# FORT COLLINS INTERAGENCY WILDFIRE DISPATCH CENTER AND AVIATION SERVICE CENTER

## 2000 ANNUAL REPORT

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

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



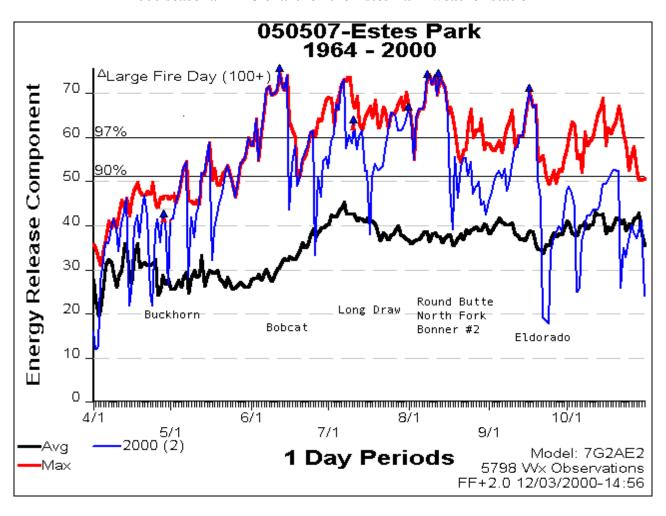
Bobcat Gulch fire from Greeley, Colorado. (32 miles to the east) Photo: Jeff Losche

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

#### 2000 FTC NARRATIVE/SUMMARY:

Weather/Seasonal Severity: The 2000 fire season was the worst fire season we have recorded history for as far acres burned and was one of the busiest fire seasons nationally in roughly 50 years. The weather patterns were dominated by a unusually warm and dry winter (Jan-Mar), followed by above normal spring temperatures with below normal snowfalls and then transitioning into a record setting warm and dry summer. There were at least 15 days in April and May that had Relative Humidity's in the single digit range at numerous fire weather stations. Energy Release Component indices were consistently at or above the 36-year historical maximum levels and way above the 36-year average annual ERC levels. New ERC records were set for much of the 2000 season. Although increasing fuel loadings may be a contributing factor to the severity of the fire season, the warm, dry, record setting weather pattern was the driving force behind the 2000 fire season.

#### 2000 seasonal ERC chart for the Estes Park weather station



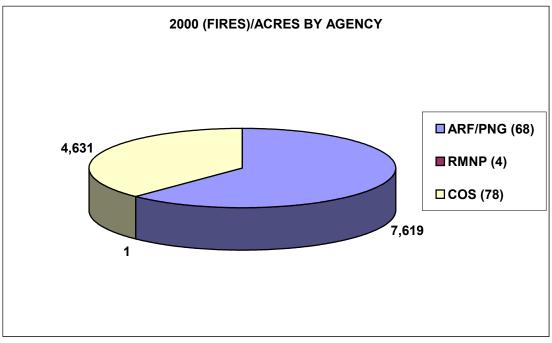
*Initial Attack:* Initial attack activity along the Northern Front Range was above average in occurrence. Acres burned were the highest in recorded history; this correlates with the record 36 year ERC readings. (See 2000 Fire Occurrence/Acres compared to five, ten, and forty-one year USFS averages below).

**Regional Support**: Regional support was above average as the same weather patterns that affected the Northern Front Range also influenced much of the Rocky Mountain Region. Resources were sent to numerous fires around the region with some limitations on support due to the severity of the local situation.

*National Support:* National support was the highest that FTC has provided since the Dispatch Center started in 1988. Resources were sent to the following states in 2000: South Dakota, Wyoming, Nebraska, Minnesota, Wisconsin, Idaho, Montana, New Mexico, Texas, Arizona, Nevada, North Carolina, South Carolina, Arkansas, Oklahoma, Kentucky, California and Colorado. Please see FTC resource statistics below.

