

**FORT COLLINS INTERAGENCY WILDFIRE DISPATCH
CENTER AND AVIATION SERVICE CENTER**

2002 ANNUAL REPORT



***ARAPAHO-ROOSEVELT NATIONAL FORESTS
AND PAWNEE NATIONAL GRASSLAND***

Prepared by: Mark Nelson

COMBINED REPORT: Agency specific information may need to be extrapolated.



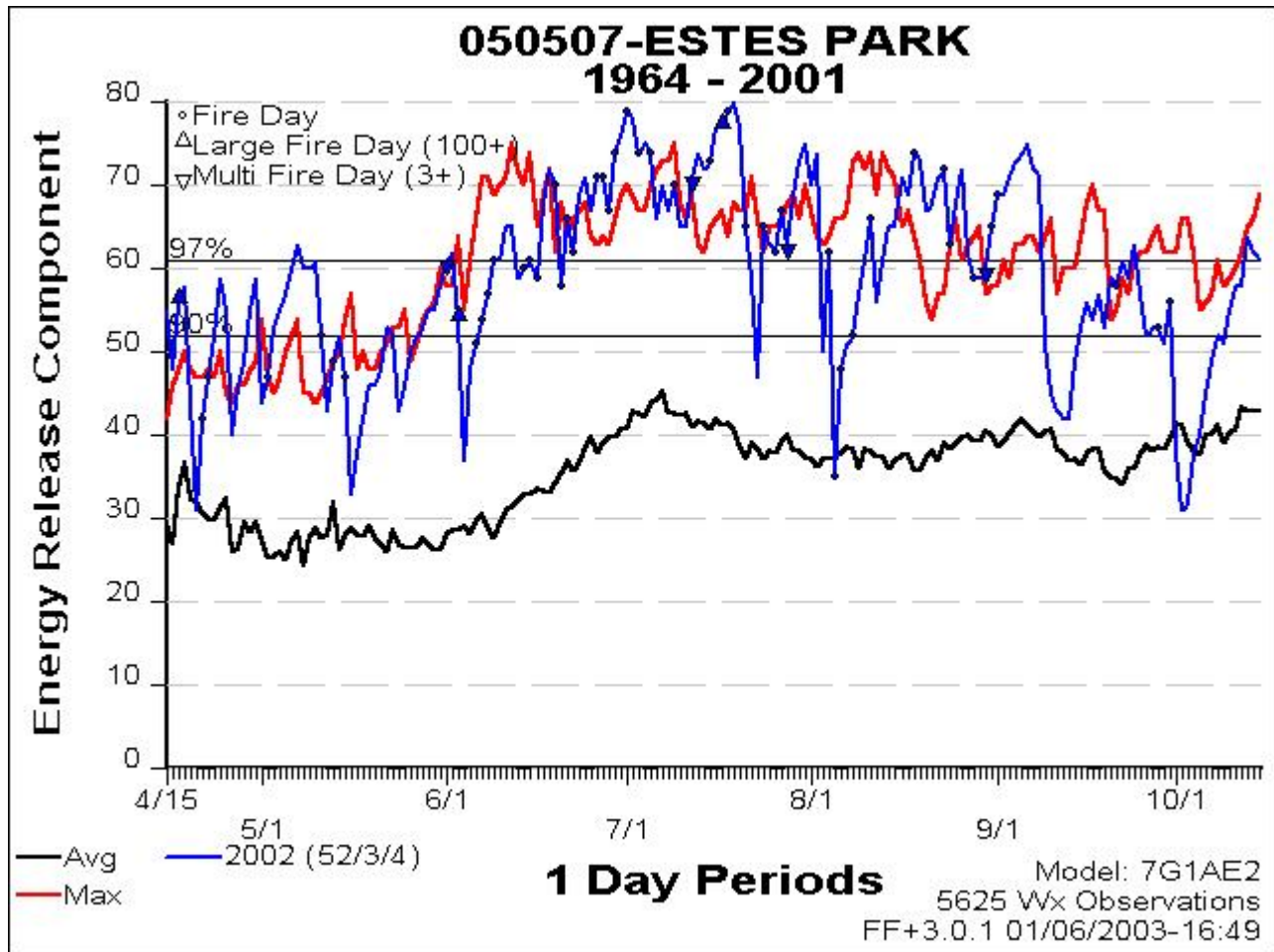
Big Elk Fire July 21, 2002. Photo B. Smith

WEBSITE: <http://www.fs.fed.us/arnf/fire/fire.html>

2002 FTC NARRATIVE/SUMMARY:

Weather/Seasonal Severity: The 2002 fire season was dominated by extreme to exceptional drought conditions (See chart below). The dry weather and lack of winter snowpack resulted in record Fire Danger Ratings (See chart below). Energy Release Component (ERC) indicies set record levels throughout the 184 day established fire season. The record ERC's were as high as 12 points over previous 39 year historical record ERC's.

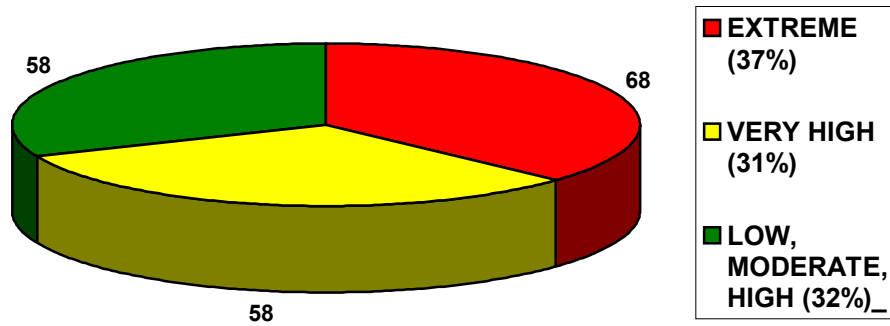
2002 fire season representative ERC chart for the Estes Park weather station



Of the established April 15th through October 15th fire season (184 days); there were 126 days (68% of fire season) spent above the Very High fire danger rating and 68 days (37% of fire season) spent above the Extreme fire danger level. An average annual fire season would have 18 days (10%) at or above the Very High Fire Danger level and 5-6 days (3%) in the extreme fire danger level (See chart below).

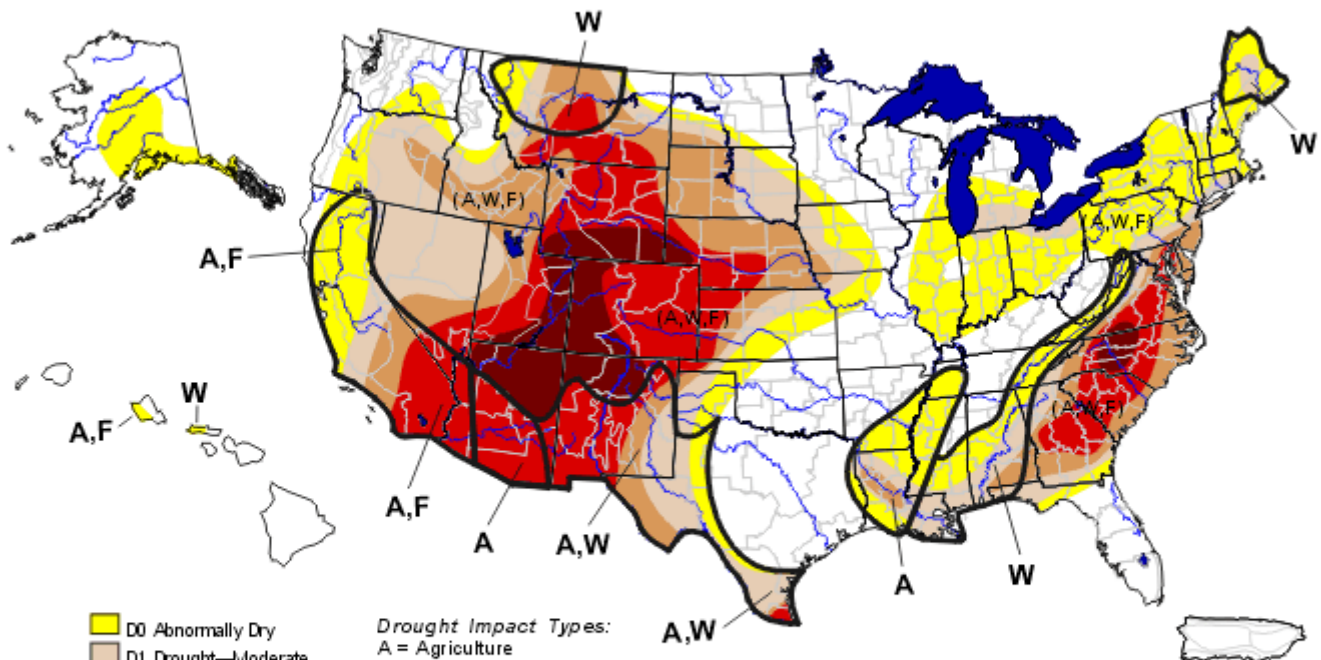
There were 40 days (22% of fire season) from April 15th through October 15th that had Minimum Relative Humidity's in the single digit range of 9 % or below and 95 days that had Minimum Relative Humidity's of 15% or below (52% of fire season) using the Estes Park fire weather station as a representative location.

