

**United States Department of Agriculture
Forest Service**



FY 2000

Aviation Summary

Table of Contents

Executive Summary	1
Overview of the Forest Service Aviation Program	2
Statistical Summary	4
USFS Owned Aircraft Statistics	10
Fixed-Wing Statistics	12
Airtanker Statistics	14
Helicopter Statistics	16
Benchmarks with other Organizations	18
Smokejumper Program Overview	21
SafeCom Summary	25
Accident Summary	35
Airwards	40

NOTE: Formulas used: Industry standard “per 100,000 hours flown”

Accident Rate = Number of accidents divided by the number of hours flown.

Fatal Accident Rate = Number of fatal accidents divided by the number of hours flown.

Fatality Rate = Number of fatalities divided by the number of hours flown.

Executive Summary

It would be an understatement to say that the year 2000 was a high effort year for Forest Service aviation. An analysis of all available statistical data shows that the 111,486 flight hours flown in one year is the second most in history. The overall mishap rate of 3.58 stands as a new benchmark for years of this magnitude. The average mishap rate for fire years with greater than 90,000 hours flown is 10.90 and the previous best mark in a large year was 8.40.

The following report shows two very positive safety trends in Forest Service aviation safety over the past ten years.

1. Lower mishap rates across the board.
2. Increased utilization of our incident reporting system (SafeComs).

Other key points to consider when looking at the following statistical summaries include:

- ✓ Helicopters provide nearly 50% of the overall aviation effort and operate in the most challenging risk areas (long line, rappel, bucket work, etc.)
- ✓ Contractors provide nearly 90% of our overall aviation production
- ✓ Statistically, our most hazardous operations, as determined by the 10-year average mishap rate (1991-2000) are:
 1. Fixed-wing air tankers (mishap rate: 13.19)
 2. Helicopters (mishap rate: 9.19)
- ✓ Statically, our safest operations, as determined by the 10-year average mishap rate (1991-2000) are:
 1. Fixed-wing contractor aircraft (mishap rate 2.33)
 2. US Forest Service owned aircraft (mishap rate: 5.42)

Even the best of years can have tragic components, and FY 2000 was no exception. The Forest Service suffered the loss of two aviation professionals in the fatal mishap of a Cessna 337 near Alamogordo, NM on May 15, 2000. We dedicate this safety summary to their memories, and rededicate ourselves to an uncompromising effort towards our zero fatality goal.

Overview of the Forest Service Aviation Program

The USDA Forest Service utilizes aircraft for a wide variety of missions, including routine administration, research, forest rehabilitation, law enforcement support, aerial photography, infrared surveillance and fire prevention and suppression. The program costs vary by fire season, but the figures below indicate the final 2000 budget, showing over two hundred million dollars allocated to fund the aviation operation.

The vast majority of flight hours involve fire, and in fact, the aviation safety office that produced this document is located within the Fire and Aviation Management Directorate administered by State and Private Forestry section of the US Department of Agriculture Forest Service.

The **primary** mission of USDA Forest Service Aviation is to support the ground firefighter through a variety of means, including, but not limited to:

- ✓ Aerial delivery of firefighters by parachute, rappel line, or on site landing
- ✓ Air tactical command and control
- ✓ Firefighter transport
- ✓ Surveillance, reconnaissance, and intelligence gathering
- ✓ Aerial delivery of fire retardant and water

USDA Forest Service Total Aviation Program FY 2000			
Major Programs	Total Flight Hours	Contractor Flight Hours	Total Costs
Aerial Photography	480	109	\$211,070
Air Attack	25,027	23,204	\$9,033,116
Helicopter (all missions)	53,199	53,145	\$147,286,022
Infrared	1,074	89	\$571,167
Leadplane	6,138	738	\$2,309,830
Research	183	46	\$126,583
Smokejumper	1,505	383	\$1,752,834
Airtankers	10,616	10,616	\$40,947,808
Other Missions	13,264	10,406	\$4,970,582
Totals:	111,486	98,737	\$207,209,012

The Aircraft

The Forest Service operates 877 aircraft (FY 2000). These include government owned, chartered, leased, and contractor aircraft which support the many mission elements. The Forest Service owns and operates 44 aircraft (43 fixed-wing and 1 helicopter). These aircraft include a vintage (a nice euphemism for “very old”) fleet of multi-engine airtankers, and over 800 contractor-owned helicopters/fixed wing aircraft of various makes and models. The aircraft are inspected and “carded” for government use by interagency inspectors, and are flown and maintained by the contractors.

Program Administration

The Forest Service aviation program is administered by 125 employees at the Washington Offices and Regional level, this number does not include aviation personnel at the local forest level. The National staff is located in Washington DC and at the National Interagency Fire Center in Boise, Idaho. The vast majority of aviation personnel are located at nine regional operations centers around the United States, providing day-to-day operational oversight and program guidance.

The USDA Forest Service aviation safety program is administered from Boise, Idaho under the guidance of the National Aviation Safety and Training Manager. The staff includes a Standardization and Training Officer, Helicopter Standardization Pilot, Fixed-wing Standardization Pilot, and Aviation Safety Specialist for data analysis.

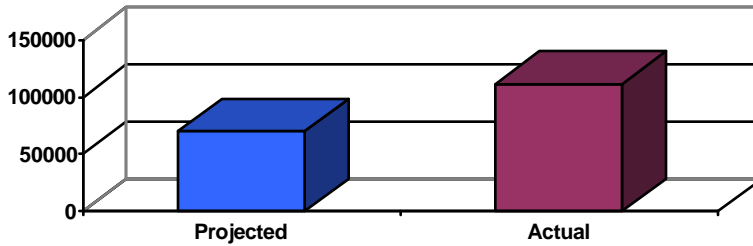
USDA Forest Service Total Aviation Program	
Forest Service Aviation Employees:	
Washington, DC:	4
Boise, ID:	19
Regional Offices:	102
	<u><u>125</u></u>
Forest Service Aircraft:	
Government Owned and Operated:	44
	<u><u>44</u></u>
Contractor Owned and Operated: (FY2000)	
Airplanes:	434
Helicopters:	359
Airtankers:	40
	<u><u>833</u></u>

Statistical Summary

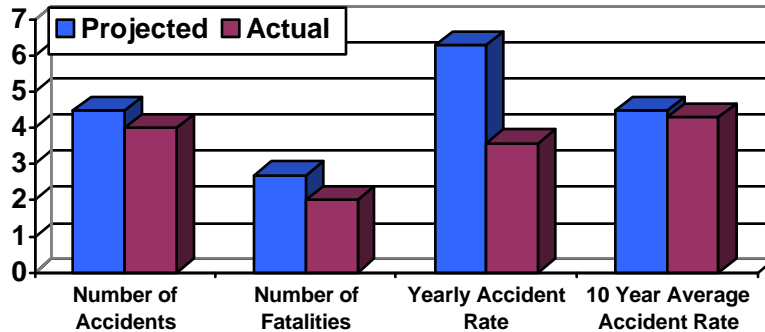
Actual hours flown in FY 2000 far exceeded the statistical projections. In spite of this, safety statistics improved across the board. Analysis of the data shows an increase in total number of hours flown in all categories compared to an average year (+41,262 hours). Accidents, fatalities and accident rates were all below what was projected for FY 2000.

Comparison of Averages from FY1990-1999 to FY2000			
	Projected	Actual	Comparison
Hours flown	70,224	111,486	41,262
Number of Accidents	4.5	4	-0.5
Number of Fatalities	2.7	2	-0.70
Yearly Accident Rate	6.30	3.58	-2.71
10 Year Accident Rate Average	4.5	4.3	-0.2

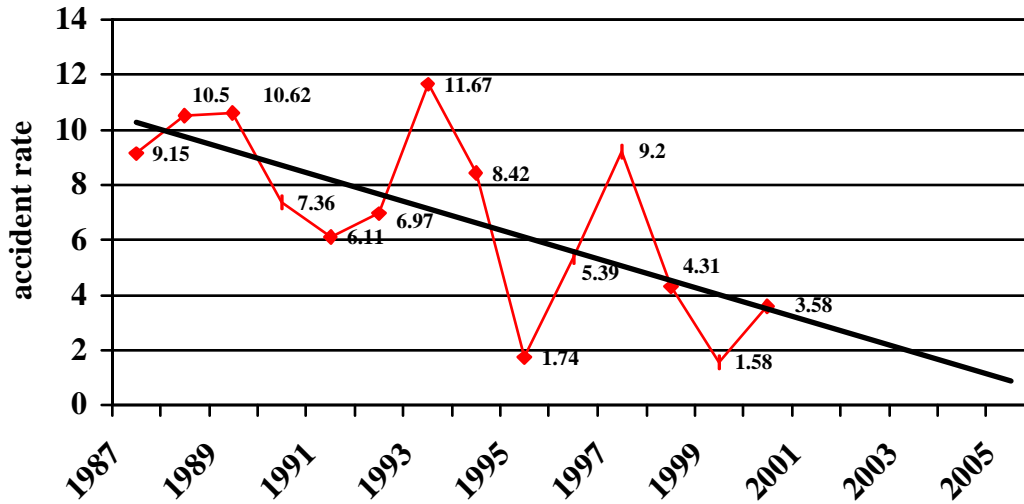
Projected vs Actual Hours Fown for FY 2000



Projected vs Actual for FY 2000



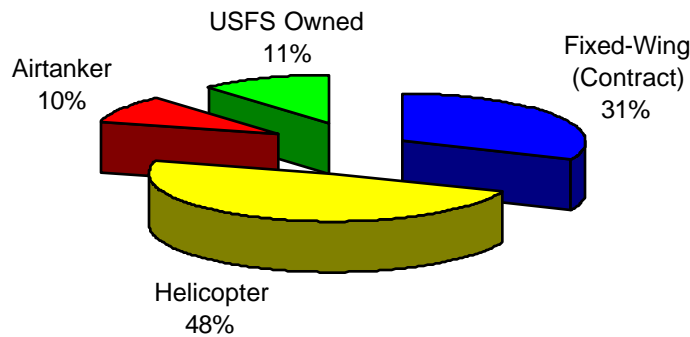
Accident Rates



FY 2000 Statistics

Aircraft Type	Hours	Gallons of Aerial Suppressants	Number of Accidents	Accident Rate	Number of Fatal Accidents	Fatal Accident Rate	Number of Fatalities	Fatality Rate
Fixed-Wing	34,976	0	1	2.85	1	2.85	2	5.71
Helicopter	53,145	86,718,895	2	3.76	0	0	0	0
Airtanker	10,616	24,488,697	0	0	0	0	0	0
USFS Owned	12,749	0	1	7.84	0	0	0	0
Total	111,486	111,207,592	4	3.58	1	.89	2	1.79

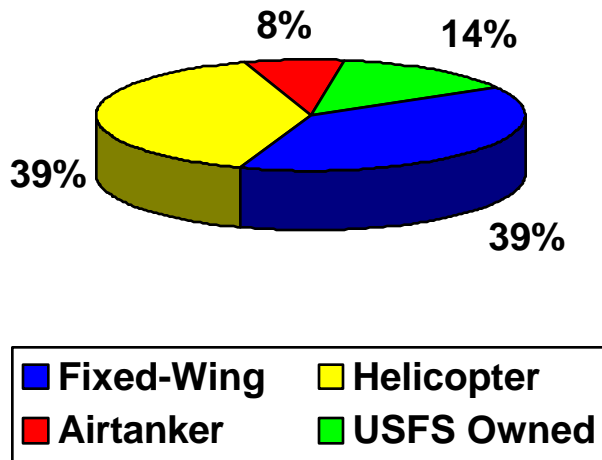
FY 2000 Percentage of Flight Hours by Aircraft Type



10-Year Statistics

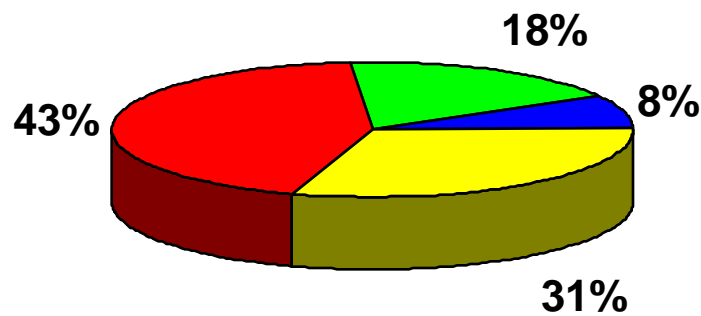
Flight Hours:					
Fiscal Year	Fixed Wing	Helicopter	Airtanker	USFS Owned	Total
2000	34,976	53,145	10,616	12,749	111,486
1999	21,873	25,174	6,069	10,019	63,135
1998	32,416	24,423	3,685	9,055	69,579
1997	16,753	16,295	2,801	7,608	43,457
1996	31,919	36,307	8,407	11,648	88,281
1995	23,406	20,031	4,154	9,883	57,474
1994	44,995	49,200	10,100	14,405	118,700
1993	19,824	12,026	1,947	9,037	42,834
1992	28,793	27,973	5,147	9,847	71,760
1991	27,056	26,032	2,782	9,610	65,480
10-year totals	282,011	290,606	55,708	103,861	732,186
Averages	28,201	29,061	5,571	10,386	73,219

