260/010 KTS	ATC/Airspace	Runway Ident - UNK/NR
Visibility - 8.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - UNK/NR
Lowest Sky/Clouds - 15000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - NONE	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - UNK/NR
Obstructions to Vision- HAZE		
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)
COMMERCIAL	Current - YES	Total - 1196
SE LAND,ME LAND	Months Since - 2	Make/Model- 163
	Aircraft Type - AA-5A	Instrument- 239
		Multi-Eng - 7
		Last 24 Hrs - 4
		Last 30 Days- 73
		Last 90 Days- 208

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE AIRCRAFT DEPARTED RUNWAY 24 FOR A BANNER PICKUP ON THE INACTIVE RUNWAY. THE PILOT FLEW A STANDARD PATTERN, ANNOUNCED HIS INTENTIONS, THEN PICKED UP THE BANNER. AFTER THE PICKUP, HE LOWERED THE NOSE FOR A SHALLOWER CLIMB. THE AIRCRAFT ROCKED GENTLY LEFT AND RIGHT, BUT THE PILOT MAINTAINED A STRAIGHT FLIGHT PATH. HE LOWERED THE NOSE FURTHER, BUT THE ROCKING CONTINUED. HE THEN RELEASED THE BANNER, BUT THE AIRCRAFT SETTLED TO THE GROUND & WAS DAMAGED.

Brief of Accident (Continued)

File No. - 1595

8/05/89

SHIRLEY, NY

A/C Reg. No. N5084X

Time (Lcl) - 1015 EDT

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

Finding(s)

1. LOAD JETTISON - DELAYED - PILOT IN COMMAND
 2. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
 3. STALL/MUSH - INADVERTENT - PILOT IN COMMAND
-

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

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE FAILURE OF THE PILOT TO MAINTAIN PROPER AIRSPEED, AND HIS DELAY TO JETTISON THE BANNER, WHICH RESULTED IN A STALL.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1528 9/18/89 AGANA, GUAM, A/C Reg. No. N8134Y Time (Lcl) - 0936 GST

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

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

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

Make/Model - HUGHES 269A	Eng Make/Model - LYCOMING HIO-360-B1A	ELT Installed/Activated - NO -N/A
Landing Gear - SKID	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1670	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 2	Rated Power - 180 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	NAS AGANA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	
Wind Dir/Speed- 090/008 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - UNK/NR SCATTERED	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - 25000 FT OVERCAST	Type Apch/Lndg - NONE	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - RAIN SHOWERS		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 42	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 562
SE LAND,ME LAND	Months Since - 5	Make/Model- 40
HELICOPTER	Aircraft Type - 269C	Instrument- 13
		Multi-Eng - 44
		Last 24 Hrs - 2
		Last 30 Days- 13
		Last 90 Days- 28
		Rotorcraft - 81

Instrument Rating(s) - AIRPLANE,HELICOPTER

-----Narrative-----

THE HELICOPTER WAS BEING OPERATED ON A VISUAL RECONNAISSANCE/ORIENTATION FLT WITH A PLT & A POLICE AGENT ABOARD. WHILE FLYING AT ABOUT 200 FT ABOVE THE FONTE RIVER (FOLLOWING A VALLEY), THE HELICOPTER COLLIDED WITH A POWER LINE THAT CROSSED THE RIVER. DURING IMPACT, THE MAIN ROTOR SYSTEM SEPARATED & THE HELICOPTER CRASHED IN DENSE JUNGLE. NO PREIMPACT MECHANICAL PROBLEM WAS EVIDENT.

Brief of Accident (Continued)

File No. - 1528

9/18/89

AGANA, GUAM,

A/C Reg. No. N8134Y

Time (Lcl) - 0936 GST

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

Finding(s)

1. OBJECT - WIRE, TRANSMISSION
 2. VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
INADEQUATE VISUAL LOOKOUT BY THE PILOT, WHICH RESULTED IN HIS FAILURE TO SEE-AND-AVOID THE POWER LINE. THE POWER LINE
WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1451 12/07/89 ATLANTIC OCEAN, A/C Reg. No. N8785B Time (Lcl) - 1348 AST

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

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

Make/Model - CESSNA 172	Eng Make/Model - CONTINENTAL O-300-A	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2075	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 - IN PERSON	GRAND TURK	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	GEORGETOWN	Runway Ident - N/A
Wind Dir/Speed- 290/011 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 7.0 SM	Type of Flight Plan - VFR	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 - 38	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 3500
SE LAND	Months Since - 23	Make/Model- 1200
	Aircraft Type - C-172	Instrument- 360
		Last 24 Hrs - 5
		Last 30 Days- 25
		Last 90 Days- 60

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING AN OVERWATER FLIGHT, ABOUT 20 MI SOUTHEAST OF MAYAGUANA ISLAND, THE OIL PRESSURE DROPPED TO ZERO PSI. THE PLT TRANSMITTED A DISTRESS MESSAGE (MAYDAY), WHICH WAS FORWARDED TO THE COAST GUARD, & CONTINUED TOWARD THE ISLAND. A SHORT TIME LATER, THE ENG SEIZED & THE ACFT WAS DITCHED APPROXIMATELY 15 MI FROM SHORE. THE PLT & HIS PASSENGER EGRESSED FROM THE ACFT AS IT SANK & INFLATED THEIR LIFE JACKETS. THEY SAW SEVERAL COAST GUARD ACFT FLY OVER THEIR POSITION & THEY TRIED TO SIGNAL FOR HELP, BUT THEY WERE NOT SIGHTED. THEY SWAM TOWARD THE SHORE, BUT THE PASSENGER DIED BEFORE REACHING IT. AFTER REACHING THE BEACH THE NEXT DAY, THE PLT SAW FISHERMEN & WAS RESCUED. THE WRECKAGE WAS NOT RECOVERED FROM THE OCEAN.

Brief of Accident (Continued)

File No. - 1451

12/07/89

ATLANTIC OCEAN,

A/C Reg. No. N8785B

Time (Lcl) - 1348 AST

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

Finding(s)

1. FLUID, OIL - STARVATION

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:
THE ENGINE SEIZED FROM OIL STARVATION (LACK OF OIL OR OIL PRESSURE), WHICH RESULTED IN THE AIRCRAFT
BEING DITCHED AT SEA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1472 4/15/89 GRATIS, OH A/C Reg. No. N757HJ Time (Lcl) - 1700 EDT

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

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

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

Make/Model - CESSNA 152	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 - 1650	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 DAYTON, OH	OFF AIRPORT/STRIP
Method - N/A	Destination	Airport Data
Completeness - N/A	LOCAL	Runway Ident - N/A
Basic Weather - VMC	ATC/Airspace	Runway Lth/Wid - N/A
Wind Dir/Speed- CALM	Type of Flight Plan - NONE	Runway Surface - N/A
Visibility - 7.0 SM	Type of Clearance - NONE	Runway Status - N/A
Lowest Sky/Clouds - UNK/NR	Type Apch/Lndg - PRECAUTIONARY LANDING	
Lowest Ceiling - 4000 FT BROKEN		
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)
COMMERCIAL, CFI	Current - UNK/NR	Total - 2280
SE LAND, ME 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) - AIRPLANE

-----Narrative-----

THE INSTRUCTOR PLT (CFI) RPRTD HE ELECTED TO MAKE A PRECAUTIONARY LANDING AFTER HE SMELLED SMOKE IN THE COCKPIT. DRG THE LANDING, THE ACFT ENCOUNTERED SOFT DIRT & NOSED OVER, DAMAGING THE VERTICAL STABILIZER. AN EXAM OF THE ENG REVEALED THERE WAS A BIRD'S NEST IN THE VICINITY OF THE #2 & #3 CYLINDERS. NO EVIDENCE OF ANY OTHER POSSIBLE SOURCE OF SMOKE OR FIRE WAS FOUND. ACCORDING TO AN FAA INSPECTOR, WHO EXAMINED THE ACFT, THE NEST WAS PARTIALLY HIDDEN, BUT IT COULD HAVE BEEN SEEN DRG A PREFLIGHT INSPECTION WITH ADEQUATE LIGHTING. BOTH THE CFI & STUDENT HAD PREFLIGHTED THE ACFT, BUT NEITHER SAW THE BIRD'S NEST.

Brief of Accident (Continued)

File No. - 1472

4/15/89

GRATIS, OH

A/C Reg. No. N757HJ

Time (Lcl) - 1700 EDT

Occurrence #1 NOSE OVER
Phase of Operation LANDING

Finding(s)

1. ENGINE COMPARTMENT - FOREIGN OBJECT
 2. AIRCRAFT PREFLIGHT - INADEQUATE - DUAL STUDENT
 3. AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND (CFI)
 4. ENGINE COMPARTMENT - SMOKE
 5. PRECAUTIONARY LANDING - PERFORMED -
 6. TERRAIN CONDITION - SOFT
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE FOREIGN MATERIAL (BIRD NEST) IN THE ENGINE COMPARTMENT, AND FAILURE OF THE DUAL STUDENT OR INSTRUCTOR
PILOT (CFI) TO IDENTIFY AND REMOVE IT DURING THEIR PREFLIGHT INSPECTION OF THE AIRCRAFT. SOFT TERRAIN IN
THE EMERGENCY LANDING AREA AND SMOKE FROM THE ENGINE COMPARTMENT WERE FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1442 6/18/89 ALBANY, OH A/C Reg. No. N40973 Time (Lcl) - 0824 EDT

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

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

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

Make/Model - PIPER PA-28	Eng Make/Model - LYCOMING O-320-E3D	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2150	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 150 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	SAME AS ACC/INC	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	CINCINNATI, OH	OHIO UNIVERSITY
Wind Dir/Speed- 200/003 KTS	ATC/Airspace	Runway Ident - 25
Visibility - 7.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4200/ 100
Lowest Sky/Clouds - 25000 FT THIN BKN	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 - 36	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 147
SE LAND	Months Since - 1	Make/Model- 143
	Aircraft Type - PA-28	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- 9
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DRG THE INITIAL CLIMB AFTER TAKEOFF, A PARTIAL POWER LOSS OF THE ENG OCCURRED & THE PLT WAS FORCED TO LAND. UNABLE TO RETURN TO THE ARPT, HE SELECTED THE ONLY AVAILABLE LANDING SITE, WHICH WAS ABOUT 300 FT LONG & 200 WIDE. THIS AREA WAS BORDERED BY TREES & 30 FT POWER LINES. JUST BEFORE TOUCHDOWN, THE RIGHT WING SEVERED LEAVES FROM A TREE. SUBSEQUENTLY, THE ACFT SLID INTO ANOTHER TREE & A FENCE. AN EXAM OF THE ENG REVEALED THE #4 EXHAUST VALVE WAS STUCK IN THE OPEN POSITION & ITS RESPECTIVE PUSH ROD WAS BENT.

Brief of Accident (Continued)

File No. - 1442

6/18/89

ALBANY, OH

A/C Reg. No. N40973

Time (Lcl) - 0824 EDT

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

Finding(s)

1. ENGINE ASSEMBLY, PUSH ROD - BENT
 2. ENGINE ASSEMBLY, VALVE, EXHAUST - SEIZED
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

3. TERRAIN CONDITION - NONE SUITABLE
 4. OBJECT - TREE(S)
-

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

Finding(s)

5. OBJECT - FENCE
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
SEIZURE OF THE #4 EXHAUST VALVE AND BENDING OF ITS RESPECTIVE PUSH ROD, WHICH RESULTED IN A SIGNIFICANT LOSS OF
ENGINE POWER. CONTRIBUTING FACTORS WERE: LACK OF A SUITABLE EMERGENCY LANDING AREA, TREES, AND THE FENCE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1563 6/18/89 ALLIANCE,OH A/C Reg. No. N49JC Time (Lcl) - 1100 EDT

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

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

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

Make/Model - COX/PITTS SPECIAL S-1S	Eng Make/Model - LYCOMING AEIO-360-H1A	ELT Installed/Activated - NO	-N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 1150	Engine Type - RECIP-FUEL INJECTED		
No. of Seats - 1	Rated Power - 180 HP		

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	BERLIN AIRPARK
Wind Dir/Speed- 250/005 KTS	ATC/Airspace	Runway Ident - 27
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2930/ 50
Lowest Sky/Clouds - 4200 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 - 24	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 2500
SE LAND,ME LAND	Months Since - 10	Make/Model- 180
	Aircraft Type - S-2B	Instrument- 475
		Multi-Eng - 700
		Last 24 Hrs - 1
		Last 30 Days- 100
		Last 90 Days- 250
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOT WAS COMPLETING A LANDING, WHEN HE ALLOWED THE MAIN LANDING GEAR OF THE AIRCRAFT TO TRACK OFF THE HARD SURFACED RUNWAY & ONTO SOFT TERRAIN. THE AIRCRAFT THEN NOSED OVER & WAS SUBSTANTIALLY DAMAGED.

Brief of Accident (Continued)

File No. - 1563

6/18/89

ALLIANCE, OH

A/C Reg. No. N49JC

Time (Lcl) - 1100 EDT

Occurrence #1 NOSE OVER
Phase of Operation LANDING - ROLL

Finding(s)

1. TERRAIN CONDITION - SOFT
 2. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND
-

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO MAINTAIN PROPER RUNWAY ALIGNMENT. THE SOFT TERRAIN WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1445 12/28/89 CHILLICOTHE, OH A/C Reg. No. N3647E Time (Lcl) - 1535 EST

-----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	1
Accident Occurred During -LANDING		0	0	0	0

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

Make/Model - AERONCA 11AC	Eng Make/Model - CONTINENTAL A-65-8F	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1250	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	ON AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	ROSS COUNTRY
Wind Dir/Speed- 240/007 KTS		Runway Ident - 22
Visibility - 12.0 SM	ATC/Airspace	Runway Lth/Wid - 5398/ 75
Lowest Sky/Clouds - 2500 FT SCATTERED	Type of Flight Plan - NONE	Runway Surface - ASPHALT
Lowest Ceiling - UNK/NR	Type of Clearance - NONE	Runway Status - ICE COVERED
Obstructions to Vision- NONE	Type Apch/Lndg - TRAFFIC PATTERN	SNOW - COMPACTED
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)
STUDENT	Current - N/A	Total - 24
	Months Since - N/A	Make/Model- 9
	Aircraft Type - N/A	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-----

THE STUDENT PILOT STATED THAT WHEN HE DEPARTED THE ARPT, THE WX & RWY CONDITIONS WERE FAIR TO GOOD. HE NOTED THAT ALTHOUGH THE WEATHER WAS COLD, IT WAS SUNNY & THE COMPACTED SNOW ON THE RUNWAY WAS MELTING. THE STUDENT PRACTICED AIRWORK IN THE LOCAL AREA FOR ABOUT AN HOUR, THEN RETURNED TO THE ARPT, INTENDING TO PRACTICE TAKEOFFS & LANDINGS. HE REPORTED THAT HIS LANDING WAS NORMAL, BUT AS THE ACFT DECELERATED ON THE RUNWAY, IT ENCOUNTERED AN ICY AREA & HE WAS UNABLE TO MAINTAIN CONTROL. THE ACFT VEERED OFF THE LEFT SIDE OF THE RUNWAY & NOSED OVER ON SNOW COVERED TERRAIN. THE PLT STATED THAT THE SKY HAD CLOUDED OVER WHILE HE WAS AWAY FROM THE ARPT. WHEN HE RETURNED, THE PREVIOUSLY MELTED SNOW ON THE RUNWAY HAD "GLAZED OVER" & WAS SLICK.

Brief of Accident (Continued)

File No. - 1445

12/28/89

CHILLICOTHE, OH

A/C Reg. No. N3647E

Time (Lcl) - 1535 EST

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

Finding(s)

1. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
2. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - SNOW COVERED
3. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - ICY
4. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
5. PROPER ALIGNMENT - NOT POSSIBLE - PILOT IN COMMAND
6. LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND

Occurrence #2 NOSE OVER
Phase of Operation LANDING - ROLL

Finding(s)

7. TERRAIN CONDITION - SNOWBANK

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER PLANNING/DECISION BY THE STUDENT PILOT, WHICH RESULTED IN A LANDING ON A SLICK RUNWAY, AND HIS FAILURE
TO MAINTAIN DIRECTIONAL CONTROL DURING THE LANDING, WHICH RESULTED IN HIS INABILITY TO MAINTAIN RUNWAY ALIGNMENT.
CONTRIBUTING FACTORS WERE: THE ICY/SNOW COVERED RUNWAY, SNOW COVERED TERRAIN BESIDE THE RUNWAY, AND THE STUDENT'S
LACK OF EXPERIENCE IN WINTER OPERATIONS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1453 2/26/89 MARIETTA,OK A/C Reg. No. N734DR Time (Lcl) - 1300 CST

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

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

-----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 AIRSTRIP
Method - N/A	DECATUR, TX	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	MCGEHEE CATFISH
Wind Dir/Speed- 045/012 KTS		Runway Ident - 17
Visibility - 5.0 SM	ATC/Airspace	Runway Lth/Wid - 2450/ 60
Lowest Sky/Clouds - UNK/NR	Type of Flight Plan - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - 3500 FT OVERCAST	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 - 24	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 91
SE LAND	Months Since - 5	Last 24 Hrs - 2
	Aircraft Type - C-172	Last 30 Days- 2
		Last 90 Days- 10
		Rotorcraft - 0
		Multi-Eng - 0

Instrument Rating(s) - NONE

-----Narrative-----

DRG ARRIVAL, THE PLT FOLLOWED ANOTHER ACFT THAT LANDED ON RWY 17. HE DID NOT RECOGNIZE A QUARTERING TAILWIND FOR THAT RWY; HOWEVER, HE NOTICED THE ACFT WAS HIGH & FAST ON THE APCH, SO HE WENT AROUND. ON THE 2ND APCH, HE NOTICED THE GROUND SPEED SEEMED TO BE FASTER THAN THE INDICATED AIRSPEED, BUT HE CONTINUED THE LANDING. DRG THE LANDING, HE WAS UNABLE TO STOP ON THE RWY. SUBSEQUENTLY, THE ACFT CONTINUED OFF THE DEPARTURE END, HIT A DITCH & A RAILING/FENCE, THEN NOSED OVER. THE PILOT ESTIMATED THE WIND WAS FROM 045 DEG AT 12 TO 15 KTS WITH GUSTS TO 20 KTS.

Brief of Accident (Continued)

File No. - 1453

2/26/89

MARIETTA,OK

A/C Reg. No. N734DR

Time (Lcl) - 1300 CST

Occurrence #1 OVERRUN
Phase of Operation LANDING - ROLL

Finding(s)

1. WRONG RUNWAY - SELECTED - PILOT IN COMMAND
2. WEATHER CONDITION - TAILWIND
3. WEATHER CONDITION - GUSTS

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

Finding(s)

4. TERRAIN CONDITION - DITCH

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

Finding(s)

5. OBJECT - FENCE

Occurrence #4 NOSE OVER
Phase of Operation LANDING

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO SELECT THE PROPER RUNWAY, WHICH RESULTED IN A DOWNWIND LANDING AND AN OVERRUN OF THE RUNWAY.
THE GUSTY TAILWIND, DITCH, AND RAILING (FENCE) WERE FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1538 4/26/89 EUFAULA, OK A/C Reg. No. N8654N Time (Lcl) - 1720 CST

-----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 - 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 - 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		BENTONVILLE, AR	
Completeness - N/A		Destination	Airport Data
Basic Weather - VMC		ARLINGTON, TX	Runway Ident - N/A
Wind Dir/Speed- LIGHT AND VARIABLE		ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 SM		Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 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 - 50	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 850
SE LAND	Months Since - 6	Make/Model- 603
	Aircraft Type - PA-32	Instrument- 151
		Multi-Eng - 0
		Last 24 Hrs - 3
		Last 30 Days- 12
		Last 90 Days- 44
		Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD THE ACFT WAS FULLY SVCD WITH FUEL BEFORE HE DEPARTED ON A X-COUNTRY FLT FM ARLINGTON, TX, TO BENTONVILLE, AR. WHILE CRUISING AT 8500' ON THE RTRN FLT, THE ENG LOST POWER. THE PLT RPRTD THAT HE TURNED THE EMERGENCY FUEL PUMP ON & SWITCHED TANKS, THEN TURNED THE PUMP OFF; THE ENG DID NOT RESTART, SUBSEQUENTLY, AN EMERGENCY LANDING MAS MADE ON ROUGH TERRAIN (ABOUT 3 MI FM THE ARPT) & THE ACFT WAS DAMAGED. THE FUEL SELECTOR WAS FOUND POSITIONED TO THE LEFT MAIN TANK. THE LEFT WING WAS DAMAGED DURING THE LANDING & AN ESTIMATED 35 GAL OF FUEL DRAINED FROM THE LEFT TANKS. NO FUEL WAS FOUND IN THE RIGHT TANK(S). DURING A POST ACNT CHECK, THE ENG OPERATED NORMALLY WITH ONLY MINOR REPAIR.

Brief of Accident (Continued)

File No. - 1538

4/26/89

EUFAULA, OK

A/C Reg. No. N8654N

Time (Lcl) - 1720 CST

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

Finding(s)

1. FLUID, FUEL - STARVATION
 2. FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Finding(s)

3. EMERGENCY PROCEDURE - NOT FOLLOWED - PILOT IN COMMAND
-

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

Finding(s)

4. TERRAIN CONDITION - ROUGH/UNEVEN
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was: THE PILOT'S IMPROPER POSITIONING OF THE FUEL SELECTOR, WHICH RESULTED IN A LOSS OF POWER DUE TO FUEL STARVATION, AND HIS FAILURE TO FOLLOWED THE EMERGENCY PROCEDURE. A FACTOR RELATED TO THE ACCIDENT WAS: ROUGH TERRAIN IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1537 11/25/89 SHAWNEE,OK A/C Reg. No. N2553F Time (Lcl) - 1400 CST

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

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

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

Make/Model - CHAMPION 7ECA	Eng Make/Model - CONTINENTAL O-200-A	ELT Installed/Activated - YES/NO
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 - 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	GUTHRIE,OK	Runway Ident - N/A
Wind Dir/Speed- 240/008 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 12000 FT SCATTERED	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 56	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 6000
SE LAND	Months Since - 4	Make/Model- 560
	Aircraft Type - 7ECA	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT TOOK OFF FROM A WHEAT FIELD INTO THE WIND. HE STATED THAT BECAUSE OF TREES AT THE END OF THE TAKEOFF AREA, HE ENTERED A RIGHT TURN AT AN ALTITUDE OF ABOUT 90 FEET AGL. DURING THE TURN, THE AIRPLANE NOSED DOWN AND IMPACTED THE GROUND.