2002 FIRE DANGER DAYS BY CLASS
(Fire Season of April 15th-October 15th = 184 Days)



U.S. Drought Monitor

July 23, 2002
Valid 8 a.m. EDT



- D0 Abnormally Dry
- D1 Drought—Moderate
- D2 Drought—Severe
- D3 Drought—Extreme
- D4 Drought—Exceptional

Drought Impact Types:
 A = Agriculture
 W = Water (Hydrological)
 F = Fire danger (Wildfires)
 — Delineates dominant impacts
 (No type = All 3 impacts)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>



Released Thursday, July 25, 2002
 Author: Brad Rippey, USDA

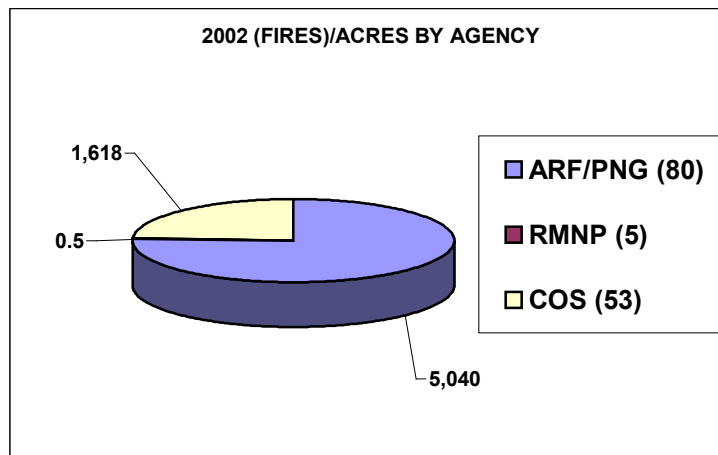
Initial Attack: Initial attack activity along the Northern Front Range was slightly above average in occurrence. Acres burned were above average due to the Prevent (190 Acres), Hewlett Gulch (500 Acres), and Big Elk fires (4,348 Acres) this correlates with the record 38 year ERC readings. (See 2002 Fire Occurrence/Acres compared to five, ten, and forty-four year USFS averages below).

Regional Support: Regional support was well above average and was probably the most intensive fire season for the state and region in recent history. The same weather patterns that affected the Northern Front Range also influenced most of the Rocky Mountain Region. Our neighbor Dispatch Center at Pueblo hosted 18 Incident Management teams and had the Hayman Fire, the largest wildfire in Colorado history at 137,000 acres. Resources were sent to numerous fires around the region with some limitations on support due to the fire danger severity in the Northern Front Range area.

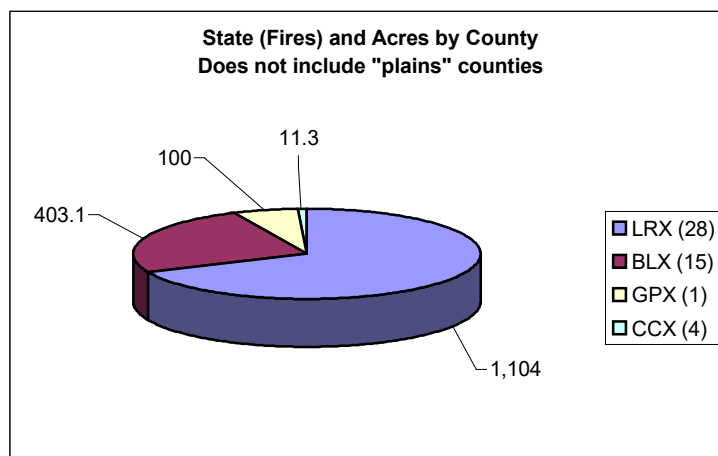
National Support: National support was limited due to the extensive support of Colorado and Region 2 Fires and providing local coverage due to the fire severity conditions. Resources were sent to the following states in 2002: Colorado, Wyoming, South Dakota, Nebraska, New Mexico, North Dakota, Georgia, Utah, California, South Carolina, Minnesota, Maryland, Alaska, Arizona, Texas, Nevada, Oregon, Missouri and Pennsylvania. Please see FTC resource statistics below.

2002 NORTHERN FRONT RANGE INTERAGENCY FIRE OCCURANCE/ACRES:

The Northern Front Range Interagency Cooperators experienced a total of 138 wildfires for a total of 6,658.5 acres. The Interagency breakdown of number of fires (in parentheses) and acres burned are shown in the following chart (does not include the state stats for agricultural/grass fires in Northeast Colorado). These stats are for Fires that received an FTC incident number. State and private statistics are available from the Colorado State Forest Service.



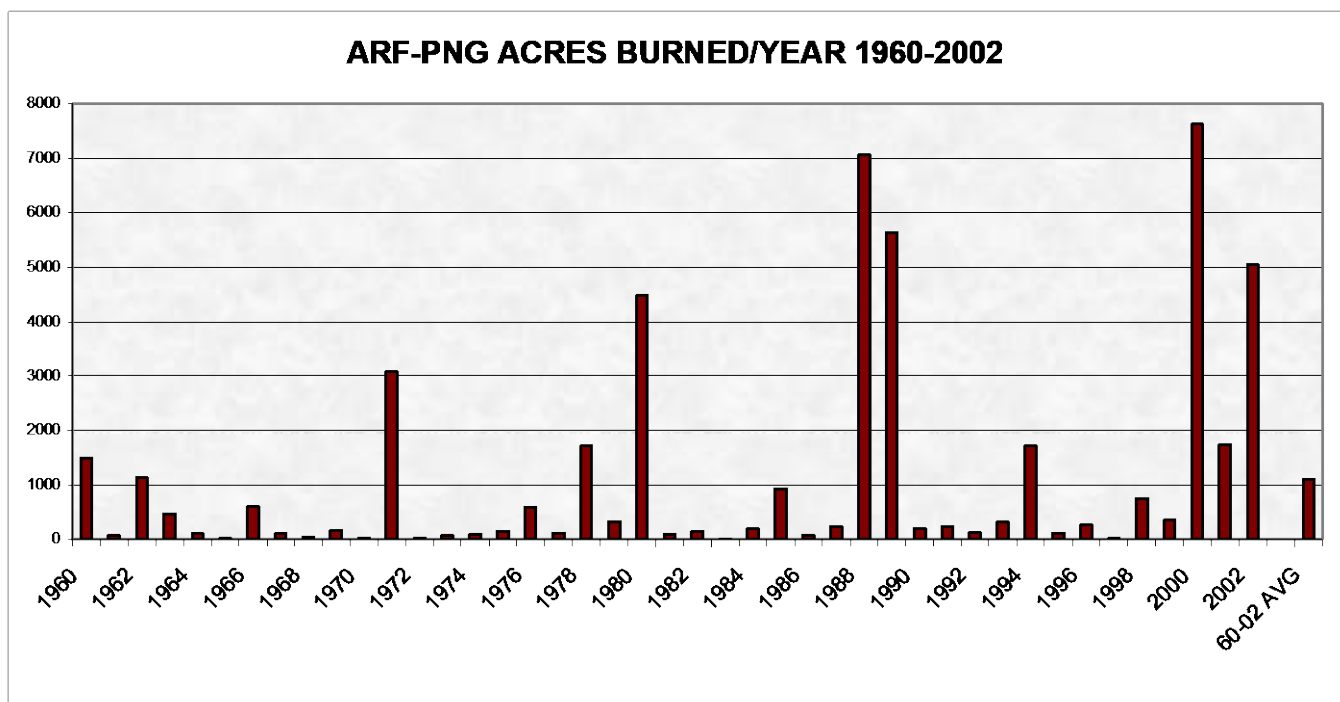
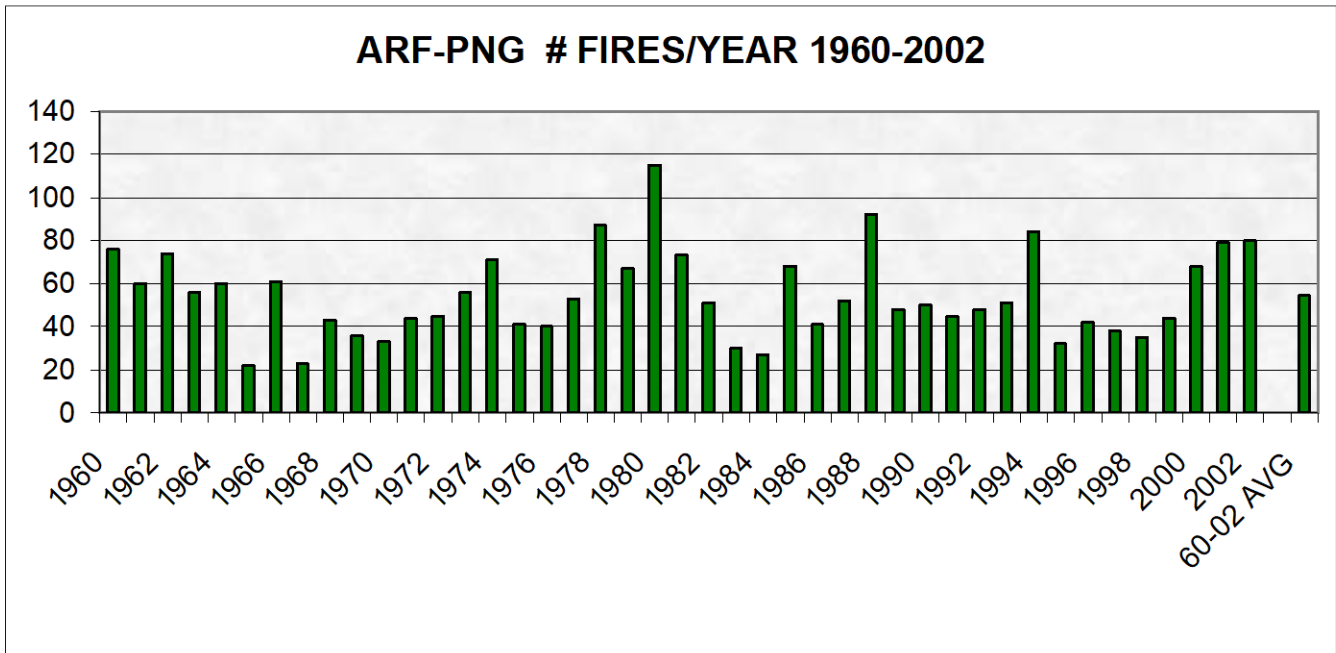
COS Includes: Larimer (LRX), Boulder (BLX), Gilpin (GPX) and Clear Creek (CCX) Counties