**10 Year Average Flight Hour Percentages
1991-2000**



Accident Rates/100,000 Hours:							
Year	Fixed Wing	Helicopter	Airtanker	USFS Owned	Fatality Rate	Fatal Accident Rate	Accident Rate
2000	2.85	3.76	0	7.84	1.79	0.89	3.58
1999	0	3.97	0	0	0	0	1.58
1998	3.08	4.09	27.14	0	5.75	2.87	4.31
1997	0	24.55	0	0	4.6	4.6	9.2
1996	0	11.02	0	8.59	0	0	5.66
1995	0	0	24.07	10.12	5.22	1.74	1.74
1994	2.22	14.23	9.9	6.94	5.05	2.53	8.42
1993	15.13	8.31	51.36	0	14.01	4.67	11.67
1992	0	14.29	19.43	0	2.79	1.39	6.97
1991	0	7.68	0	20.81	3.05	3.05	6.11
1990	0	18.31	22.49	0	2.45	1.22	7.36
10-year totals	23.28	91.9	131.9	54.30	42.26	21.74	59.24
Averages	2.33	9.19	13.19	5.40	4.23	2.17	5.92

10 Year Average Accident Rate Percentages 1991-2000



Forest Service Aircraft Accident Statistics in 5-Year Increments

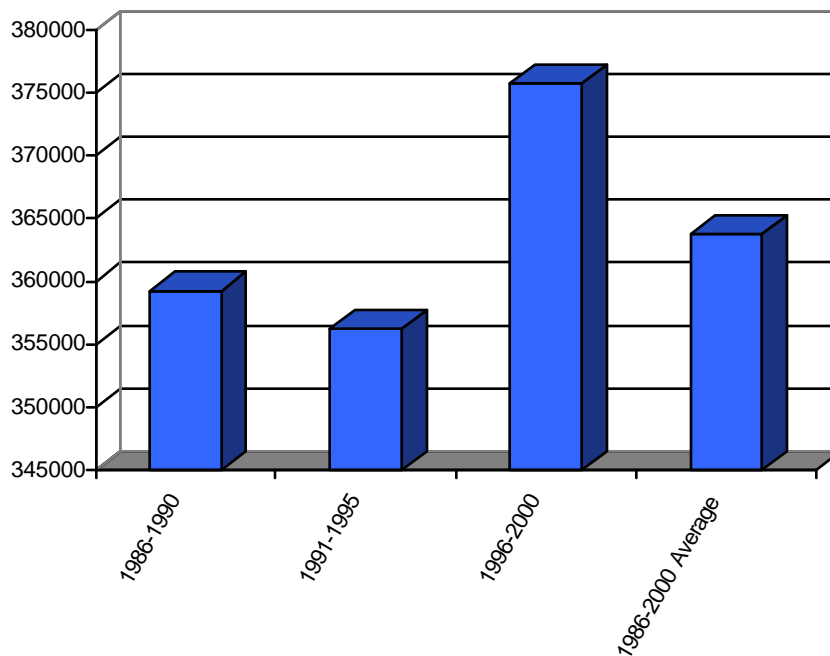
Observations

The 1996-2000 5-year increment shows an increase of hours flown over the previous 5-year increments.

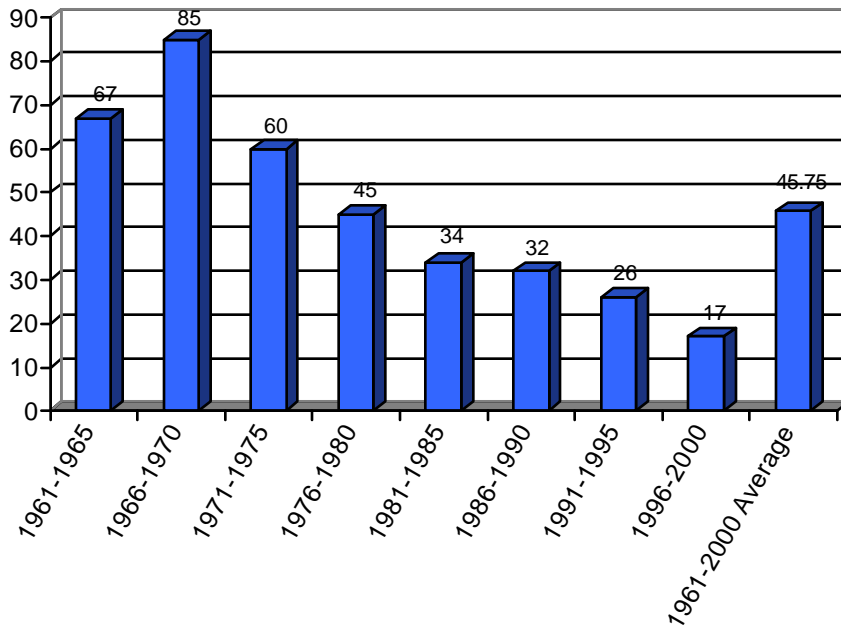
The total number of accidents in 5-year periods shows a steady decline.

The total number of fatalities in 5-year periods shows steady decline with the exception of the 1991-1995 period.

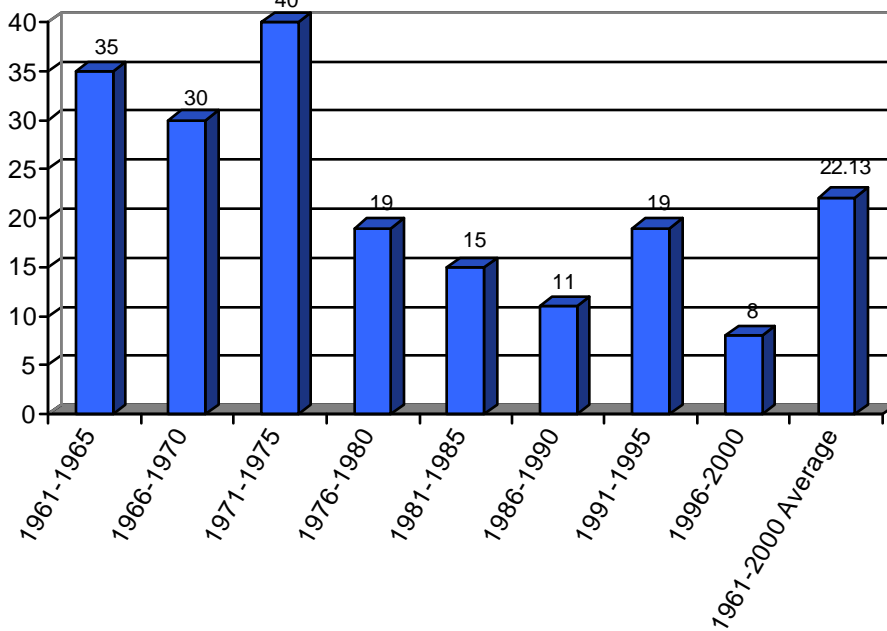
**Total Number Flight Hours for all aircraft
(5-Year Increments for 15-Years)**



**Total Number of Accidents for all aircraft
(5-Year Increments for 40-Years)**



**Total Number of Fatalities for all aircraft
(5-Year Increments for 40-Years)**



USFS Owned Aircraft

Forest Service owned aircraft accounted for approximately ten percent of the total hours flown in FY 2000; the ten-year average is fourteen percent. Accident rates have steadily declined and fatality rates have decreased the past five years.

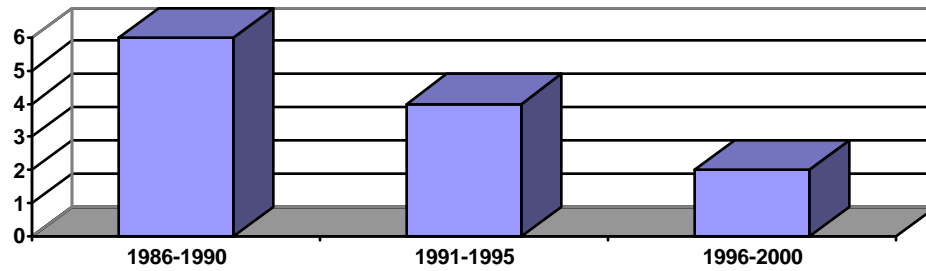


USFS Owned 10-Year Statistics

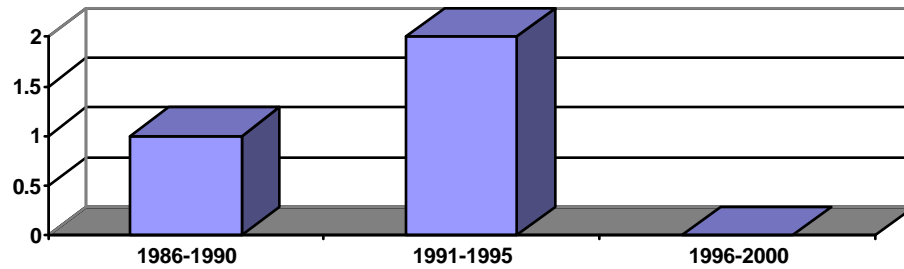
Fiscal Year	Hours Flown	Accidents	Accident Rate	Fatal Accidents	Fatal Accident Rate	Fatalities	Fatality Rate
2000	12,749	1	7.84	0	0	0	0
1999	10,019	0	0	0	0	0	0
1998	9,055	0	0	0	0	0	0
1997	7,608	0	0	0	0	0	0
1996	11,648	1	8.58	0	0	0	0
1995	9,883	1	10.11	1	10.11	1	10.11
1994	14,405	1	6.94	0	0	0	0
1993	9,037	0	0	0	0	0	0
1992	9,847	0	0	0	0	0	0
1991	9,610	2	20.81	1	10.4	1	10.4
1990	10,396	0	0	0	0	0	0
Total	103,861	6	54.28	2	20.51	2	26
Average	10,386	0.6	5.42	0.2	2.05	0.2	2.6

USFS Owned 15-Year Statistics in 5-Year Increments					
Year	Hours	Accidents	Fatalities	Accident Rate	Fatality Rate
1986-1990	53,466	6	1	11.23	1.87
1991-1995	52,782	4	2	7.58	3.79
1996-2000	51,616	2	0	3.87	0
Total	157,864	12	3	22.68	5.66
Average	52,621	4	1	7.56	1.89

Number of Accidents in 5-Year Increments



Number of Fatalities in 5-Year Increments



Fixed-Wing (Contract)

Fixed-Wing aircraft accounted for 31 percent of the total hours flown in FY 2000; the ten-year average is 39 percent. The number of hours flown in FY 2000 is 34,976, which is above the ten-year average of 28,201. Both accident and fatality rates have decreased over the past forty years.

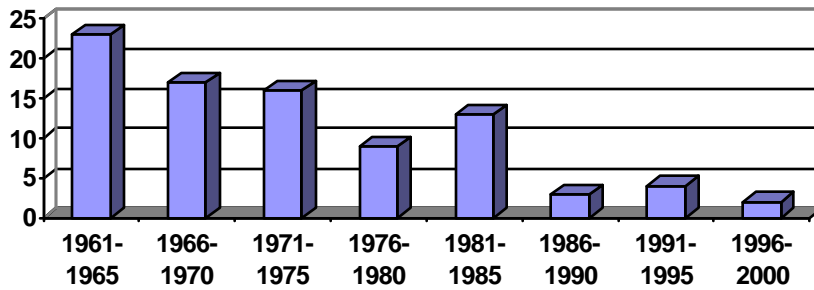


Fixed-Wing 10-Year Statistics

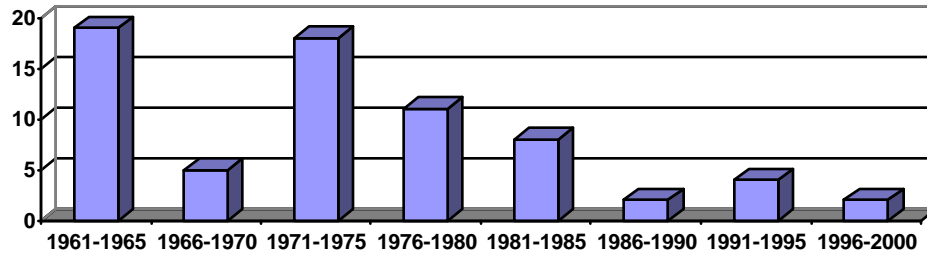
Fiscal Year	Hours Flown	Accidents	Accident Rate	Fatal Accidents	Fatal Accident Rate	Fatalities	Fatality Rate
2000	34,976	1	2.85	1	2.85	2	5.71
1999	21,873	0	0	0	0	0	0
1998	32,416	1	3.08	0	0	0	0
1997	16,753	0	0	0	0	0	0
1996	31,919	0	0	0	0	0	0
1995	23,406	0	0	0	0	0	0
1994	44,995	1	2.22	0	0	0	0
1993	19,824	3	15.13	1	5.04	4	20.17
1992	28,793	0	0	0	0	0	0
1991	27,056	0	0	0	0	0	0
Total	282,011	6	23.28	2	7.89	6	25.88
Average	28,201	0.6	2.33	0.2	0.8	0.6	2.59

Fixed-Wing 15-Year Statistics in 5-Year Increments					
Year	Hours	Accidents	Fatalities	Accident Rate	Fatality Rate
1986-1990	175,418	3	2	1.71	1.14
1991-1995	144,074	4	4	2.78	2.78
1996-2000	137,937	2	2	1.44	1.44
Total	457,429	9	8	5.39	5.36
Average	152,476	3	2.67	1.98	1.79

Number of Accidents in 5-Year Increments



Number of Fatalities in 5-Year Increments



Airtankers

Airtankers only accounted for 8 percent of the total hours flown in FY 2000; the ten-year average is 12 percent. Although they fly the least amount of hours, they have the highest accident rate. This past five-year increment had the lowest accident rate in the past 40 years.