#### 2000 NORTHERN FRONT RANGE INTERAGENCY FIRE OCCURANCE/ACRES:

The Northern Front Range Interagency Cooperators experienced a total of 150 wildfires for a total of 12,252 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).

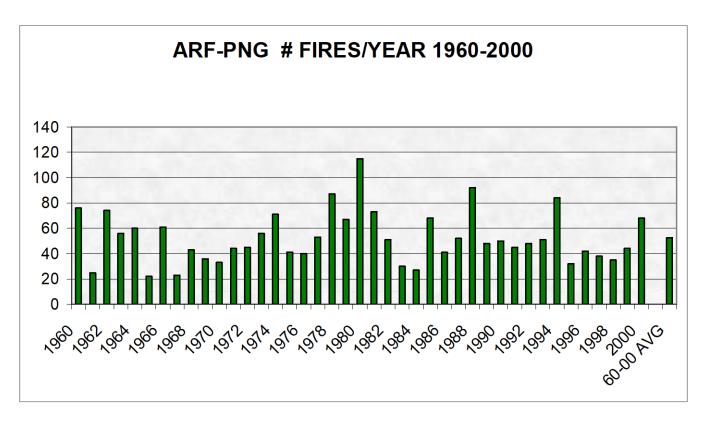


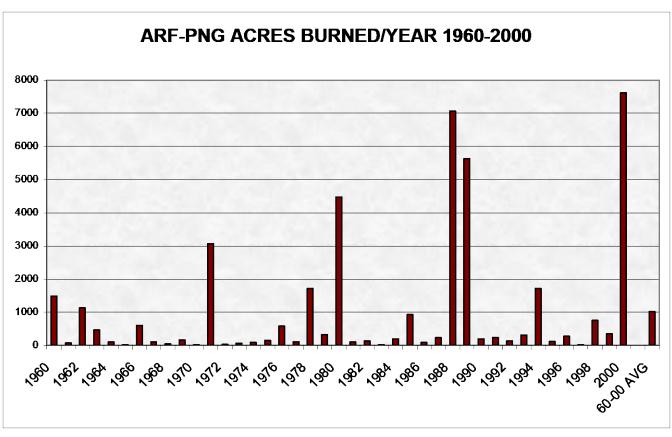
COS Includes: Larimer, Boulder, Gilpin and Clear Creek Counties

#### 2000 ARAPAHO-ROOSEVELT N.F./PAWNEE N.G. FIRE OCCURANCE/ACRES:

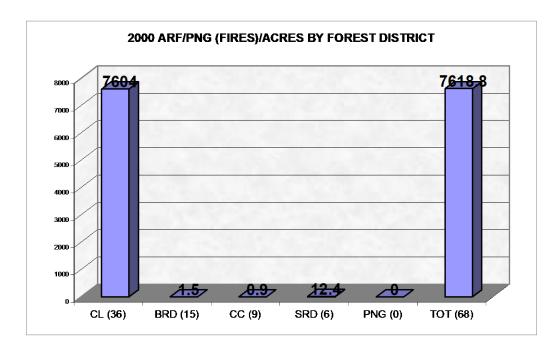
The Arapaho-Roosevelt National Forests and Pawnee National Grassland experienced 68 fires for a total of 7,733.3 acres burned (USFS acres only) in 2000. Of the 68 fires 22 fires (32%) were human caused for 7,618.8 acres. 46 fires (68%) were lightning caused for 114.5 acres. 7,552 acres of the 7,733.3 total acres burned occurred on the Bobcat Gulch incident. The following bar graphs show the fire occurrence and acres burned from 1960 thru 2000 for the Arapaho-Roosevelt National Forests and Pawnee National Grassland. Historical records for the interagency cooperators are not available.