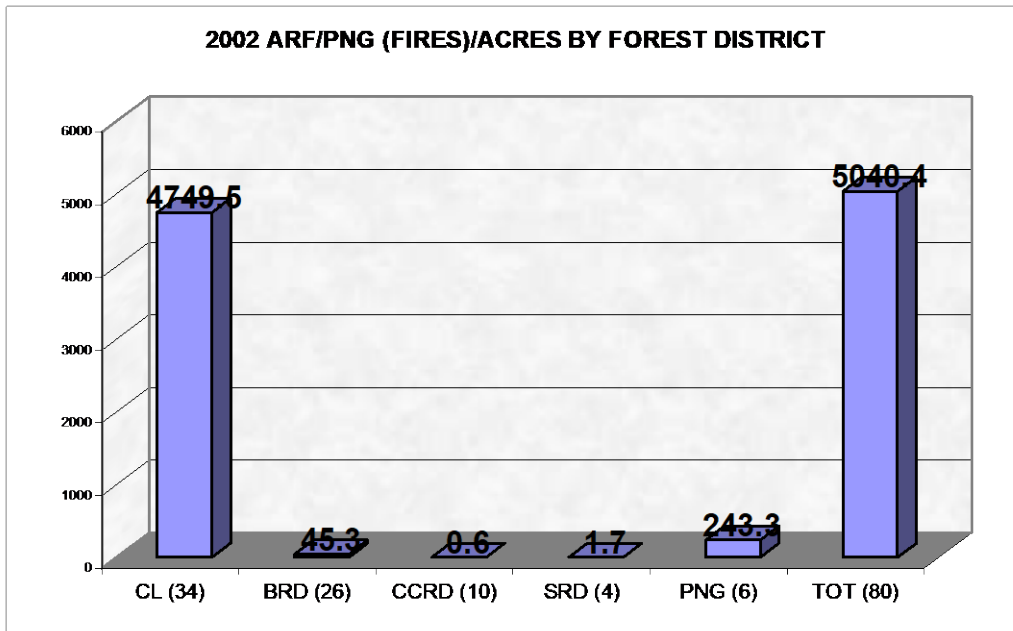
2002 ARAPAHO-ROOSEVELT N.F./PAWNEE N.G. FIRE OCCURANCE/ACRES:

The Arapaho-Roosevelt National Forests and Pawnee National Grassland experienced 80 fires for a total of 5,040.4 acres burned (USFS acres only) in 2002. Of the 80 fires 33 fires (41%) were human caused for 4,859.1 acres. 47 fires (59%) were lightning caused for 181.3 acres. The following bar graphs show the fire occurrence and acres burned from 1960 thru 2002 for the Arapaho-Roosevelt National Forests and Pawnee National Grassland. Historical records for the interagency cooperators are not available.

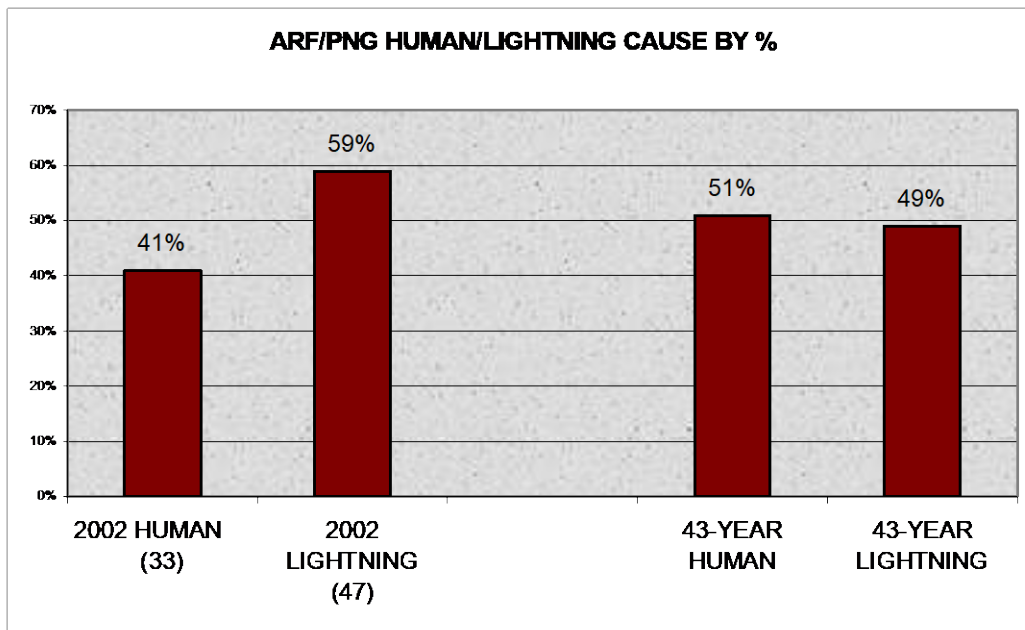
- The 43-year historical average annual fire occurrence and acres burned is: 54 fires for 1,111 acres/year.
- The five-year average annual is: 61 fires for 3,102 acres per year.
- The ten-year average annual is: 55 fires for 1,796 acres per year burned.
- There have been a total of 2,341 fires for 47,774 acres burned from 1960 through 2002 (43 Years).



The following chart shows the 2002 distribution of (fires) and acres burned by USFS district.