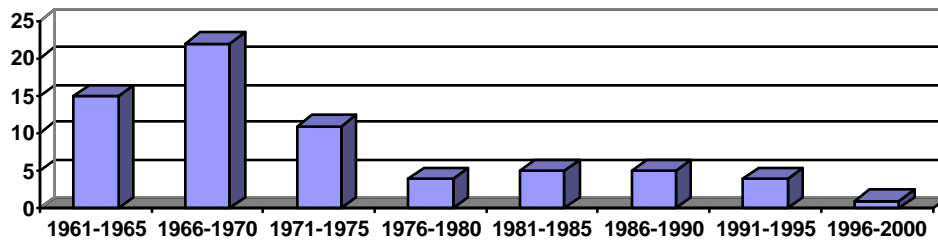


Airtanker 10-Year Statistics

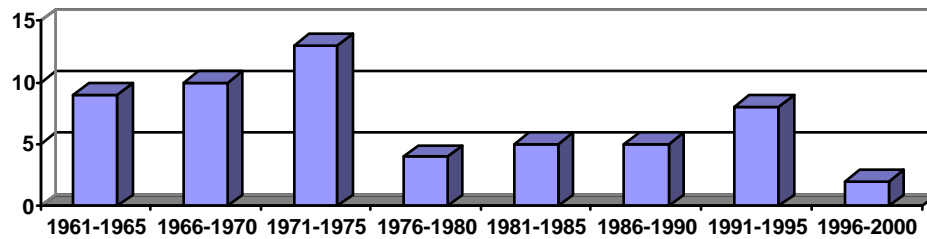
Fiscal Year	Hours Flown	Accidents	Accident Rate	Fatal Accidents	Fatal Accident Rate	Fatalities	Fatality Rate
2000	10,616	0	0	0	0	0	0
1999	6,069	0	0	0	0	0	0
1998	3,685	1	27.13	1	27.13	2	54.27
1997	2,801	0	0	0	0	0	0
1996	8,407	0	0	0	0	0	0
1995	4,154	1	24.07	1	24.07	2	48.14
1994	10,100	1	9.9	1	9.9	2	19.80
1993	1,947	1	51.36	1	51.36	2	102.72
1992	5,147	1	19.42	1	19.42	2	38.85
1991	2,782	0	0	0	0	0	0
Total	55,708	5	131.88	5	131.88	10	263.76
Average	5,571	0.5	13.19	0.5	13.19	1.0	26.38

Airtanker 15-Year Statistics in 5-Year Increments					
Year	Hours	Accidents	Fatalities	Accident Rate	Fatality Rate
1986-1990	21,529	5	5	23.22	23.22
1991-1995	24,130	4	8	16.58	33.15
1996-2000	31,578	1	2	3.16	6.33
Total	77,237	10	15	42.96	62.7
Average	25,746	3.33	5	14.32	20.9

Number of Accidents in 5-Year Increments



Number of Fatalities in 5-Year Increments



Helicopters

Helicopters accounted for the biggest percent of the total hours flown in FY 2000. They flew 48 percent of the total hours flown in FY 2000, compared to the 10-year average of 39 percent. While the number of accidents has steadily decreased the number of fatalities has increased over the past 15 years.

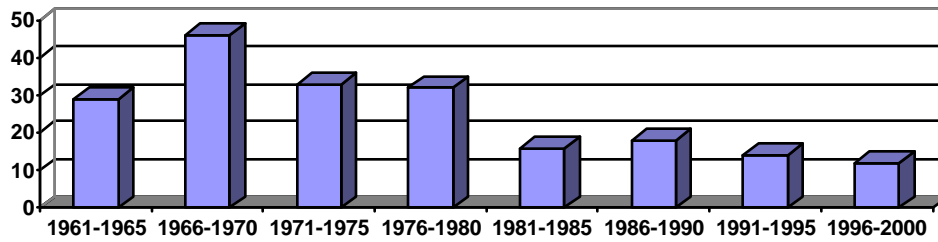


Helicopter 10-Year Statistics

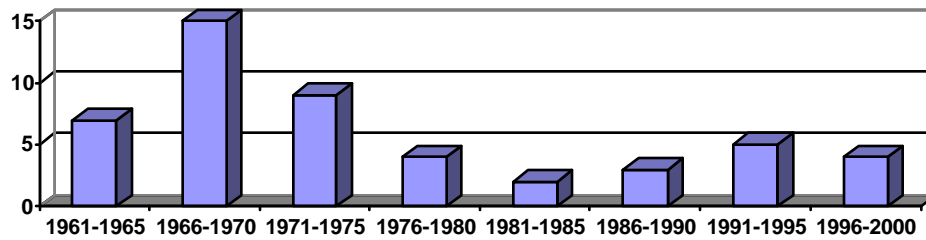
Fiscal Year	Hours Flown	Accidents	Accident Rate	Fatal Accidents	Fatal Accident Rate	Fatalities	Fatality Rate
2000	53,145	2	3.76	0	0	0	0
1999	25,174	1	3.97	0	0	0	0
1998	24,423	1	4.09	1	4.09	2	8.18
1997	16,295	4	24.54	1	6.13	2	12.27
1996	36,307	4	11.01	0	0	0	0
1995	20,031	0	0	0	0	0	0
1994	49,200	7	14.22	3	6.09	4	8.13
1993	12,026	1	8.31	0	0	0	0
1992	27,973	4	14.29	0	0	0	0
1991	26,032	2	7.68	1	3.84	1	3.84
Total	290,606	26	91.87	6	20.15	9	32.42
Average	29,056	2.6	9.19	0.6	2.02	0.9	3.24

Helicopter 15-Year Statistics in 5-Year Increments					
Year	Hours	Accidents	Fatalities	Accident Rate	Fatality Rate
1986-1990	108,854	18	3	16.55	2.76
1991-1995	135,262	14	5	10.35	3.7
1996-2000	155,344	12	4	7.72	2.57
Total	399,460	44	12	34.62	9.03
Average	133,153	14.67	4	11.54	3.01

Number of Accidents in 5-Year Increments



Number of Fatalities in 5-Year Increments



Benchmarks with other Organizations

These comparisons are for general information only and do not accurately reflect direct comparison due to mission profiles.

These charts present comparable statistical data from other organizations for the current fiscal or calendar years, where 2000 data was not available 1999 data was used.

The Forest Service Accident Rate for 2000 is well below the average (5.97) of the other organizations available.

Comparison to Other Organizations (Sorted by ascending Accident Rate)				
Organization	Accidents	Accident Rate	Hours	Note
U.S. Navy, Class A, FY2000	20	1.78	1,121,045	2
U.S. Air Force, Class A & B, FY1999	40	1.86	2,147,758	1
U.S. Marine Corps, Class A, FY2000	9	2.65	339,182	2
14 CFR 135, Non-scheduled Service, CY1999	76	2.71	2,809,000	4
U.S. Forest Service, FY2000, All Aircraft	4	3.58	111,486	
Civilian Helicopter, Multi-Engine Turbine, CY2000	19	3.78	503,000	3
Office of Aircraft Services (Dept. of Interior Agencies) FY2000	5	5.48	91,079	7
Civilian Helicopter, Single Engine Turbine, CY2000	97	6.44	1,507,000	3
U.S. General Aviation, CY1999	1908	7.05	27,080,000	4
U.S. Civilian Helicopter, All Types, CY2000	206	8.33	2,472,000	3
U.S. Army, Class A-C, FY2000	82	8.46	969,267	5
U.S. Civilian Helicopter, Reciprocating, CY2000	90	19.48	462,000	3
14 CFR 135, Non-scheduled Service, CY2000	80	N/A	N/A	6
Aerial Application, All Aircraft, CY2000	122	N/A	N/A	6
U.S. General Aviation, CY2000	1835	N/A	N/A	6

The USFS Fatal Accident Rate is also well below the average (1.35) of the other organizations available.

**Comparison to Other Organizations Fatality Statistics
(Sorted by ascending Fatal Accident Rate)**

Organization	Number of Fatal Accidents	Total Fatalities	Fatal Accident Rate	Note
14 CFR 135, Non-Scheduled, CY1999	12	38	.43	4
U.S. Forest Service, All Aircraft, FY2000	1	2	.89	
Civilian Helicopter, Multi-Engine Turbine, CY2000	6	17	1.19	3
Civilian Helicopter, Single Engine Turbine, CY2000	19	30	1.26	3
U.S. General Aviation, CY1999	342	628	1.26	4
Civilian Helicopter, All Types, CY2000	35	63	1.42	3
Civilian Helicopter, Reciprocating, CY2000	10	16	2.16	3
Office of Aircraft Services (Dept. of Interior Agencies) FY2000	2	4	2.19	7
U.S. Army, Classes A,B,C Aviation, Flight, FY2000	N/A	4	N/A	5
U.S. Air Force, Class A & B, FY 1999	N/A	9	N/A	1
Aerial Application, All Aircraft FY 1999	12	14	N/A	6
Aerial Application, All Aircraft CY 2000	20	21	N/A	6
U.S. Army, Classes A,B,C Aviation, Flight, FY1999	N/A	22	N/A	5
14 CFR 135, Non-Scheduled, CY2000	22	71	N/A	6
U.S. General Aviation, CY2000	341	592	N/A	6

The 5-Year statistics show the Forest Service accident rate higher than all Department of Defense Agencies, except the Army. The U.S. Forest Service 5-year accident rate is considerably lower than that of all General and Civilian aviation operations.

Comparison to Other Organizations 5 Year Statistics (Sorted by ascending Accident Rate)

Organization	Accidents	Number of Fatalities	Total Hours	Accident Rate	Fatality Rate	Note
U.S. Air Force, Classes A & B, FY1995-1999	206	161	10,763,600	1.91	1.5	1
U.S. Navy, All Aircraft, Class A, FY1996-2000	92	N/A	5,842,294	1.57	N/A	2
Civilian Helicopter, Multi-Engine Turbine, CY1996-2000	64	62	2,471,000	2.59	2.51	3
U.S. Marine Corps, All Aircraft, Class A, FY1996-2000	58	N/A	1,824,244	3.18	N/A	2
14 CFR 135, Non-Scheduled, CY1995-1999	400	240	11,333,000	3.53	2.12	4
U.S. Forest Service, All Aircraft, FY1996-2000	17	8	375,751	4.52	2.12	
Civilian Helicopter, Single Engine Turbine, CY1996-2000	417	151	6,682,000	6.24	2.26	3
General Aviation, CY1995-1999	9,631	3,260	129,127,000	7.46	2.53	4
Office of Aircraft Services (Dept. of Interior Agencies), FY1996-2000	31	19	390,731	7.93	4.86	7
Civilian Helicopter, All Types, CY1996-2000	934	283	11,427,000	8.17	2.48	3
U.S. Army, All Aircraft, FY1996-2000 Classes A,B,C	438	67	4,807,314	9.11	1.39	5
Civilian Helicopter, Reciprocating, CY1996-2000	453	70	2,274,000	19.92	3.08	3

The 10-Year statistics show the Forest Service accident rate is near the average (6.03) of the other organizations available.