- The 41-year historical average annual fire occurrence and acres burned is: 52 fires for 999 acres/year.
- The five-year average annual is: 45 fires for 1,805 acres per year.
- The ten-year average annual is: 49 fires for 1,154 acres burned.
- There have been a total of 2,147 fires for 40,989 acres burned from 1960 through 2000 (41 Years).

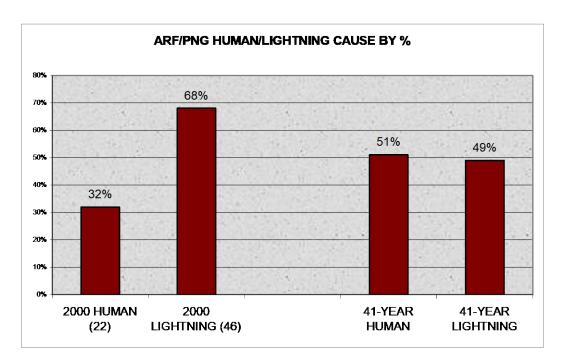




The following chart shows the 2000 distribution of (fires) and acres burned by district.



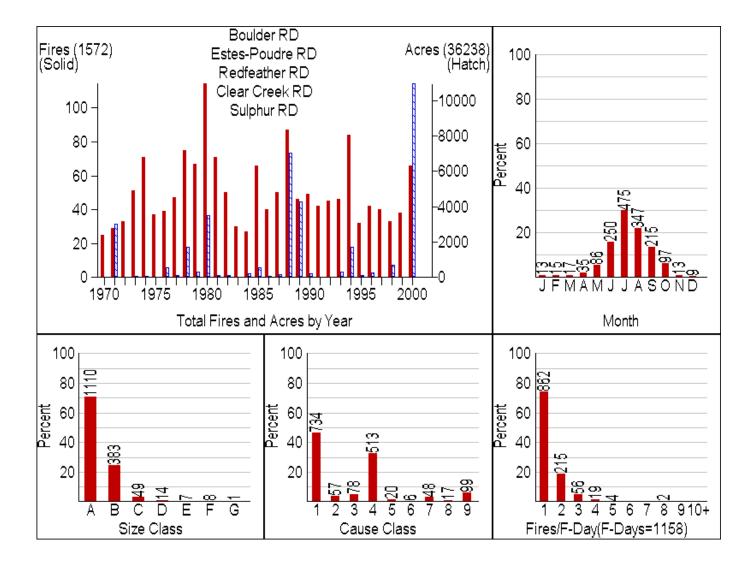
The following chart shows fire cause for 2000 compared to 41-year average.



#### The follow series of charts are a compilation of fire records from 1970 to 2000:

(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: 10-300) (D: 300-1,000) (E: 1,000-5,000) (F: 5,000-10,000) (G: 10,000+)
- Fires by cause: (1=Lightning) (2=Equipment) (3=Smoking) (4=Campfire) (5=Debris) (6=Railroad) (7=Arson) (8=Children) (9=Miscellaneous)
- Fires per day.

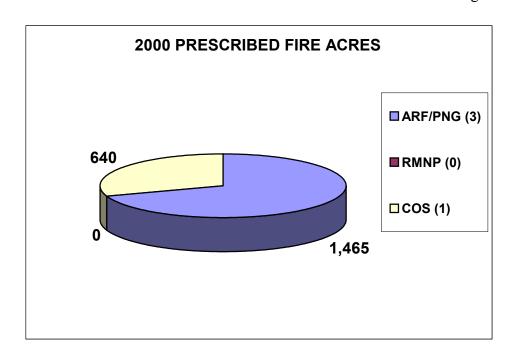


ARF/PNG LARGE FIRE HISTORY 1960-2000 (300+ ACRES GRASS/100+ ACRES TIMBER):