Brief of Accident (Continued)

File No. - 1537

11/25/89

SHAWNEE,OK

A/C Reg. No. N2553F

Time (Lcl) - 1400 CST

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

Finding(s)

1. TERRAIN CONDITION - HIGH OBSTRUCTION(S)
 2. MANEUVER - INITIATED - PILOT IN COMMAND
 3. AIRSPEED - INADEQUATE - PILOT IN COMMAND
 4. STALL - INADVERTENT - PILOT IN COMMAND
-

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

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO MAINTAIN ADEQUATE AIRSPEED DURING THE TURN AFTER TAKEOFF, WHICH RESULTED IN A STALL. THE
OBSTRUCTIONS (TREES) WERE A FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1562 3/06/89 JOHNSTOWN, PA A/C Reg. No. N45861 Time (Lcl) - 0925 EST

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

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

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

Make/Model	- BEECH TC-45J	Eng Make/Model	- P&W R-985	ELT Installed/Activated	- YES/NO
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 2	Stall Warning System	- YES
Max Gross Wt	- 8625	Engine Type	- RECIPROCATING-CARBURETOR		
No. of Seats	- 10	Rated Power	- 450 HP		

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

Weather Data		Itinerary		Airport Proximity	
Wx Briefing	- FSS	Last Departure Point		ON AIRPORT	
Method	- TELEPHONE	PHILADELPHIA, PA		Airport Data	
Completeness	- UNK/NR	Destination		JOHNSTOWN-CAMBERIA COUNTY	
Basic Weather	- IMC	SAME AS ACC/INC		Runway Ident	- 33
Wind Dir/Speed	050/014 KTS	ATC/Airspace		Runway Lth/Wid	- 5486/ 150
Visibility	- .750 SM	Type of Flight Plan	- IFR	Runway Surface	- ASPHALT
Lowest Sky/Clouds	- 300 FT SCATTERED	Type of Clearance	- IFR	Runway Status	- SNOW - DRY
Lowest Ceiling	- 400 FT BROKEN	Type Apch/Lndg	- ILS-COMPLETE		
Obstructions to Vision	- FOG				
Precipitation	- SNOW				
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)	
ATP, CFI	Current - YES	Total - 8851	Last 24 Hrs - 2
SE LAND, ME LAND	Months Since - UNK/NR	Make/Model- 3075	Last 30 Days- 69
	Aircraft Type - TC-45J	Instrument- 985	Last 90 Days- 190
		Multi-Eng - 5000	Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT LANDED THE ACFT ON RWY 33 IN IMC WITH SNOW FALLING & SNOW ON THE RWY. THE WIND WAS FROM 050 DEG A 14 KTS. SUBSEQUENTLY, THE ACFT SLID OFF THE SIDE OF THE RWY & THE NOSE GEAR FAILED.

Brief of Accident (Continued)

File No. - 1562

3/06/89

JOHNSTOWN, PA

A/C Reg. No. N45861

Time (Lcl) - 0925 EST

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

Finding(s)

1. WEATHER CONDITION - SNOW
 2. WEATHER CONDITION - CROSSWIND
 3. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - SNOW COVERED
 4. LANDING GEAR, NOSE GEAR - OVERLOAD
 5. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO MAINTAIN RUNWAY ALIGNMENT. THE CROSSWIND AND SNOW COVERED RUNWAY WERE RELATED FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1561 3/22/89 JOHNSTOWN, PA A/C Reg. No. N23605 Time (Lcl) - 1020 EST

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

Type Operating Certificate-ON-DEMAND AIR TAXI	Aircraft Damage SUBSTANTIAL	Fatal	Injuries			None
Type of Operation -POSITIONING	Fire	0	Serious	Minor	0	2
Flight Conducted Under -14 CFR 91	NONE	0	0	0	0	0
Accident Occurred During -LANDING		0	0	0	0	0

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

Make/Model - BEECH A100	Eng Make/Model - P&W PT6A-28	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 11500	Engine Type - TURBOPROP	
No. of Seats - 10	Rated Power - 1628 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRSTRIP
Method - UNK/NR	WEST MIFFLIN, PA	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	JOHNSTOWN
Wind Dir/Speed- 310/005 KTS	ATC/Airspace	Runway Ident - 33
Visibility - 12.0 SM	Type of Flight Plan - IFR	Runway Lth/Wid - 5486/ 150
Lowest Sky/Clouds - 1200 FT SCATTERED	Type of Clearance - IFR	Runway Surface - ASPHALT
Lowest Ceiling -	Type Apch/Lndg - ILS-COMLETE	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)
ATP	Current - YES	Total - 6245
SE LAND, ME LAND	Months Since - 10	Make/Model- 388
	Aircraft Type - A100	Instrument- 421
		Multi-Eng - 2757

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING A LANDING ROLL OUT, THE LEFT MAIN LANDING GEAR COLLAPSED. AN EXAM REVEALED THAT THE LANDING GEAR DOWN LOCK PLATE WAS BROKEN, WHICH ALLOWED THE MAIN LANDING GEAR TO COLLAPSE INTO THE WHEEL WELL.

Brief of Accident (Continued)

File No. - 1561

3/22/89

JOHNSTOWN, PA

A/C Reg. No. N23605

Time (Lcl) - 1020 EST

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

Finding(s)

1. LANDING GEAR, GEAR LOCKING MECHANISM - FAILURE, TOTAL
-

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

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE DOWN LOCK PLATE, WHICH ALLOWED THE LANDING GEAR TO COLLAPSE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1497 7/12/89 DOYLESTOWN,PA A/C Reg. No. N10659 Time (Lcl) - 1145 EDT

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

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

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

Make/Model - CESSNA 150L	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 AIRPORT
Method - N/A	DOYLESTOWN,PA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SUSSEX,NJ	DOYLESTOWN
Wind Dir/Speed- 050/008 KTS		Runway Ident - 05
Visibility - 20.0 SM	ATC/Airspace	Runway Lth/Wid - 3004/ 50
Lowest Sky/Clouds - 10000 FT SCATTERED	Type of Flight Plan - VFR	Runway Surface - ASPHALT
Lowest Ceiling - NONE	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 - 24	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 70
SE LAND	Months Since - 5	Last 24 Hrs - 0
	Aircraft Type - PA-28	Make/Model- 2
		Last 30 Days- 4
		Instrument- UNK/NR
		Last 90 Days- 12
		Multi-Eng - 0
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT DRG TAKEOFF, THE ACFT REACHED AN ALTITUDE OF ABOUT 50 TO 75 FT, WHEN HE NOTICED THE AIRSPEED WAS SLOWLY DROPPING. HE DID NOT BELIEVE THE ACFT WOULD CLEAR TREES BEYOND THE END OF THE RWY, SO HE ELECTED TO ABORT THE TAKEOFF. SUBSEQUENTLY, THE ACFT TOUCHED DOWN, NOSEWHEEL FIRST, BETWEEN THE END OF THE RWY & THE TREES, THEN IT NOSED OVER. RPRTDLY, THE FLAPS WERE IN A FULL DOWN POSITION.

Brief of Accident (Continued)

File No. - 1497

7/12/89

DOYLESTOWN, PA

A/C Reg. No. N10659

Time (Lcl) - 1145 EDT

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

Finding(s)

1. AIRCRAFT PREFLIGHT - IMPROPER - PILOT IN COMMAND
 2. LOWERING OF FLAPS - IMPROPER - PILOT IN COMMAND
 3. PROPER CLIMB RATE - NOT ATTAINED -
 4. TERRAIN CONDITION - HIGH OBSTRUCTION(S)
 5. ABORTED TAKEOFF - DELAYED - PILOT IN COMMAND
 6. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
 7. FLARE - NOT ATTAINED -
-

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 PREFLIGHT PREPARATION BY THE PILOT BY TAKING OFF WITH THE FLAPS EXTENDED, WHICH RESULTED IN AN
INADEQUATE RATE OF CLIMB TO CLEAR OBSTRUCTIONS BEYOND THE END OF THE RUNWAY, AND THE PILOT'S DELAY IN ABORTING
THE TAKEOFF AND HIS FAILURE IN MAINTAINING AIRSPEED, WHICH REDUCED HIS ABILITY TO FLARE THE AIRCRAFT. THE
HIGH OBSTRUCTIONS (TREES) NEAR THE END OF THE RUNWAY WERE CONSIDERED TO BE A FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1591 7/28/89 MT PLEASANT, PA A/C Reg. No. N19652 Time (Lcl) - 2000 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 - 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 MT PLEASANT, PA	ON AIRPORT
Method - N/A	Destination LOCAL	Airport Data
Completeness - N/A		MT PLEASANT/SCOTTDALE
Basic Weather - VMC	ATC/Airspace	Runway Ident - 06
Wind Dir/Speed- 005 KTS	Type of Flight Plan - NONE	Runway Lth/Wid - 2000/ 160
Visibility - 10.0 SM	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Sky/Clouds - 4000 FT SCATTERED	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Lowest Ceiling - NONE		
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 - 100
SE LAND	Months Since - 9	Last 24 Hrs - 1
	Aircraft Type - C172	Make/Model- 100
		Instrument- 3
		Last 30 Days- 1
		Last 90 Days- 6
		Multi-Eng - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT WAS MAKING TAKEOFFS AND LANDINGS WHEN THE AIRCRAFT TOUCHED DOWN HARD AND THE NOSE STRUT FAILED. THE NOSE OF THE AIRCRAFT THEN CONTACTED THE SURFACE AND THE PROP WAS BENT. NO MAINTENANCE OR MECHANICAL IRREGULARITY OF THE AIRCRAFT WAS NOTED.

Brief of Accident (Continued)

File No. - 1591

7/28/89

MT PLEASANT, PA

A/C Reg. No. N19652

Time (Lcl) - 2000 EDT

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

Finding(s)
1. FLARE - IMPROPER - PILOT IN COMMAND

Occurrence #2 NOSE GEAR COLLAPSED
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)
2. LANDING GEAR, NOSE GEAR - OVERLOAD

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
AN IMPROPER FLARE BY THE PILOT THAT RESULTED IN A HARD LANDING.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1514 7/30/89 CHALFONT, PA A/C Reg. No. N5209G Time (Lcl) - 0900 EDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries			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 305A	Eng Make/Model - CONTINENTAL O-470-11B	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2300	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 213 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	MOYER
Wind Dir/Speed-	ATC/Airspace	Runway Ident - 13
Visibility - 3.000 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2800/ 80
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - 1500 FT OVERCAST	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)
PRIVATE	Current - YES	Total - 750
SE LAND	Months Since - UNK/NR	Make/Model- 90
	Aircraft Type - PA-32	Instrument- 69
		Multi-Eng - UNK/NR
		Last 24 Hrs - 1
		Last 30 Days- 9
		Last 90 Days- 25
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

SHORTLY AFTER TAKEOFF FROM A PRIVATE FIELD, THE AIRCRAFT ENGINE LOST POWER, AND THE AIRCRAFT WAS LANDED IN A SOY BEAN FIELD WHERE IT NOSED OVER. AN ENGINE CHECK WAS MADE AND NO MECHANICAL DISCREPANCIES WERE FOUND. THE PHILADELPHIA TEMPERATURE AND DEW POINT WERE 72 DEGREES AND 59 DEGREES, RESPECTIVELY.

Brief of Accident (Continued)

File No. - 1514

7/30/89

CHALFONT, PA

A/C Reg. No. N5209G

Time (Lcl) - 0900 EDT

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 DESCENT - EMERGENCY

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

Finding(s)

4. TERRAIN CONDITION - ROUGH/UNEVEN
-

Occurrence #4 NOSE OVER
Phase of Operation OTHER

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT'S IMPROPER USE OF CARBURETOR HEAT, WHICH RESULTED IN A POWER LOSS DUE TO CARBURETOR ICE. FACTORS RELATED
TO THE ACCIDENT WERE: CARBURETOR ICING CONDITIONS AND ROUGH/UNEVEN TERRAIN IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1596 8/02/89 PHILADELPHIA, PA A/C Reg. No. N75044 Time (Lcl) - 0900 EDT

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

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

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

Make/Model - SCHWEIZER 269C	Eng Make/Model - LYCOMING HIO-360-D1A	ELT Installed/Activated - YES/NO
Landing Gear - SKID	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 2050	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 2	Rated Power - 190 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	QUAKERTOWN, PA	Runway Ident - N/A
Wind Dir/Speed- 060/005 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 20.0 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 - NONE	
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 - 2300
HELICOPTER	Months Since - 19	Make/Model- 1700
	Aircraft Type - HU-300C	Instrument- 0
		Last 24 Hrs - 5
		Last 30 Days- 70
		Last 90 Days- 220
		Rotorcraft - 2290

Instrument Rating(s) - NONE

-----Narrative-----

SHORTLY AFTER DEPARTING PENNS LANDING HELIPORT AT PIER 38, WHICH WAS 20 FEET ABOVE THE WATER, THE HELICOPTER CRASHED INTO THE WATER AND WAS SUBSTANTIALLY DAMAGED. IT WAS RECOVERED FROM THE WATER & THE WATER AND MUD WERE REMOVED. AFTER SEVERAL ATTEMPTS, THE ENGINE RAN NORMALLY.

Brief of Accident (Continued)

File No. - 1596

8/02/89

PHILADELPHIA, PA

A/C Reg. No. N75044

Time (Lcl) - 0900 EDT

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

Finding(s)

1. REASON FOR OCCURENCE UNDETERMINED

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

2. TERRAIN CONDITION - WATER

----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. A FACTOR RELATED TO THE ACCIDENT WAS: WATER IN THE EMERGENCY LANDING
AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1589 8/10/89 MOUNT JOY, PA A/C Reg. No. N1611R Time (Lcl) - 1820 EDT

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

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

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

Make/Model - GRUMMAN AA-5	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 - 2200	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	UNK/NR
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	DONEGAL SPRINGS
Wind Dir/Speed- 090/004 KTS	ATC/Airspace	Runway Ident - 09
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3254/ 40
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - GO AROUND	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 23	Medical Certificate - VALID MEDICAL-NO 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
	Aircraft Type - N/A	Instrument- 0
		Last 24 Hrs - UNK/NR
		Last 30 Days- 4
		Last 90 Days- 5

Instrument Rating(s) - NONE

-----Narrative-----

DURING A TOUCH-&-GO LANDING, THE STUDENT PLT INITIATED A GO-AROUND. HE SAID THAT HE FELT THAT THE ACFT WAS TOO FAR DOWN THE RWY & THAT HE PULLED BACK ON THE YOKE TOO MUCH & STALLED THE ACFT. THE ACFT DRIFTED LEFT. SUBSEQUENTLY, THE LEFT WING CONTACTED TALL CORN & THE ACFT CAME TO REST IN THE CORN FIELD.

Brief of Accident (Continued)

File No. - 1589

8/10/89

MOUNT JOY, PA

A/C Reg. No. N1611R

Time (Lcl) - 1820 EDT

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

Finding(s)

1. PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
 2. GO-AROUND - DELAYED - PILOT IN COMMAND
 3. TERRAIN CONDITION - CROP
 4. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT'S DELAY IN INITIATING A GO-AROUND, AND HIS FAILURE TO MAINTAIN PROPER RUNWAY ALIGNMENT. FACTORS RELATED TO
THE ACCIDENT WERE: FAILURE OF THE PILOT TO ATTAIN THE PROPER TOUCHDOWN POINT AND THE CROP.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1421 8/25/89 BARRANQUITAS, PR A/C Reg. No. N6573R Time (Lcl) - 1559 AST

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

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

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

Make/Model - BEECH C23	Eng Make/Model - LYCOMING O-360-A4J	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2450	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 180 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SAN JUAN, PR	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 090/012 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 1400 FT SCATTERED	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 33	Medical Certificate - NON-VALID MEDICAL
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
FOREIGN, PRIVATE	Current - UNK/NR	Total - 250
SE LAND	Months Since - UNK/NR	Make/Model- 5
	Aircraft Type - UNK/NR	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 1
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT (FM THE NETHERLANDS) WAS CHECKED OUT IN THE ACFT BY AN INSTRUCTOR PLT (CFI). AFTER A 40 MIN CHECK-OUT FLT, THE PLT & 3 PAX TOOK OFF ON A LOCAL FLT. SUBSEQUENTLY, THE ACFT CRASHED IN A RAVINE/VALLEY AREA (ORIENTED IN A NORTH-SOUTH DIRECTION ON MOUNTAINOUS/HILLY TERRAIN). IMPACT OCCURRED ON THE EASTERN SLOPE OF THE VALLEY AT AN ELEV OF APRX 1100 FT. DRG IMPACT, THE ENG WAS BURIED IN DIRT & THE ACFT BEGAN BURNING. AN EXAM OF THE PROP REVEALED CHORDWISE SCRATCHES ON BOTH BLADES AS WELL AS S-CURLING. NO PREIMPACT PART FAILURE/MALFUNCTION WAS FOUND. WITNESSES RPTD SEEING A SINGLE ENG ACFT FLYING LOW IN THE RAVINES (VALLEYS). SHORTLY THEREAFTER, THEY HEARD THE ACFT CRASH, THEN THEY SAW SMOKE/FIRE FROM THE ACFT SITE. THE ACFT WAS ESTIMATED TO BE LOADED ABOUT 48 LBS OVER ITS MAX WT LIMIT.

Brief of Accident (Continued)

File No. - 1421

8/25/89

BARRANQUITAS, PR

A/C Reg. No. N6573R

Time (Lcl) - 1559 AST

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

Finding(s)

1. AIRCRAFT WEIGHT AND BALANCE - EXCEEDED - PILOT IN COMMAND
2. IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
3. LOW PASS - PERFORMED - PILOT IN COMMAND
4. TERRAIN CONDITION - RISING
5. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
6. STALL - INADVERTENT - PILOT IN COMMAND
7. LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND

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

Finding(s)

8. TERRAIN CONDITION - MOUNTAINOUS/HILLY

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER IN-FLIGHT PLANNING/DECISION BY THE PILOT AND HIS FAILURE TO MAINTAIN ADEQUATE FLYING SPEED, WHICH RESULTED
IN A STALL AND SUBSEQUENT IMPACT WITH THE TERRAIN. CONTRIBUTING FACTORS WERE: OPERATION OF THE AIRCRAFT BY THE
PILOT WITH EXCESSIVE GROSS WEIGHT, HIS LACK OF EXPERIENCE IN THIS MAKE AND MODEL OF AIRCRAFT AND THE TERRAIN CONDITIONS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1418 4/17/89 AIKEN, SC A/C Reg. No. N118HS Time (Lcl) - 1205 EDT

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

Type Operating Certificate-EXTERNAL LOAD	Aircraft Damage	Fatal	Injuries			None
	SUBSTANTIAL		Serious	Minor		
Type of Operation -OTHER WORK USE	Fire	Crew 0	1	0	0	0
Flight Conducted Under -14 CFR 133	NONE	Pass 0	0	0	0	0
Accident Occurred During -DESCENT						

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

Make/Model - BELL UH-1E	Eng Make/Model - LYCOMING T-53-L-11D	ELT Installed/Activated - NO	-N/A
Landing Gear - SKID	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 9500	Engine Type - TURBOSHAFT		
No. of Seats - 7	Rated Power - 1100 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 - FULL	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- CALM	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 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 - 42	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - UNK/NR
SE LAND, ME LAND	Months Since - 1	Last 24 Hrs - 30
HELICOPTER	Aircraft Type - UH-1	Make/Model- 4000
		Instrument- UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- 39
		Rotorcraft - 4000

Instrument Rating(s) - HELICOPTER

-----Narrative-----

THE HELICOPTER WAS BEING OPERD AT APRX 100 FT AGL WITH A HOPPER EXTDD FROM A CABLE. WITNESSES HEARD A LOUD POPPING SOUND. AS THEY LOOKED IN THE DRCTN OF THE HELICOPTER, THEY NOTED THE TAIL ROTOR WAS NOT TURNING & ONE BLADE APPEARED TO BE HANGING. THE PLT RPRTD THERE WAS NO WARNING OF AN IMPENDING ANTI-TORQUE CONTROL PROBLEM WHEN HE LOST CONTROL OF THE HELICOPTER. THE HELICOPTER THEN COLLIDED WITH TREES & CRASHED. INV REVEALED THE PLT HAD RPRTD AN OIL LEAK FM THE 90 DEG GEARBOX ON 4/11/89. THE COMPANY MECHANIC SUBSEQUENTLY REPLACED THE GEARBOX & A FUNCTIONAL TEST FLT WAS COMPLETED. THE ACDNT OCCURRED AFTER APRX ANOTHER 6 HRS OF OPN. AN EXAM OF THE TAIL ROTOR ASSEMBLY REVEALED THAT 1 OF THE 2 RETENTION BOLTS WERE MISSING FM THE TAIL ROTOR PITCH CHANGE CROSSHEAD. THREADED IMPRINTS WERE FND INSIDE THE RESPECTIVE CROSSHEAD RETENTION THRU-BOLT HOLE. THE RETENTION BOLT, NUT, WASHER & COTTER PIN WERE NOT RECOVERED. BOTH TAIL ROTOR BLADES CONTAINED CHORDWISE MARKS WHICH CORRESPONDED TO MARKS ON THE VERTICAL FIN (OPPOSITE OF THE TAIL ROTOR TIP PATH PLANE).