Comparison to Other Organizations 10 Year Statistics (Sorted by ascending Accident Rate)			
Organization	Accidents	Accident Rate	Note
U.S. Air Force, Class A & B, FY1990-1999	485	1.91	1
14 CFR 135, Non-Scheduled, CY1990-1999	825	3.87	4
U.S. Forest Service, FY 1991-2000	43	5.92	
Office of Aircraft Services (Dept. of Interior Agencies)	60	7.36	7
U.S. General Aviation, CY1990-1999	17,912	7.9	4
U.S. Army, All Aircraft, FY1991-2000 Classes A,B,C	1041	9.22	5

N/A= Not Available

FY = Fiscal Year CY = Calendar Year

Notes: Sources Cited

- 1 United States Air Force website: www-afsc.saia.af.mil
- 2 United States Navy website: www.safetycenter.navy.mil/statistics
- 3 Helicopter Association International (HAI) website: www.rotor.com
- 4 National Transportation Safety Board (NTSB) website: <http://www.nts.gov/> *Note* Since April, 1995, the NTSB has been required by law to investigate all public use aircraft accidents. The effect upon the number of General Aviation accidents has been an increase of approximately 1.75%.
- 5 United States Army website: http://asmis.army.mil/asmis/statis/army_statist
- 6 NTSB website at: www.nts.gov/aviation/curr_mo.txt CY2000 flight hours in any aircraft category not available.
7. Office of Aircraft Services (OAS) - Department of Interior Agencies. Information obtained via telephone from OAS

Military Definitions:

Class A is an accident resulting in: a. Damage costs of \$1,000,000 or more and/or; b. Destruction of an aircraft, missile or spacecraft and/or; c. Fatality or permanent total disability.

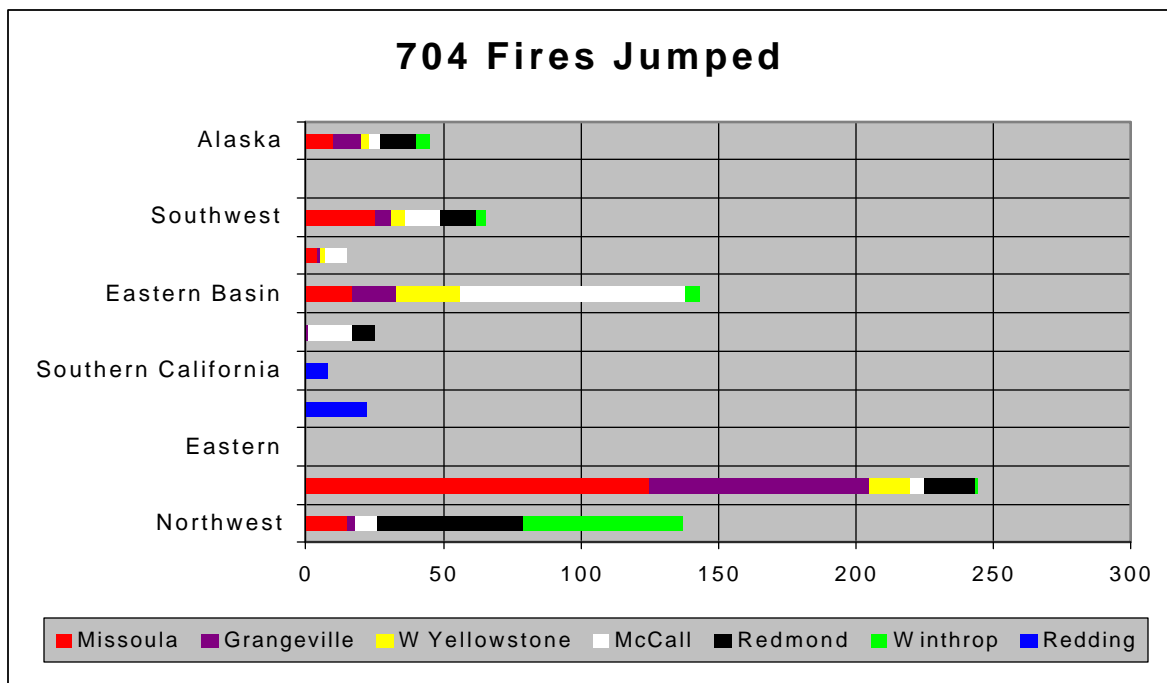
Class B is an accident resulting in: a. Damage costs of \$200,000 or more, but less than \$1,000,000 and/or; b. permanent partial disability and/or; c. Hospitalization of five or more people as inpatients.

Class C is an accident resulting in: a. Damage costs of \$10,000 or more, but less than \$200,000 and/or; b. Non-fatal injury resulting in loss of time from work beyond day/shift when injury occurred and/or; c. Non-fatal illness/disability causes loss of time from work.

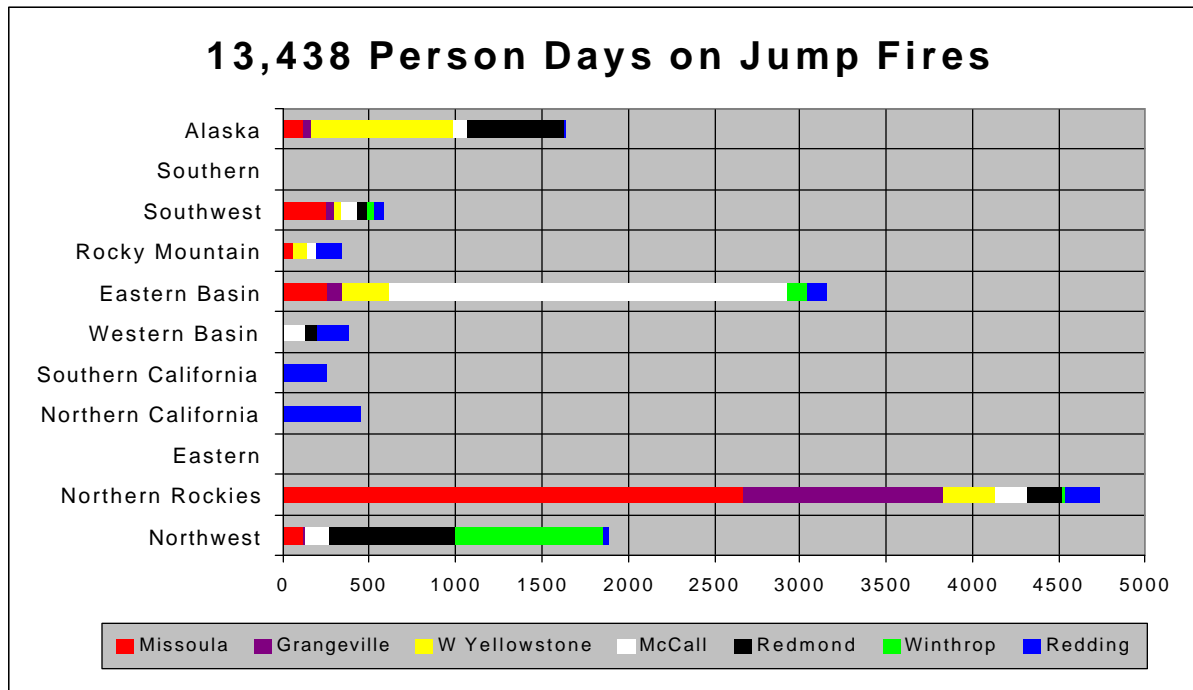
Smokejumper Program Overview



Fires Jumped – 704 fires were staffed by smokejumpers from Forest Services bases in 2000.

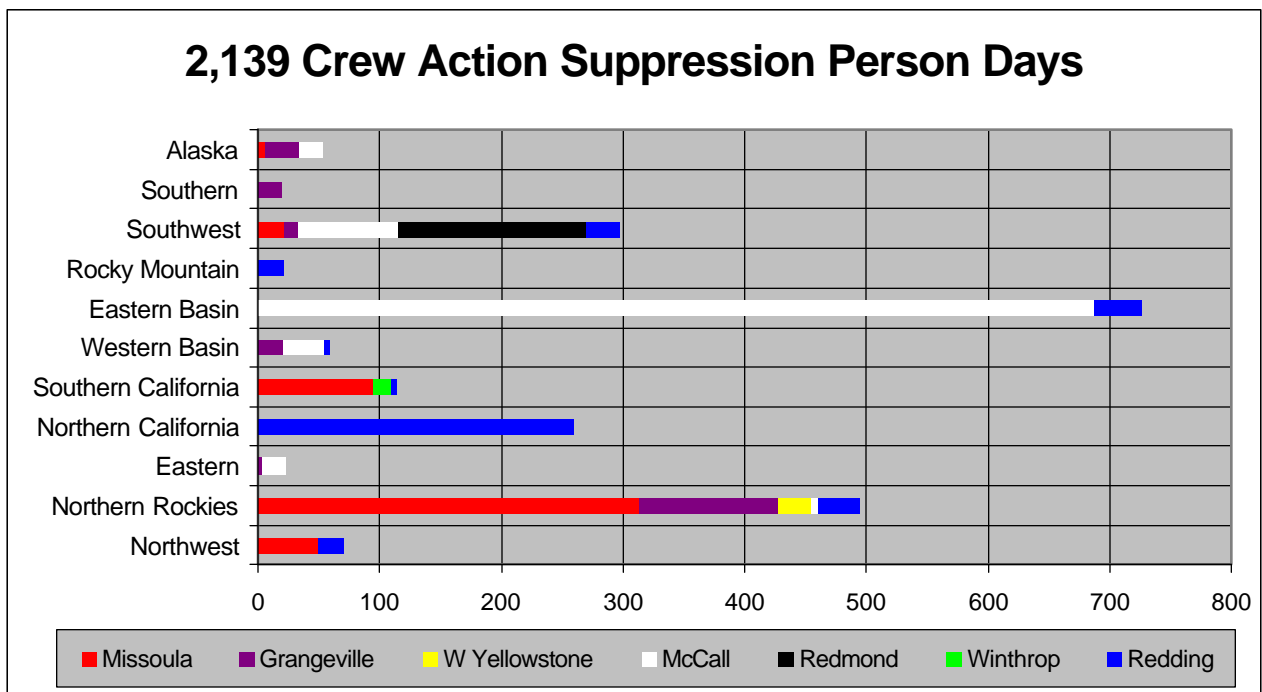


Person Days on Fires Jumped – Smokejumpers worked 13,438 person days on fires jumped.

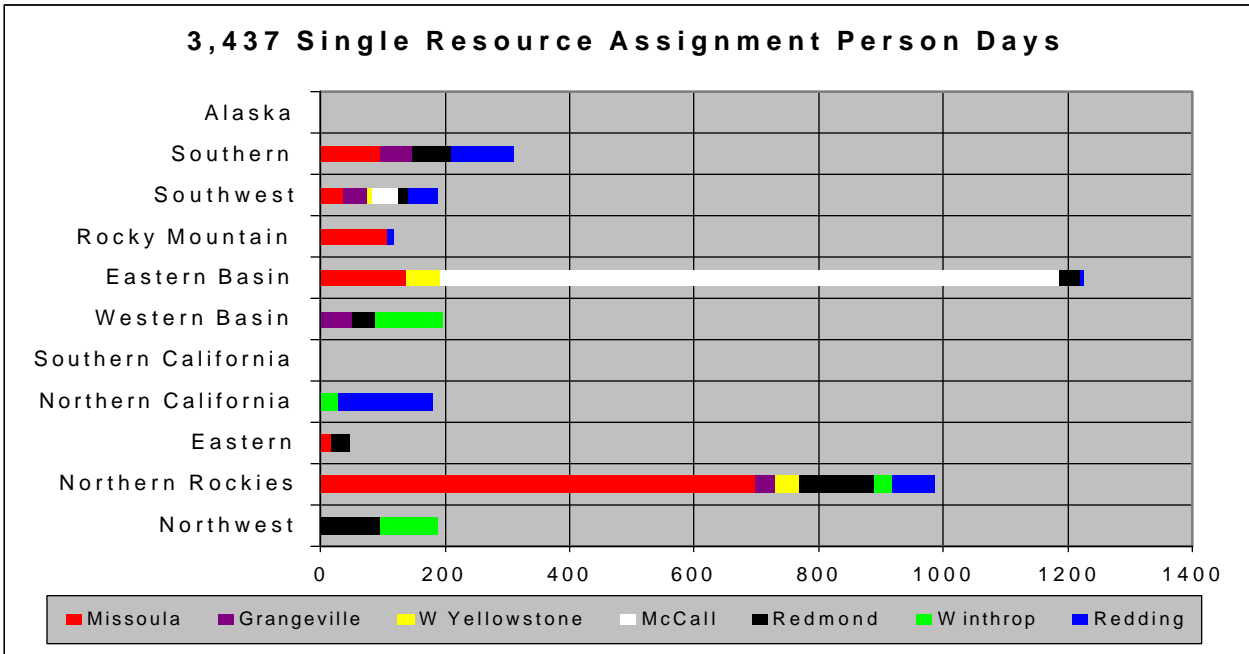


(1 Person Day = 8 Hours)

Suppression Ground Crews – Smokejumpers contributed 2,139 person days on ground action fires.