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

#### **2000 PRESCRIBED FIRE ACCOMPLISHMENTS:**

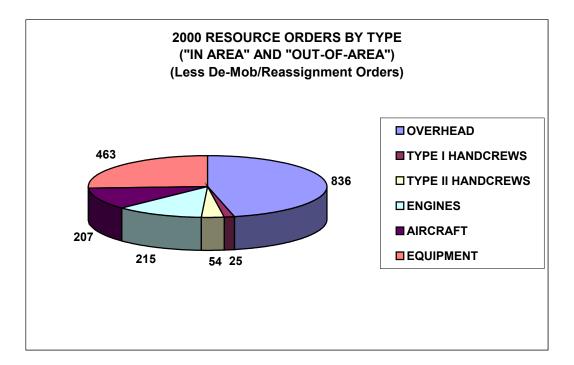
The Interagency Cooperators completed 4 prescribed fire projects for a total of 2,105 acres treated. Of this total, the Arapaho-Roosevelt National Forests and Pawnee National Grassland completed 4 projects for a total acreage of 1,465 acres. The USFS projects consisted of: Dadd Bennett (650 acres), Sand Creek (175 acres) and Pawnee Grassland (640 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 under a moratorium after the Cerro Grande situation and weather and fuel conditions were not conducive to fall burning.



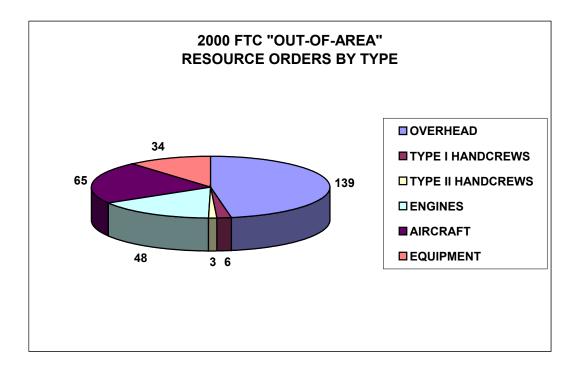
#### 2000 FORT COLLINS INTERAGENCY DISPATCH CENTER AND AVIATION SERVICE CENTER REPORT:

The Fort Collins Interagency Wildfire Dispatch Center and Aviation Service Center experience its busiest season ever in terms of both Initial Attack, Project fire support, and regional and national support. FTC filled a total of 1,458 resource orders. This includes all resources orders for "in-area" and "out-of-area" assignments. This does not include many resources that were not ordered through official channels, 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.

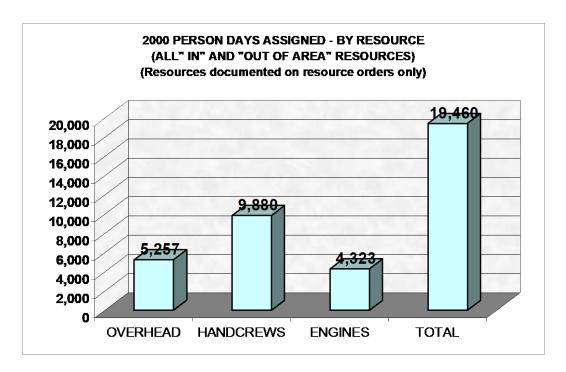


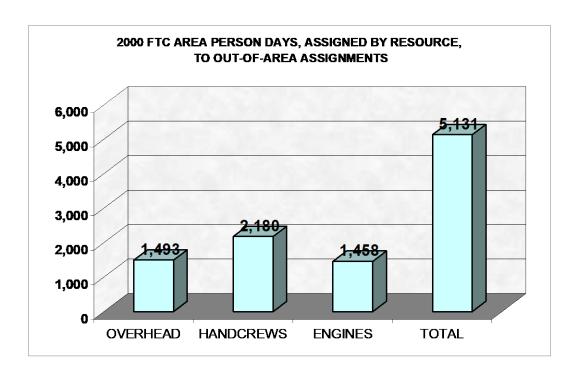
The following chart is FTC resources dispatched in support of regional and national assignments.