Brief of Accident (Continued)

File No. - 1418

4/17/89

AIKEN, SC

A/C Reg. No. N118HS

Time (Lcl) - 1205 EDT

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

Finding(s)

1. ROTOR SYSTEM, TAIL ROTOR HUB PITCH CHANGE BEAM - NOT SAFETIED
2. MAINTENANCE, INSTALLATION - IMPROPER - COMPANY MAINTENANCE PSNL
3. ROTOR SYSTEM, TAIL ROTOR HUB PITCH CHANGE BEAM - LOOSE
4. ROTOR SYSTEM, TAIL ROTOR HUB - FAILURE, TOTAL
5. ROTOR SYSTEM, TAIL ROTOR BLADE - SEPARATION

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

Finding(s)

6. DIRECTIONAL CONTROL - NOT POSSIBLE -

Occurrence #3 FORCED LANDING
Phase of Operation DESCENT - UNCONTROLLED

Finding(s)

7. AUTOROTATION - ATTEMPTED -

Occurrence #4 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation DESCENT - UNCONTROLLED

Finding(s)

8. OBJECT - TREE(S)

----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER INSTALLATION OF A TAIL ROTOR PITCH CHANGE CROSSHEAD RETENTION BOLT BY THE COMPANY MECHANIC, WHICH
RESULTED IN LOOSENING OF THE BOLT AND EVENTUAL FAILURE OF THE TAIL ROTOR ASSEMBLY/BLADE AND SUBSEQUENT
LOSS OF CONTROL. TREES AT THE CRASH SITE CONTRIBUTED TO HELICOPTER DAMAGE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1426 5/06/89 LUGOFF, SC A/C Reg. No. N4985D Time (Lcl) - 1715 EDT

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

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries			None
Type of Operation - SKYDIVING	Fire	Crew	0	1	0	0
Flight Conducted Under -14 CFR 105	NONE	Pass	0	0	0	0
Accident Occurred During -APPROACH						

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

Make/Model - CESSNA 182A	Eng Make/Model - CONTINENTAL O-470-L	ELT Installed/Activated - UNK/NR
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2650	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 1	Rated Power - 230 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRSTRIP
Method - TELEPHONE	SAME AS ACC/INC	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LOCAL	LUGOFF
Wind Dir/Speed- 260/020 KTS	ATC/Airspace	Runway Ident - 31
Visibility - 7.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 2800 -UNK/NR
Lowest Sky/Clouds - N/A	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - 3500 FT BROKEN	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 - 29	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 1250
SE LAND, ME LAND, SE SEA	Months Since - 6	Make/Model- 140
GLIDER	Aircraft Type - KA-7	Instrument- 136
		Multi-Eng - 74
		Last 24 Hrs - 2
		Last 30 Days- 35
		Last 90 Days- 115
		Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT WAS RETURNING TO LAND AFTER HAULING SKYDIVERS. HE RPRTD THAT WHILE ON A SHORT FINAL APCH TO LAND ON RWY 31 WITH 20 TO 30 DEG OF FLAPS EXTENDED, THE ACFT ENTERED A HIGH SINK RATE IN GUSTY WIND CONDITIONS. HE SAID THAT HE LOWERED THE NOSE TO INCREASE SPEED & THAT HE PLANNED TO ARREST THE SINK RATE IN THE FLARE, BUT THEN "THE BOTTOM FELL OUT" & THE ACFT COLLIDED WITH THE GROUND IN A NOSE LOW ATTITUDE. THE FLT MANUAL RECOMMENDED THAT IF THE RWY LENGTH PERMITTED, CROSSWIND LANDINGS SHOULD BE PERFORMED WITH THE FLAPS RETRACT. THE MANUFACTURER ESTIMATED THAT 560 FT WOULD HAVE BEEN REQUIRED TO LAND THE ACFT ON A HARD SURFACE WITH NO WIND & 40 DEG OF FLAPS. THE RWY LENGTH WAS 2800 FT. THE PLT RPRTD THE WIND WAS VARIABLE FROM 240 TO 270 DEG WITH GUSTS TO 20 KTS. APRX 20 MI SOUTHEAST AT SHAW AFB, THE 1655 EDT WIND WAS RPRTD TO BE FROM 260 DEG AT 20 GUSTING 28 KTS.

Brief of Accident (Continued)

File No. - 1426

5/06/89

LUGOFF, SC

A/C Reg. No. N4985D

Time (Lcl) - 1715 EDT

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

Finding(s)

1. WEATHER CONDITION - CROSSWIND
 2. WEATHER CONDITION - GUSTS
 3. LOWERING OF FLAPS - EXCESSIVE - PILOT IN COMMAND
 4. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
 5. AIRSPEED - INADEQUATE - PILOT IN COMMAND
 6. STALL - INADVERTENT - PILOT IN COMMAND
-

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

-----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 ADEQUATE SPEED FOR THE WIND
CONDITIONS, WHICH RESULTED IN A STALL ON FINAL APPROACH. HIS EXCESSIVE USE OF FLAPS AND THE WIND CONDITIONS WERE
CONSIDERED TO BE CONTRIBUTING FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1503 10/14/89 RIDGELAND, SC A/C Reg. No. N734PL Time (Lcl) - 1530 EDT

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

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

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

Make/Model - CESSNA 172	Eng Make/Model - LYCOMING O-320-H2AD	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2300	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 160 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	RIDGELAND, SC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	RIDGELAND
Wind Dir/Speed- 360/004 KTS	ATC/Airspace	Runway Ident - 03
Visibility - 5.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3100/ 70
Lowest Sky/Clouds - 4000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 10000 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 - 66	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 2099
SE LAND	Months Since - 14	Make/Model- 72
	Aircraft Type - C-172	Instrument- 0
		Last 24 Hrs - 1
		Last 30 Days- 2
		Last 90 Days- 4

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT REPORTED THAT THE AIRCRAFT TOUCHED DOWN LONG AND SUBSEQUENTLY RAN OFF THE DEPARTURE END OF THE RUNWAY. NO MECHANICAL PROBLEMS OF THE AIRCRAFT WERE REPORTED.

Brief of Accident (Continued)

File No. - 1503

10/14/89

RIDGELAND, SC

A/C Reg. No. N734PL

Time (Lcl) - 1530 EDT

Occurrence #1 OVERRUN
Phase of Operation LANDING - ROLL

Finding(s)

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

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT MISJUDGED THE AIRSPEED AND FAILED TO ATTAIN THE PROPER TOUCHDOWN POINT.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1505 10/26/89 FLORENCE, SC A/C Reg. No. N57470 Time (Lcl) - 1100 EDT

-----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	0	1
Accident Occurred During -LANDING			0	0	0	0	0

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

Make/Model - BELLANCA 7KCAB	Eng Make/Model - LYCOMING IO-320	ELT Installed/Activated - UNK/NR
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1650	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 2	Rated Power - 150 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point HARTSVILLE, SC	ON AIRPORT
Method - N/A	Destination SAME AS ACC/INC	Airport Data
Completeness - N/A	ATC/Airspace	ELLIOT FIELD
Basic Weather - VMC	Type of Flight Plan - NONE	Runway Ident - UNK/NR
Wind Dir/Speed- 045/005 KTS	Type of Clearance - NONE	Runway Lth/Wid - 1500/ 60
Visibility - 10.0 SM	Type Apch/Lndg - FULL STOP	Runway Surface - GRASS/TURF
Lowest Sky/Clouds - CLEAR		Runway Status - DRY
Lowest Ceiling - NONE		
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 32	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 700
SE LAND	Months Since - 15	Make/Model- 150
GLIDER	Aircraft Type - UNK/NR	Instrument- 50
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - 10

Instrument Rating(s) - NONE

-----Narrative-----

WHILE ATTEMPTING A LANDING AT HIS PRIVATE AIRSTRIP, THE PILOT LOST CONTROL OF THE AIRPLANE ON THE LANDING ROLL. HE STATED THAT THE RIGHT BRAKE LOCKED WHEN HE APPLIED THE HEEL BRAKES & WOULD NOT RELEASE. HE THEN APPLIED LEFT BRAKE AND THE AIRCRAFT NOSED OVER. EXAMINATION OF THE AIRPLANE DID NOT REVEAL A BRAKE SYSTEM MALFUNCTION. HOWEVER, THE TAILWHEEL STEERING ARM & FORK ASSEMBLY WERE WORN BEYOND LIMITS, WHICH AFFECTED DIRECTIONAL CONTROL.

Brief of Accident (Continued)

File No. - 1505

10/26/89

FLORENCE, SC

A/C Reg. No. N57470

Time (Lcl) - 1100 EDT

Occurrence #1 LOSS OF CONTROL - ON GROUND

Phase of Operation LANDING - ROLL

Finding(s)

1. LANDING GEAR, STEERING SYSTEM - WORN
 2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
 3. GROUND LOOP/SWERVE - UNCONTROLLED - PILOT IN COMMAND
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE WORN STEERING SYSTEM.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1570 9/02/89 PHILIP,SD A/C Reg. No. N2685G Time (Lcl) - 1345 MDT

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

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

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

Make/Model - CESSNA 182B	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 - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	CASPER, WY	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	MURDO, SD	PHILIP
Wind Dir/Speed- 160/018 KTS	ATC/Airspace	Runway Ident - 30
Visibility - 25.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4000/ 75
Lowest Sky/Clouds - 5000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 15000 FT BROKEN	Type Apch/Lndg - GO AROUND	Runway Status - DRY
Obstructions to Vision- NONE	FORCED LANDING	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 53	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - .743
SE LAND	Months Since - 21	Make/Model- 627
	Aircraft Type - C-182B	Instrument- 4
		Last 24 Hrs - 2
		Last 30 Days- 29
		Last 90 Days- 33

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT REPORTED THAT HE WAS LANDING ON RUNWAY 30 (4000 X 75T RWY) WITH A STRONG LEFT CROSSWIND. HE SAID THAT AS HE WAS LANDING, THE AIRCRAFT ENCOUNTERED A SUDDEN GUST & HE DECIDED TO GO AROUND. HE INITIATED A GO-AROUND, BUT THE ENGINE LOST POWER. DURING THE SUBSEQUENT FORCED LANDING, THE AIRCRAFT HIT A POWER LINE AND POLE, THEN CRASHED. THE AIRPORT OPERATOR REPORTED THE WIND WAS FROM THE SOUTH AT ABOUT 30 KTS. DURING A WEATHER OBSERVATION AT 1245 MDT, THE WIND WAS FROM 160 DEG AT 18 GUSTING 25 KTS.

Brief of Accident (Continued)

File No. - 1570

9/02/89

PHILIP,SD

A/C Reg. No. N2685G

Time (Lcl) - 1345 MDT

Occurrence #1 LOSS OF ENGINE POWER
Phase of Operation LANDING - ABORTED

Finding(s)

1. REASON FOR OCCURRENCE UNDETERMINED
-

Occurrence #2 FORCED LANDING
Phase of Operation LANDING

Occurrence #3 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation LANDING

Finding(s)

2. OBJECT - POLE
 3. OBJECT - WIRE, TRANSMISSION
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
LOSS OF ENGINE POWER FOR AN UNDETERMINED REASON. FACTORS RELATED TO THE ACCIDENT WERE: THE POWER LINE & POLE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1479 8/27/89 GALLATIN, TN A/C Reg. No. N5684S Time (Lcl) - 1500 CDT

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

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

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

Make/Model - BEECH A23-19	Eng Make/Model - LYCOMING O-320-E2C	ELT Installed/Activated - YES/YES
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 - 150 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point GALLATIN, TN	ON AIRPORT
Method - N/A	Destination LOCAL	Airport Data
Completeness - N/A	ATC/Airspace	PRIVATE
Basic Weather - VMC	Type of Flight Plan - NONE	Runway Ident - UNK/NR
Wind Dir/Speed-	Type of Clearance - NONE	Runway Lth/Wid - 1700 -UNK/NR
Visibility - 10.0 SM	Type Apch/Lndg - NONE	Runway Surface - GRASS/TURF
Lowest Sky/Clouds - CLEAR		Runway Status - ROUGH
Lowest Ceiling - NONE		
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----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 - 1250
SE LAND	Months Since - 18	Last 24 Hrs - UNK/NR
	Aircraft Type - UNK/NR	Make/Model- 300
		Last 30 Days- 1
		Instrument- UNK/NR
		Last 90 Days- 13
		Multi-Eng - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

DURING TAKEOFF FROM A PRIVATE AIRSTRIP, THE AIRPLANE COLLIDED WITH A FENCE NEAR THE DEPARTURE END OF THE 1700 FOOT GRASS RUNWAY. GRASS ON THE RUNWAY WAS 12 INCHES TALL, AND THE RUNWAY WAS ROUGH AND UNEVEN. THE INVESTIGATION FAILED TO DISCLOSE ANY MECHANICAL PROBLEMS WHICH WOULD HAVE PREVENTED NORMAL OPERATION OF THE AIRPLANE.

Brief of Accident (Continued)

File No. - 1479

8/27/89

GALLATIN, TN

A/C Reg. No. N5684S

Time (Lcl) - 1500 CDT

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

Finding(s)

1. RUNWAY MAINTENANCE - INADEQUATE -
 2. UNSUITABLE TERRAIN - SELECTED - PILOT IN COMMAND
 3. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - ROUGH/UNEVEN
 4. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - HIGH VEGETATION
 5. OBJECT - FENCE
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT USED AN UNSUITABLE RUNWAY AREA (TERRAIN) FOR TAKEOFF. RELATED FACTORS WERE: INADEQUATE MAINTENANCE
OF THE RUNWAY, RUNWAY CONDITIONS (UNEVEN SURFACE & TALL GRASS), AND THE FENCE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1449 10/18/89 ATHENS, TN A/C Reg. No. N5005S Time (Lcl) - 1902 EDT

-----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 -DESCENT					

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

Make/Model - PIPER PA-28R-200	Eng Make/Model - LYCOMING IO-360	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2650	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 200 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	MORRISTOWN, TN	
Completeness - FULL	Destination	Airport Data
Basic Weather - IMC	CLEVELAND, TN	Runway Ident - N/A
Wind Dir/Speed- 360/010 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 2.000 SM	Type of Flight Plan - IFR	Runway Surface - N/A
Lowest Sky/Clouds - N/A	Type of Clearance - IFR	Runway Status - N/A
Lowest Ceiling - 600 FT BROKEN	Type Apch/Lndg - NONE	
Obstructions to Vision- FOG		
Precipitation - RAIN		
Condition of Light - DUSK		

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

Pilot-In-Command	Age - 52	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 435
SE LAND	Months Since - 1	Make/Model- 202
	Aircraft Type - PA-28	Instrument- 47
		Multi-Eng - 10
		Last 24 Hrs - 0
		Last 30 Days- 15
		Last 90 Days- 52
		Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DRG AN IFR FLT AT 8000' MSL IN IMC CONDS, THE PLT WAS CLEARED BY ATC TO DSCND & MAINT 4000'. HE ACKNOWLEDGED. APRX 2 MIN LATER, HE WAS ADZD THAT RADAR SVC WAS TERMINATED & WAS TOLD TO CONTACT APCH CONTROL ON ANOTHER FREQ. THE PLT'S ACKNOWLEDGEMENT WAS UNINTELLIGIBLE. SUBSEQUENTLY, CONTACT WITH THE ACFT WAS LOST & IT CRASHED IN A STEEP DSCNT. BEFORE THE ACNT, A WITNESS HEARD THE ACFT CIRCLING OVERHEAD. INITIALLY, HE WAS UNABLE TO SEE THE ACFT DUE TO CLOUDS, THEN HE SAW THE ACFT COME OUT OF THE CLOUDS IN A STEEP DIVE. HE SAID THE NOSE OF THE ACFT APPEARED TO PULL UP JUST BEFORE IMPACT. RADAR DATA SHOWED THAT THE ACFT WAS IN A SPIRALING DSCNT BEFORE IT CRASHED. THE PLT HAD JUST RCVD AN INSTRUMENT RATING ON 9/20/89. THIS WAS HIS 1ST KNOWN FLT IN ACTUAL INSTRUMENT CONDS SINCE HE HAD RCVD HIS NEW RATING. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE ACFT WAS FOUND, ALTHOUGH IT WAS BADLY DAMAGED BY IMPACT.

Brief of Accident (Continued)

File No. - 1449

10/18/89

ATHENS, TN

A/C Reg. No. N5005S

Time (Lcl) - 1902 EDT

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

Finding(s)

1. LIGHT CONDITION - DUSK
 2. WEATHER CONDITION - CLOUDS
 3. WEATHER CONDITION - LOW CEILING
 4. DESCENT - INITIATED -
 5. SPIRAL - INADVERTENT - PILOT IN COMMAND
 6. SPATIAL DISORIENTATION - PILOT IN COMMAND
 7. LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - 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:
LOSS OF CONTROL OF THE AIRPLANE IN INSTRUMENT FLIGHT CONDITIONS DUE TO SPATIAL DISORIENTATION, WHICH RESULTED
IN AN INADVERTENT DESCENDING SPIRAL. LACK OF TOTAL EXPERIENCE IN THE TYPE OF OPERATION (ACTUAL INSTRUMENT
CONDITIONS) WAS CONSIDERED TO BE A CONTRIBUTING FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1485 11/04/89 DYERSBURG, TN A/C Reg. No. N95617 Time (Lcl) - 1400 CST

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

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

-----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 - 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	MADISONVILLE, KY	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	DYERSBURG, TN	Runway Ident - N/A
Wind Dir/Speed- 190/005 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 15.0 SM	Type of Flight Plan - VFR	Runway Surface - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - VFR	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 - 18	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 90
SE LAND	Months Since - 5	Make/Model- 90
	Aircraft Type - UNK/NR	Instrument- UNK/NR
		Multi-Eng - 0
		Last 24 Hrs - 3
		Last 30 Days- 24
		Last 90 Days- 35
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

A PRIVATE PLT (18 YEAR OLD STUDENT, FLYING A UNIVERSITY ACFT) WAS ON A CROSS-COUNTRY INSTRUCTIONAL FLT. DRG THE FLT, HE NOTED A TINGLING FEELING THAT BEGAN IN HIS FINGERTIPS. AT FIRST, HE WAS NOT CONCERNED, SINCE HE THOUGHT IT WAS CAUSED BY HOLDING THE CONTROLS TOO TIGHTLY. AS TIME PASSED, THE TINGLING SPREAD UP HIS ARMS & A SIMILAR SENSATION WAS NOTED IN HIS LEGS. THE TINGLING TURNED TO NUMBNESS & EVENTUALLY AFFECTED HIS FACE & SPEECH. HE ELECTED TO MAKE AN EMERGENCY LANDING; HOWEVER, THE FIELD THAT HE SELECTED WAS SOFTER THAN HE EXPECTED. IMMEDIATELY AFTER TOUCHDOWN, THE WHEELS ENTERED THE SOFT DIRT & THE ACFT NOSED OVER. SUBSEQUENT MEDICAL EXAMINATIONS FAILED TO REVEAL ANY MEDICAL PROBLEMS WITH THE PLT.

Brief of Accident (Continued)

File No. - 1485

11/04/89

DYERSBURG, TN

A/C Reg. No. N95617

Time (Lcl) - 1400 CST

Occurrence #1 MISCELLANEOUS/OTHER
Phase of Operation CRUISE

Finding(s)

1. MISCELLANEOUS
 2. PHYSIOLOGICAL CONDITION - PILOT IN COMMAND
-

Occurrence #2 NOSE OVER
Phase of Operation LANDING - ROLL

Finding(s)

3. PRECAUTIONARY LANDING - PERFORMED -
 4. TERRAIN CONDITION - SOFT
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
PILOT'S TEMPORARY PHYSICAL CONDITION (POSSIBLE HYPERVENTILATION OR ANXIETY ATTACK). SOFT TERRAIN IN THE EMERGENCY
LANDING AREA WAS CONSIDERED TO BE A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1499 12/03/89 JACKSON, TN A/C Reg. No. N1361P Time (Lcl) - 1230 CST

-----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 - PIPER PA-23-150	Eng Make/Model - LYCOMING O-320-C23B	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 2	Stall Warning System - YES
Max Gross Wt - 3800	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 BOLIVAR, TN	ON AIRPORT
Method - N/A	Destination JACKSON, TN	Airport Data
Completeness - N/A	ATC/Airspace	MCKELLER FIELD
Basic Weather - VMC	Type of Flight Plan - NONE	Runway Ident - 20
Wind Dir/Speed- 320/007 KTS	Type of Clearance - NONE	Runway Lth/Wid - 6008/ 150
Visibility - 10.0 SM	Type Apch/Lndg - FORCED LANDING	Runway Surface - ASPHALT
Lowest Sky/Clouds - CLEAR		Runway Status - DRY
Lowest Ceiling - NONE		
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 32	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
ATP, CFI	Current - YES	Total - 2030
SE LAND, ME LAND	Months Since - 4	Make/Model- 253
	Aircraft Type - PA-44	Instrument- 96
		Multi-Eng - 303
		Last 24 Hrs - 2
		Last 30 Days- 34
		Last 90 Days- 204

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PILOTS WERE CONDUCTING INSTRUMENT FLIGHT TRAINING & THE ACFT WAS OVER THE VOR WHEN THE LEFT ENGINE LOST POWER. THE FLIGHT INSTRUCTOR (CFI) ASSUMED CONTROL OF THE AIRPLANE & ATTEMPTED TO RESTORE THE POWER, BUT WAS UNABLE. SHORTLY THEREAFTER, THE RIGHT ENGINE QUIT. THE CFI TRIED TO MAKE AN EMERGENCY LANDING ON THE AIRPORT, BUT WAS UNABLE TO REACH THE SELECTED RUNWAY. THE ACFT TOUCHED DOWN ON SOFT TERRAIN SHORT OF RUNWAY 20 & WAS DAMAGED. AN EXAM OF THE ACFT REVEALED NO MECHANICAL PROBLEMS WHICH WOULD HAVE PREVENTED NORMAL OPERATION OF THE ENGINE OR ACFT SYSTEMS. BOTH ENGINES OPERATED NORMALLY DURING A POST-ACCIDENT CHECK. THE TEMPERATURE & DEW POINT WERE 30 & 7 DEGREES, RESPECTIVELY. ACCORDING TO CARBURETOR ICING CHARTS, CARBURETOR ICING WAS NOT PROBABLE.