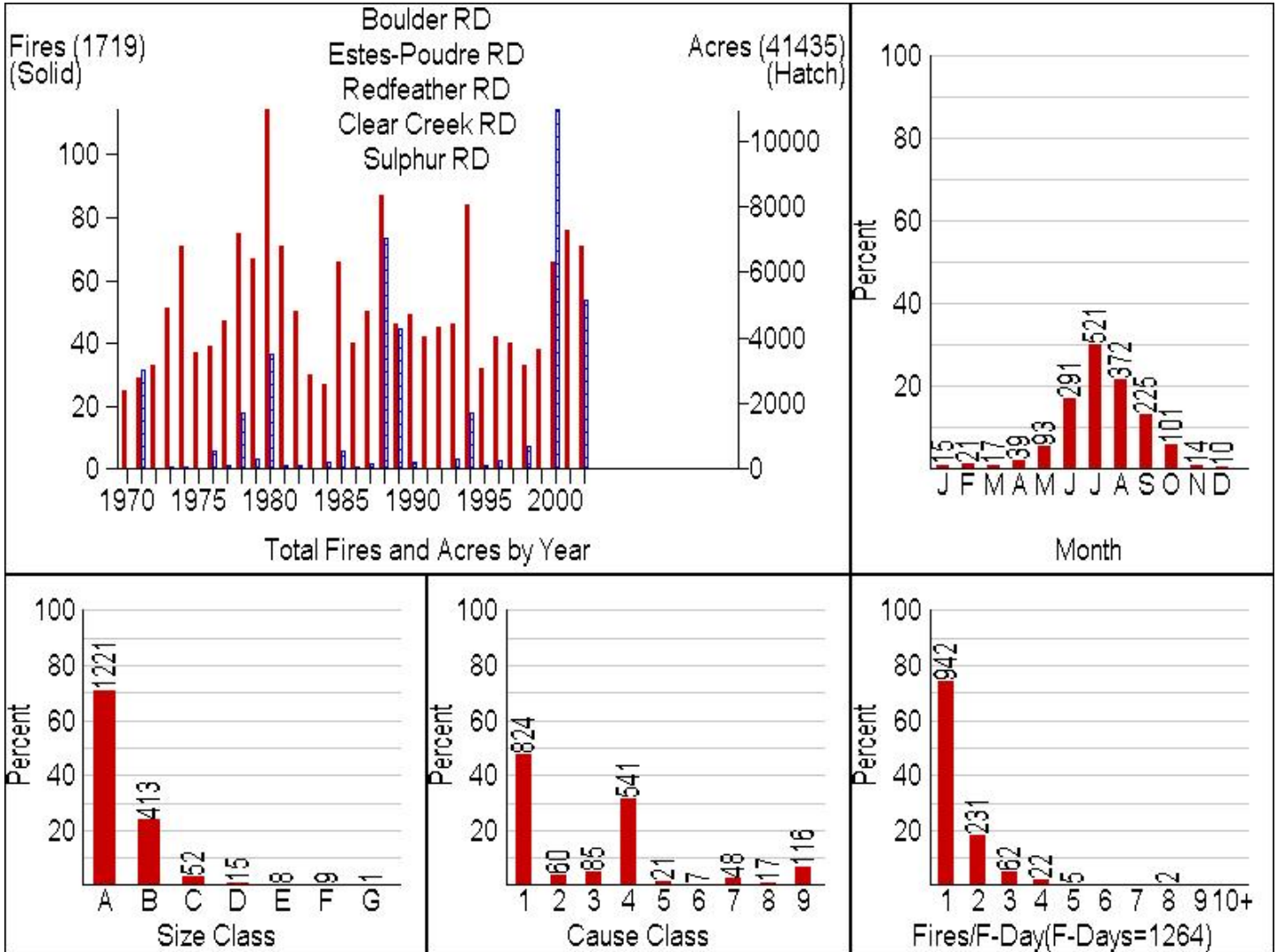


The following chart shows USFS fire cause (Human Vs Lightning) for 2002 compared to 43-year average.



The follow series of charts are a compilation of fire records from 1970 to 2002:
 (Does not include Pawnee National Grassland fires)

- The first chart shows fires and acres burned each year (*Includes Non-forest Service acres*).
- Fire occurrence by month (Fire Season).
- Fires by size class: (A: 0-.25) (B: .25-10) (C: 10-100) (D: 100-300) (E: 300-1,000) (F: 1,000-5,000) (G: 5,000+)
- Fires by cause: (1=Lightning) (2=Equipment) (3=Smoking) (4=Campfire) (5=Debris) (6=Railroad) (7=Arson) (8=Children) (9=Miscellaneous)
- Fires per day.

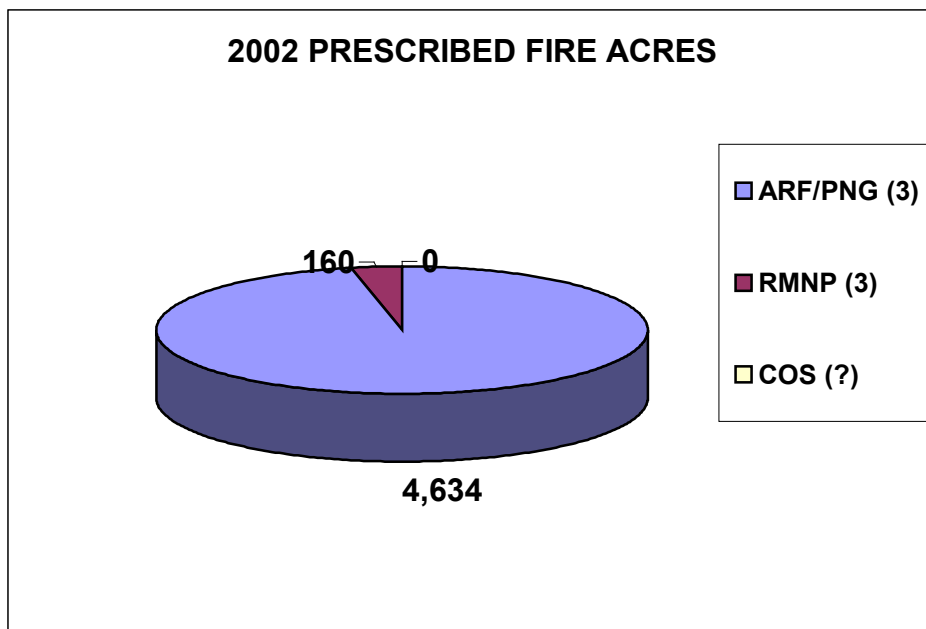


ARF/PNG LARGE FIRE HISTORY 1960-2002 (300+ ACRES GRASS/100+ ACRES TIMBER):

YEAR	UNIT	FIRE NAME	ACRES	H/L	YEAR	UNIT	FIRE NAME	ACRES	H/L
1960	PNG	RENO	606	H	1988	RFRD	GRACE CK.	2,800	H
1960	PNG	TOEDTLI	660	L	1988	BRD	BEAVER LK.	757	H
1962	CCRD	REST HOUSE	1,007	H	1988	BRD	CANYON	2,471	H
1962	RFRD	ROACH	748	H	1988	RFRD	SWAN	200	L
1962	EPRD	PALISADE	140	H	1989	BRD	BLACKTIGER	1,804	H
1966	EPRD	COMANCHE	470	H	1989	RFRD	MOBERLY	364	L
1968	CCRD	LINCOLN	740	L	1989	RFRD	LIVERMORE	1,967	L
1971	RFRD	BULL MTN.	2,635	H	1989	RFRD	EATON RES.	100	H
1971	RFRD	LOOKOUT	124	L	1989	PNG	HORSETAIL	1,283	H
1971	RFRD	SKYLINE	210	H	1990	RFRD	GOODELL	141	L
1976	BRD	COMFORTER	256	H	1993	EPRD	SNOWTOP	275	L
1976	RFRD	ANSEL #2	250	H	1994	EPRD	HOURLGLASS	1,221	L
1978	CCRD	RESERVOIR	400	H	1994	EPRD	EGGERS	370	L
1978	RFRD	KILLPECKER	1,200	H	1996	EPRD	CRYSTAL	370	L
1979	EPRD	PIERSON PARK	312	H	1998	RFRD	GREYROCK	130	H
1980	SRD	M.SUPPLY CK.	477	H	1998	CCRD	BEAR TRACK	477	H
1980	RFRD	BEARTRAP	2,734	H	2000	CLRD	BOBCAT GULCH	10,599	H
1980	EPRD	YOUNG GULCH	180	H	2001	PNG	SPRING	1,268	H
1980	PNG	KLINGENSMITH	1,000	L	2002	CLRD	PREVENT	190	H
1985	RFRD	GREYROCK	235	L	2002	CLRD	HEWLETT GULCH	500	H
1985	PNG	McGREW	310	L	2002	CLRD	BIG ELK	4,348	H

2002 PRESCRIBED FIRE ACCOMPLISHMENTS:

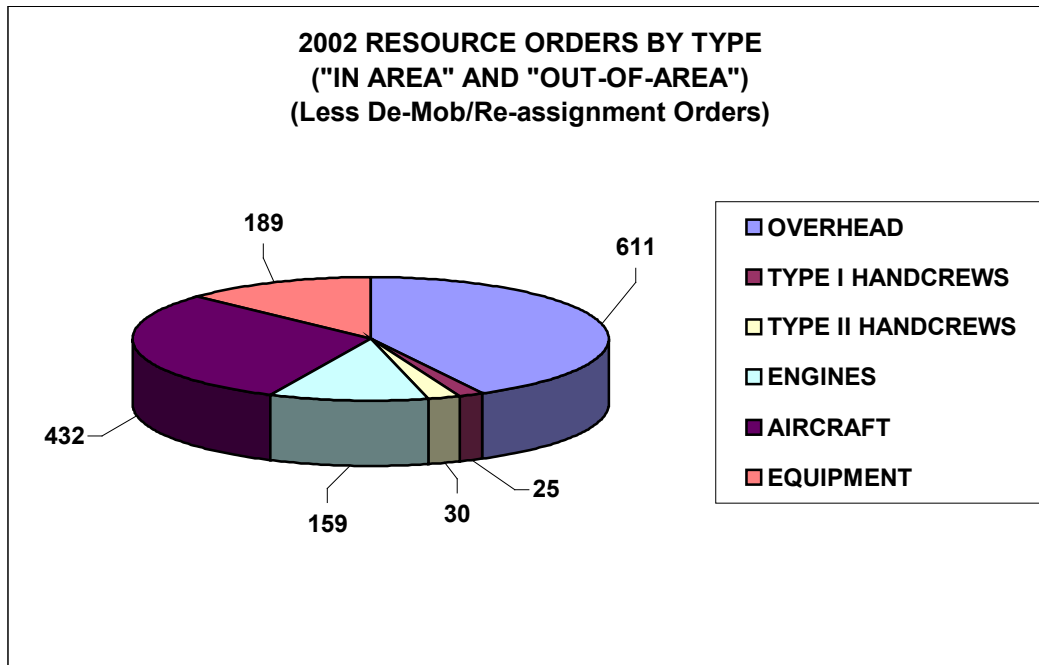
The Interagency Cooperators completed 6 prescribed fire projects for a total of 4,794 acres treated. Of this total, the Arapaho-Roosevelt National Forests and Pawnee National Grassland completed 3 projects for a total acreage of 4,634 acres. The USFS projects consisted of: Dadd Bennett (2,034 acres), pile burns on the Sulphur Ranger District (200 acres) and Pawnee Grassland projects (2,400 acres). The Pawnee burn was for Mountain Plover habitat. The rest of the burns were for wildlife habitat and hazard fuel reduction. The Prescribed fire program was hampered by drought and fire conditions during 2002.