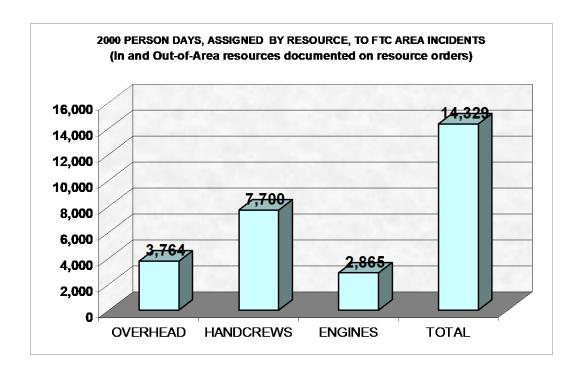


There was a total of 19,460 person days on all assignments documented on resource orders for the Fort Collins Dispatch Center for the 2000 Fire Season. The following bar graph shows a break down of days by resource type for all in-area and out-of-area resources. (Does not include equipment orders and miscellaneous positions).

Of the total 19,460 person days; 5,131 person days were in support of FTC area fires and 14,329 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 2000. 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 63% 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
CSFS Colorado State Forest Service

LCSD Larimer County Sheriff's Department

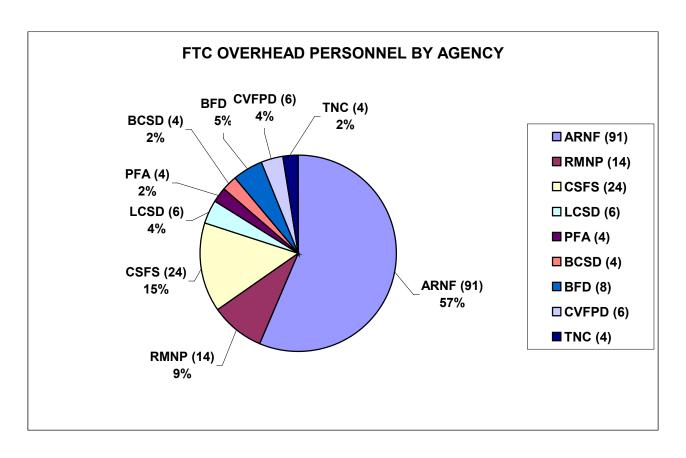
PFA Poudre Fire Authority

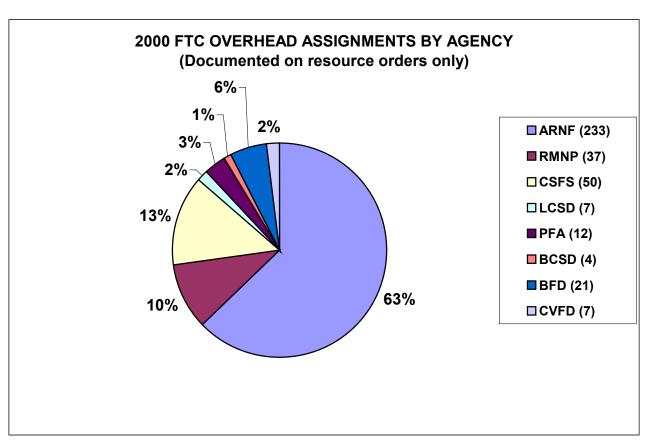
BCSD Boulder County Sheriff's Department

BFD Boulder Fire Department

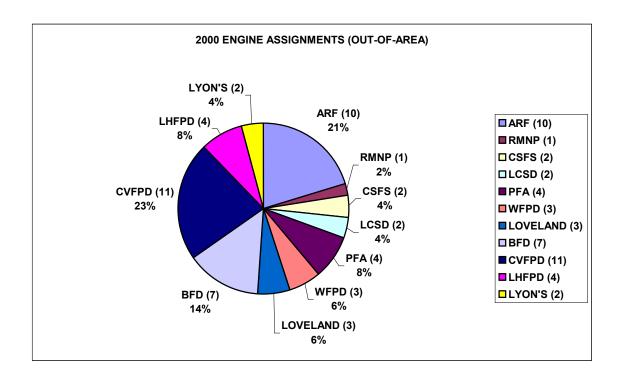
CVFPD Cherryvale Fire Protection District