Brief of Accident (Continued)

File No. - 1499

12/03/89

JACKSON, TN

A/C Reg. No. N1361P

Time (Lcl) - 1230 CST

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

Finding(s)

1. PLANNING-DECISION - IMPROPER - DUAL STUDENT
 2. SUPERVISION - INADEQUATE - PILOT IN COMMAND (CFI)
 3. FLUID, FUEL - STARVATION
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 NOSE GEAR COLLAPSED
Phase of Operation LANDING - ROLL

Finding(s)

4. LANDING GEAR, NOSE GEAR - OVERLOAD
 5. TERRAIN CONDITION - SOFT
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
LOSS OF POWER IN BOTH ENGINES (PROBABLE FUEL STARVATION) DUE TO IMPROPER PLANNING/DECISION BY THE PILOT(S),
AND LACK OF SUPERVISION BY THE INSTRUCTOR. SOFT TERRAIN IN THE EMERGENCY LANDING AREA WAS CONSIDERED TO BE
A FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1452 2/17/89 CONROE, TX A/C Reg. No. N3976W Time (Lcl) - 0605 CST

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

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

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

Make/Model - PIPER PA-32-260	Eng Make/Model - LYCOMING O-540-E4B5	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3400	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 6	Rated Power - 260 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	WALLER, TX	
Completeness - FULL	Destination	Airport Data
Basic Weather - IMC	GRENADA, MS	Runway Ident - N/A
Wind Dir/Speed- 040/006 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 8.0 SM	Type of Flight Plan - IFR	Runway Surface - N/A
Lowest Sky/Clouds - 400 FT	Type of Clearance - IFR	Runway Status - N/A
Lowest Ceiling - 400 FT OVERCAST	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - NIGHT (DARK)		

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

Pilot-In-Command	Age - 23	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL,CFI	Current - YES	Total - 1433
SE LAND,ME LAND	Months Since - 1	Make/Model- 25
	Aircraft Type - PA-34	Instrument- 182
		Multi-Eng - 194
		Last 24 Hrs - 1
		Last 30 Days- 39
		Last 90 Days- 232

Instrument Rating(s) - AIRPLANE

-----Narrative-----

WHILE THE AIRCRAFT WAS CRUISING ABOVE AN OVERCAST AT NIGHT AT 7000' MSL, THE ENGINE FAILED. THE PILOT OBTAINED VECTORS TOWARD THE NEAREST AIRPORT. HE SAID THE AIRCRAFT "BROKE OUT" OF THE CLOUDS AT ABOUT 400' AGL & HE SAW THE AIRPORT, BUT HE WAS UNABLE TO REACH IT. SUBSEQUENTLY, THE AIRCRAFT COLLIDED WITH TREES AS THE PILOT MADE AN EMERGENCY LANDING AT NIGHT IN A WOODED AREA. AN EXAM OF THE ENGINE REVEALED THE CRANKSHAFT HAD FAILED FROM FATIGUE AT THE #6 JOURNAL.

Brief of Accident (Continued)

File No. - 1452

2/17/89

CONROE, TX

A/C Reg. No. N3976W

Time (Lcl) - 0605 CST

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

Finding(s)

1. ENGINE ASSEMBLY, CRANKSHAFT - FATIGUE
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation LANDING

Finding(s)

2. WEATHER CONDITION - LOW CEILING
 3. LIGHT CONDITION - DARK NIGHT
 4. OBJECT - TREE(S)
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE ENGINE CRANKSHAFT DUE TO FATIGUE. THE LOW CEILING, DARK NIGHT, AND TREES IN THE EMERGENCY
LANDING AREA WERE FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1420 3/26/89 FORT WORTH, TX A/C Reg. No. N45940 Time (Lcl) - 1813 CST

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

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

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

Make/Model - CESSNA 152	Eng Make/Model - LYCOMING O-235	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1670	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 110 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	ON AIRPORT
Method - ACFT RADIO	SAME AS ACC/INC	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LOCAL	MEACHAM
Wind Dir/Speed- 130/013 KTS	ATC/Airspace	Runway Ident - 16R
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4001/ 75
Lowest Sky/Clouds - 5000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Obstructions to Vision- NONE	TOUCH AND GO	
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)
STUDENT	Current - N/A	Total - 59
	Months Since - N/A	Make/Model- 59
	Aircraft Type - N/A	Instrument- 1
		Last 24 Hrs - 2
		Last 30 Days- 33
		Last 90 Days- 39

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PLT HAD 52 HRS OF DUAL FLT INSTRUCTION & 107 LANDINGS AT THE TIME OF HIS 1ST SUPERVISED SOLO ON 3/23/89. AFTER THAT, HE OBTAINED AN ADDITIONAL 8 HRS OF DUAL FLT TIME & 30 LANDINGS. EARLIER ON THE DAY OF THE ACDNT, HIS PRIMARY INSTRUCTOR (CFI) ADVISED HIM THAT THE WX CONDITIONS WERE NOT SUFFICIENT FOR HIS TRAINING & TO CHECK WITH HIM LATER IN THE DAY FOR ANOTHER EVALUATION OF THE WIND FOR A SOLO FLT. WHEN THE STUDENT WAS UNABLE TO CONTACT HIS CFI, HE UTILIZED ANOTHER CFI FOR TRAINING. THEY MADE TWO TOUCH-&-GO LANDINGS & ONE FULL STOP LANDING, THEN THIS CFI AUTHORIZED THE STUDENT TO MAKE A 2ND SOLO FLT. DRG THE NEXT LANDING (2ND SOLO FLT), THE ACFT TOUCHED DOWN ON RWY 16R & BOUNCED; THE STUDENT HELD THE FLARE & CONTD THE LANDING. THE ACFT TOUCHED DOWN AGAIN ON THE LEFT SIDE OF THE RWY, THEN VEERED LEFT AND CROSSED A TWY & AN EMBANKMENT. SUBSEQUENTLY, IT HIT A RAVINE/CULVERT & TREES. THE WIND WAS RPRPT FROM 130 DEG AT 13 KTS.

Brief of Accident (Continued)

File No. - 1420

3/26/89

FORT WORTH, TX

A/C Reg. No. N45940

Time (Lcl) - 1813 CST

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

Finding(s)

1. SUPERVISION - IMPROPER - FLIGHT INSTRUCTOR(ON GROUND)
 2. WEATHER CONDITION - CROSSWIND
 3. FLARE - IMPROPER - PILOT IN COMMAND
 4. RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND
 5. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
 6. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
-

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

Finding(s)

7. TERRAIN CONDITION - DITCH
 8. OBJECT - TREE(S)
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO MAINTAIN DIRECTIONAL CONTROL DURING THE LANDING, WHICH RESULTED IN AN INADVERTENT GROUND SWERVE.
CONTRIBUTING FACTORS WERE: INADEQUATE SUPERVISION BY THE CFI, WHO AUTHORIZED THE 2ND SOLO FLIGHT IN UNFAVORABLE WIND
CONDITIONS, THE CROSSWIND, THE STUDENT PILOT'S IMPROPER FLARE AND RECOVERY FROM A BOUNCED LANDING, THE RAVINE (DITCH),
AND THE TREES.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1509 4/08/89 PADRE ISLAND, TX A/C Reg. No. N51774 Time (Lcl) - 1416 CDT

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

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

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

Make/Model - ENSTROM F28C	Eng Make/Model - LYCOMING H10-360	ELT Installed/Activated - NO -N/A
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 - UNK/NR	Last Departure Point	OFF AIRPORT/STRIP
Method - ACFT RADIO	SAME AS ACC/INC	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	LOCAL	Runway Ident - N/A
Wind Dir/Speed- 170/016 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 42	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE, COMMERCIAL	Current - YES	Total - 2800
SE LAND	Months Since - 16	Make/Model- 500
HELICOPTER	Aircraft Type - C-172	Instrument- 100
		Last 24 Hrs - 0
		Last 30 Days- 4
		Last 90 Days- 10
		Rotorcraft - 980

Instrument Rating(s) - NONE

-----Narrative-----

THE COMMERCIAL PILOT REPORTED LOCAL WINDS TO BE 15 KNOTS WITH GUSTS TO 50 KNOTS. HE WAS REPOSITIONING THE HELICOPTER TO AN AREA 200 YARDS AWAY AND EXECUTED A DOWNWIND DEPARTURE FROM A HOVER. THE APPROACH TO LAND WAS ALSO DOWNWIND WITH A PEDAL TURN APPROXIMATELY 30 TO 50 FEET AGL. THE AIRCRAFT DRIFTED LATERALLY IN A RIGHT DIRECT CROSSWIND AND THE LEFT SKID CONTACTED THE GROUND. THE HELICOPTER THEN ROLLED LEFT AND THE MAIN ROTOR BLADES STRUCK THE GROUND.

Brief of Accident (Continued)

File No. - 1509

4/08/89

PADRE ISLAND, TX

A/C Reg. No. N51774

Time (Lcl) - 1416 CDT

Occurrence #1 ROLL OVER
Phase of Operation TAXI - AERIAL

Finding(s)

1. FLIGHT INTO KNOWN ADVERSE WEATHER - PERFORMED - PILOT IN COMMAND
 2. WEATHER CONDITION - UNFAVORABLE WIND
 3. WEATHER CONDITION - GUSTS
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT'S DECISION TO FLY IN ADVERSE WEATHER CONDITION. THE ADVERSE WEATHER WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1457 4/17/89 JUNCTION, TX A/C Reg. No. N8785V Time (Lcl) - 0920 CDT

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

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

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

Make/Model - BELLANCA 17-30A	Eng Make/Model - CONTINENTAL IO-520-K	ELT Installed/Activated - NO	N/A
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES	
Max Gross Wt - 3325	Engine Type - RECIP-FUEL INJECTED		
No. of Seats - 4	Rated Power - 300 HP		

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	MIDLAND, TX	
Completeness - FULL	Destination	Airport Data
Basic Weather - IMC	SAN ANTONIO, TX	Runway Ident - N/A
Wind Dir/Speed- UNK/NR	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - .500 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - 200 FT OVERCAST	Type Apch/Lndg - NONE	
Obstructions to Vision- FOG		
Precipitation - DRIZZLE		
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)
PRIVATE	Current - YES	Total - 281
SE LAND	Months Since - 4	Last 24 Hrs - 1
	Aircraft Type - C-182	Make/Model- 30
		Instrument- 3
		Last 30 Days- 19
		Last 90 Days- 30

Instrument Rating(s) - NONE

-----Narrative-----

THE NON-INSTRUMENT RATED PLT HAD RECENTLY ACCEPTED A NEW EMPLOYMENT POSITION & WAS USING HIS ACFT TO COMMUTE TO WORK. BEFORE TAKING OFF ON THE ACDNT FLT, HE OBTAINED A WX BRIEFING & WAS ADVISED THAT VFR FLT WAS NOT RECOMMENDED. DRG THE FLT, THE ACFT CRASHED IN AN AREA OF ADVERSE WX. A WITNESS, WHO HEARD THE ACFT CRASH, ESTIMATED THE CEILING WAS 200 FT OVERCAST & VISIBILITY WAS 1/2 MI WITH FOG & DRIZZLE. THE ACFT CRASHED NEAR A HIGHWAY THAT EVENTUALLY PASSED NEAR THE DESTINATION AIRPORT. AN EXAM OF THE WRECKAGE REVEALED THE ACFT HAD IMPACTED IN A STEEP DESCENT. THE WITNESS STATED THAT THE ENG WAS REVVED UP TO A HIGH RPM WHEN IMPACT OCCURRED. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE ACFT WAS FOUND DRG THE INVESTIGATION, THOUGH THE ACFT WAS EXTENSIVELY DAMAGED.

Brief of Accident (Continued)

File No. - 1457

4/17/89

JUNCTION, TX

A/C Reg. No. N8785V

Time (Lcl) - 0920 CDT

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

Finding(s)

1. WEATHER CONDITION - CLOUDS
2. WEATHER CONDITION - LOW CEILING
3. WEATHER CONDITION - FOG
4. WEATHER CONDITION - DRIZZLE
5. VFR FLIGHT INTO IMC - CONTINUED - PILOT IN COMMAND
6. SELF-INDUCED PRESSURE - PILOT IN COMMAND

Occurrence #2 LOSS OF CONTROL - IN FLIGHT
Phase of Operation CRUISE - NORMAL

Finding(s)

7. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
8. 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 VFR FLIGHT INTO INSTRUMENT METEOROLOGICAL CONDITIONS (IMC) BY THE PILOT, WHICH RESULTED IN HIS FAILURE
TO MAINTAIN CONTROL OF THE AIRCRAFT DUE TO SPATIAL DISORIENTATION. THE WEATHER CONDITIONS AND HIS SELF-INDUCED
PRESSURE WERE FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1515 4/21/89 LEAKEY, TX A/C Reg. No. N182BS Time (Lcl) - 1815 CDT

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

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

-----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 - 4	Rated Power - 230 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - TELEPHONE	CONROE, TX	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	TEXAS MOUNTAIN RANCH
Wind Dir/Speed- 360/010 KTS	ATC/Airspace	Runway Ident - UNK/NR
Visibility - 20.0 SM	Type of Flight Plan - VFR	Runway Lth/Wid - 3400/ 30
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 - 45	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 220
SE LAND	Months Since - 1	Make/Model- 4
	Aircraft Type - C182	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 2
		Last 30 Days- 10
		Last 90 Days- 10
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

A WITNESS SAID THAT ON THE 2ND ATTEMPT TO LAND, THE ACFT TOUCHED DOWN ABOUT 2700 FT DOWN THE 3400 FT RWY. THE PLT RPRTD THAT WHEN THE ACFT WAS APRX 25 FT AGL IN THE FLARE, IT ENCOUNTERED A GUST & HE PULLED BACK ON THE YOKE TO ARREST A DESCENT. SUBSEQUENTLY, THE ACFT TOUCHED DOWN HARD, BOUNCED & WAS DAMAGED.

Brief of Accident (Continued)

File No. - 1515

4/21/89

LEAKEY, TX

A/C Reg. No. N182BS

Time (Lcl) - 1815 CDT

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

Finding(s)

1. WEATHER CONDITION - GUSTS
 2. COMPENSATION FOR WIND CONDITIONS - IMPROPER - PILOT IN COMMAND
 3. FLARE - IMPROPER - PILOT IN COMMAND
 4. RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND
 5. LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT'S IMPROPER COMPENSATION FOR WIND CONDITIONS, IMPROPER FLARE, AND IMPROPER RECOVERY FROM A BOUNCED LANDING.
FACTORS RELATED TO THE ACCIDENT WERE: THE GUSTY WIND CONDITION AND THE PILOT'S LACK OF EXPERIENCE IN THIS MAKE AND
MODEL OF AIRCRAFT.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1456 5/18/89 ROCKSPRINGS, TX A/C Reg. No. N58228 Time (Lcl) - 1830 CDT

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

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

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

Make/Model - HUGHES 269C	Eng Make/Model - LYCOMING H10-360	ELT Installed/Activated - NO	-N/A
Landing Gear - SKID	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 2050	Engine Type - RECIP-FUEL INJECTED		
No. of Seats - 3	Rated Power - 190 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- 290/006 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 8.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 39	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - UNK/NR	Total - 2450
SE LAND	Months Since - UNK/NR	Make/Model- UNK/NR
HELICOPTER	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-----

THE PLT WAS FLYING LOW & HERDING ANTELOPE, WHEN THE HELICOPTER IMPACTED THE TERRAIN & WAS DESTROYED. HE WAS STILL CONSCIOUS AFTER THE ACNT, BUT DIED ABOUT 3 HRS LATER. BEFORE DYING, HE SAID THE ENG HAD LOST POWER; HOWEVER, NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE ACFT OR ENG WAS FOUND THAT WOULD HAVE LED TO A POWER LOSS. AN EXAM OF THE WRECKAGE REVEALED THE HELICOPTER HAD IMPACTED IN A LEFT BANK, NOSE LOW ATTITUDE. ALL 3 MAIN ROTOR BLADES HAD EVIDENCE OF HIGH FLAPPING ANGLES AT IMPACT. TOXICOLOGY CHECKS OF THE PLT'S BLOOD, LIVER & KIDNEY REVEALED THE PRESENCE OF NORDIAZEPAM AT LEVELS OF 0.104 MG/L, 0.846 MG/L & 0.427 MG/L, RESPECTIVELY. THE TOXICOLOGIST RPRTD THE THERAPEUTIC RANGE FOR NORDIAZEPAM IN BLOOD WAS 0.02 TO 0.18 MG/L. NORDIAZAPAM IS A SEDATIVE & CNS DEPRESSANT WHICH IS NOT APPROVED FOR FLYING.

Brief of Accident (Continued)

File No. - 1456

5/18/89

ROCKSPRINGS, TX

A/C Reg. No. N58228

Time (Lcl) - 1830 CDT

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

Finding(s)

1. MANEUVER - PERFORMED - PILOT IN COMMAND
 2. ROTOR RPM - NOT MAINTAINED - PILOT IN COMMAND
 3. ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
 4. DIVERTED ATTENTION - PILOT IN COMMAND
 5. PHYSICAL IMPAIRMENT(DRUGS) - PILOT IN COMMAND
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT DIVERTED HIS ATTENTION FROM OPERATION OF THE HELICOPTER, FAILED TO MAINTIAN PROPER ROTOR RPM, AND FAILED TO MAINTAIN ALTITUDE (CLEARANCE) ABOVE THE GROUND, WHILE MANEUVERING AT LOW ALTITUDE. A CONTRIBUTING FACTOR WAS HIS IMPAIRMENT FROM USE OF A PRESCRIPTION DRUG (NORDIAZEPAM OR DIAZEPAM), WHICH WAS NOT COMPATIBLE WITH FLYING.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1550 5/25/89 ADDISON, TX A/C Reg. No. N6434J Time (Lcl) - 2200 CDT

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

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

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

Make/Model - CESSNA 172	Eng Make/Model - LYCOMING O-320	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 - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	UNK/NR	ADDISON
Wind Dir/Speed- UNK/NR	ATC/Airspace	Runway Ident - UNK/NR
Visibility - UNK/NR	Type of Flight Plan - UNK/NR	Runway Lth/Wid - UNK/NR
Lowest Sky/Clouds - N/A	Type of Clearance - UNK/NR	Runway Surface - ASPHALT
Lowest Ceiling - UNK/NR	Type Apch/Lndg - UNK/NR	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - NIGHT (DARK)		

-----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 - UNK/NR	Total - 161
SE LAND	Months Since - UNK/NR	Make/Model- 27
	Aircraft Type - UNK/NR	Instrument- 1
		Multi-Eng - 0
		Last 24 Hrs - 7
		Last 30 Days- 28
		Last 90 Days- 56
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

DURING A NIGHT OPERATION, THE PILOT TAXIED THE AIRCRAFT ONTO AN ADJOINING ROADWAY, WHERE IT STRUCK AN UNMARKED TELEPHONE POLE AND THEN VEERED INTO A DITCH.

Brief of Accident (Continued)

File No. - 1550

5/25/89

ADDISON, TX

A/C Reg. No. N6434J

Time (Lcl) - 2200 CDT

Occurrence #1 ON GROUND COLLISION WITH OBJECT
Phase of Operation TAXI

Finding(s)

1. LIGHT CONDITION - DARK NIGHT
 2. BECAME LOST/DISORIENTED - INADVERTENT - PILOT IN COMMAND
 3. VISUAL/AURAL PERCEPTION - PILOT IN COMMAND
 4. OBJECT - UTILITY POLE
 5. CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
-

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

Finding(s)

6. TERRAIN CONDITION - DITCH
-

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
FAILURE OF THE PILOT TO MAINTAIN CLEARANCE FROM THE TELEPHONE POLE. FACTORS RELATED TO THE ACCIDENT WERE: DARKNESS,
THE PILOT'S DISORIENTATION, LACK OF VISUAL PERCEPTION AT NIGHT, THE TELEPHONE (UTILITY) POLE, AND THE DITCH.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1549 5/29/89 STRATFORD, TX A/C Reg. No. N3279Q Time (Lcl) - 2112 CDT

-----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 - PIPER PA-32R	Eng Make/Model - LYCOMING IO-540-K1G5D	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3600	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 6	Rated Power - 300 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - UNK/NR	Last Departure Point	ON AIRPORT
Method - UNK/NR	TULSA, OK	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	STRATFORD
Wind Dir/Speed- 050 KTS		Runway Ident - 22
Visibility - 15.0 SM	ATC/Airspace	Runway Lth/Wid - 3200/ 32
Lowest Sky/Clouds - 2500 FT SCATTERED	Type of Flight Plan - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 5000 FT BROKEN	Type of Clearance - NONE	Runway Status - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - TRAFFIC PATTERN	
Precipitation - NONE	GO AROUND	
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 - NO	Total - 2256
SE LAND	Months Since - 25	Make/Model- 1140
	Aircraft Type - PA-32R	Instrument- UNK/NR
		Multi-Eng - 0
		Last 24 Hrs - 4
		Last 30 Days- UNK/NR
		Last 90 Days- 21
		Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

DURING AN APPROACH TO LAND, THE PILOT INITIATED A GO-AROUND AFTER ENCOUNTERING A WIND SHIFT. CONTROL OF THE AIRPLANE WAS LOST DURING THE GO-AROUND AND THE AIRPLANE IMPACTED THE GROUND IN A LEVEL ATTITUDE. THE PILOT REPORTED WINDS AT THE ACCIDENT SITE WERE FROM 160 DEGREES GUSTING TO 50 KNOTS.

Brief of Accident (Continued)

File No. - 1549

5/29/89

STRATFORD, TX

A/C Reg. No. N3279Q

Time (Lcl) - 2112 CDT

Occurrence #1 IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

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

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

Finding(s)

6. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
-

Occurrence #3 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 PLANNING/DECISION BY THE PILOT, AND HIS INADEQUATE COMPENSATION FOR WIND CONDITIONS, WHICH RESULTED IN A LOSS
OF AIRCRAFT CONTROL. THE WIND CONDITION WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1548 7/01/89 PORT ARANSAS, TX A/C Reg. No. N15250 Time (Lcl) - 1600 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 -TAXI						2

----Aircraft Information----

Make/Model - PIPER PA-28R	Eng Make/Model - LYCOMING IO-360-C1C	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2650	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 200 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAN ANTONIO, TX	MUSTANG BEACH
Wind Dir/Speed- 160/012 KTS	ATC/Airspace	Runway Ident - UNK/NR
Visibility - 20.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - UNK/NR
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 - 33	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 573
SE LAND	Months Since - 1	Make/Model- 425
	Aircraft Type - PA-28R	Instrument- 45
		Multi-Eng - 0
		Last 24 Hrs - 2
		Last 30 Days- 13
		Last 90 Days- 38
		Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

----Narrative----

AS THE PLT WAS TAXIING TO TAKEOFF ON A HOT DAY, THE TAXIWAY SURFACE COLLAPSED UNDER THE LEFT MAIN GEAR. SUBSEQUENTLY, THE LEFT WING SPAR WAS DAMAGED.