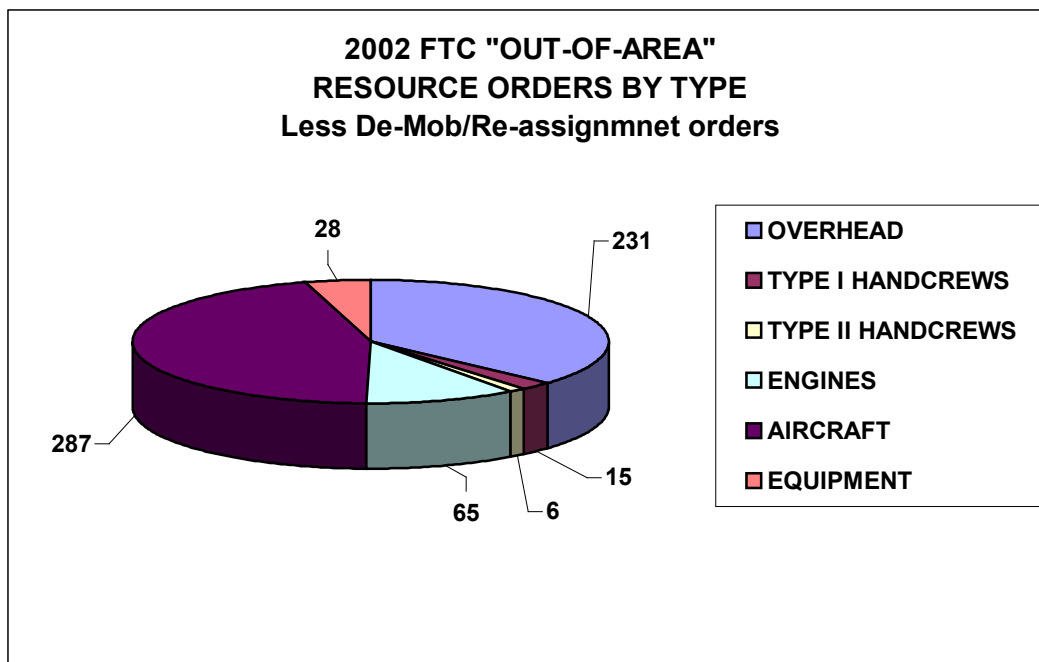
2002 FORT COLLINS INTERAGENCY DISPATCH CENTER AND AVIATION SERVICE CENTER REPORT:

The Fort Collins Interagency Wildfire Dispatch Center and Aviation Service Center experience its busiest season ever in terms of Initial Attack, Project fire support, and regional and national support. FTC filled a total of **1,446** resource orders. This includes all resource orders for “in-area” and “out-of-area” assignments. *This does not include many resources that were not ordered through official channels (Local I.A.), nor does it include de-mob and reassignment orders for out-of-area resources brought into the area for project fire support.*

The breakdown of resource assignments by type is shown in the following chart.

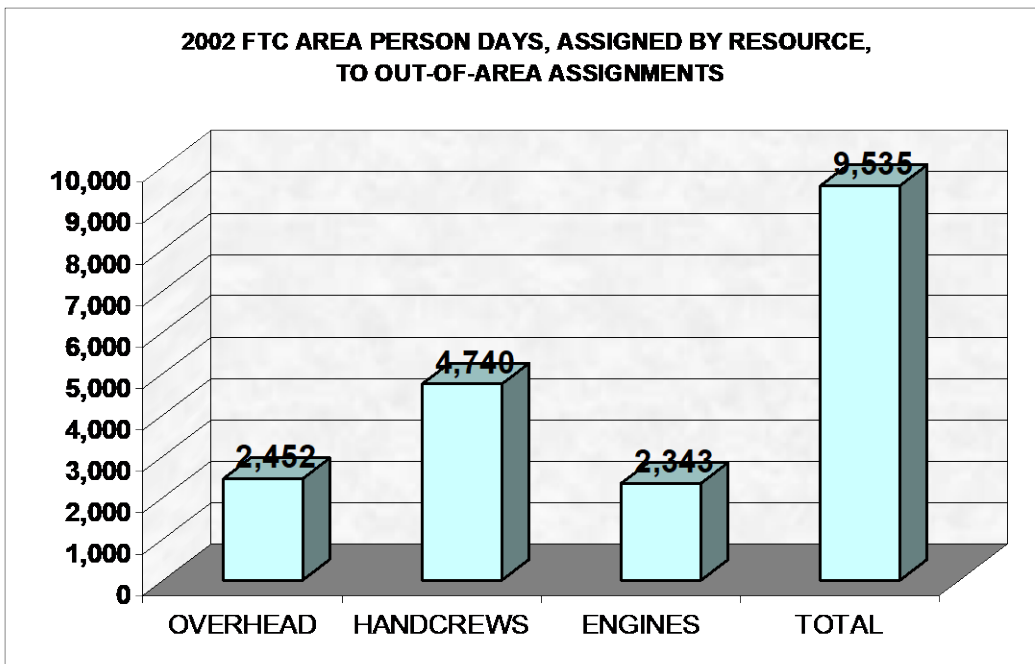
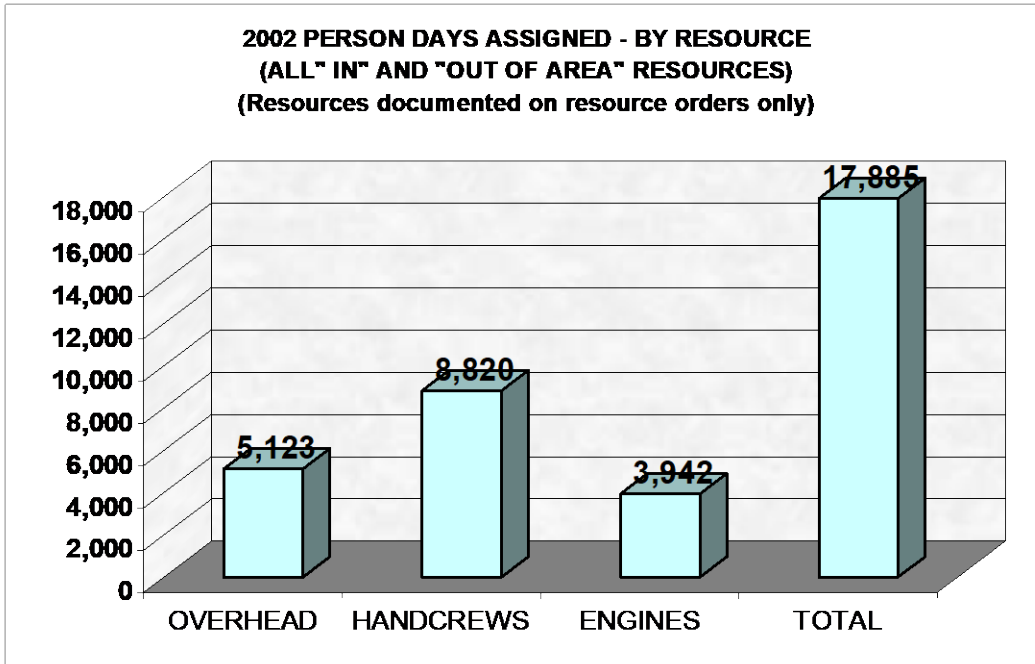


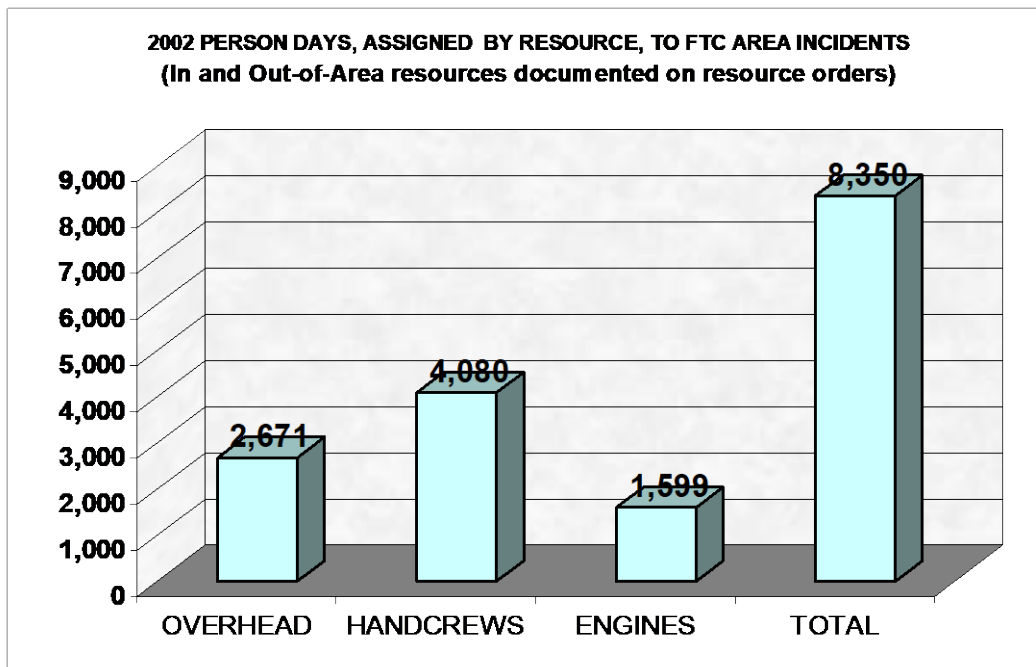
The following chart is FTC resources dispatched in support of regional and national assignments.