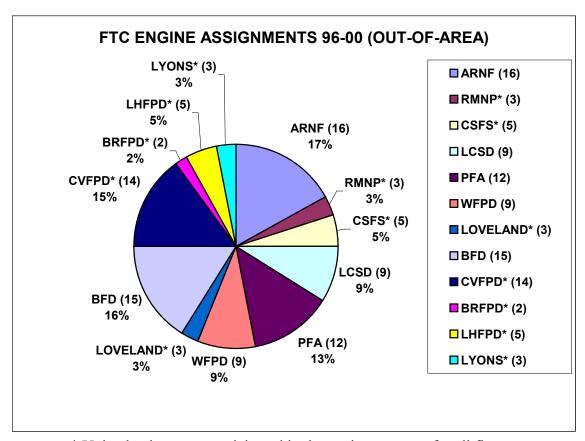
TNC The Nature Conservancy





There were more "out-of-area" engine assignments in 2000 than in the previous 4 years combined. A total of 49 out-of-area engine assignments were filled. There were 47 total assignments from 1996 through 1999. The average annual number of engine assignments was 12.5 orders per year. There were 72 documented engine resource orders for FTC area assignments, however, this number does not reflect the numerous engines that were ordered outside of the established resource ordering process for the Bobcat Gulch, Eldorado, and High Meadows fires. Some agencies over-committed on their support of out-of-area assignments, resulting in requests for release from those incidents to support fires in or near their jurisdictions.

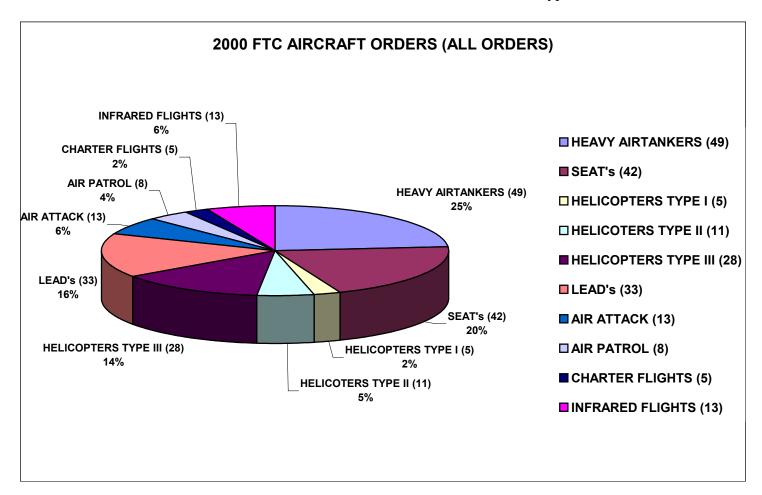




<sup>\*</sup> Units that have not participated in the engine program for all five years.

In spite of documented concerns (Inadequate staffing, inadequate facilities, coordination of additional radio communications sites, undocumented procedure changes, and insufficient transition time) about the transfer of tactical aircraft dispatching responsibilities from the Regional Coordination Center to the Fort Collins Dispatch Center we were forced to implement additional responsibilities during the busiest fire season ever for the Northern Front Range. A transition meeting was being held the morning that the Bobcat and High Meadows fires started. In spite of poor planning and communications on the part of regional office staff, we escaped the 2000 fire season without any major aviation dispatch/coordination problems. This was due to the good communications and coordination between Fort Collins and Pueblo Dispatch Centers, Jeffco Tanker base, and RMACC personnel.