Brief of Accident (Continued)

File No. - 1548

7/01/89

PORT ARANSAS, TX

A/C Reg. No. N15250

Time (Lcl) - 1600 CDT

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

Finding(s)

1. AIRPORT FACILITIES, TAXIWAY CONDITION - SOFT
 2. OTHER AIRPORT/RUNWAY MAINTENANCE - INADEQUATE -
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE COLLAPSE OF THE TAXIWAY, WHICH WAS INADEQUATELY MAINTAINED.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1516 7/03/89 TERRELL, TX A/C Reg. No. N2946V Time (Lcl) - 0230 CDT

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

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

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

Make/Model - BEECH 35	Eng Make/Model - CONTINENTAL E-185-1	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2550	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 185 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - TELEPHONE	DENTON, TX	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	AIRPARK EAST
Wind Dir/Speed- 290/003 KTS		Runway Ident - 31
Visibility - 50.0 SM	ATC/Airspace	Runway Lth/Wid - 2630/ 30
Lowest Sky/Clouds - N/A	Type of Flight Plan - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 25000 FT OVERCAST	Type of Clearance - NONE	Runway Status - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - TRAFFIC PATTERN	
Precipitation - NONE		
Condition of Light - NIGHT (BRIGHT)		

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

Pilot-In-Command	Age - 47	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 689
SE LAND	Months Since - 12	Make/Model- 30
	Aircraft Type - C-152	Instrument- 13
		Multi-Eng - 0
		Last 24 Hrs - 4
		Last 30 Days- 4
		Last 90 Days- 22
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PILOT STATED THAT AS BRAKES WERE APPLIED, THE LEFT WHEEL DEPARTED THE EDGE OF THE ASPHALT RUNWAY & DIRECTIONAL CONTROL WAS LOST. HE WAS UNABLE TO STEER THE AIRPLANE BACK ONTO THE RUNWAY. SUBSEQUENTLY, IT COLLIDED WITH A PILE OF DIRT ABOUT 10 FEET LEFT OF THE RUNWAY AND THE AIRPLANE NOSED OVER.

Brief of Accident (Continued)

File No. - 1516

7/03/89

TERRELL, TX

A/C Reg. No. N2946V

Time (Lcl) - 0230 CDT

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

Finding(s)

1. LIGHT CONDITION - BRIGHT NIGHT
 2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
 3. GROUND LOOP/SWERVE - UNCONTROLLED - PILOT IN COMMAND
-

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

Finding(s)

4. TERRAIN CONDITION - DIRT BANK
-

Occurrence #3 NOSE OVER
Phase of Operation LANDING - ROLL

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL. A FACTOR RELATED TO THE ACCIDENT WAS: THE PILE OF DIRT
(DIRT BANK) BESIDE THE RUNWAY.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1439 7/13/89 WHARTON, TX A/C Reg. No. N7037K Time (Lcl) - 1945 CDT

-----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 0	0	0	0
Accident Occurred During -MANEUVERING					

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

Make/Model - LOWE/BENSEN KB-2	Eng Make/Model - MCCULLOCH AFO-0100-3	ELT Installed/Activated - NO	-N/A
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 550	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	OFF AIRPORT/STRIP
Method - N/A		WHARTON, TX	
Completeness - N/A		Destination	Airport Data
Basic Weather - VMC		LOCAL	Runway Ident - N/A
Wind Dir/Speed- 145/013 KTS		ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 SM		Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 2000 FT SCATTERED		Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - 3500 FT OVERCAST		Type Apch/Lndg - NONE	
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)
STUDENT	Current - N/A	Total - 16
	Months Since - N/A	Make/Model- 16
	Aircraft Type - N/A	Instrument- 0
		Multi-Eng - 0
		Last 24 Hrs - 0
		Last 30 Days- 8
		Last 90 Days- 10
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT OF N7037K WAS IN A FLT OF 2 GYROPLANES, FLYING IN-TRAIL OF THE OTHER ACFT. WHEN LAST SEEN BY THE LEAD PLT, N7037K WAS BEHIND, MAKING A DIVING MANEUVER TOWARD THE GROUND. THE LEAD PLT STATED THAT THRU-OUT THEIR FLT, THE PLT OF THE ADCNT ACFT HAD BEEN FLYING AT ALTITUDES RANGING FM 1000' AGL TO 50' AGL, MAKING STEEP TURNS IN CLOSE PROXIMITY TO TREES & TERRAIN. THE LEAD PLT DID NOT SEE N7037K CRASH, BUT FOUND IT LATER, IN THE VICINITY OF WHERE HE LAST SAW IT. N7037K WAS EXTENSIVELY DAMAGED; THERE WAS LITTLE FORWARD MOVEMENT OF THE GYROPLANE AFTER IMPACT. NO PREIMPACT MECHANICAL FAILURE WAS FOUND. THERE WERE NO KNOWN WITNESSES TO THE ACNT. THE PLT OF N7037K HELD ONLY A STUDENT PLT CERTIFICATE.

Brief of Accident (Continued)

File No. - 1439

7/13/89

WHARTON, TX

A/C Reg. No. N7037K

Time (Lcl) - 1945 CDT

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

Finding(s)

1. JUDGEMENT - POOR - PILOT IN COMMAND
 2. MANEUVER - EXCESSIVE - PILOT IN COMMAND
 3. TERRAIN CONDITION - OPEN FIELD
 4. CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
 5. LACK OF FAMILIARITY WITH AIRCRAFT - PILOT IN COMMAND
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
POOR JUDGEMENT BY THE STUDENT PILOT BY PERFORMING EXCESSIVE/LOW ALTITUDE MANEUVERS, WHICH RESULTED IN HIS FAILURE TO MAINTAIN SUFFICIENT CLEARANCE (ALTITUDE) ABOVE THE OPEN FIELD. HIS LACK OF FAMILIARITY WITH THE AIRCRAFT WAS A CONTRIBUTING FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1527 7/16/89 CELINA, TX A/C Reg. No. N4360K Time (Lcl) - 1343 CDT

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

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

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

Make/Model - PIPER PA-32R-301T	Eng Make/Model - LYCOMING TIO-540-S1AD	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 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	ON AIRSTRIP
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	HOUSTON, TX	PRIVATE
Wind Dir/Speed- 080/005 KTS		Runway Ident - 01
Visibility - 8.0 SM	ATC/Airspace	Runway Lth/Wid - 1931/ 67
Lowest Sky/Clouds - 3000 FT SCATTERED	Type of Flight Plan - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - NONE	Type of Clearance - NONE	Runway Status - WET
Obstructions to Vision- NONE	Type Apch/Lndg - NONE	
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 50	Medical Certificate - EXPIRED
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - UNK/NR	Total - 750
SE LAND	Months Since - UNK/NR	Make/Model- 120
	Aircraft Type - UNK/NR	Instrument- 0
		Multi-Eng - 172
		Last 24 Hrs - 0
		Last 30 Days- 7
		Last 90 Days- 25
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT ELECTED TO TAKEOFF TO THE NORTH FROM A 1931 FT GRASS STRIP. THE WIND WAS FROM 080 DEG AT 5 KTS, THE TEMP WAS 93 DEG, & THE DENSITY ALT WAS ABOUT 2925 FT. GRASS ON THE STRIP WAS 4 TO 6 INCHES TALL & WAS WET. THE SOUTH END OF THE STRIP WAS SOFT & WET; THE PLT INITIATED HIS TAKEOFF FROM A POINT WITH 1647 FT OF RWY REMAINING. DRCTLY OFF THE DEP END OF THE STRIP WAS A 32 FT STORAGE TANK WITH A 10 FT WIND SOCK ON TOP. AFTER LIFT-OFF, THE ACFT WAS BANKED TO THE RGT. IT CLEARED A LOWER MAINT BLDG BY A FEW FT, BUT STRUCK PWR LINES (28 & 33 FT AGL), THEN CRASHED. AN INVESTIGATION REVEALED THE ACFT WAS LOADED TO ABOUT 12 LBS BELOW THE 3600 LB MAX ALLOWABLE LIMIT. ACCORDING TO THE PILOT OPERATING HANDBOOK, 1700 FT WOULD HAVE BEEN REQUIRED TO CLEAR A 50 FT OBSTACLE DRG TAKEOFF FROM A DRY, PAVED RWY. DATA PROVIDED BY THE MANUFACTURER INDCD THAT APRX 2340 FT WOULD HAVE BEEN REQUIRED TO TAKEOFF FROM A SOD RWY WITH 6 INCH, WET GRASS. THE PLT'S LAST MED CERT WAS DATED 3/17/87.

Brief of Accident (Continued)

File No. - 1527

7/16/89

CELINA, TX

A/C Reg. No. N4360K

Time (Lcl) - 1343 CDT

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

Finding(s)

1. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
 2. ALL AVAILABLE RUNWAY - NOT USED - PILOT IN COMMAND
 3. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - GRASS
 4. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - WET
 5. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - SOFT
 6. TERRAIN CONDITION - HIGH OBSTRUCTION(S)
 7. OBJECT - WIRE, TRANSMISSION
-

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 PLANNING/DECISION BY THE PILOT. RELATED FACTORS WERE: FAILURE OF THE PILOT TO USE ALL OF THE
AVAILABLE RUNWAY AREA, THE RUNWAY/TERRAIN CONDITIONS, AND OBSTRUCTIONS/POWER LINES BEYOND THE DEPARTURE
END OF THE RUNWAY.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1547 9/02/89 BELLVILLE, TX A/C Reg. No. N13620 Time (Lcl) - 1325 CDT

-----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	1
Accident Occurred During -LANDING		0	0	0	0

-----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-----

Weather Data		Itinerary	Airport Proximity
Wx Briefing - FSS		Last Departure Point	ON AIRPORT
Method - IN PERSON		HOUSTON, TX	
Completeness - FULL		Destination	Airport Data
Basic Weather - VMC		SAME AS ACC/INC	GRAWUNDER
Wind Dir/Speed- 190/005 KTS		ATC/Airspace	Runway Ident - 15
Visibility - 20.0 SM		Type of Flight Plan - VFR	Runway Lth/Wid - 2480/ 30
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 - 40	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 20
	Months Since - N/A	Make/Model- 20
	Aircraft Type - N/A	Instrument- 0
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

AS THE STUDENT PLT WAS LANDING ON A X-COUNTRY FLT, THE ACFT BOUNCED AFTER TOUCHDOWN, THEN ENTERED A "PILOT INDUCED OSCILLATION". SUBSEQUENTLY, THE NOSE GEAR COLLAPSED & THE ACFT NOSED OVER.

Brief of Accident (Continued)

File No. - 1547

9/02/89

BELLVILLE, TX

A/C Reg. No. N13620

Time (Lcl) - 1325 CDT

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

Finding(s)

1. FLARE - IMPROPER - PILOT IN COMMAND

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

Finding(s)

2. RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND
3. PORPOISE - INADVERTENT - PILOT IN COMMAND

Occurrence #3 NOSE GEAR COLLAPSED
Phase of Operation LANDING

Finding(s)

4. LANDING GEAR, NOSE GEAR - OVERLOAD

Occurrence #4 NOSE OVER
Phase of Operation LANDING

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

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER FLARE BY THE PILOT AND HIS IMPROPER RECOVERY FROM A BOUNCED LANDING, WHICH RESULTED IN AN INADVERTENT
PORPOISE AND SUBSEQUENT NOSE GEAR FAILURE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1552 9/05/89 CARMIN, TX A/C Reg. No. N94777 Time (Lcl) - 0715 CDT

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

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

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

Make/Model - CESSNA 152	Eng Make/Model - LYCOMING O-235-N2C	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 - 108 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - PATWAS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	SAME AS ACC/INC	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	HOUSTON, TX	Runway Ident - N/A
Wind Dir/Speed- CALM	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 7.0 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 - 22	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 57
SE LAND	Months Since - 2	Make/Model- 47
	Aircraft Type - C-152	Instrument- 1
		Multi-Eng - 0
		Last 24 Hrs - 1
		Last 30 Days- 7
		Last 90 Days- 29
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

THE PRIVATE PILOT WITH 57 HOURS TOTAL TIME WAS DEPARTING FROM A DIRT STRIP WHEN THE ENGINE BEGAN TO RUN ROUGH. SUBSEQUENTLY, HE MADE A FORCED LANDING ON A FARM ROAD. DURING THE LANDING ROLL, THE LEFT MAIN GEAR ENTERED A DITCH AND THE ACFT STRUCK A TREE. NO REASON WAS FOUND FOR THE LOSS OF POWER.

Brief of Accident (Continued)

File No. - 1552

9/05/89

CARMIN, TX

A/C Reg. No. N94777

Time (Lcl) - 0715 CDT

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

Finding(s)

1. REASON FOR OCCURRENCE UNDETERMINED

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 - DITCH

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

Finding(s)

3. OBJECT - FENCE

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
LOSS OF POWER FOR AN UNKNOWN REASON. FACTORS RELATED TO THE ACCIDENT WERE THE DITCH & FENCE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1543 9/16/89 KERRVILLE, TX A/C Reg. No. N14LU Time (Lcl) - 1040 CDT

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

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

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

Make/Model - ZENAIR CH-200	Eng Make/Model - LYCOMING O-235-F2B	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 1550	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 125 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	JUSTIN, TX	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	LOUIS SCHRIENER FIELD
Wind Dir/Speed- 280/004 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 - DAYLIGHT		

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

Pilot-In-Command	Age - 49	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 850
SE LAND, ME LAND	Months Since - 14	Make/Model- 20
	Aircraft Type - CE-310	Instrument- 13
		Multi-Eng - 25

Instrument Rating(s) - NONE

-----Narrative-----

THE EXPERIMENTAL AIRPLANE WAS ON AN EXTENDED BASE LEG TO LAND WHEN THE ENG LOST POWER. THE PILOT WAS UNABLE TO REACH THE ARPT & THE ACFT STRUCK A TREE & CRASHED BEFORE REACHING A CLEAR AREA. LESS THAN ONE CUP OF FUEL WAS DRAINED FROM THE ENTIRE FUEL SYSTEM AT THE ACCIDENT SITE. FUEL SYSTEM INTEGRITY WAS CONFIRMED BY THE INVESTIGATOR. THERE WAS NO EVIDENCE FOUND OF INTERNAL POWERPLANT FAILURE.

Brief of Accident (Continued)

File No. - 1543

9/16/89

KERRVILLE, TX

A/C Reg. No. N14LU

Time (Lcl) - 1040 CDT

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

Finding(s)

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

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation LANDING

Finding(s)

4. 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, WHICH RESULTED IN FUEL EXHAUSTION, DUE TO AN INADEQUATE SUPPLY OF FUEL.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1540 9/17/89 BRENHAM, TX A/C Reg. No. N9462V Time (Lcl) - 1154 CDT

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

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

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

Make/Model - MOONEY M20E	Eng Make/Model - LYCOMING IO-360-A1A	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2575	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 200 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - UNK/NR	PORTER, TX	
Completeness - WEATHER NOT PERTINENT	Destination	Airport Data
Basic Weather - VMC	PECOS, TX	Runway Ident - N/A
Wind Dir/Speed- LIGHT AND VARIABLE	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 9.0 SM	Type of Flight Plan - VFR	Runway Surface - N/A
Lowest Sky/Clouds - 4000 FT SCATTERED	Type of Clearance - VFR	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 - 63	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 2226
SE LAND	Months Since - 5	Last 24 Hrs - 1
	Aircraft Type - UNK/NR	Make/Model- 1275
		Last 30 Days- UNK/NR
		Instrument- 0
		Last 90 Days- UNK/NR
		Multi-Eng - 0
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

DURING CRUISE AT 6500 FT, OIL APPEARED ON THE WINDSCREEN. FORWARD VISIBILITY WAS SOON RESTRICTED & SEVERE VIBRATIONS PROMPTED THE PLT TO SECURE THE ENG. SUBSEQUENTLY, THE ACFT WAS DMGD WHEN IT HIT A SMALL TREE & ENCTRD UNEVEN TERRAIN DRG A FORCED LNDG. INV REVEALED A 90 DEG ALUMINUM FITTING ON THE PROP GOVERNOR OIL LINE HAD FAILED WHERE IT ENTERED THE ENG CASE. THE OIL LINE WAS STAINLESS STEEL & ITS MOVEMENT WAS DESIGNED TO BE RESTRAINED BY CLAMPS, WHICH WERE NOT IN PLACE. A SVC INSTRN, ISSUED IN 1986, RCMNDD THAT ALUMINUM FITTINGS BE UPGRADED TO STAINLESS STEEL. A SVC BULLETIN DATED 9/8/89 RELATED TO NUMEROUS "ENGINE FAILURES DUE TO OIL STARVATION RESULTING FROM BROKEN GOVERNOR LINES." ACCORDING TO THAT BULLETIN, FAILURE TO RE-INSTALL THE GOVERNOR LINE CLAMPS AFTER MAINT HAD BEEN THE CAUSE OF NUMEROUS ENG FAILURES. MAINT PERSONNEL ACCOMPLISHED BOTH A TOP OVERHAUL & AN ANNUAL INSPN, 50 & 12 HRS, RESPECTIVELY, BFR THE ACNT.

Brief of Accident (Continued)

File No. - 1540

9/17/89

BRENHAM, TX

A/C Reg. No. N9462V

Time (Lcl) - 1154 CDT

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

Finding(s)

1. LUBRICATING SYSTEM, OIL LINE - NOT SECURED
 2. MAINTENANCE, TOP OVERHAUL - IMPROPER - OTHER MAINTENANCE PSNL
 3. MAINTENANCE, SERVICE BULLETINS - NOT FOLLOWED - OTHER MAINTENANCE PSNL
 4. LUBRICATING SYSTEM, OIL LINE - FAILURE, TOTAL
 5. PROPELLER GOVERNOR CONTROL - LEAK
 6. FLUID, OIL - EXHAUSTION
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

7. OBJECT - TREE(S)
-

Occurrence #4 ON GROUND COLLISION WITH TERRAIN/WATER
Phase of Operation LANDING - ROLL

Finding(s)

8. TERRAIN CONDITION - ROUGH/UNEVEN
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER MAINTENANCE, IMPROPERLY SECURED OIL LINE TO THE PROPELLER GOVERNOR, FAILURE OF THE PROPELLER GOVERNOR OIL
LINE, AND SUBSEQUENT LOSS OF OIL, WHICH RESULTED IN OIL EXHAUSTION. FACTORS RELATED TO THE ACCIDENT WERE: FAILURE OF
MAINTENANCE PERSONNEL TO FOLLOW THE SERVICE BULLETIN/INSTRUCTION, AND THE TREE AND ROUGH TERRAIN IN THE EMERGENCY
LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1512 10/26/89 SAN ANTONIO, TX A/C Reg. No. N77707 Time (Lcl) - 1550 CDT

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

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

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

Make/Model - MCCLISH/FUNK B85C	Eng Make/Model - CONTINENTAL C-90-12F	ELT Installed/Activated - NO -N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1350	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 90 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	SAN ANTONIO HORIZON
Wind Dir/Speed- 180/013 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - 4000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - N/A
Lowest Ceiling - 5000 FT BROKEN	Type Apch/Lndg - NONE	Runway Status - N/A
Obstructions to Vision- NONE		
Precipitation - UNK/NR		
Condition of Light - DAYLIGHT		

-----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 - 385
SE LAND	Months Since - 7	Last 24 Hrs - 0
	Aircraft Type - B85	Make/Model- UNK/NR
		Last 30 Days- 4
		Instrument- 4
		Last 90 Days- 12
		Multi-Eng - UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

WHEN THE PILOT TOOK OFF, THERE WERE NUMEROUS THUNDERSTORMS & RAINSHOWERS IN THE AREA. TOWERING CUMULUS CLOUDS WERE REPORTED IN ALL QUADRANTS & THE WIND WAS REPORTED TO BE GUSTING TO 25 KTS. AFTER DEPARTING FROM RUNWAY 16, THE PILOT MADE RIGHT TURNS TO THE NORTH & BEGAN A CLIMB. ACCORDING TO WITNESSES, THE ACFT WAS CLIMBING IN A NOSE HIGH ATTITUDE WHEN IT ENTERED A DESCENT & CRASHED. IMPACT OCCURRED JUST WEST OF THE ARPT. NO PREIMPACT PART FAILURE OR MALFUNCTION OF THE AIRCRAFT WAS FOUND.

Brief of Accident (Continued)

File No. - 1512

10/26/89

SAN ANTONIO, TX

A/C Reg. No. N77707

Time (Lcl) - 1550 CDT

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

Finding(s)

1. WEATHER CONDITION - GUSTS
 2. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
 3. 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:
FAILURE OF THE PILOT TO MAINTAIN AIRSPEED, WHICH RESULTED IN A STALL. THE UNFAVORABLE/GUSTY WIND CONDITION WAS A
RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1539 11/11/89 FABENS, TX A/C Reg. No. N7337G Time (Lcl) - 1200 MST

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

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

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

Make/Model - CESSNA 172K	Eng Make/Model - LYCOMING O-320-E2A	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 AIRSTRIP
Method - N/A	LAS CRUSES, NM	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	MACGUIRE
Wind Dir/Speed- 190/004 KTS	ATC/Airspace	Runway Ident - 23
Visibility - 70.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 8500/ 70
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - UNK/NR
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 - 65	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 187
SE LAND	Months Since - 20	Make/Model- 62
	Aircraft Type - 172	Instrument- UNK/NR
		Multi-Eng - 0
		Last 24 Hrs - 1
		Last 30 Days- 4
		Last 90 Days- 7
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE ACFT TOUCHED DOWN & BOUNCED AFTER A NORMAL APCH. AFTER THE INITIAL BOUNCE, IT VEEERED LEFT & THE NOSE GEAR COLLAPSED. THE PLT STATED THAT THE ARPT WAS ON A MESA & WAS SUBJECT TO "SHARP AND CHANGING GUSTS OF WIND AT GROUND LEVEL."