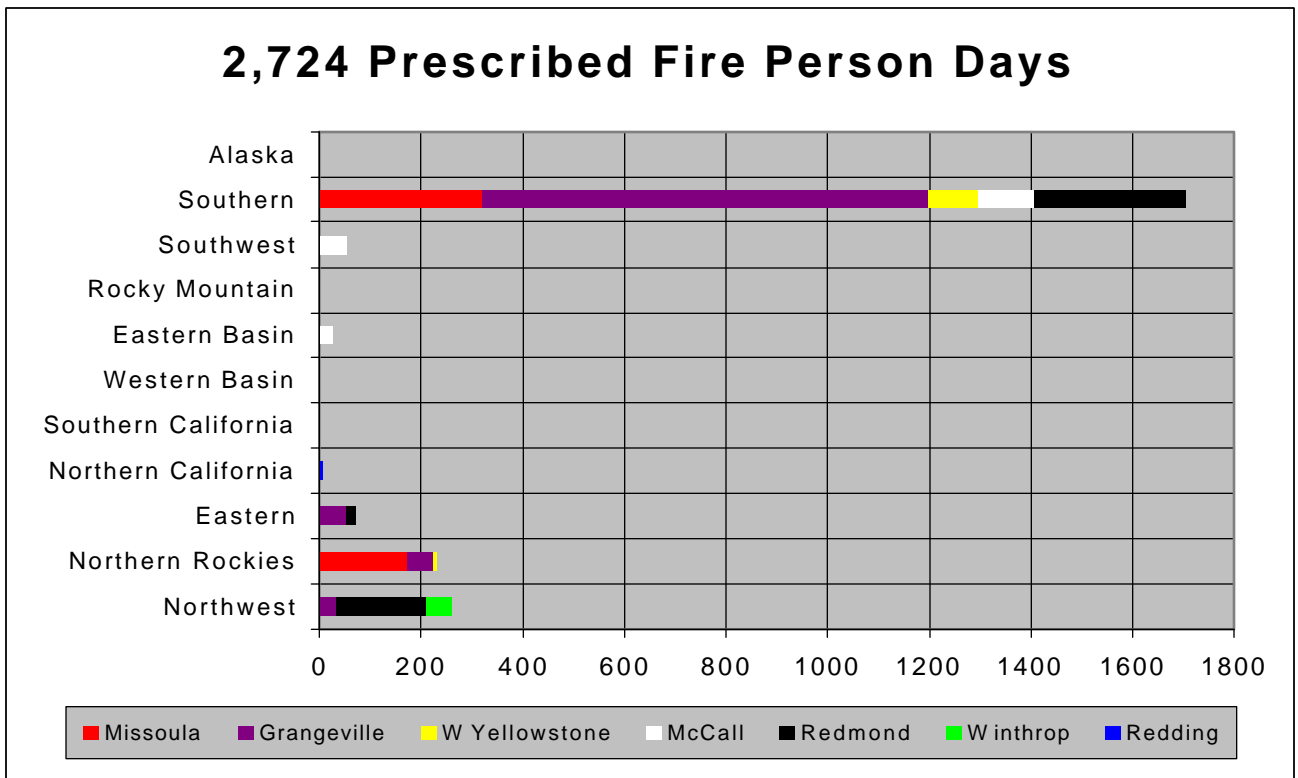


Suppression Overhead – Smokejumpers contributed 3,437 person days to single resource assignments.

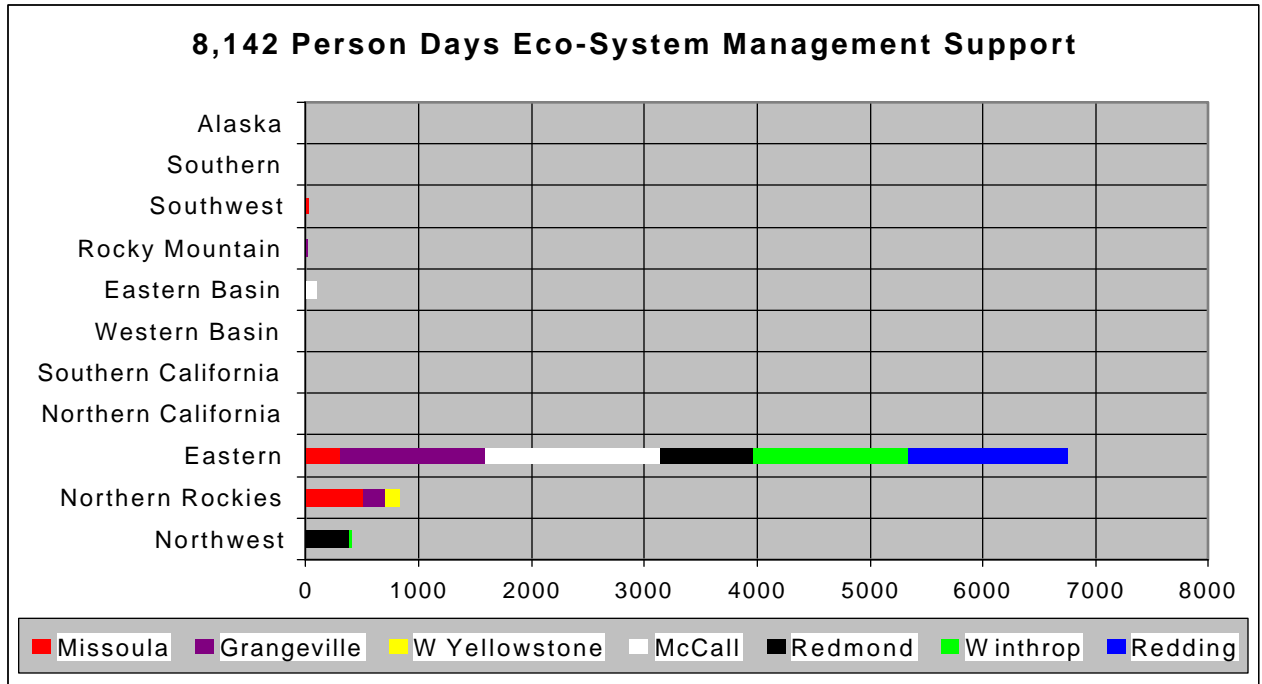


(1 Person Day = 8 Hours)

Prescribed Fire Support – Smokejumpers contributed 2,724 person days to the prescribed fire program. Assistance included crew, overhead and planning, as well as 78 person days of Prescribed Fire Use type assignments.



Other Person Days – Smokejumpers contributed an additional 8,142 person days in support of the Chief’s Natural Resource Agenda. Contributions were made in the following programs and areas; mechanical fuels treatment, timber, recreation, range and genetics research. Work accomplishment in the Eastern Region was mostly in support of the USDA Asian Longhorned Beetle Eradication Project (APHIS).



SafeCom Summary

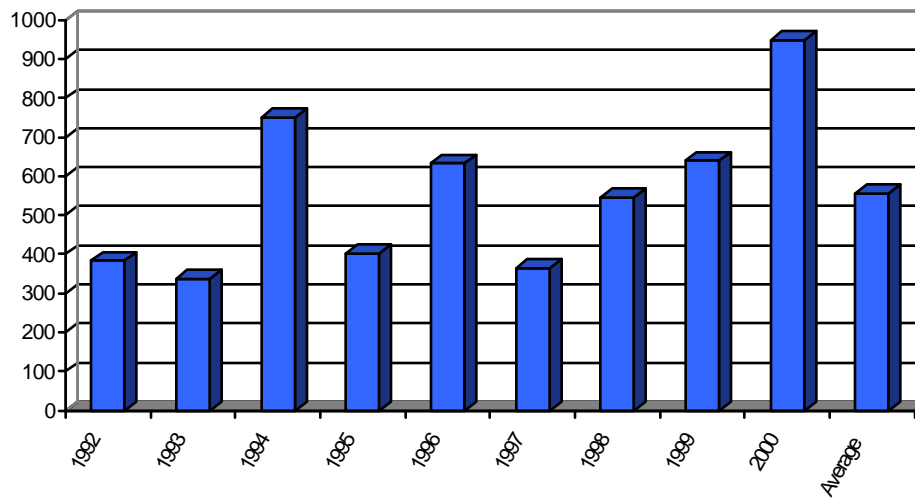
The SafeCom system satisfies Federal Aviation Regulations requirements for incident reporting, but more importantly, it provides management and front line supervisors with near real time trend information. Armed with data on emerging safety and effectiveness challenges, operators and management can take appropriate actions before a mishap occurs. The National Safety Office increased the flow of SafeCom information to the field by 400% in FY 2000, providing hard copy and internet access to vital risk management data.

These charts trend the SafeCom data posted on the Forest Service Aviation Internet site at www.aviation.fs.fed.us. The average of total numbers of submitted SafeCom's is 556 per year. The FY 2000 number is significantly higher at 949. The total number of SafeCom's submitted usually fluctuates with the total number of hours flown. The web based SafeCom system is proving its success with the continuation of increased use each year.

The emphasis for 2001 will be focused on avoiding mid-air collision potential and eliminating policy deviations. Although there were only 16 SafeCom's categorized as near mid-air, there were over 40 that had mention of close calls or having to take evasive action. The same is true for policy deviation, there were 58 SafeCom's categorized as policy deviation, but numerous more that indicated actual deviation from policy. Communication problems are alarming as well. The highest numbers of SafeComs in the Hazard category were communications related and numerous others indicated communications as a part of the problem. Many SafeCom's related to frequency and radio issues but the majority showed that we have basic communication failures at multiple levels of our operations.

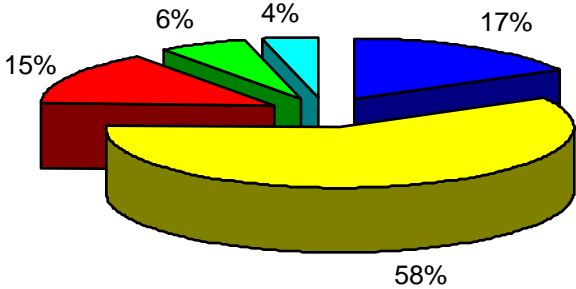
Previous Years Safecom Totals	
Year	Number of Safecom's
2000	949
1999	640
1998	546
1997	366
1996	633
1995	402
1994	751
1993	336
1992	383
Average	556
Total	5,006

Total Number of SafeComs by Year



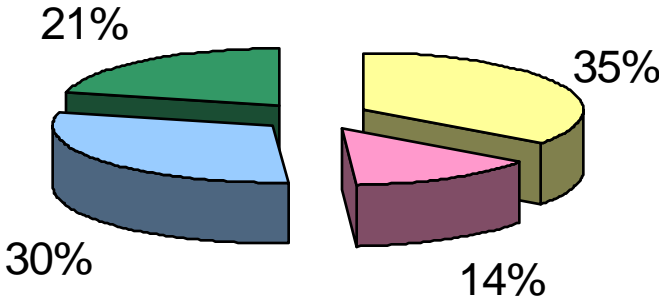
FY 2000 SafeCom Information		
Aircraft Type	Number	Percent of all SafeCom's
Fixed Wing	162	17.1%
Helicopter	554	58.4%
Airtanker	139	14.6%
USFS Owned	58	6.1%
Other	36	3.8%
Total	949	100.0%
Category	Number	Percent of all SafeCom's
Airspace	134	14.1%
Hazard	281	29.6%
Incident	203	21.4%
Maintenance	331	34.9%
Total	949	100.0%

SafeCom's by Aircraft Type



- Fixed-Wing
- Airtanker
- Other
- Helicopter
- USFS Owned

SafeCom's by Category



- Maintenance
- Airspace
- Hazard
- Incident

SafeCom's by Region

Region 1				
Aircraft	Number	% of total R-1	% of all SafeCom's	% of category total
Fixed Wing	27	14.1%	2.8%	16.7%
Helicopter	130	68.1%	13.7%	23.5%
Airtanker	20	10.5%	2.1%	14.39%
USFS Owned	8	4.2%	0.8%	13.8%
Other	6	3.1%	0.6%	16.7%
Total	191	100.0%	20.1%	

Region 2				
Aircraft	Number	% of total R-2	% of all SafeCom's	% of category total
Fixed Wing	14	17.1%	1.5%	8.6%
Helicopter	42	51.2%	4.4%	7.6%
Airtanker	21	25.6%	2.2%	15.1%
USFS Owned	5	6.1%	0.5%	8.6%
Other	0	0.0%	0.0%	0.0%
Total	82	100.0%	8.6%	

Region 3				
Aircraft	Number	% of total R-3	% of all SafeCom's	% of category total
Fixed Wing	22	15.4%	2.3%	13.6%
Helicopter	73	51.0%	7.7%	13.2%
Airtanker	31	21.7%	3.3%	22.3%
USFS Owned	11	7.7%	1.2%	19.0%
Other	6	4.2%	0.6%	16.7%
Total	143	100.0%	15.1%	