There was a total of 17,885 person days *on all assignments documented on resource orders* for the Fort Collins Dispatch Center for the 2002 Fire Season. The following bar graph shows a break down of days by resource type for all in-area and out-of-area resources. (Does not include equipment orders and miscellaneous positions).

Of the total 17,885 person days; 8,350 person days were in support of FTC area fires and 9,535 person days were in support of regional and national incidents.



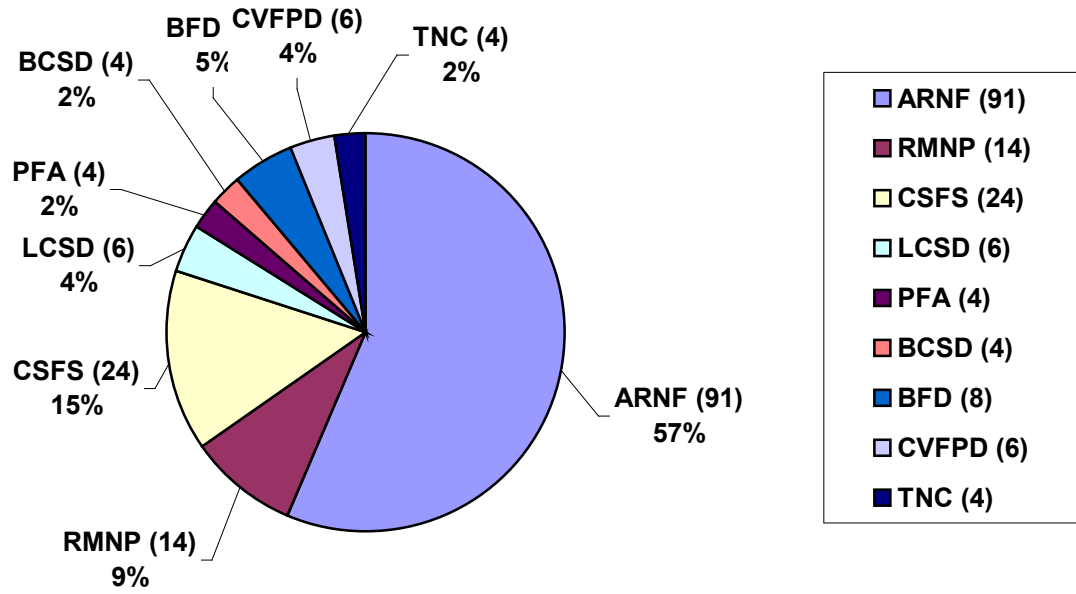


The following two pie charts show the distribution of incident qualified overhead by agency (Single Resource quals and above only). The number in () shows the number of personnel with an Incident Qualification card by agency. The other number is the percentage of the total Incident Qualified personnel by agency in the FTC Incident Qualified Overhead listing.

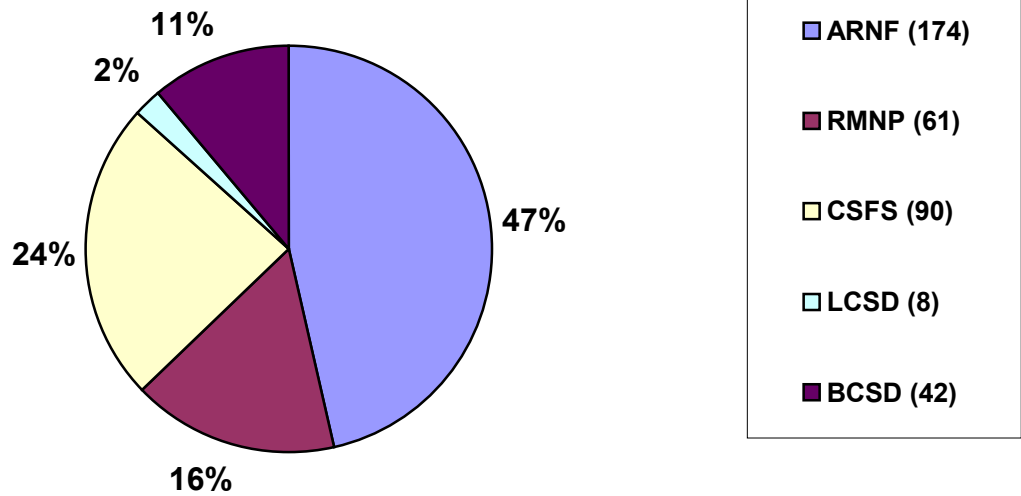
The second chart shows the number of personnel assigned to incidents from each agency for 2002. The number in () is the number of Overhead assignments the agency filled. The percentage of the total number of filled Overhead assignments is also denoted. Example: The Arapaho-Roosevelt N.F./Pawnee N.G. have 57% of the total number of Overhead personnel (chart #1) and filled 47% of the Overhead resource orders (chart #2). These numbers are influenced by the amount of commitment required on the home unit due to fire severity.

Key to Legend Mnemonics:	ARNF	Arapaho-Roosevelt/Pawnee
	RMNP	Rocky Mountain National Park
	RMR	Rocky Mountain Arsenal National Wildlife Refuge
	CSFS	Colorado State Forest Service
	LCSD	Larimer County Sheriff's Department
	PFA	Poudre Fire Authority
	WFPD	Wellington Fire Protection District
	LVFD	Loveland Fire Department
	BCSD	Boulder County Sheriff's Department
	BFD	Boulder Fire Department
	MTNVW	Mountain View Fire Department
	CVFPD	Cherryvale Fire Protection District
	BRFPD	Boulder Rural Fire Protection District
	LHFPD	Lefthand Fire Protection District
	LYONS	Lyons Fire Department
	BMFD	Boulder Mountain Fire Department
	SGRLF	Sugarloaf Fire Department
	TNC	The Nature Conservancy

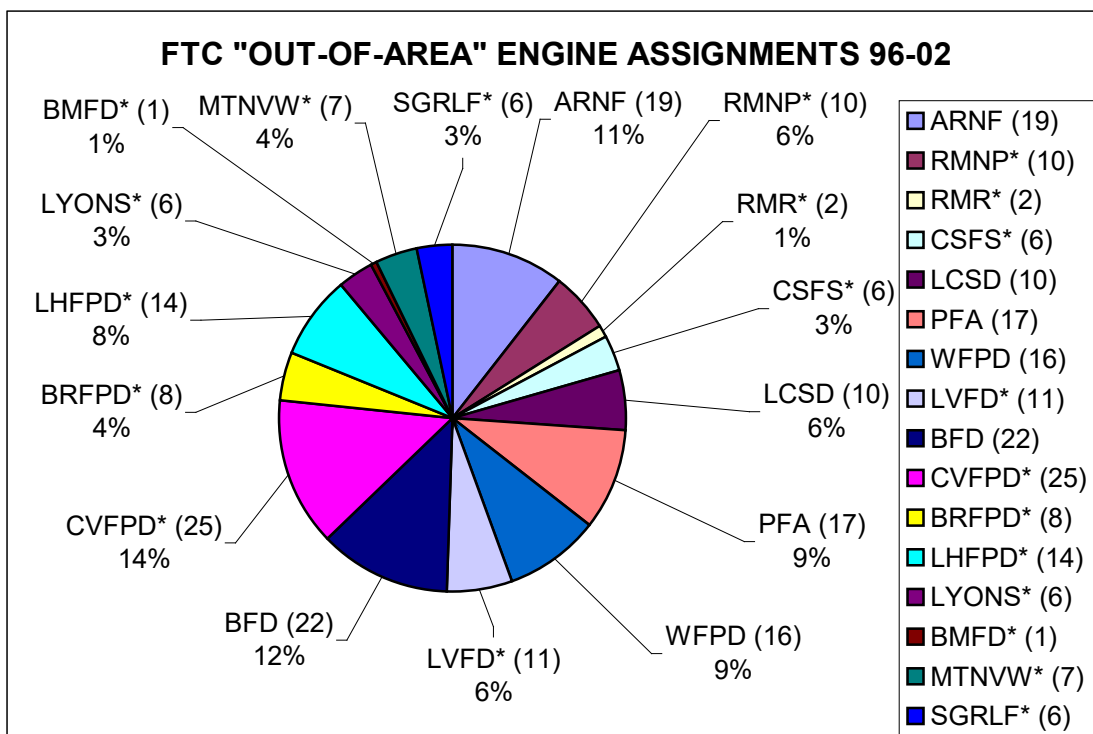
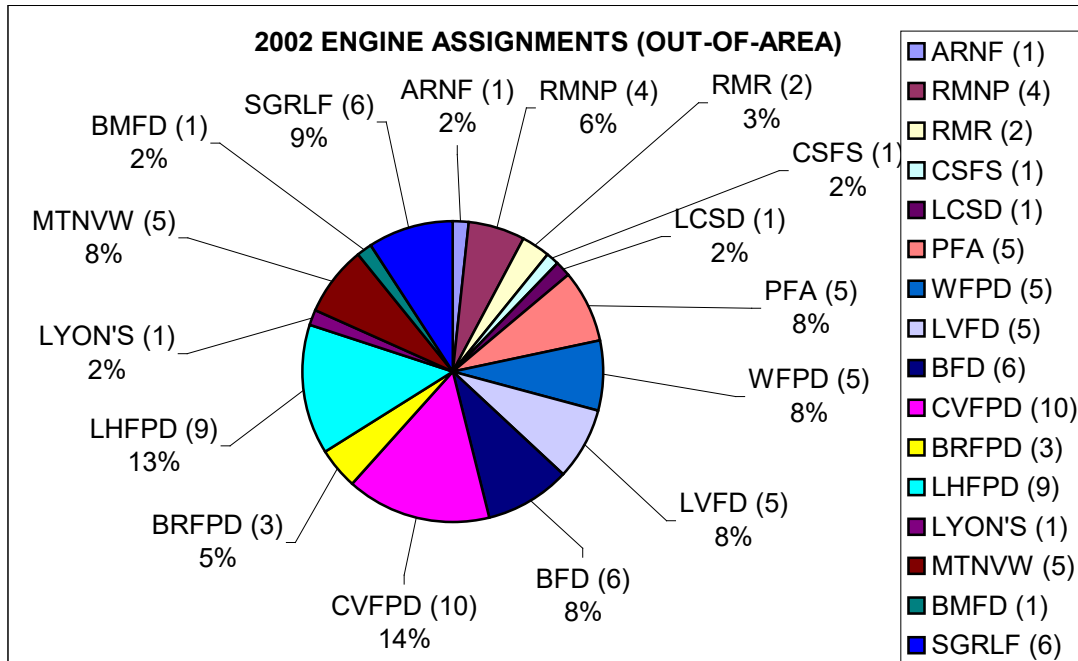
FTC OVERHEAD PERSONNEL BY AGENCY