Brief of Accident (Continued)

File No. - 1539

11/11/89

FABENS, TX

A/C Reg. No. N7337G

Time (Lcl) - 1200 MST

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

Finding(s)

1. WEATHER CONDITION - UNFAVORABLE WIND
 2. FLARE - IMPROPER - PILOT IN COMMAND
 3. RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND
-

Occurrence #2 NOSE GEAR COLLAPSED
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

4. LANDING GEAR, NOSE GEAR - OVERLOAD
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT'S IMPROPER FLARE DURING LANDING AND INADEQUATE RECOVERY FROM THE ENSUING BOUNCED LANDING. THE UNFAVORABLE
WIND WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1567 8/11/89 BULLFROG, UT A/C Reg. No. N84164 Time (Lcl) - 1320 MDT

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

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

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

Make/Model - AEROFAB LAKE LA-250	Eng Make/Model - LYCOMING TIO-540	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 3140	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 270 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	LAKE POWELL, UT	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	LAKE POWELL
Wind Dir/Speed- 270/005 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 50.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - N/A
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Surface - WATER
Lowest Ceiling -	Type Apch/Lndg - STRAIGHT-IN	Runway Status - WATER-CALM
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)
ATP	Current - YES	Total - 3994
SE LAND, ME LAND, SE SEA	Months Since - 12	Last 24 Hrs - 5
	Aircraft Type - C-210	Make/Model- 387
		Last 30 Days- 69
		Instrument- 558
		Last 90 Days- 205
		Multi-Eng - 448

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE ATP PLT WAS PRACTICING "SPLASH AND GO LANDINGS" ON LAKE POWELL WITH TWO PSGRS. HE LANDED TO THE WEST IN WINDS HE ESTIMATED WERE LESS THAN 5 KTS. HE SAID THAT DURING THE LANDING RUN, THE ACFT STRUCK AN UNSEEN SUBMERGED OBJECT, POSSIBLY A LOG FLOATING BENEATH THE SURFACE; THE ACFT SANK IN 130 FT OF WATER. THE OBJECT PENETRATED THE HULL BETWEEN THE RUDDER PEDALS AND BROKE BOTH OF THE PLT'S LEGS. HE SAID THE IMPACT SEPARATED THE CABIN FROM THE EMPENNAGE. THE FRONT SEAT PSGR WAS EJECTED THRU THE WINDSHIELD ALONG WITH THE SEAT, SEAT BELT & SHOULDER HARNESS ATTACHED. WITNESSES REPORTED THAT THE ACFT NOSED OVER AND CAME TO REST INVERTED IN THE WATER. ALL 3 OCCUPANTS WERE RESCUED BY A PASSING SKI BOAT. THE PLT WAS AIR LIFTED TO PAGE, ARIZONA, FOR EMERGENCY TREATMENT. A POST-SALVAGE INVESTIGATION VERIFIED HULL PENETRATION IN THE AREA OF THE PLT'S FEET.

Brief of Accident (Continued)

File No. - 1567

8/11/89

BULLFROG, UT

A/C Reg. No. N84164

Time (Lcl) - 1320 MDT

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

Finding(s)

1. TERRAIN CONDITION - WATER
 2. OBJECT - SUBMERGED OBJECT
-

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:
A SUBMERGED OBJECT IN THE LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1405 8/14/89 BOUNTIFUL, UT A/C Reg. No. N3128P Time (Lcl) - 0825 MDT

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

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

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

Make/Model - CONSOLIDATED LAKE LA-4-200	Eng Make/Model - LYCOMING IO-360-A1B	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2690	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 4	Rated Power - 200 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	GARDEN CITY, UT	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	BOUNTIFUL SKYPARK
Wind Dir/Speed- 020 KTS	ATC/Airspace	Runway Ident - 16
Visibility - 30.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4700/ 60
Lowest Sky/Clouds - UNK/NR SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - UNK/NR	Type Apch/Lndg - STRAIGHT-IN	Runway Status - DRY
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 57	Medical Certificate - EXPIRED
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - NO	Total - 1000
SE LAND	Months Since - 30	Make/Model- 50
	Aircraft Type - UNK/NR	Instrument- 0
		Last 24 Hrs - 2
		Last 30 Days- 10
		Last 90 Days- 15

Instrument Rating(s) - NONE

-----Narrative-----

DRG ARRIVAL, THE PLT MADE A STRAIGHT-IN APCH TO RWY 16 IN WINDS THAT HE ESTIMATED WERE VARIABLE AT 20 GUSTING 55 KTS. HE RPRTD THAT DRG THE LANDING ROLL, THE ACFT WAS LIFTED BY A GUST OF WIND. HE APPLIED POWER & THE ACFT SETTLED BACK ONTO THE RWY. HOWEVER, THE PLT LOST DIRECTIONAL CONTROL & THE ACFT SUBSEQUENTLY STRUCK 2 PARKED AIRPLANES BEFORE COMING TO REST.

Brief of Accident (Continued)

File No. - 1405

8/14/89

BOUNTIFUL, UT

A/C Reg. No. N3128P

Time (Lcl) - 0825 MDT

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

Finding(s)

1. PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
 2. WEATHER CONDITION - UNFAVORABLE WIND
 3. WEATHER CONDITION - CROSSWIND
 4. WEATHER CONDITION - GUSTS
 5. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
 6. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
 7. GROUND LOOP/SWERVE - UNCONTROLLED -
-

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

Finding(s)

8. OBJECT - AIRCRAFT PARKED
-

-----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 DIRECTIONAL CONTROL DURING THE LANDING. THE PILOT'S INADEQUATE PREFLIGHT PREPARATION (LACK OF A WEATHER BRIEFING) AND THE WEATHER CONDITIONS WERE CONTRIBUTING FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1565 8/22/89 LOGAN, UT A/C Reg. No. N6697G Time (Lcl) - 2145 MDT

-----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 - 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	OFF AIRPORT/STRIP
Method - N/A	REXBURG, ID	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOGAN, UT	Runway Ident - N/A
Wind Dir/Speed- CALM	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - UNK/NR	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 - NIGHT (DARK)		

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

Pilot-In-Command	Age - 21	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 65
SE LAND	Months Since - 5	Make/Model- 23
	Aircraft Type - C-150	Instrument- 2
		Last 24 Hrs - 3
		Last 30 Days- 22
		Last 90 Days- 51

Instrument Rating(s) - NONE

-----Narrative-----

THE PRIVATE PLT WAS RETURNING FROM A NIGHT X-COUNTRY FLT. HE SAID HE WAS AT NORMAL CRUISE AT 8000 FT & 8 MI FROM THE DESTINATION, WHEN THE ENGINE SUDDENLY LOST POWER & HE WAS UNABLE TO RESTART IT. HE LANDED IN A FIELD. DURING THE LANDING ROLL, THE PLANE WENT THRU A FENCE, NOSED OVER & CAME TO REST INVERTED. THE PLT SAID HE HAD FLOWN 3 HRS ON THIS TANK OF FUEL & SHOULD HAVE HAD 1 HR LEFT. HOWEVER, A POST-ACDNT INVESTIGATION REVEALED NO EVIDENCE OF A MECHANICAL ENGINE FAILURE. NO FUEL WAS FOUND IN THE CARBURETOR, FUEL GASCOLATOR OR FUEL PUMP. ONE GALLON OF FUEL WAS FOUND IN THE RIGHT TANK & NONE IN THE LEFT. NO EVIDENCE OF A FUEL SPILL WAS FOUND AT THE CRASH SCENE.

Brief of Accident (Continued)

File No. - 1565

8/22/89

LOGAN, UT

A/C Reg. No. N6697G

Time (Lcl) - 2145 MDT

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

Finding(s)

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

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

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

Finding(s)

4. LIGHT CONDITION - DARK NIGHT
 5. OBJECT - FENCE
-

Occurrence #4 NOSE OVER
Phase of Operation LANDING - ROLL

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER PLANNING/DECISION BY THE PILOT, WHICH RESULTED IN FUEL EXHAUSTION, DUE TO LACK OF FUEL. FACTORS RELATED TO
THE ACCIDENT WERE: DARKNESS AND A FENCE IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1566 8/30/89 DUTCH JOHN,UT A/C Reg. No. N7111W Time (Lcl) - 1215 MDT

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

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

-----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 - 2400	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 180 HP	

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

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	ON AIRPORT
Method - ACFT RADIO	SAME AS ACC/INC	
Completeness - FULL	Destination	Airport Data
Basic Weather - VMC	HEBER,UT	DUTCH JOHN
Wind Dir/Speed- 023 KTS	ATC/Airspace	Runway Ident - 25
Visibility - 15.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 4400/ 100
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - DIRT
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	Runway Status - SOFT
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

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

Pilot-In-Command	Age - 47	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 116
SE LAND	Months Since - 24	Make/Model- 116
	Aircraft Type - B-19	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 4
		Last 30 Days- 10
		Last 90 Days- 15
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT HE & A FRIEND WERE TAKING OFF ON A SOFT, DIRT RWY WITH AN ESTIMATED 23 KNOT HEADWIND. HE SAID THAT DURING THE TAKEOFF GROUND RUN, THE PLANE ENCOUNTERED A GUST OF WIND THAT HE ESTIMATED AS 50 KTS. THE PLANE TURNED SHARPLY TO THE LEFT. THE PLT ATTEMPTED TO CORRECT WITH RIGHT RUDDER. HE SAID HE PULLED THE NOSE OFF THE GROUND AS THE PLANE DEPARTED THE RUNWAY TO THE LEFT. THE PLANE FLEW OVER SAGE BRUSH BESIDE THE RUNWAY, BUT THE LEFT WING STRUCK A 10 FT HIGH CEDAR TREE ABOUT 8 FT ABOVE THE GROUND. THE PLANE THEN HIT THE GROUND & NOSED OVER.

Brief of Accident (Continued)

File No. - 1566

8/30/89

DUTCH JOHN, UT

A/C Reg. No. N7111W

Time (Lcl) - 1215 MDT

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

Finding(s)

1. WEATHER CONDITION - UNFAVORABLE WIND
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 - UNCONTROLLED - PILOT IN COMMAND

Occurrence #2 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation TAKEOFF

Finding(s)

6. TERRAIN CONDITION - HIGH VEGETATION
7. OBJECT - TREE(S)

Occurrence #3 NOSE OVER
Phase of Operation LANDING - FLARE/TOUCHDOWN

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
INADEQUATE COMPENSATION FOR THE WIND CONDITIONS BY THE PILOT, RESULTING IN A LOSS OF CONTROL DURING THE TAKEOFF GROUND
RUN. FACTORS RELATED TO THE ACCIDENT WERE: THE UNFAVORABLE (VARIABLE/GUSTY) WIND CONDITION, AND THE HIGH VEGETATION
AND TREE BESIDE THE RUNWAY.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1573 8/31/89 DELTA, UT A/C Reg. No. N6372K Time (Lcl) - 2000 MDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage				
	SUBSTANTIAL		Fatal	Injuries	
Type of Operation -INSTRUCTIONAL	Fire	Crew	0	Serious	Minor
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During -TAKEOFF					None
					1
					0

-----Aircraft Information-----

Make/Model - CESSNA 150M	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	DELTA
Wind Dir/Speed- CALM	ATC/Airspace	Runway Ident - 12
Visibility - 50.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 5935/ 85
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 - DUSK		

-----Personnel Information-----

Pilot-In-Command	Age - 36	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 14
	Months Since - N/A	Make/Model- 14
	Aircraft Type - N/A	Instrument- 0
		Last 24 Hrs - 1
		Last 30 Days- 4
		Last 90 Days- 14

Instrument Rating(s) - NONE

-----Narrative-----

THE STUDENT PLT WAS MAKING A LOCAL SUPERVISED SOLO TRAINING FLIGHT. THE CFI STATED THAT THE STUDENT HAD MADE ONE TOUCH-&-GO LANDING WITHOUT INCIDENT. AFTER A SECOND TOUCH-&-GO, THE STUDENT ADDED POWER TO TAKE OFF. THE PLANE THEN SWERVED LEFT, DEPARTED THE RWY & NOSED OVER. THE STUDENT SAID THE NOSE WHEEL ENTERED SOFT SAND & COLLAPSED, THEN THE AIRPLANE NOSED OVER & CAME TO REST INVERTED.

Brief of Accident (Continued)

File No. - 1573

8/31/89

DELTA, UT

A/C Reg. No. N6372K

Time (Lcl) - 2000 MDT

Occurrence #1 LOSS OF CONTROL - ON GROUND
Phase of Operation TAKEOFF - GROUND RUN

Finding(s)

1. TOUCH-AND-GO - INITIATED - PILOT IN COMMAND
 2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
 3. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
-

Occurrence #2 ON GROUND COLLISION WITH TERRAIN/WATER
Phase of Operation TAKEOFF - GROUND RUN

Finding(s)

4. TERRAIN CONDITION - SOFT
-

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:
FAILURE OF THE PILOT TO MAINTAIN DIRECTIONAL CONTROL WHICH RESULTED IN A GROUND SWERVE. SOFT TERRAIN BESIDE THE RUNWAY
WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1575 9/01/89 MOAB, UT A/C Reg. No. N42027 Time (Lcl) - 1730 MDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries			None
Type of Operation -PERSONAL	Fire	Crew 0	Serious 0	Minor 0	1	
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	0	1	
Accident Occurred During -LANDING						

-----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 PAGE, AZ	ON AIRPORT
Method - N/A	Destination SAME AS ACC/INC	Airport Data
Completeness - N/A		CANYONLANDS
Basic Weather - VMC	ATC/Airspace	Runway Ident - 21
Wind Dir/Speed- 010 KTS	Type of Flight Plan - VFR	Runway Lth/Wid - 6000/ 75
Visibility - 25.0 SM	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Sky/Clouds - CLEAR	Type Apch/Lndg - STRAIGHT-IN	Runway Status - DRY
Lowest Ceiling - NONE		
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 57	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 132
SE LAND	Months Since - 12	Make/Model- 14
	Aircraft Type - PA-28	Instrument- 2
		Last 24 Hrs - 5
		Last 30 Days- 16
		Last 90 Days- 20

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT AND HIS WIFE WERE MAKING A X-COUNTRY FLIGHT. RPRTDLY, WHEN HE LANDED, THE WIND WAS VARIABLE FROM 270 TO 300 DEG AT 10 TO 15 KTS WITH GUSTS TO 20 KTS. THE PLT SAID THAT AT TOUCHDOWN, THE PLANE ENCOUNTERED A WIND GUST AND LANDED HARD. HE SAID HE MADE A GO-AROUND AND LANDED ON RWY 3 WITHOUT FURTHER INCIDENT. AFTER LANDING, HE FOUND A WRINKLE IN THE FUSELAGE AND AN A&P MECHANIC DISCOVERED DAMAGE TO THE FIREWALL. DENSITY ALT WAS ABOUT 7500 FT AT THE ARPT.

Brief of Accident (Continued)

File No. - 1575

9/01/89

MOAB,UT

A/C Reg. No. N42027

Time (Lcl) - 1730 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 - GUSTS
 4. COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
 5. FLARE - NOT ATTAINED - PILOT IN COMMAND
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
INADEQUATE COMPENSATION FOR THE WIND CONDITIONS BY THE PILOT, AND HIS FAILURE TO ATTAIN A FLARE. THE UNFAVORABLE
(VARIABLE & GUSTY) WIND CONDITION WAS A RELATED FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1425 10/14/89 SALT LAKE CITY, UT A/C Reg. No. N503DA Time (Lcl) - 1419 MST

-----Basic Information-----

Type Operating Certificate	-AIR CARRIER - FLAG/DOMESTIC	Aircraft Damage		Injuries			
Name of Carrier	-DELTA AIRLINES, INC.	DESTROYED		Fatal	Serious	Minor	None
Type of Operation	-SCHEDULED, INTL, PASSENGER	Fire	Crew	0	0	1	6
Flight Conducted Under	-14 CFR 121	ON GROUND	Pass	0	0	1	11
Accident Occurred During	-STANDING		Other	0	0	3	0

-----Aircraft Information-----

Make/Model	- BOEING 727-232	Eng Make/Model	- P&W JT8D-15A	ELT Installed/Activated	- UNK/NR
Landing Gear	- TRICYCLE-RETRACTABLE	Number Engines	- 3	Stall Warning System	- YES
Max Gross Wt	- 185200	Engine Type	- TURBOJET		
No. of Seats	- 155	Rated Power	- 15500 LBS THRUST		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity	
Wx Briefing	- UNK/NR	ON AIRPORT	
Method	- UNK/NR		
Completeness	- UNK/NR	Airport Data	
Basic Weather	- UNK/NR	SALT LAKE CITY	
Wind Dir/Speed	- UNK/NR	Runway Ident	- UNK/NR
Visibility	- 20.0 SM	Runway Lth/Wid	- UNK/NR
Lowest Sky/Clouds	- N/A	Runway Surface	- UNK/NR
Lowest Ceiling	- UNK/NR	Runway Status	- UNK/NR
Obstructions to Vision	- UNK/NR		
Precipitation	- UNK/NR		
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)	
ATP	Current - YES	Total - 15000	Last 24 Hrs - 0
SE LAND, ME LAND	Months Since - 0	Make/Model- 5000	Last 30 Days- 70
	Aircraft Type - 727	Instrument- 3600	Last 90 Days- 200
		Multi-Eng - 15000	

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE CREW HEARD A MUFFLED EXPLOSION & SAW FLAMES COMING FROM THE VENT NEAR SEAT 3-D WHILE ACFT WAS PARKED AT GATE. LOCATION OF FIRE PREVENTED CREW FROM RETURNING TO COCKPIT TO NOTIFY CFR & ILLUMINATE EMERG FLOOR LIGHTING. PASSENGERS & CREW EVACUATED ACFT. SECOND OFFICER, LAST TO LEAVE, COULD NOT REACH REAR AIRSTAIRS & EXITED VIA EMERG WINDOW EXIT AFTER HAVING DIFFICULTY IN LOCATING AN EXIT BECAUSE OF SMOKE. A MECHANIC NOTED LOW PASSENGER OXYGEN SUPPLY DURING PREFLIGHT & REPLACED OXYGEN CYLINDERS. WHILE EXITING THE ELECTRICAL EQUIP BAY THE MECHANIC SAW A WHITE FLASH ENGULF THE OXYGEN SYSTEM FLOW CONTROL UNIT. HE ATTEMPTED TO HAVE CFR NOTIFIED OF THE FIRE USING A HAND HELD RADIO TO NO AVAIL. THE PASSENGER OXYGEN SYSTEM HAD 6 LOW OXYGEN QUANTITY MAINTENANCE WRITE-UPS DURING PREVIOUS 30 DAYS BUT WAS NOT "FLAGGED" BY COMPANY AUTOMATED TREND ANALYSIS PROGRAM BECAUSE OF THE JOB TITLE OF THE PERSON ENTERING THE WRITE-UPS. INSPECTION OF DELTA'S FLEET REVEALED 35 OXYGEN SYSTEM LEAKS ON OTHER ACFT.

Brief of Accident (Continued)

File No. - 1425

10/14/89

SALT LAKE CITY, UT

A/C Reg. No. N503DA

Time (Lcl) - 1419 MST

Occurrence #1 FIRE/EXPLOSION
Phase of Operation STANDING

Finding(s)

1. OXYGEN SYSTEM, PASSENGER - LEAK
 2. OXYGEN SYSTEM, PASSENGER - UNDETERMINED
 3. MAINTENANCE - INADEQUATE - COMPANY MAINTENANCE PSNL
 4. INSUFFICIENT STANDARDS/REQUIREMENTS, AIRCRAFT - COMPANY/OPERATOR MGMT
 5. EMERGENCY PROCEDURE - INADEQUATE - COMPANY/OPERATOR MGMT
 6. EMERGENCY LIGHTS - NOT POSSIBLE -
 7. EVACUATION - DELAYED - COPILOT/SECOND PILOT
-

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
A FIRE WHICH STARTED IN THE PASSENGER OXYGEN SYSTEM FOR UNDETERMINED REASONS. CONTRIBUTING TO THE ACCIDENT WAS THE FAILURE OF DELTA AIRLINES TO RECOGNIZE, ATTEND TO AND CORRECT REPEATED LEAKS IN THE OXYGEN SYSTEM.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1404 8/03/89 MIDLAND, VA A/C Reg. No. N13906 Time (Lcl) - 1610 EDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries		
Type of Operation -PERSONAL	Fire	0	Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	0	0	0	1
Accident Occurred During -LANDING		Pass	0	0	0

-----Aircraft Information-----

Make/Model - TRAVEL AIR B-4000	Eng Make/Model - WRIGHT R-760-8	ELT Installed/Activated - UNK/NR
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 2900	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 3	Rated Power - 220 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point CULPEPPER, VA	ON AIRPORT
Method - N/A	Destination	Airport Data
Completeness - N/A	SAME AS ACC/INC	WARRENTON
Basic Weather - VMC	ATC/Airspace	Runway Ident - 32
Wind Dir/Speed- 045/005 KTS	Type of Flight Plan - NONE	Runway Lth/Wid - 4106/ 60
Visibility - 10.0 SM	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Sky/Clouds - CLEAR	Type Apch/Lndg - TRAFFIC PATTERN	Runway Status - DRY
Lowest Ceiling - NONE		
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 - 1722
SE LAND	Months Since - 4	Make/Model- 2
	Aircraft Type - C-207	Instrument- 227
		Last 24 Hrs - UNK/NR
		Last 30 Days- 36
		Last 90 Days- 49

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT RPRTD HE WAS LANDING ON RWY 32 WITH A WIND FROM THE NORTHEAST AT 5 GUSTING 10 KTS. HE RPRTD THAT DRG THE LANDING FLARE, A GUST OF WIND FROM THE WEST PUSHED THE ACFT TO THE RIGHT SIDE OF THE RWY. HE APPLIED LEFT RUDDER TO CENTER THE ACFT; HOWEVER, IT TOUCHED DOWN IN A CRAB. SUBSEQUENTLY, THE SIDE LOADS FROM THE LANDING COLLAPSED THE RIGHT MAIN LANDING GEAR. THE ACFT THEN FLIPPED INVERTED & CAME TO REST IN THE CENTER OF THE RWY. THE PLT HAD ONLY 2 HRS IN THIS MAKE & MODEL OF ACFT.