Region 4				
Aircraft	Number	% of total R-4	% of all SafeCom's	% of category total
Fixed Wing	21	13.6%	2.2%	13.0%
Helicopter	99	64.3%	10.4%	17.9%
Airtanker	21	13.6%	2.2%	15.1%
USFS Owned	9	5.8%	0.9%	15.5%
Other	4	2.6%	0.4%	11.1%
Total	154	100.0%	16.1%	

Region 5				
Aircraft	Number	% of total R-5	% of all SafeCom's	% of category total
Fixed Wing	39	21.3%	4.1%	24.1%
Helicopter	113	61.7%	11.9%	20.4%
Airtanker	21	11.5%	2.2%	15.1%
USFS Owned	5	2.7%	0.5%	8.6%
Other	5	2.7%	0.5%	13.9%
Total	183	100.0%	30.8%	

Region 6				
Aircraft	Number	% of total R-6	% of all SafeCom's	% of category total
Fixed Wing	9	11.4%	0.9%	5.6%
Helicopter	29	36.7%	3.1%	5.2%
Airtanker	14	17.7%	1.5%	10.1%
USFS Owned	15	19.0%	1.6%	25.9%
Other	12	15.2%	1.3%	33.3%
Total	79	100.0%	8.4%	

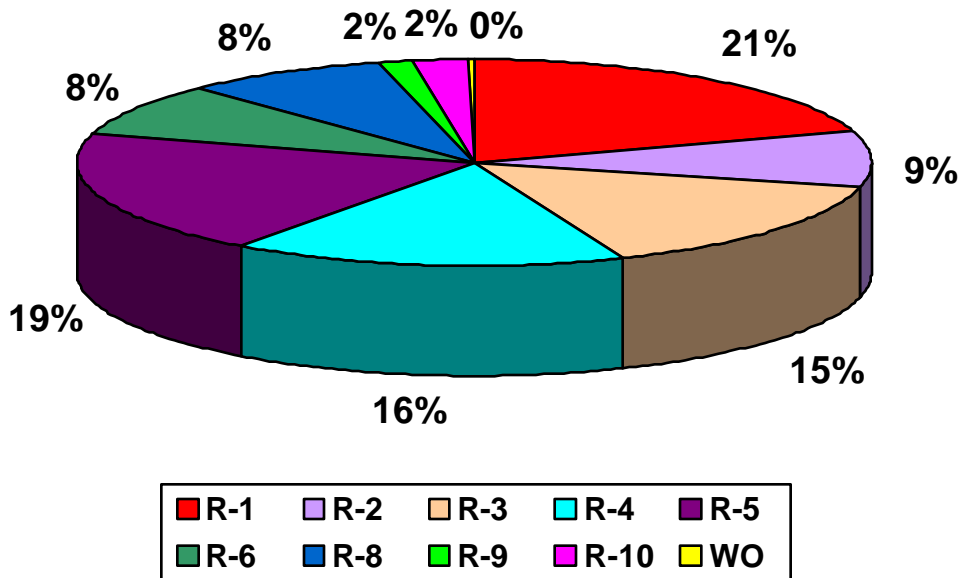
Region 8				
Aircraft	Number	% of total R-8	% of all SafeCom's	% of category total
Fixed Wing	9	11.4%	0.9%	5.6%
Helicopter	55	69.6%	5.8%	10.0%
Airtanker	9	11.4%	0.9%	6.5%
USFS Owned	3	3.8%	0.3%	5.2%
Other	3	3.8%	0.3%	8.3%
Total	79	100.0%	8.2%	

Region 9				
Aircraft	Number	% of total R-9	% of all SafeCom's	% of category total
Fixed Wing	6	40.0%	0.6%	3.7%
Helicopter	6	40.0%	0.6%	1.1%
Airtanker	1	6.7%	0.1%	0.7%
USFS Owned	2	13.3%	0.2%	3.4%
Other	0	0.0%	0.0%	0.0%
Total	15	100.0%	1.5%	

Region 10				
Aircraft	Number	% of total R-10	% of all SafeCom's	% of category total
Fixed Wing	14	70.0%	1.5%	8.6%
Helicopter	6	30.0%	0.6%	1.1%
Airtanker	0	0.0%	0.0%	0.0%
USFS Owned	0	0.0%	0.0%	0.0%
Other	0	0.0%	0.0%	0.0%
Total	20	100.0%	2.1%	

WO				
Aircraft	Number	% of total WO	% of all SafeCom's	% of category total
Fixed Wing	1	33.3%	0.1%	0.6%
Helicopter	1	33.3%	0.1%	0.2%
Airtanker	1	33.3%	0.1%	0.7%
USFS Owned	0	0.0%	0.0%	0.0%
Other	0	0.0%	0.0%	0.0%
Total	3	100.0%	0.3%	

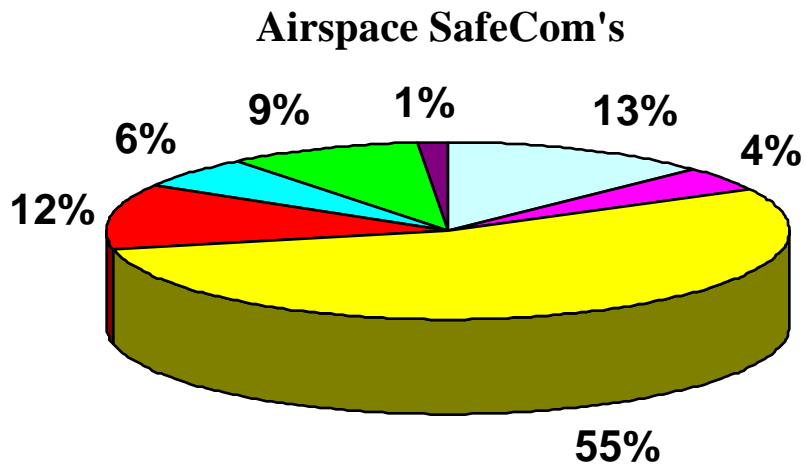
Percent of SafeCom's by Region



SafeCom's by Category					
Region	Airspace	Hazard	Incident	Maintenance	Total
Region 1	25	61	60	45	191
Region 2	8	35	10	29	82
Region 3	34	28	30	51	143
Region 4	17	40	40	57	154
Region 5	28	58	25	72	183
Region 6	7	28	15	29	79
Region 8	15	14	15	35	79
Region 9	0	7	4	4	15
Region 10	0	8	4	8	20
WO	0	2	0	1	3
Total	134	281	203	331	949

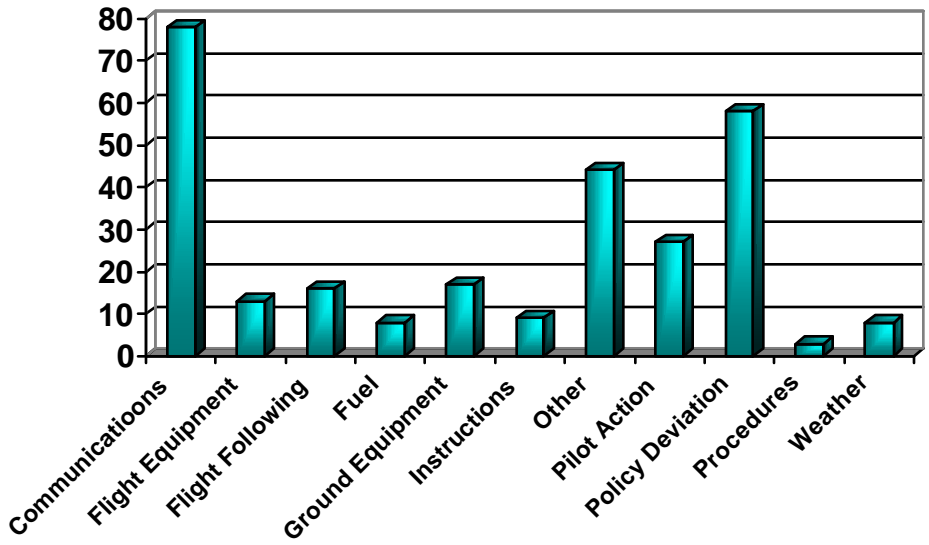
SafeCom's by Major and Minor Category					
	Airspace	Hazard	Incident	Maintenance	Total
Aircraft Damage	0	0	27	0	27
Airframe	0	0	0	11	11
Avionics	0	0	0	8	8
Caution Light	0	0	0	6	6
Chip Light	0	0	0	38	38
Communications	0	78	0	0	78
Conflict	17	0	0	0	17
Congestion	6	0	0	0	6
Dragged Load	0	0	13	0	13
Dropped Load	0	0	49	0	49
Electrical	0	0	0	32	32
Emergency Equipment	0	0	0	1	1
Engine	0	0	0	74	74
Environmental	0	0	0	2	2
Flight Controls	0	0	0	6	6
Flight Equipment	0	13	0	0	13
Flight Following	0	16	0	0	16
Forced Landing	0	0	2	0	2
Fuel	0	8	0	28	36
Gear Box	0	0	0	4	4
Ground Damage	0	0	2	0	2
Ground Equipment	0	17	0	0	17
Hydraulic	0	0	0	12	12
Instructions	0	9	0	0	9

Instrument	0	0	0	15	15
Intrusion	73	0	0	0	73
Landing Gear	0	0	0	18	18
Near Mid-Air	16	0	0	0	16
Oil	0	0	0	18	18
Other	8	44	77	26	155
Pilot Action	0	27	0	0	27
Policy Deviation	0	58	0	0	58
Precautionary Landing	0	0	33	0	33
Procedures	12	3	0	0	15
Propeller	0	0	0	8	8
Rotor (Main)	0	0	0	10	10
Rotor (Tail)	0	0	0	1	1
Route Deviation	2	0	0	0	2
Transmission	0	0	0	7	7
Trim	0	0	0	1	1
Vacuum	0	0	0	1	1
Warning Light	0	0	0	4	4
Weather	0	8	0	0	8
Total	134	281	203	331	949