2002 FTC OVERHEAD ASSIGNMENTS BY AGENCY (Documented on resource orders only)



There were a total of 65 out-of-area engine assignments filled. There were 180 total assignments from 1996 through 2002 (seven years). The average annual number of engine assignments is 25.7 orders per year.



* Units that have not participated in the engine program for all seven years.

AVIATION:

There were three aviation accidents in 2003. Airtanker 123 suffered a structural failure while doing a retardent run on the Big Elk Fire and pilots Milt Stollak and Rick Schwartz were fatally injured. A Lama Helicopter was also lost on the Big Elk fire when an apparent engine/mechanical failure resulted in the lost of the aircraft and pilot Gordon Knight. The Colorado State Single Engine Airtanker (T-182) had an accident while on a take off run from Jeffco Airtanker base. The left main tire inner seal apparently separated from the wheel. The pilot received minor injuries.

Accident reports can be obtained from the NTSB (National Traffic Safety Board) at the following websites:

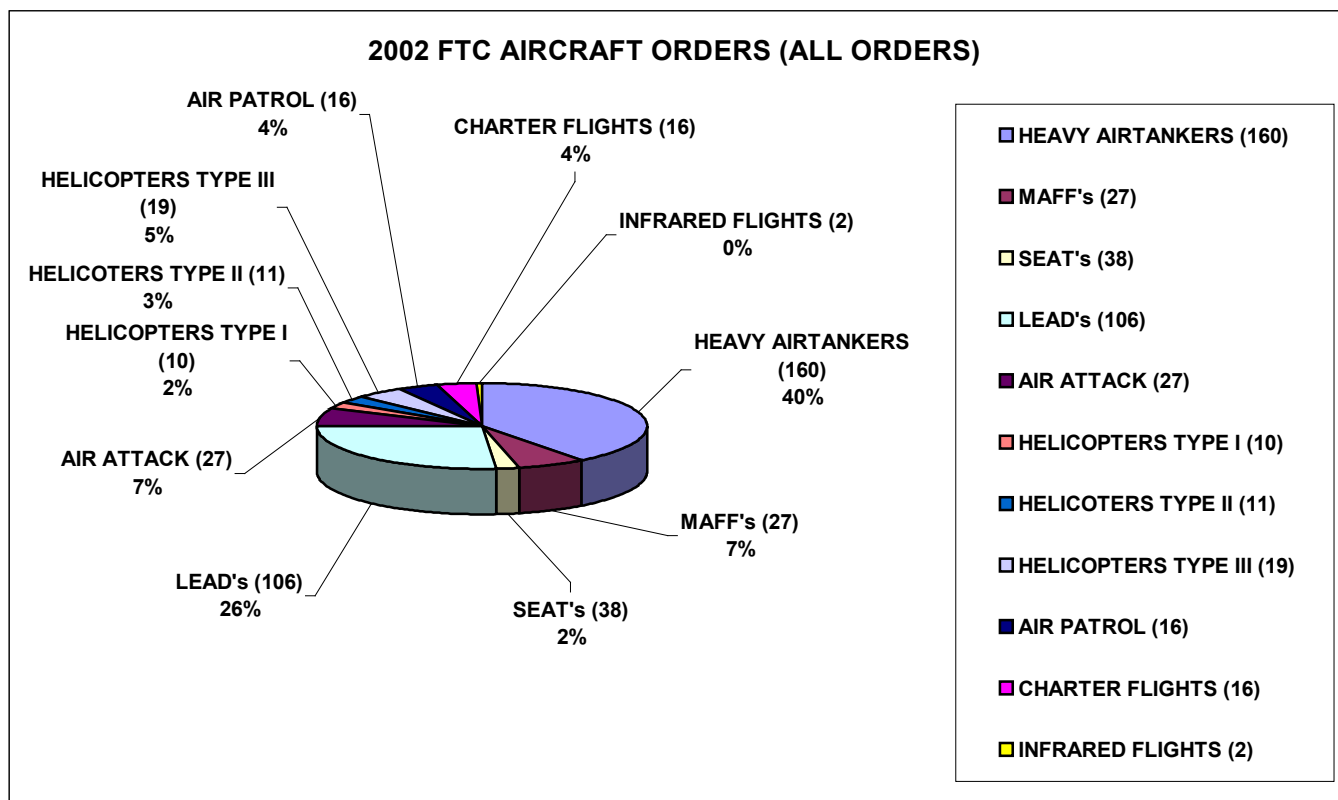
Airtanker 123: http://www.nts.gov/ntsb/brief.asp?ev_id20020726x01227&key=1

Helicopter N3978Y: http://www.nts.gov/ntsb/brief.asp?ev_id=20020808x01330&key=1

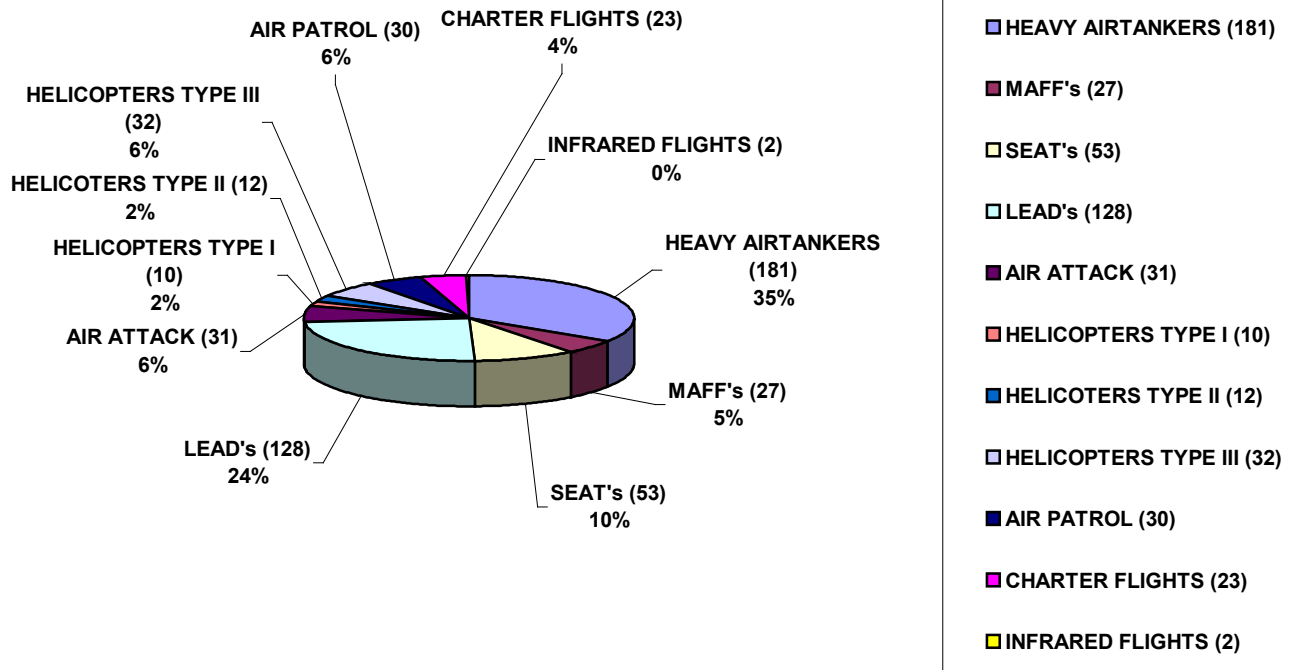
SEAT T-182: http://www.nts.gov/ntsb/brief2.asp?ev_id=20020816X01406&ntsbno=DEN02TA092&akey=1

The Redfeather Helicopter was located at the Redfeather Work center from June 17 through July 16. It flew a total of 66.8 flight hours. 46.3 hours were in support of FTC area fires. 1.8 hours were for administrative/training flights and 18.7 hours were flown in support of out-of-area fires.