Brief of Accident (Continued)

File No. - 1404

8/03/89

MIDLAND,VA

A/C Reg. No. N13906

Time (Lcl) - 1610 EDT

Occurrence #1 HARD LANDING
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

1. WEATHER CONDITION - UNFAVORABLE WIND
 2. WEATHER CONDITION - CROSSWIND
 3. WEATHER CONDITION - GUSTS
 4. COMPENSATION FOR WIND CONDITIONS - IMPROPER - PILOT IN COMMAND
 5. FLARE - IMPROPER - PILOT IN COMMAND
 6. LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
-

Occurrence #2 MAIN GEAR COLLAPSED
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

7. LANDING GEAR,MAIN GEAR - OVERLOAD
-

Occurrence #3 NOSE OVER
Phase of Operation LANDING

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT'S IMPROPER COMPENSATION FOR WIND CONDITIONS AND IMPROPER FLARE DURING THE LANDING. CONTRIBUTING FACTORS WERE:
THE WIND CONDITIONS AND THE PILOT'S LACK OF EXPERIENCE IN THIS MAKE AND MODEL OF AIRCRAFT.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1403 8/13/89 LEESBURG,VA A/C Reg. No. N4325V Time (Lcl) - 0300 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 -LANDING					1

-----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 - 2440	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	OFF AIRPORT/STRIP
Method - N/A	WINCHESTER,VA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LEESBURG,VA	Runway Ident - N/A
Wind Dir/Speed- CALM	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 8.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - UNK/NR	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - BROKEN	Type Apch/Lndg - PRECAUTIONARY LANDING	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - NIGHT(DARK)		

-----Personnel Information-----

Pilot-In-Command	Age - 29	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
PRIVATE	Current - YES	Total - 72
SE LAND	Months Since - 1	Make/Model- 72
	Aircraft Type - PA-28	Instrument- 0
		Last 24 Hrs - 1
		Last 30 Days- 12
		Last 90 Days- 25

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT WAS ON A ROUND ROBIN FLT FROM LEESBURG, VA, WITH EN ROUTE STOPS AT FREDERICK, MD & WINCHESTER, VA. AFTER AN APRX 4 HR STOPOVER AT WINCHESTER, HE DID NOT UPDATE HIS WX BRIEFING BEFORE DEPG ON THE RTRN TRIP TO LEESBURG. WHILE ON THE RTRN FLT, HE HAD TO DSCND DUE TO A LOWER CEILING. HE STATED THAT HE PERFORMED A 180 DEG TURN TO RETURN TO WINCHESTER; HOWEVER, THE WX IN THAT DRCTN HAD ALSO DETERIORATED. BEING CONCERNED ABOUT THE WX & HIS LOW FUEL STATE, HE ELECTED TO REVERSE COURSE AGAIN & CONT TO HIS ORIGINAL DESTN (LEESBURG). THE WX CONTD TO DETERIORATE, SO HE THEN ELECTED TO LAND ON A HIGHWAY (ROUTE 15). DRG THE LANDING ROLL-OUT, THE LEFT WING CONTACTED ROAD REFLECTORS & A POLE, DAMAGING THE ACFT.

Brief of Accident (Continued)

File No. - 1403

8/13/89

LEESBURG, VA

A/C Reg. No. N4325V

Time (Lcl) - 0300 EDT

Occurrence #1 IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation CRUISE - NORMAL

Finding(s)

1. PLANNING-DECISION - IMPROPER - PILOT IN COMMAND
 2. WEATHER CONDITION - LOW CEILING
 3. WEATHER CONDITION - FOG
 4. VFR FLIGHT INTO IMC - INADVERTENT - PILOT IN COMMAND
-

Occurrence #2 ON GROUND COLLISION WITH OBJECT
Phase of Operation LANDING - ROLL

Finding(s)

5. PRECAUTIONARY LANDING - PERFORMED -
 6. LIGHT CONDITION - DARK NIGHT
 7. OBJECT - POLE
 8. PROPER ALIGNMENT - NOT MAINTAINED - 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 WHICH RESULTED IN HIS INADVERTENT FLIGHT INTO INSTRUMENT METEOROLOGICAL
CONDITIONS (IMC), AND HIS FAILURE TO MAINTAIN PROPER ALIGNMENT, WHILE LANDING AT NIGHT ON A ROAD. THE WEATHER
CONDITIONS, DARK NIGHT, AND POLE/REFLECTORS BESIDE THE ROAD WERE CONSIDERED TO BE CONTRIBUTING FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1402 8/17/89 MANASSAS, VA A/C Reg. No. N8557H Time (Lcl) - 1130 EDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL	Fatal	Injuries			None
Type of Operation -INSTRUCTIONAL	Fire	Crew 0	Serious 0	Minor 0	2	
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	0	0	
Accident Occurred During -HOVER						

-----Aircraft Information-----

Make/Model - ROBINSON R22	Eng Make/Model - LYCOMING O-320-B2C	ELT Installed/Activated - NO -N/A
Landing Gear - SKID	Number Engines - 1	Stall Warning System - UNK/NR
Max Gross Wt - 1370	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 160 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	ON AIRPORT
Method - N/A	SAME AS ACC/INC	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	MANASSAS MUNI
Wind Dir/Speed- 340/005 KTS	ATC/Airspace	Runway Ident - UNK/NR
Visibility - 5.0 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 - 31	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, CFI	Current - YES	Total - 850
SE LAND	Months Since - 9	Make/Model- 350
HELICOPTER	Aircraft Type - R22	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - 2
		Last 30 Days- 64
		Last 90 Days- 150
		Rotorcraft - 350

Instrument Rating(s) - NONE

-----Narrative-----

THIS WAS THE STUDENT'S 1ST FLT IN A HELICOPTER. THE INSTRUCTOR (CFI) DEMONSTRATED A HOVER, THEN LET THE STUDENT TAKE CONTROL THE HELICOPTER, WHILE HE (THE CFI) FOLLOWED THRU LIGHTLY ON THE CONTROLS. THE CFI RPRTD THAT THE HELICOPTER MOVED TO THE LEFT & THE STUDENT CORRECTED BY APPLYING FULL RIGHT CYCLIC. THE CFI ATTEMPTED TO TAKE CONTROL OF THE HELICOPTER, BUT THE STUDENT OVERPOWERED HIM. SUBSEQUENTLY, THE RIGHT SKID CONTACTED THE GROUND & THE HELICOPTER ROLLED OVER.

Brief of Accident (Continued)

File No. - 1402

8/17/89

MANASSAS,VA

A/C Reg. No. N8557H

Time (Lcl) - 1130 EDT

Occurrence #1 LOSS OF CONTROL - IN FLIGHT
Phase of Operation HOVER

Finding(s)

1. CYCLIC - IMPROPER USE OF - DUAL STUDENT
 2. LACK OF TOTAL EXPERIENCE - DUAL STUDENT
 3. REMEDIAL ACTION - ATTEMPTED - PILOT IN COMMAND (CFI)
 4. RELINQUISHING OF CONTROL - NOT PERFORMED - DUAL STUDENT
-

Occurrence #2 ROLL OVER
Phase of Operation HOVER

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER USE OF THE CYCLIC CONTROL BY THE STUDENT PILOT AND HIS FAILURE TO RELINQUISH CONTROL OF THE HELICOPTER TO THE
INSTRUCTOR (CFI). A CONTRIBUTING FACTOR WAS THE STUDENT'S LACK OF EXPERIENCE.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1477 9/17/89 HAYMARKET,VA A/C Reg. No. N40892 Time (Lcl) - 1530 EDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage				
Type of Operation -PERSONAL	DESTROYED		Fatal	Serious	Minor
Flight Conducted Under -14 CFR 91	Fire	Crew	0	0	1
Accident Occurred During -APPROACH	NONE	Pass	0	0	0
				None	None

-----Aircraft Information-----

Make/Model - PIPER PA-28-180	Eng Make/Model - LYCOMING O-360-A4A	ELT Installed/Activated - YES-UNK/NR
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2500	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	OFF AIRPORT/STRIP
Method - UNK/NR	MT AIRY,NC	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	GAITHERSBURG,MD	Runway Ident - N/A
Wind Dir/Speed- 300/006 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 12.0 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 - 9000 FT BROKEN	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)
FOREIGN,PRIVATE	Current - UNK/NR	Total - 114
SE LAND	Months Since - UNK/NR	Make/Model- 12
	Aircraft Type - UNK/NR	Instrument- 30
		Multi-Eng - 0
		Last 24 Hrs - 8
		Last 30 Days- UNK/NR
		Last 90 Days- 93
		Rotorcraft - 0

Instrument Rating(s) - NONE

-----Narrative-----

AFTER NEARLY 3 HRS OF FLT, THE ENG BEGAN RUNNING ROUGH. THE PLT APPLIED CARB HEAT, TURNED ON THE ELECTRIC FUEL PUMP, AND MOVED THE MIXTURE TO RICH, BUT THE ENG LOST ALL POWER. THE PLT ATTEMPTED TO MAKE AN EMERGENCY LANDING IN A PASTURE; HOWEVER, BEFORE REACHING THE PASTURE, THE ACFT CONTACTED TREES & CRASHED. AN EXAM OF THE ACFT REVEALED THE FUEL SELECTOR WAS POSITIONED TO THE LEFT TANK, WHICH CONTAINED APRX 1 PINT OF FUEL. THE RIGHT TANK WAS FULL OF FUEL. DRG A POST-ACDNT TEST RUN, THE ENG OPERATED NORMALLY. THE PLT WAS A FOREIGN NATIONAL FROM MOZAMBIQUE.

Brief of Accident (Continued)

File No. - 1477

9/17/89

HAYMARKET,VA

A/C Reg. No. N40892

Time (Lcl) - 1530 EDT

Occurrence #1 LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL
Phase of Operation CRUISE - NORMAL

Finding(s)

1. FLUID,FUEL - STARVATION
2. FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Finding(s)

3. EMERGENCY PROCEDURE - IMPROPER - PILOT IN COMMAND

Occurrence #3 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation APPROACH - VFR PATTERN - FINAL APPROACH

Finding(s)

4. OBJECT - TREE(S)

Occurrence #4 IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation APPROACH

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
IMPROPER USE OF THE FUEL SELECTOR, WHICH RESULTED IN FUEL STARVATION & LOSS OF ENGINE POWER; AND IMPROPER
USE OF EMERGENCY PROCEDURES AFTER LOSS OF ENGINE POWER. THE PRESENCE OF HIGH OBSTRUCTIONS (TREES) IN THE
APPROACH PATH TO THE EMERGENCY LANDING AREA WAS A FACTOR.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1448 11/05/89 WINDMILL POINT,VA A/C Reg. No. N4519L Time (Lcl) - 1200 EST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage				
	SUBSTANTIAL		Fatal	Injuries	
Type of Operation -INSTRUCTIONAL	Fire	Crew	0	Serious	Minor
Flight Conducted Under -14 CFR 91	NONE	Pass	0	0	0
Accident Occurred During -LANDING			0	0	0
				None	1
					0

-----Aircraft Information-----

Make/Model - GULFSTREAM AMERICAN AA-5B	Eng Make/Model - LYCOMING O-360-A4K	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
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	SALISBURY,MD	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	ATLANTIC CITY,NJ	Runway Ident - N/A
Wind Dir/Speed- 070/008 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 7.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 3000 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 - 34	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	Make/Model- 47
	Aircraft Type - N/A	Instrument- 1
		Last 24 Hrs - 2
		Last 30 Days- 6
		Last 90 Days- 24

Instrument Rating(s) - NONE

-----Narrative-----

THE ACDNT OCCURRED ON THE 2ND LEG OF A SOLO "ROUND ROBIN" X-COUNTRY FLT. THE STUDENT RPRTD THAT DURING THE PREFLT BEFORE THAT LEG, THE ENG OIL LEVEL WAS 5 QTS. THE 2ND LEG OF THE PLANNED FLT WAS TOWARD THE NORTHEAST; HOWEVER, FOR UNDETERMINED REASONS, THE STUDENT FLEW SOUTHWEST. HE RPRTD THAT ABOUT 20 MIN INTO THE FLT, AT AN ALT OF 3500' MSL, THE OIL PRESSURE DROPPED, & THE ENG LOST POWER. ALSO, HE SAID THE PROP CAME TO A STOP & DID NOT WINDMILL. THE ACFT WAS OVER THE CHESAPEAKE BAY & THE STUDENT WAS UNABLE TO GLIDE THE ACFT TO LAND, SO HE DITCHED IT IN THE BAY. HE DID NOT NOTICE ANY OIL LEAKS DURING THE OCCURRENCE. THE STUDENT RPRTD THAT THE ACFT STAYED AFLOAT FOR ABOUT 20 MIN AFTER DITCHING, THEN SANK. HE SWAM FOR ABOUT 40 MIN, THEN WAS RESCUED BY A SAILBOAT CREW. THE ACFT WAS NOT RECOVERED.

Brief of Accident (Continued)

File No. - 1448

11/05/89

WINDMILL POINT,VA

A/C Reg. No. N4519L

Time (Lcl) - 1200 EST

Occurrence #1 LOSS OF ENGINE POWER
Phase of Operation CRUISE

Finding(s)

1. FLUID,OIL - STARVATION

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 DITCHING
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

2. TERRAIN CONDITION - WATER

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
LOSS OF ENGINE POWER DUE TO OIL STARVATION.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1407 11/14/89 FRONT ROYAL, VA A/C Reg. No. N96096 Time (Lcl) - 1245 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 -LANDING					

-----Aircraft Information-----

Make/Model - CESSNA 152	Eng Make/Model - LYCOMING O-235-N2C	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	WARREN COUNTY
Wind Dir/Speed- 230/012 KTS	ATC/Airspace	Runway Ident - 27
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Lth/Wid - 3000/ 50
Lowest Sky/Clouds - 15000 FT SCATTERED	Type of Clearance - NONE	Runway Surface - ASPHALT
Lowest Ceiling - 25000 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 - 25	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL, CFI	Current - YES	Total - 467
SE LAND, ME LAND	Months Since - 5	Make/Model- 296
	Aircraft Type - PA-28	Instrument- 134
		Multi-Eng - 22
		Last 24 Hrs - 2
		Last 30 Days- 24
		Last 90 Days- 35
		Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE INSTRUCTOR (CFI) RPRTD THE STUDENT WAS HIGH & FAST ON FINAL APCH, SO HE TOOK CONTROL OF THE ACFT, REDUCED POWER & CORRECTED FOR A X-WIND. HE RPRTD THAT A GUST OF WIND DRIFTED THE ACFT TO THE RIGHT OF THE RWY. HE APPLIED POWER & LEFT RUDDER TO CORRECT THE SITUATION; HOWEVER, THE ACFT CONTACTED A RWY LIGHT & CROSSED OVER THE RWY. SUBSEQUENTLY, IT CONTACTED THE GROUND IN A NOSE LOW ATTITUDE & WAS DAMAGED.

Brief of Accident (Continued)

File No. - 1407

11/14/89

FRONT ROYAL, VA

A/C Reg. No. N96096

Time (Lcl) - 1245 EST

Occurrence #1 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

1. ALTITUDE - MISJUDGED - DUAL STUDENT
 2. AIRSPEED - EXCESSIVE - DUAL STUDENT
 3. REMEDIAL ACTION - DELAYED - PILOT IN COMMAND (CFI)
 4. WEATHER CONDITION - CROSSWIND
 5. PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND (CFI)
 6. OBJECT - RUNWAY LIGHT
-

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:
FAILURE OF THE INSTRUCTOR PILOT (CFI) TO MAINTAIN PROPER RUNWAY ALIGNMENT WITH THE RUNWAY. CONTRIBUTING FACTORS WERE:
THE STUDENT PILOT'S HIGH AND FAST APPROACH, THE CFI'S DELAY IN INITIATING REMEDIAL ACTION, THE CROSSWIND, AND THE RUNWAY LIGHT.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1489 6/11/89 EVERETT, WA A/C Reg. No. N13AT Time (Lcl) - 1105 PDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage DESTROYED	Fatal	Injuries		
Type of Operation -FLT TEST	Fire	Crew 1	Serious 0	Minor 0	None 0
Flight Conducted Under -14 CFR 91	NONE	Pass 0	0	0	0
Accident Occurred During -DESCENT					

-----Aircraft Information-----

Make/Model - ANDERSON BD-5	Eng Make/Model - HONDA CIVIC 1200 CC	ELT Installed/Activated - NO	-N/A
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 850	Engine Type - RECIPROCATING-CARBURETOR		
No. of Seats - 1	Rated Power - 75 HP		

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	EVERETT, WA	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	LOCAL	PAINE FIELD
Wind Dir/Speed- 330/005 KTS		Runway Ident - 34L
Visibility - 50.0 SM	ATC/Airspace	Runway Lth/Wid - 9010/ 150
Lowest Sky/Clouds - 20000 FT SCATTERED	Type of Flight Plan - NONE	Runway Surface - ASPHALT
Lowest Ceiling - NONE	Type of Clearance - VFR	Runway Status - DRY
Obstructions to Vision- NONE	Type Apch/Lndg - FORCED LANDING	
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)
COMMERCIAL	Current - YES	Total - 861
SE LAND, ME LAND	Months Since - 24	Make/Model- 0
	Aircraft Type - C-177	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) - AIRPLANE

-----Narrative-----

THE HOMEBUILT ACFT WAS ON ITS INITIAL TEST FLT, WHEN IT CRASHED. SVRL PSNL RPRTD THAT BEFORE THE FLT, ENG PROBLEMS HAD BEEN EXPERIENCED. RPRTDLY, THERE HAD BEEN PROBLEMS WITH THE MIXTURE CONTROL SYS & THE ENG HAD BEEN OVERHEATING. ONE WITNESS NOTED THE ENG HAD STOPPED RUNNING 2 TIMES AS THE PLT WAS TAXIING TO TAKE OFF. BOTH TIMES, IT WAS RESTARTED AFTER MANY "CRANKS" OR "SPINS OF THE PROP." ALSO, THE WITNESS NOTED THAT WHILE THE PLT WAS WAITING FOR ANOTHER ACFT TO DEPART, THE "ENGINE WAS RUNNING AT HIGH REM IN ORDER (HE PRESUMED) TO KEEP IT GOING." AFTER TAKEOFF, THE ACFT REMAINED AT LOW ALT, TURNED NORTH, THEN ENTERED A WIDE TURN TO THE SOUTH. TWR PSNL NOTED THE ACFT BEGAN DSCNDG, THEN ENTERED A STEEP DSCNT & DISAPPEARED BEHIND TREES. SUBSEQUENTLY, IT IMPACTED IN A BAY ABT 2 MI WEST OF THE ARPT. AFTER THE WRECKAGE WAS RETRIEVED, NO APPARENT PREIMPACT STRUCTURAL FAILURE OF THE ENG OR ACCESSORIES WAS FOUND. SOOT/DARK DISCOLORATION WERE FOUND INSIDE THE ENG COMPARTMENT, BUT A FIRE HAD OCCURRED IN THAT AREA ABT 1 YEAR BFR THE ACDNT.

Brief of Accident (Continued)

File No. - 1489

6/11/89

EVERETT,WA

A/C Reg. No. N13AT

Time (Lcl) - 1105 PDT

Occurrence #1 LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL
Phase of Operation MANEUVERING

Finding(s)

1. MAINTENANCE - INADEQUATE - PILOT IN COMMAND
 2. OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - PERFORMED - PILOT IN COMMAND
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 LOSS OF CONTROL - IN FLIGHT
Phase of Operation DESCENT - EMERGENCY

Finding(s)

3. AIRSPEED(VS) - NOT MAINTAINED - PILOT IN COMMAND
 4. STALL - INADVERTENT - PILOT IN COMMAND
-

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:
INADEQUATE MAINTENANCE BY THE PILOT/OWNER/BUILDER, HIS OPERATION OF THE AIRCRAFT WITH A KNOWN DEFICIENCY, AND
HIS FAILURE TO MAINTAIN ADEQUATE AIRSPEED DURING AN EMERGENCY DESCENT, WHICH RESULTED IN AN INADVERTENT STALL.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1582 5/14/89 WAUNAKEE,WI A/C Reg. No. N7465P Time (Lcl) - 0913 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 -LANDING			0	0	0	1
			0	0	0	2

-----Aircraft Information-----

Make/Model - PIPER PA-24-250	Eng Make/Model - LYCOMING O-540-A1B5	ELT Installed/Activated - YES/YES
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - YES
Max Gross Wt - 2900	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 4	Rated Power - 250 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	WAUNAKEE, IL	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	MORRIS, IL	
Wind Dir/Speed- 010/006 KTS	ATC/Airspace	Runway Ident - N/A
Visibility - 4.000 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 - 11000 FT OVERCAST	Type Apch/Lndg - FORCED LANDING	Runway Status - N/A
Obstructions to Vision- HAZE		
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 - 3300
SE LAND	Months Since - 7	Make/Model- 2600
	Aircraft Type - PA-24	Instrument- 5
		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-----

AS THE AIRCRAFT WAS CLIMBING FROM TAKEOFF, THE PILOT NOTICED AN UNUSUAL ENGINE NOISE & OIL PRESSURE FLUCTUATIONS. WHEN HE REALIZED THE AIRCRAFT WOULD NOT REACH THE AIRPORT, HE SHUT DOWN THE ENGINE & MADE A WHEELS UP LANDING IN A NEWLY PLANTED CORN FIELD. EXAMINATION OF THE ENGINE REVEALED EVIDENCE OF OIL STARVATION OF THE #4 ROD BEARING, THE #5 ROD BEARING & THE MAIN BEARING, THEN SUBSEQUENT FAILURE OF THE #5 ROD. THERE WAS EVIDENCE THAT THE OCCURRENCE WAS INITIATED BY SLIPPAGE OF A BEARING.

Brief of Accident (Continued)

File No. - 1582

5/14/89

WAUNAKEE,WI

A/C Reg. No. N7465P

Time (Lcl) - 0913 CDT

Occurrence #1 LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation CLIMB - TO CRUISE

Finding(s)

1. ENGINE ASSEMBLY,BEARING - SLIPPED
2. LUBRICATING SYSTEM,OIL PORT/PASSAGE, INTERNAL - BLOCKED(TOTAL)
3. ENGINE ASSEMBLY,CONNECTING ROD - FAILURE,TOTAL

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation LANDING

Finding(s)

4. WHEELS UP LANDING

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
SLIPPAGE OF A BEARING, WHICH RESULTED IN BLOCKAGE OF THE LUBRICATION SYSTEM, AND SUBSEQUENT FAILURE OF A CONNECTING
ROD.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1572 6/25/89 NEW BERLIN,WI A/C Reg. No. N87KS Time (Lcl) - 1130 CDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage DESTROYED	Injuries				
Type of Operation -PERSONAL	Fire	Crew	Fatal	Serious	Minor	None
Flight Conducted Under -14 CFR 91	NONE	Pass	0	1	0	0
Accident Occurred During -DESCENT			0	1	0	0

-----Aircraft Information-----

Make/Model - SCHUNING/TERATORN TERRA II	Eng Make/Model - BOMBARDIER ROTAX	ELT Installed/Activated - NO	-N/A
Landing Gear - TAILWHEEL-ALL FIXED	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 901	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	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 - 15.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - UNK/NR SCATTERED	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - NONE	Type Apch/Lndg - NONE	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 22	Medical Certificate - VALID MEDICAL-NO WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 580
SE LAND	Months Since - 8	Make/Model- 8
HELICOPTER	Aircraft Type - C-152	Instrument- 75
		Multi-Eng - 0
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - 500

Instrument Rating(s) - HELICOPTER

-----Narrative-----

AFTER INITIATING A GO-AROUND FROM A VFR APPROACH TO LAND, THE EXPERIMENTAL CUSTOM BUILT AIRCRAFT ENTERED A DESCENT & CRASHED. SUBSEQUENT INSPECTION OF THE AIRCRAFT FAILED TO REVEAL ANY ANOMALY THAT WOULD HAVE CONTRIBUTED TO THE EVENT.