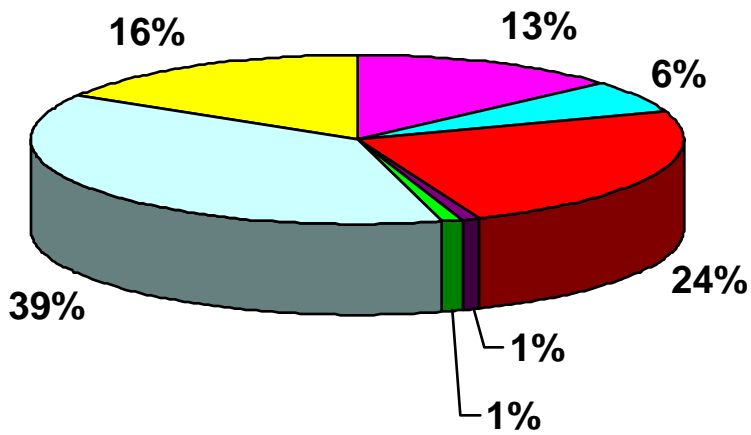


Conflict	Congestion	Intrusion
Near Mid-Air	Other	Procedures
Route Deviation		

Hazard SafeCom's

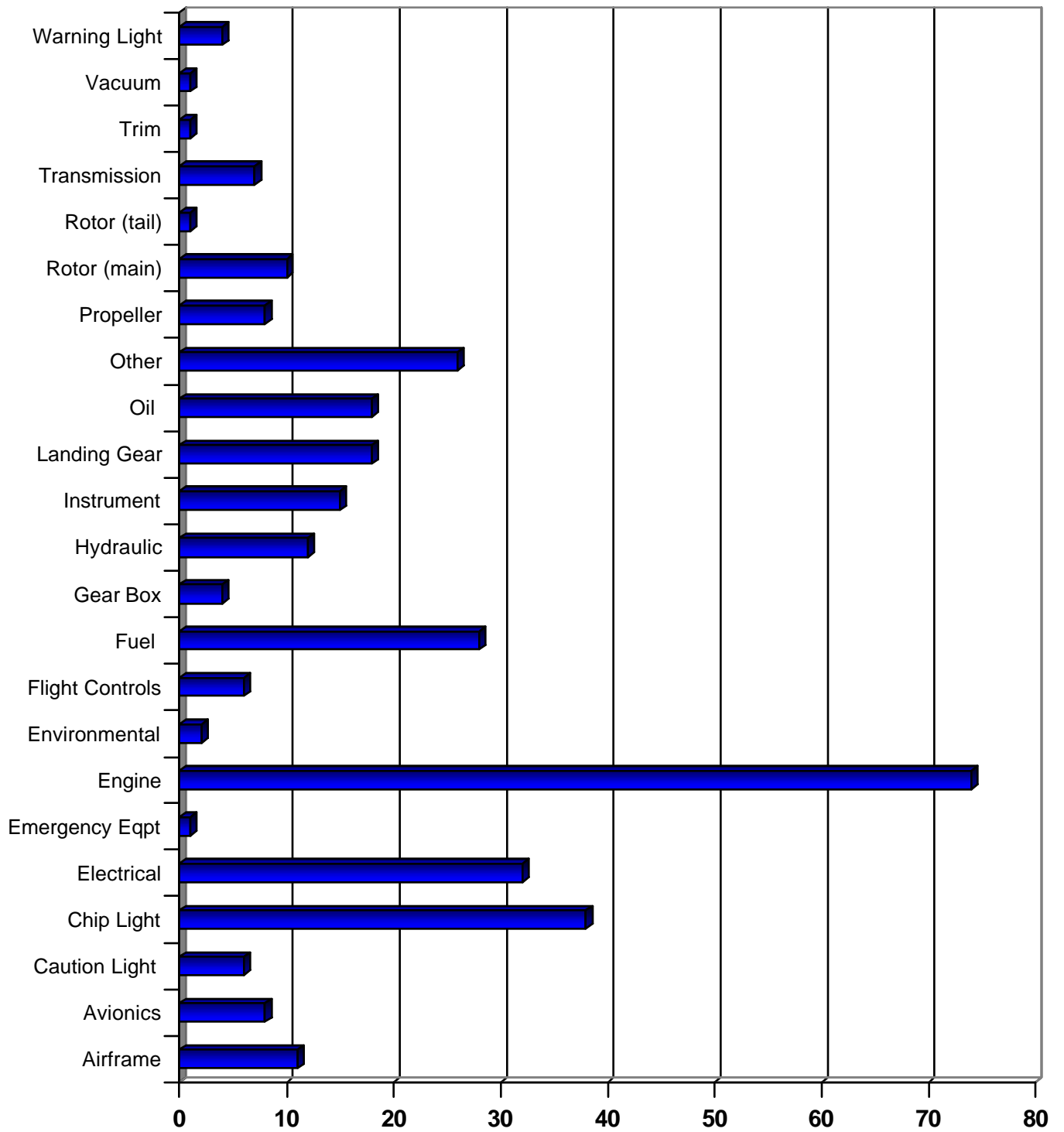


Incident SafeCom's



■ Aircraft Damage	■ Dragged Load	■ Dropped Load
■ Forced Landing	■ Ground Damage	■ Other
■ Precautionary Landing		

Maintenance SafeComs



Accident Summaries

Note: At the time of this publication there was only one NTSB final report available, therefore no discussion of causal factors is included in these summaries.

Cessna 337
May 15, 2000 at ALAMOGORDO, NM
Injuries: 2 Fatal.

This is preliminary information, subject to change, and may contain errors

On May 15, 2000, approximately 1235 mountain daylight time, a Cessna Skymaster 337, was destroyed following impact with terrain near Alamogordo, New Mexico. The aircraft was assigned to the Lincoln National Forest and was on an aerial reconnaissance mission. Both the pilot and the Air Attack/Observer were fatally injured. Visual meteorological conditions prevailed for the local flight, which originated from Alamogordo, New Mexico. The aircraft went down approximately 6 minutes after take off.

A witness said that the airplane was flying in a northeasterly direction, and he could not hear any engine sounds. He said the airplane rotated to the left and disappeared behind the mountain. Seconds later, he saw the smoke rising.



Cessna 337 debris

Short C-23A (Sherpa)
July 30, 2000 at ELK CITY, ID
Injuries: None.

This is preliminary information, subject to change, and may contain errors

On July 30, 2000, approximately 1700 Pacific daylight time, a Short Brothers C-23A airplane, registered to and operated by the U.S. Forest Service on a public-use firefighting mission, was substantially damaged when the parachute of a cargo box being dropped from the aircraft became entangled in the aircraft's horizontal stabilizer. Following the entanglement, the cargo box (which contained chain saws and water for a smokejumper crew which the aircraft had just dropped) broke free of its parachute and fell away from the aircraft, and the aircraft subsequently returned to its departure base of Missoula, Montana, and landed without further incident. There were no injuries to the airline transport pilot-in-command, copilot, or two spotters aboard the aircraft, nor were there any reports of injuries to persons on the ground. The accident occurred near Frog Lake, in the Selway-Bitterroot Wilderness of the Clearwater National Forest, on the Idaho side of the Idaho/Montana border approximately 60 miles northeast of Elk City, Idaho. Visual meteorological conditions prevailed at the time of the accident, and the aircraft was on an agency visual flight rules flight plan.



Sherpa stabilizer with chute entangled

Bell 212
August 31, 2000 at JACKSON, WY
Injuries: 2 Minor.

This is preliminary information, subject to change, and may contain errors.

On August 31, 2000, at 1055 mountain daylight time, a Bell 212 helicopter, sustained substantial damage when control was lost as it was standing with the rotors turning at Jackson, Wyoming. The pilot and one helitack crewperson on the ground received minor injuries. Visual meteorological conditions prevailed.

According to preliminary information, the helicopter rotor system was turning at flight rpm and passengers were being loaded for a firefighting operation. The helicopter tipped back and the tail rotor struck the ground. Subsequently, the helicopter became airborne, spun several times, and impacted the ground damaging the skids and tail boom.



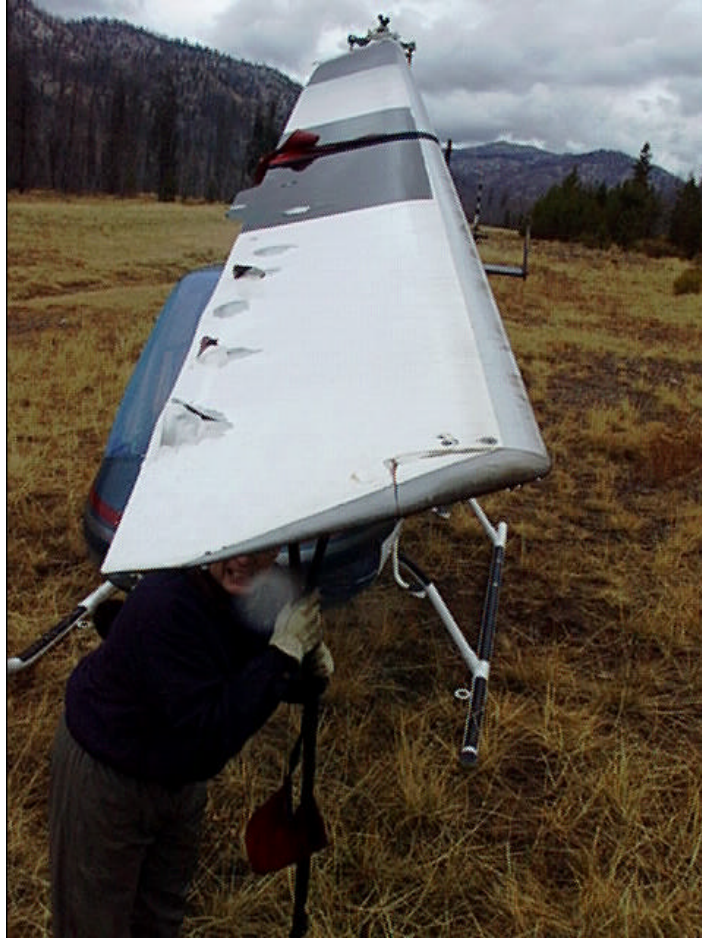
Bell 212 sitting on belly after skid failure

Bell 206-L4
September 21, 2000 at ATLANTA, ID
Injuries: None.

On September 21, 2000, at 1100 mountain daylight time, a Bell 206-L4, contracted and operated by the United States Forest Service as a public use external load operation, collided with trees during descent to the landing zone near Atlanta, Idaho. Visual meteorological conditions prevailed at the time and a company flight plan was in effect. The helicopter was substantially damaged and the commercial pilot, the sole occupant was not injured. The flight originated from a Forest Service strip near Graham, Idaho, at an unknown time.

In a written statement, the pilot reported that he performed an aerial survey of the drop points (one and two) and determined that there was sufficient room to belly hook the loads in lieu of using a long line. The pilot then returned to Graham to pick up the cargo that was pre-rigged in cargo nets. The pilot reported that as he was descending to drop point two, a ground crew member was talking to him on the radio and giving him distance to ground information. The load was released and the pilot began a vertical climb to clear trees, and then transitioned to forward flight. The pilot reported that at approximately 40 knots, he felt a one-to-one vertical vibration. Due to the lack of an acceptable landing site, the pilot elected to return the 3.5 miles back to Graham. After landing and upon inspection of the helicopter, it was found that the main rotor blades were damaged. The pilot stated that he was unaware of the collision.

Two ground crew members present at the drop point reported that they expected the load to be dropped via a long line, and were surprised when the helicopter approached with the load attached at the belly hook. The drop point was a clearing surrounded by dead (burned) lodge pole pine trees. The ground crew reported that as the helicopter descended, the main rotor blades struck two of the approximate 1-3 inch diameter trees that were located at about the pilot's nine o'clock position. The helicopter continued to the drop spot where the load was released. After the release, the helicopter lifted away to the south of the clearing to return to Graham. The ground crew member who was in contact with the pilot reported that she was "awestruck" when the collision occurred, but allowed the drop to continue and did not notify the pilot of the collision at the time. She later stated, "HINDSIGHT: I should have notified the pilot sooner of the strike. Also, I should have further discussed using the long line as an option."



Top of rotor blade on Bell 206-L4



Underneath of rotor blade on Bell 206-L4



AIRWARD NEWS

In Recognition of Professional Performance during a Hazardous Aviation Event or Significant Contribution to Aviation Mishap Prevention

FY 2000

It is our belief that recognizing and awarding employees, contractors and cooperators for their superior actions that contribute to a safe operation improves our safety mission across the board. The Airwards program recognizes people for being professionals, taking care of a hazardous situation, for making a significant contribution to aviation mishap prevention, a good idea or suggestion, developing and/or implementing a new process or procedure, making a difference, and leading by example.

The Airwards program is about saying thanks to people for keeping it safe and having the RIGHT ATTITUDE, a SAFE ATTITUDE. Anyone can recommend someone for an Airward by simply submitting a SafeCom or contacting your Regional Aviation Safety Manager. We would love to see more SafeCom's with a positive aspect, and we know there are a lot of good things happening out there that we're not hearing about. Thanks for your superior efforts and congratulations to those of you that received Airwards.

Persistence Pays Off



When you are managing the ramp of an airtanker base, you are trained to be observant. Bill Mitchell was doing just that on May 29, 2000 at the Phoenix base when he observed fuel leaking from the wing of a P3. He informed the flight crew, who were busy inspecting an area of the tail section. The crew told Bill that a leak in that area was normal and was probably just water. Bills ramp manager training may not have included being persistent, but that is what he was. He put some of the leaking fluid on his hand and went back to the flight crew for them to smell. The crew then agreed that the fluid was in fact a fuel leak. During inspection, it was determined that the wing spar was cracked and the aircraft was grounded. IT PAYS TO BE BOTH OBSERVANT AND PERSISTENT! Safecom 00-199

Tanker Crew Gets Workout

We all know the key to staying healthy is exercise. The crew of T-06 recently performed their daily exercise during an in flight emergency. During the New Mexico fire siege, they were returning to reload when they experienced a complete loss of hydraulic pressure. The pilot Tom Radder, co-pilot Skip Alderson and mechanic Steve Davidson, worked together to identify the problem, follow emergency procedures and land safely back at the Albuquerque airport. They were able to successfully clear active runway 10, and not block ongoing tanker operations. AN EXERCISE WELL DONE! SafeCom 00-152



Golden Moment



Geo-Seis Helicopters Pilot Mike Golden and Helicopter Manager Isidoro Solis were flying on a series of lightning fires in Region 5 when Mike felt a strange pedal position and deteriorating yaw control on the Aerospatiale AS 316B he was flying. He immediately performed an emergency landing into a pasture approximately 2 miles north of the USFS Havilah Fire Station. The helicopter was flown to the ground headed north, rotated 180 degrees around the left wheel on touchdown, but was kept level by Mr. Golden. He stopped the rotation by decreasing power and torque immediately on touchdown.