FTC processed 432 aircraft orders during the 2002 fire season. See chart below for breakdown of orders and aviation resource types.

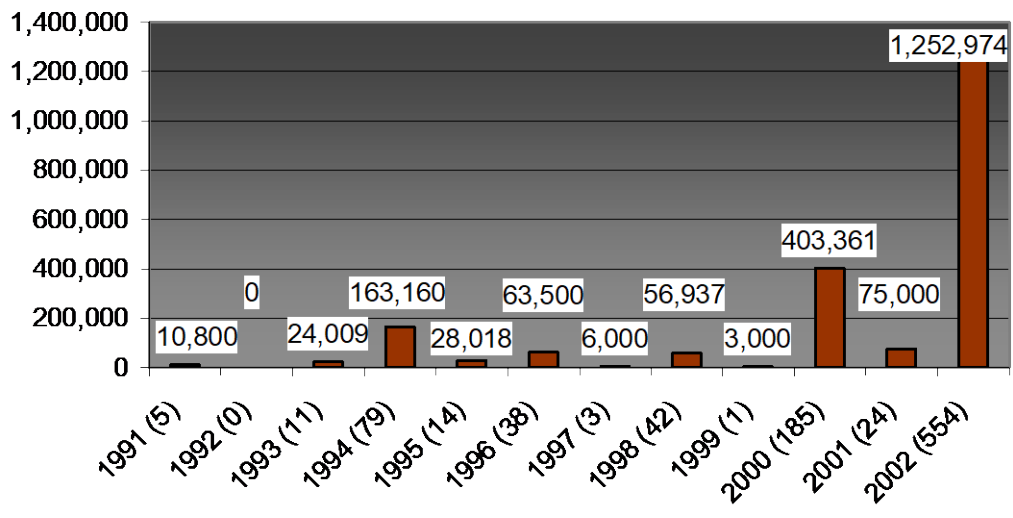


2001-2002 FTC AIRCRAFT ORDERS (ALL ORDERS)



There was a record 554 missions flown, delivering a record 1,252,974 gallons of retardant, from the Jeffco Airtanker Base in the 2002 fire season. The previous single year record of retardant delivered was 403,361 gallons over 185 missions in 2000. The 5 five year average annual numbers for the Jeffco Airtanker base are 161 missions flown per year and 358,254 gallons of retardant delivered per year.

1991-2002 JEFFCO AIRTANKER BASE (MISSIONS FLOWN) & GALLONS OF RETARDANT DELIVERED

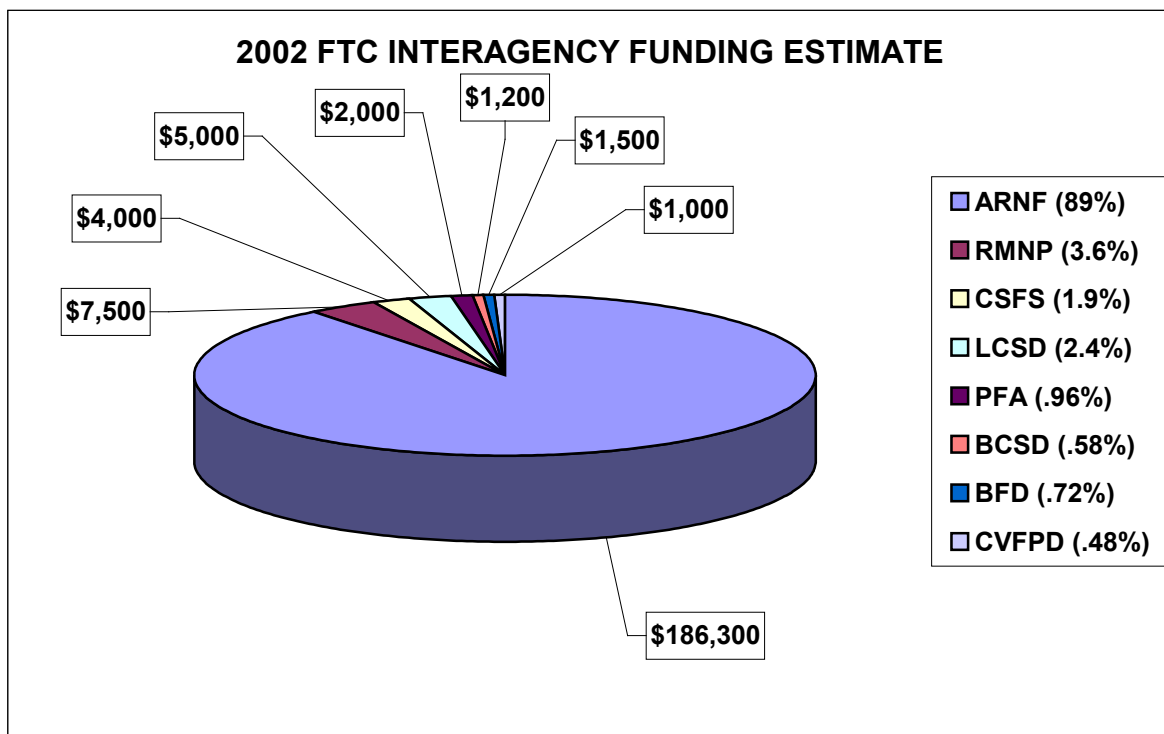


2002 FORT COLLINS INTERAGENCY DISPATCH CENTER FUNDING:

In 2002, contributions from state entities accounted for about than 7% of FTC's operating funds. The CSFS contribution accounted for less than 2%. The Colorado State Forest Service will increase its contribution from \$2,800 to \$4,000 in 2003 but this is grossly inadequate for the amount of workload required to support state entities and resources.

Some optional funding scenarios include; implementing annual inflation increases, Routing National Fire Plan funding appropriated to the state back to the Interagency Dispatch Center, Assessing user or function fees, and funding based on percentage of revenues generated by assignments (*Example: In 2000 state entities and departments grossed a conservative estimate of \$1,048,320.00 on engine assignments alone, their combined funding contributions to FTC was \$13,500. A 5% revenue fee would have generated \$52,416 of funding for FTC.*

The following chart is the estimated 2002 funding breakdown.



FUNDING SUMMARY:

Based on this general analysis a fair share funding level from the Colorado State Forest Service (in conjunction with other local agencies) is \$125,100.

- Data and information is generic and is open to interpretation by individuals. A common federal/state analysis will need to be done if all six Colorado Dispatch Centers request fair share funding.
- Fair share funding should be addressed as a statewide issue.
- The proposed funding levels will probably require Colorado funding legislation.
- Support could be in the form of monetary or staff position(s).

- State should look at designating or creating a Fire Management Officer position within each Dispatch Center area to coordinate state, local, VFD resources, Agreements, payments, qualifications, Emergency Fire Fund, MAC Group Representative, etc... This would help standardize procedures and facilitate a single point of contact for administrative and operational functions related to dispatch center operations.
- State should consider being the “Collection Point” for other agencies (Counties, VFD’s, etc... that currently provide funding to the Dispatch Center(s).

2002 EMPHASIS AREAS FOR FTC:

- Obtain “Fair Share” funding for FTC from state entities.
- Revision of FTC mob guide in reference to preparedness planning and
- Implement Multi-agency Coordinating Group use and standards.
- Implement Type III Team use and standards.
- Implementation of the new “ROSS” (Resource Order Status System). ROSS is an automated resource ordering system that will “computerize” resource coordination.
- Re-format of FTC documents into consolidated FTC Mobilization Guide: FTC Operations Guide, Northern Front Range Aviation Plan, Helibase Operating Guide, Aviation Incident/Accident Response Guide, Engine Dispatch Operations Guide, Hand crew dispatch Guide, Weather Station Maintenance Operating Plan, Pre-Dispatch Response Plan (Conversion to GIS based System) etc....
- Replacement of FTS weather stations to new Handar satellite telemetry, radio alert warning system stations at Sulphur. Preventative maintenance and sensor swaps on existing stations.
- Radio Frequency Authorizations (RFA’s) and interagency licensing.