Brief of Accident (Continued)

File No. - 1572

6/25/89

NEW BERLIN,WI

A/C Reg. No. N87KS

Time (Lcl) - 1130 CDT

Occurrence #1 LOSS OF CONTROL - IN FLIGHT
Phase of Operation GO-AROUND (VFR)

Finding(s)

1. GO-AROUND - INITIATED - PILOT IN COMMAND
 2. AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
 3. 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:
FAILURE OF THE PILOT TO MAINTAIN ADEQUATE AIRSPEED DURING THE GO-AROUND, WHICH RESULTED IN AN INADVERTENT STALL.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1520 7/28/89 WAUKESHA,WI A/C Reg. No. N412RC Time (Lcl) - 0859 CDT

-----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

-----Aircraft Information-----

Make/Model - CABRINHA/FREE SPIRIT 412	Eng Make/Model - LYCOMING O-320	ELT Installed/Activated - NO -N/A
Landing Gear - TRICYCLE-RETRACTABLE	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 1450	Engine Type - RECIPROCATING-CARBURETOR	
No. of Seats - 2	Rated Power - 160 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - PATWAS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	SIOUX FALLS, SD	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - VMC	OSHKOSH,WI	Runway Ident - N/A
Wind Dir/Speed- 310/010 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 7.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - UNK/NR THIN OVC	Type of Clearance - NONE	Runway Status - N/A
Lowest Ceiling - 2400 FT OVERCAST	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- NONE		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 55	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 750
SE LAND	Months Since - 1	Make/Model- 100
	Aircraft Type - C-172	Instrument- 0
		Last 24 Hrs - 10
		Last 30 Days- 15
		Last 90 Days- 25

Instrument Rating(s) - NONE

-----Narrative-----

DURING A FLT FROM SIOUX FALLS, SD, TO OSHKOSH, WI, THE PLT ENCTRD CLOUDS & HAZY CONDITIONS WITH REDUCED VISIBILITY TO THE EAST DUE TO THE MORNING SUN. SUBSEQUENTLY, HE BECAME LOST & HIS FUEL SUPPLY WAS LOW BEFORE HE RE-ORIENTED HIMSELF. BEFORE REACHING AN ARPT, THE ENG LOST POWER FROM FUEL EXHAUSTION. THE PLT ELECTED TO LAND ON A ROADWAY. JUST BEFORE LANDING, THE LEFT WING "CLIPPED" A ROAD SIGN & THE PLT BALLOONED THE ACFT TO AVOID A TRUCK. SUBSEQUENTLY, THE MAIN GEAR COLLAPSED DURING TOUCHDOWN & THE ACFT'S RIGHT WING HIT AN AUTOMOBILE BEFORE THE PLANE CAME TO REST.

Brief of Accident (Continued)

File No. - 1520

7/28/89

WAUKESHA, WI

A/C Reg. No. N412RC

Time (Lcl) - 0859 CDT

Occurrence #1 LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL
Phase of Operation CRUISE

Finding(s)

1. WEATHER CONDITION - CLOUDS
2. WEATHER CONDITION - HAZE/SMOKE
3. LIGHT CONDITION - SUNGLARE
4. BECAME LOST/DISORIENTED - INADVERTENT - PILOT IN COMMAND
5. FLUID, FUEL - EXHAUSTION
6. REMEDIAL ACTION - INADEQUATE - PILOT IN COMMAND

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 HARD LANDING
Phase of Operation LANDING

Finding(s)

7. OBJECT - SIGN
8. OBJECT - VEHICLE
9. MANEUVER - PERFORMED - PILOT IN COMMAND
10. FLARE - NOT POSSIBLE -

Occurrence #4 ON GROUND COLLISION WITH OBJECT
Phase of Operation LANDING

Finding(s)

11. OBJECT - VEHICLE

----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PLT BECAME LOST/DISORIENTED AND ALLOWED FUEL EXHAUSTION TO OCCUR BEFORE ACCOMPLISHING REMEDIAL ACTION.
FACTORS RELATED TO THE ACCIDENT WERE: THE ADVERSE ENVIRONMENTAL CONDITIONS AND THE ROAD SIGN AND VEHICLES
IN THE EMERGENCY LANDING AREA.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1560 10/22/89 WARRENS,WI A/C Reg. No. N91269 Time (Lcl) - 0905 CDT

-----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	1	0
Accident Occurred During -LANDING					

-----Aircraft Information-----

Make/Model - WYCHEN CHALLENGER II	Eng Make/Model - ROTAX 503 DC	ELT Installed/Activated - NO	-N/A
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - NO	
Max Gross Wt - 800	Engine Type - RECIPROCATING-CARBURETOR		
No. of Seats - 2	Rated Power - 52 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- 170/005 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - UNK/NR THIN BKN	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 - 41	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
STUDENT	Current - N/A	Total - 120
	Months Since - N/A	Make/Model- 85
	Aircraft Type - N/A	Instrument- 0
		Last 24 Hrs - 0
		Last 30 Days- 30
		Last 90 Days- 75

Instrument Rating(s) - NONE

-----Narrative-----

SHORTLY AFTER DEPARTING A PRIVATE STRIP, THE AIRCRAFT'S ENGINE LOST POWER. SUBSEQUENTLY, THE AIRCRAFT WAS DAMAGED & THE PILOT WAS INJURED, WHILE LANDING ON AN EARTHEN DIKE BETWEEN CRANBERRY BEDS. AN EXAM OF THE ENGINE REVEALED ITS CRANKSHAFT HAD FAILED.

Brief of Accident (Continued)

File No. - 1560

10/22/89

WARRENS,WI

A/C Reg. No. N91269

Time (Lcl) - 0905 CDT

Occurrence #1 LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation TAKEOFF - INITIAL CLIMB

Finding(s)

1. ENGINE ASSEMBLY,CRANKSHAFT - FAILURE,TOTAL

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation LANDING

Finding(s)

2. TERRAIN CONDITION - NONE SUITABLE

-----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
A BROKEN CRANSKSHAFT WHICH RESULTED IN THE LOSS OF POWER. A FACTOR RELATED TO THE ACCIDENT WAS: THE LACK OF SUITABLE
TERRAIN FOR A FORCED LANDING.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1441 11/30/89 BARRON,WI A/C Reg. No. N8749D Time (Lcl) - 1400 CST

-----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 - PIPER PA-22	Eng Make/Model - LYCOMING O-320-B2A	ELT Installed/Activated - YES/NO
Landing Gear - TRICYCLE-FIXED	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 2000	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	ANOKA,MN	
Completeness - N/A	Destination	Airport Data
Basic Weather - VMC	SAME AS ACC/INC	BARRON
Wind Dir/Speed- 270/012 KTS	ATC/Airspace	Runway Ident - 27
Visibility - 10.0 SM	Type of Flight Plan - NONE	Runway lth/Wid - 2585/ 265
Lowest Sky/Clouds - CLEAR	Type of Clearance - NONE	Runway Surface - GRASS/TURF
Lowest Ceiling - NONE	Type Apch/Lndg - FORCED LANDING	Runway Status - SNOW - WET
Obstructions to Vision- NONE		
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)
PRIVATE	Current - YES	Total - 1382
SE LAND, SE SEA	Months Since - 18	Make/Model- 25
	Aircraft Type - C-185	Instrument- UNK/NR
		Multi-Eng - 0
		Last 24 Hrs - 1
		Last 30 Days- 7
		Last 90 Days- 27
		Rotorcraft - UNK/NR

Instrument Rating(s) - NONE

-----Narrative-----

THE PLT RPRTD THAT DRG ARRIVAL IN THE VICINITY OF THE DESTN ARPT, HE "CIRCLED (THE) AREA SEVERAL TIMES TO REDUCE SPEED AND ALTITUDE." WHILE MANEUVERING, THE ENG LOST POWER & THE PLT MADE AN EMERGENCY LANDING ON THE ARPT; HOWEVER, HE WAS UNABLE TO STOP ON THE SLICK/SNOW COVERED RWY. SUBSEQUENTLY, THE ACFT IMPACTED SOME TREES & BRUSH. A POST-ACDNT ENG RUN-UP REVEALED THE ENG WAS CAPABLE OF SATISFACTORY OPN THRU-OUT ITS NORMAL RANGE. THE TEMP & DEW POINT WERE 37 & 26 DEG, RESPECTIVELY. ACCORDING TO CARB ICING CHARTS, CONDITIONS WERE CONDUCIVE TO CARB ICE.

Brief of Accident (Continued)

File No. - 1441

11/30/89

BARRON,WI

A/C Reg. No. N8749D

Time (Lcl) - 1400 CST

Occurrence #1 LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL
Phase of Operation APPROACH

Finding(s)

1. WEATHER CONDITION - CARBURETOR ICING CONDITIONS
2. CARBURETOR HEAT - IMPROPER USE OF - PILOT IN COMMAND
3. FUEL SYSTEM,CARBURETOR - ICE

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 OVERRUN
Phase of Operation LANDING - ROLL

Finding(s)

4. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - SNOW COVERED
5. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - WET

Occurrence #4 ON GROUND COLLISION WITH OBJECT
Phase of Operation LANDING - ROLL

Finding(s)

6. OBJECT - TREE(S)

----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 SUBSEQUENT CARBURETOR ICE. CONTRIBUTING FACTORS WERE:
CARBURETOR ICING CONDITIONS, SLICK (WET/SNOW COVERED) RUNWAY, AND TREES/BRUSH NEAR THE DEPARTURE END OF THE
RUNWAY.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1529 12/28/89 MERRILL,WI A/C Reg. No. N37329 Time (Lcl) - 1450 CST

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage DESTROYED	Fatal	Injuries			None
Type of Operation -PERSONAL	Fire	Crew 1	Serious 0	Minor 0	None 0	
Flight Conducted Under -14 CFR 91	ON GROUND	Pass 2	0	0	0	
Accident Occurred During -DESCENT						

-----Aircraft Information-----

Make/Model - BEECH A24R	Eng Make/Model - LYCOMING IO-360-A1B6	ELT Installed/Activated - YES/NO
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-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - FSS	Last Departure Point	OFF AIRPORT/STRIP
Method - TELEPHONE	IRONWOOD,MI	
Completeness - UNK/NR	Destination	Airport Data
Basic Weather - UNK/NR	BELVIDERE, IL	Runway Ident - N/A
Wind Dir/Speed- UNK/NR	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - UNK/NR	Type of Flight Plan - IFR	Runway Surface - N/A
Lowest Sky/Clouds - UNK/NR	Type of Clearance - IFR	Runway Status - N/A
Lowest Ceiling - UNK/NR	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- FOG		
Precipitation - FREEZING RAIN		
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)
COMMERCIAL	Current - YES	Total - 740
SE LAND	Months Since - 12	Make/Model- 65
	Aircraft Type - UNK/NR	Instrument- UNK/NR
		Multi-Eng - UNK/NR
		Last 24 Hrs - UNK/NR
		Last 30 Days- UNK/NR
		Last 90 Days- UNK/NR
		Rotorcraft - UNK/NR

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE ACFT COLLIDED WITH TREES & TERRAIN AS THE PLT WAS ATTEMPTING TO REACH AN ARPT. HE HAD TOLD ATC PSNL THAT STRUCTURAL ICE WAS ACCUMULATING ON THE ACFT AND THAT HE WAS UNABLE TO MAINTAIN ALT. SUBSEQUENTLY, THE ACFT DSCNDD BELOW AN ALT WHERE RADAR CONTACT COULD NOT BE MAINTAINED. AIR & GROUND SEARCH PROCEDURES WERE STARTED AFTER ALL CONTACT WITH THE ACFT WAS LOST. THREE DAYS LATER, THE ACFT WAS FOUND BY GROUND SEARCHERS. THE WEATHER ALONG THE ROUTE CONSISTED OF LOW OVERCAST SKIES, BELOW FREEZING TEMPERATURES & FOG. LAYERED PIECES OF ICE WERE FOUND IN THE WRECKAGE AREA, WHICH WERE 3/4 TO 1-1/4 INCH THICK; THESE PIECES OF ICE CONTAINED INNER SURFACES THAT MATCHED THE SHAPE OF AIRFOILS. WEATHER IN THE AREA WAS INFLUENCED BY A WARM FRONT WITH LOW OVERCAST SKIES, FREEZING TEMPS & FOG TO THE NORTH OF THE FRONT. BEFORE THE FLT, THE PLT WAS ADVISED OF OCCASIONAL MODERATE RIME ICING ALONG HIS ROUTE.

Brief of Accident (Continued)

File No. - 1529

12/28/89

MERRILL,WI

A/C Reg. No. N37329

Time (Lcl) - 1450 CST

Occurrence #1 IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation CRUISE - NORMAL

Finding(s)

1. FLIGHT INTO KNOWN ADVERSE WEATHER - CONTINUED - PILOT IN COMMAND
 2. WEATHER CONDITION - ICING CONDITIONS
 3. FUSELAGE - ICE
 4. WING - ICE
 5. CLIMB - NOT POSSIBLE -
-

Occurrence #2 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #3 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation DESCENT

Finding(s)

6. OBJECT - TREE(S)
-

----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 STRUCTURAL/WING ICE. FACTORS RELATED TO THE ACCIDENT WERE:
THE ICING CONDITIONS AND TREES IN THE AREA OF THE ACCIDENT.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1408 8/21/89 CLENDENIN,WV A/C Reg. No. N7597W Time (Lcl) - 1133 EDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage	Fatal	Injuries		
Type of Operation -PERSONAL	DESTROYED	0	Serious	Minor	None
Flight Conducted Under -14 CFR 91	Fire	0	0	1	0
Accident Occurred During -LANDING	NONE	0	1	2	0
		Crew			
		Pass			

-----Aircraft Information-----

Make/Model - PIPER PA-28-180	Eng Make/Model - LYCOMING O-360	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
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point	OFF AIRPORT/STRIP
Method - N/A	FALLSTON,MD	
Completeness - N/A	Destination	Airport Data
Basic Weather - IMC	FAYETTEVILLE,WV	Runway Ident - N/A
Wind Dir/Speed- 240/004 KTS	ATC/Airspace	Runway Lth/Wid - N/A
Visibility - 1.500 SM	Type of Flight Plan - NONE	Runway Surface - N/A
Lowest Sky/Clouds - 800 FT SCATTERED	Type of Clearance - SPECIAL VFR	Runway Status - N/A
Lowest Ceiling - 1300 FT BROKEN	Type Apch/Lndg - FORCED LANDING	
Obstructions to Vision- FOG		
Precipitation - NONE		
Condition of Light - DAYLIGHT		

-----Personnel Information-----

Pilot-In-Command	Age - 33	Medical Certificate - VALID MEDICAL-WAIVERS/LIMIT
Certificate(s)/Rating(s)	Biennial Flight Review	Flight Time (Hours)
COMMERCIAL	Current - YES	Total - 774
SE LAND,ME LAND	Months Since - 7	Make/Model- 40
	Aircraft Type - C-172	Instrument- 67
		Multi-Eng - 30
		Last 24 Hrs - 4
		Last 30 Days- 25
		Last 90 Days- 27
		Rotorcraft - 0

Instrument Rating(s) - AIRPLANE

-----Narrative-----

THE PLT ENCTRD DETERIORATING WX BEFORE REACHING HIS 1ST REFUELING STOP (FAYETTEVILLE, WV) & DIVERTED TOWARD CHARLESTON, WV. HE REQUESTED A SPECIAL VFR CLNC TO LAND AT CHARLESTON & DESCENDED TO A LOWER ALT TO MAINT VMC; HOWEVER, THE ACFT RAN OUT OF FUEL BEFORE REACHING THE ARPT. AS THE PLT WAS ABOUT TO LAND IN A CLEARING, THE ACFT'S LEFT WING HIT A LIGHT POLE & WAS SEVERED. THE ACFT THEN CRASHED TO THE GND & WAS EXTENSIVELY DMGD. THE PLT WAS IFR RATED, BUT THE ACFT WAS NOT EQUIPPED FOR IFR FLT. THE ACFT HAD BEEN TOPPED OFF WITH FUEL BEFORE THE FLT, BUT THE PLT DID NOT RECEIVE A WX BRIEFING FOR THE X-COUNTRY FLT.

Brief of Accident (Continued)

File No. - 1408

8/21/89

CLENDENIN,WV

A/C Reg. No. N7597W

Time (Lcl) - 1133 EDT

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 TO ALTERNATE DESTINATION - DELAYED - PILOT IN COMMAND

Occurrence #2 LOSS OF ENGINE POWER(TOTAL) - NON-MECHANICAL
Phase of Operation CRUISE

Finding(s)

6. FLUID,FUEL - EXHAUSTION

Occurrence #3 FORCED LANDING
Phase of Operation DESCENT - EMERGENCY

Occurrence #4 IN FLIGHT COLLISION WITH OBJECT
Phase of Operation LANDING - FLARE/TOUCHDOWN

Finding(s)

7. OBJECT - POLE

----Probable Cause-----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
INADEQUATE PREFLIGHT PLANNING/PREPARATION BY THE PILOT WHICH RESULTED IN FUEL EXHAUSTION. THE WEATHER CONDITIONS, THE
PILOT'S DELAY IN DIVERTING TO AN ALTERNATE AIRPORT, AND THE LIGHT POLE WERE CONTRIBUTING FACTORS.

National Transportation Safety Board
Washington, D.C. 20594

Brief of Accident

File No. - 1483 8/31/89 PARKERSBURG, WV A/C Reg. No. N58281 Time (Lcl) - 1330 EDT

-----Basic Information-----

Type Operating Certificate-NONE (GENERAL AVIATION)	Aircraft Damage SUBSTANTIAL		Fatal	Injuries			
Type of Operation -AERIAL OBSERVATION	Fire - NONE	Crew	0	Serious	Minor	None	0
Flight Conducted Under -14 CFR 91		Pass	0	1	0	0	0
Accident Occurred During -OTHER				0	0	0	0

-----Aircraft Information-----

Make/Model - HUGHES 269C	Eng Make/Model - LYCOMING HIO-360-D1A	ELT Installed/Activated - YES/YES
Landing Gear - SKID	Number Engines - 1	Stall Warning System - NO
Max Gross Wt - 2050	Engine Type - RECIP-FUEL INJECTED	
No. of Seats - 2	Rated Power - 190 HP	

-----Environment/Operations Information-----

Weather Data	Itinerary	Airport Proximity
Wx Briefing - NO RECORD OF BRIEFING	Last Departure Point PITTSBURG, PA	ON AIRPORT
Method - N/A	Destination SAME AS ACC/INC	Airport Data
Completeness - N/A	ATC/Airspace	WOOD COUNTY
Basic Weather - VMC	Type of Flight Plan - COMPANY (VFR)	Runway Ident - UNK/NR
Wind Dir/Speed- CALM	Type of Clearance - NONE	Runway Lth/Wid - UNK/NR
Visibility - 15.0 SM	Type Apch/Lndg - FULL STOP	Runway Surface - UNK/NR
Lowest Sky/Clouds - CLEAR		Runway Status - UNK/NR
Lowest Ceiling - NONE		
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 - 1854
	Months Since - 1	Make/Model- 144
HELICOPTER	Aircraft Type - 269C	Instrument- 374
		Last 24 Hrs - 11
		Last 30 Days- 85
		Last 90 Days- 145
		Rotorcraft - 1616

Instrument Rating(s) - HELICOPTER

-----Narrative-----

THE PLT RPRTD THAT WHILE HE WAS PREPARING TO SHUT DOWN THE ENG AFTER LANDING, HE SET THE ENG SPEED AT 3000 RPM & BEGAN TIMING FOR 2 MIN. HE SAID HE THEN SET THE COLLECTIVE FRICTION WITH HIS LEFT HAND, MOVED HIS LEFT LEG & KNEE AGAINST THE COLLECTIVE STICK TO MONITOR ITS MOVEMENT, PLACED HIS RIGHT FOOT AGAINST BOTH TAIL ROTOR PEDALS TO HOLD THEM IN A NEUTRAL POSTION & MOVED HIS LEFT HAND TO HOLD THE CYCLIC WHILE USING HIS RIGHT HAND TO SET THE CYCLIC FRICTION. AT THAT INSTANT, THE COLLECTIVE STICK MOVED UP & THE HELICOPTER LIFTED OFF ABOUT 3 TO 5 FT & BEGAN SPINNING TO THE RIGHT. THE PLT APPLIED LEFT PEDAL TO STOP THE ROTATION, BUT THE HELICOPTER WENT IN A 45 DEG BANK & THE MAIN ROTOR BLADES HIT THE GROUND. THE HELICOPTER ROLLED OVER ON ITS LEFT SIDE & CAME TO REST WITH THE PLT'S LEFT ARM PINNED BETWEEN THE DOOR FRAME & THE GROUND. ABOUT 30 SEC LATER, SOMEONE ARRIVED AT THE SCENE & LIFTED THE DOOR FRAME TO FREE THE PLT.

Brief of Accident (Continued)

File No. - 1483

8/31/89

PARKERSBURG, WV

A/C Reg. No. N58281

Time (Lcl) - 1330 EDT

Occurrence #1 LOSS OF CONTROL - ON GROUND
Phase of Operation STANDING - ENGINE(S) OPERATING

Finding(s)

1. COLLECTIVE - INADVERTENT USE - PILOT IN COMMAND
 2. LIFT-OFF - INADVERTENT -
 3. AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
-

Occurrence #2 ROLL OVER
Phase of Operation OTHER

Occurrence #3 IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation OTHER

----Probable Cause----

The National Transportation Safety Board determines that the Probable Cause(s) of this accident was:
THE PILOT'S INADVERTENT USE (MOVEMENT) OF THE COLLECTIVE CONTROL DURING ENGINE OPERATION BEFORE SHUTDOWN,
AND A SUBSEQUENT LIFT-OFF, LOSS OF CONTROL, ROLL OVER, AND COLLISION WITH THE GROUND.

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