The cause of the malfunction was a tail rotor cable turnbuckle failure, where the stainless steel male end pulled out of the brass female coupling. The brass threads were stripped and the end deformed. Mr. Golden did an outstanding job controlling the helicopter and prevented a mishap. For his Golden efforts, he received this Airward. Mike, thank you! Safecom 00-547

There's a Time and a Place for Everything

Montana is on fire. Crews both on the ground and in the air are becoming tired from weeks of hard work and heat, with little relief forecast in the near future. At times like these, it's easy to become mission oriented and it might be tempting to accept a potentially unsafe mission. It might be easier and faster to break a policy or two than to follow them. On August 22, 2000, Neptune Aviation's Gordon Koenig wasn't going to hear any of that, he was just plain fatigued and he wasn't going to take it anymore. Once he realized that he could soon be operating his Lockheed P2V at less than optimal performance, he terminated the mission. He returned to Missoula for rest. We thought that was the professional thing to do and awarded him an Airward! Good job Gordon! Safecom 00-738



Silver Screen Action, Without the Million Dollar Actors

In the style of Hollywood, this event was acted out for real the morning of August 6, 2000. Captain Gene Wahlstrom and Co-pilot Dale Dahl, the crew of a Neptune Aviation Lockheed P2V, had just completed dropping a load of retardant on the High Ore fire and were heading back to Helena, Montana for a load-and-return to the fire when they had a problem with their nose landing gear. They were approaching the airport for a landing when they noticed the nose landing gear would not extend when selected to the down position. Knowing that your nose precedes your face in anything that you do, another attempt to cycle the landing gear commenced, producing the same results. An examination of the nose wheel gear, from the crawlway to the nose compartment, revealed that the ¼" bolt connecting the hydraulic actuator to the up lock mechanism was sheared. In true "McGyver" fashion, they located a bolt and nut of the required dimensions in amongst the spare parts located in the aircraft, and installed them! The gear lowered, and a "normal" landing at the maintenance base in Missoula was executed. They certainly earned their pay that day, and Airwards too. A job well done! SafeCom 00-636



High Three Takes on New Meaning



In the Federal Service we refer to the High Three as the pay scale that we draw retirement based upon, but on the afternoon of August 15, 2000, Captain Don Fair and his Co-pilot Wynn Atchison of Conair Aviation found themselves a little short, in an entirely different way. They had just become airborne in their Douglas DC-6 on their way to a fire dispatch, when the Number 2 engine failed. The failure occurred as the landing gear was in transit-up. The Number 2 engine barked hard twice, and then the auto-feather system feathered it. As the aircraft could not maintain altitude on three engines, the retardant load was dropped on the runway at Kalispell, the aircraft climbed away, and engine clean up was carried out. The runway was closed with trucks on it for cleanup of the retardant and the aircraft diverted to Missoula, where Don and Wynn skillfully landed without further incident. Investigation of the fault on the Number 2 engine was actually determined to be an engine nose gear failure. Don and Wynn, thanks for a job well done! SafeCom 00-649

My Name is Brad, I Like to Fly

With a Hippie in a tie-dye shirt and sandals painted on the nose of his Lockheed P2V, Neptune Aviation's pilot Brad Ruble flies the skies above fires (to the tune of over 360 hours flying time for this fire season already) and drops doors and doors of retardant to help the fire fighting efforts on the ground. That's his story and he's sticking to it. At least until he feels it necessary to change the story line. Such was the case the evening of August 17, 2000 in Montana. With visibility, lighting and fatigue working



against his favor, he cancelled the mission he was asked to do. A hard call to make in one of the busiest fire years in recent memory, but an extremely important and professional one. Thank you Brad. This Airward's for you! SafeCom 00-739

Kick em' When Their Up, Kick em' When Their Down

There they were, 200' above the ground over the Clearwater National Forest with an airspeed of 105-110 knots, when all of a sudden the aircraft pitched down.....



In a relatively normal day of dropping people and kicking cargo out the door of their Shorts C-23A, Sherpa, the unexpected occurred. It was a "stable air" evening on July 30, 2000, as Pilot in Command Nels Jensen and Co-pilot Kathy Luken took to the sky to drop off smokejumpers and their cargo. Spotters Wayne Williams and Mitch Kearns had successfully dropped eight smokejumpers and three cargo passes without incident. The fourth pass was a chainsaw box and water cubie.

The command to "kick" was given and within a second the aircraft pitched down. The box rose as it exited the aircraft, and traveled over the horizontal stabilizer. Simultaneously the parachute deployed underneath the horizontal stabilizer and the parachute shroud lines became wedged between the fuselage and stabilizer. Backpressure and power were applied. Several other up and down pitches occurred. Both the box breaking away and the chute blowing out caused the aircraft to return to flying in a normal manner. The damage was done and Nels and Kathy knew what they had to do, and they did it with skill, knowledge and Crew Resource Management. They flew the aircraft back to Missoula, declared an emergency, and landed successfully without incident. For their professionalism and crew coordination efforts, not to mention the safe landing, they received Airwards. Thank you Nels and Kathy! No SafeCom submitted

Three-peat for Pilot Paul

Although Paul Bradley's efforts to ensure the safety of his flights could have rewarded him with a possible three Airwards, they were grouped into one Airward. Here's what he did to



1. The Monument Canyon fire on the Sawtooth National Forest was in its second day. The fire was growing rapidly. A Leadplane, a couple of Single Engine Air Tankers (SEATS), and heavy tankers were over the fire. A Call-When-Needed Helicopter manager was with Air Resources Helicopters pilot Paul Bradley, an exclusive use pilot, and his helicopter, a Bell 206L4. The helicopter was not requested to shut down from bucket work when the tankers were in the area since the fire did cover a large area. VHF traffic got very heavy, per usual, when the Leadplane was trying to give the tankers instructions.

It was hard to find a break in the communications traffic to speak. Paul saw that this was not a good situation and took it upon himself to return to the helibase and shut down until the traffic could be resolved.

2. The crew was dispatched to Initial Attack (I.A.) the Rankin Fire that was just over the border of the Sawtooth and on the Challis National Forest. Salmon/Challis had hopes that Sawtooth Helitack would be able to handle this fire and had instructed dispatch to run the fire on the Sawtooth Net. It became obvious quickly that this was not a normal I.A. due to fire behavior and other aircraft were dispatched to the fire. Paul recognized quickly that the situation was out of hand due to mixing of fixed wing with rotary wing and landed his helicopter back at the helispot where the Helitack was and they did not take off to clear out of the area until communications were established with all other aircraft in the area. It was quickly recognized that switching back and forth between two forests frequencies was not working.

3. The helicopter was working the West Basin Fire, where it was sent to pick up the Operations Chief and a safety officer for a recon flight of the fire. After briefing and loading the passengers, they departed for the recon. The air to ground and victor were hosting non-stop traffic and after talking to Air Attack several times, no one on board the helicopter, not even the pilot himself, could really say for sure where the other aircraft were working. Paul told the Operations Chief who was on board his helicopter, "I have to return to the pickup point. I cannot ensure the safety of this aircraft or of the people on board it. You are trying to do something here and Air Attack is trying to do something else and the two are not compatible at this point." The helicopter returned to the helispot and set down until Operations established another mission that could be accomplished.

Thanks, Paul, for realizing these three situations that were shouting "WATCH OUT!" and acting upon them! No SafeCom submitted

Lead 214 – A New Meaning

Gale Wilson gives the term Lead 214 a whole new meaning. Around 0900 on August 26th a Bell 214 heard an unusual sound followed by a master caution light, indicating a loss of tail rotor hydraulic boost. The number 1 hydraulic system was shut down and airspeed was maintained at 80 knots. This is where Gale comes into the picture. Gale was flying his Jet Ranger in the same area, and knowing the area and the situation, he was able to help the 214. Gale knew the 214 would need enough room to make a safe landing and “Lead Copter” he became. He knew of a remote airstrip and led the 214 to it, where the 214 made a safe partial run-on landing with no impact or yaw. Without Gales assistance this could have been a serious accident. Great job Gale, Thanks. SafeCom 00-757



Jill McCurdy Makes a Great Catch and Steps Up to Plate

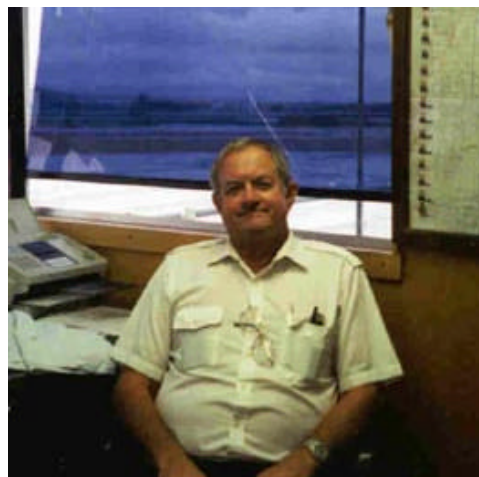


Jill McCurdy and Jim Morrison

The district biologist asked Jill McCurdy, a Helicopter Manager on the Ashley National Forest, if she could store some 2,000 pounds of grass seed at the helibase. Jill told the biologist that she could store it, but not for long, and the biologist replied “we’ll be moving it tomorrow, we’re doing an aerial seeding project”. This was news to Jill, as it was to dispatch and everyone else. She attempted to contact the Forest Aviation Officer, but found that he was out of town. This is the great catch; project planned, no aviation plan. So what does Jill do, she steps up to the plate and takes it upon herself to put together an aviation plan to make sure all the bases are covered. For your great work Jill, this Airward’s for you! No SafeCom submitted

Bob Wofford “The Wise Guy”

Bob Wofford, airtanker pilot of T-11, a P2V that he flies for Neptune Aviation, is commended for making a very wise decision. Bob was working out of McCall, ID on the Nick Fire in mid-August. At the same time, the McCall area was hosting a Back Country Fly In, which drew aviation enthusiasts from all over. The McCall Airport was experiencing heavy traffic, communications were poor, and the Forest Service had a very complex aviation program in full swing. Bob became very concerned and decided he had to shut down airtanker operations. His suggestion to reload out of Boise was an excellent idea. For being such a “Wise Guy” we gave Bob a well-deserved Airward. Thanks Bob! No SafeCom submitted



Houston Helicopter Pilot Saves The Day

Jorge Pino, a Bell 212 pilot for Houston Helicopters is commended for the actions he took when the landing gear on his Bell 212 failed. With crewmembers approaching the helicopter when the landing gear failed, he was able to keep it from hitting anyone. While the helicopter sustained major damage, fortunately Jorge and one person on the ground received only minor injuries. For your actions Jorge, we extend a huge Thank-You and an Airward too! SafeCom 00-810

Hey Brendan, You da Man

In the middle of a hectic fire season, Brendan Mullen became fully qualified as a helicopter manager for the Lewis and Clark National Forest light helicopter. Brendan was bombarded with minimally qualified crewmembers and trainees that were rotating in and out almost daily. Brendan was often tasked to do multiple missions which he assisted management in prioritizing. With this challenging situation, Brendan initiated regular communication with the Forest Aviation Officer regarding his concerns and needs. He demonstrated a high level of proficiency and a sincere effort to ensure safety above everything else. Due to his actions, his crew became better and consistently staffed. Forest Fire Management Officers were better informed of his helicopter and crew capabilities and limitations, resulting in better utilization of the helicopter. Congratulations and Thanks Brendan for a job well done! SafeCom 00-759



Super Mechanic, Aaron Young



(Note: This is what happens when you don't send us a picture!)

Rogers Helicopter mechanic Aaron Young's pre-flight inspection on his Bell 212 includes a procedure for inspecting the tail rotor for delamination and debonding. Using a coin, he taps on the entire tail rotor, listening for a distinctive noise that would indicate a bad rotor. As Aaron was tapping his rotors one morning, a mechanic from another company was watching him, wondering what in the world he was doing. When he asked Aaron, he explained and offered to show him on his Bell 412. As Aaron was showing the other mechanic, low and behold, they heard a very different distinctive noise on that 412. One of the rotors was indeed delaminated. Aaron's pro-active safety attitude and willingness to share his knowledge earned him this Airward. Our hats are off to you Aaron, THANKS No SafeCom submitted

"See and Avoid" Pays Off

Dell Boyd was flying Air Attack on the Storrie Incident when he observed a helicopter approaching head on at the same altitude. To avoid a mid-air collision, Dell took evasive action by diving and taking a hard right. He estimated the distance between the helicopter and his Cessna 182 to be less than 500 feet. The helicopter was identified as a Life Flight helicopter that had been cleared into the TFR earlier that day to transport an injured firefighter. Follow-up with the FAA and Life Flight determined that the Life Flight pilot thought that once he was cleared into a TFR he had clearance for the remainder of the day. This obviously is not the case. The pilot of Life Flight was directed to write a TFR plan for the company, present it to all employees and send a copy to the Sacramento FSDO. Once again "See and Avoid" pays off. Thanks Dell, keep up the Good Work and Safe Attitude! SafeCom 00-770





Enough Already

On the afternoon of August 25th, Ron Tieg had had enough. He was managing a helispot on the Lewis and Clark National Forest in support of the Antelope Creek fire and the Incident Commander was asking just too much of the minimally staffed crew. Ron put his foot down and called for a Stand Down of the helispot, which included two lights and one medium helicopter. There was so much confusion and poor management of the resources, Ron felt like he had to do something. He called a meeting with the Incident Commander and crews to discuss how the resources would be best utilized and staffed and how the helispot should be managed. The stand down was exactly what needed to happen and we're grateful for your decision Ron. Excellent job, Thanks!

SafeCom 00-758



Aviation Safety Office www.aviation.fs.fed.us