With the additional aviation responsibilities and the intense 2000 fire season, FTC processed over 207 aircraft orders. See chart below for breakdown of orders and aviation resource types.



There was a record 185 missions flown, delivering a record 403,361 gallons of retardant from the Jeffco Airtanker Base in the 2000 fire season. The previous single year record of retardant delivered was 186,000 gallons in 1988. The previous 5 five year average annual numbers for the Jeffco Airtanker base were 20 missions per year and 37,624 gallons of retardant delivered per year. The tanker base ran out of retardant on two separate occasions due to the unprecedented volume of business. Additional retardant storage facilities are in place to help alleviate potential future problems. Operational procedures will be revised and implemented for 2001.

BELOW: Airtanker 123 a PB4Y circles the smoke column from the Bobcat Gulch Fire. Photo: Coloradoan Newspaper.

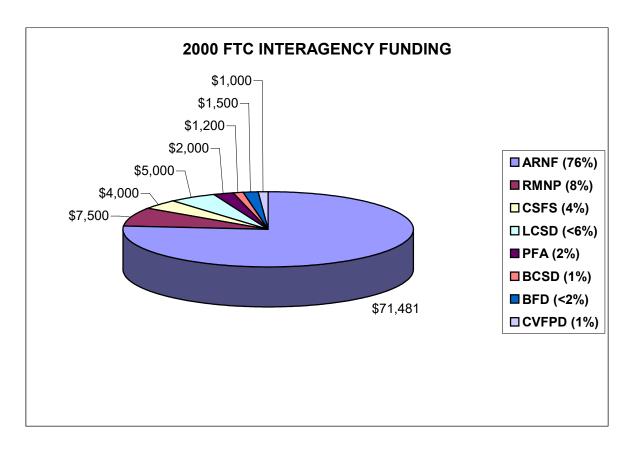
It would take approximately 71,969,468 gallons of retardant delivered by 29,987 airtanker drops (2400 gallons per load) at a cost of roughly \$90,000,000.00 (\$3,000/load) to equal ½ inch of rainfall over a 10,600 acre area.



#### **2000 FORT COLLINS INTERAGENCY DISPATCH CENTER FUNDING:**

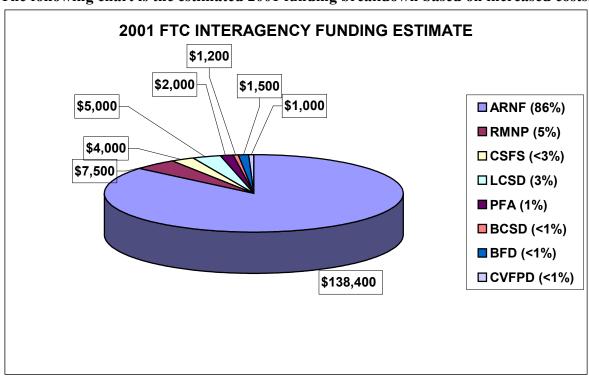
The following chart shows FTC's 2000 interagency funding contributions. The Fort Collins center is the only center that is not funded by multiple federal agencies with significant fire funding. The Larimer County Sheriff's Department increased its contribution from \$1,500 in 1999 to \$5,000 in 2000 with a built in annual inflation adjustment.

In 2000, contributions from state entities accounted for less than 16% of FTC's operating expenses. The Colorado State Forest Service will be increasing its contribution from \$2,800 to \$4,000 in 2001 but this is grossly inadequate for the amount of workload required to support state entities. Additional funding of FTC by state entities needs to be addressed. Some options include; implementing annual cost of living 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, their combined contributions to FTC is \$13,500.



In 2001 the operating costs of the dispatch center will increase significantly due to the addition of three permanent employees (1–Permanent full time GS-7, 1- Permanent Part time 18/8 GS-7, and 1 Permanent Part time 13/13 GS-5). Based on these new costs state entities will account for less than 10% of the Interagency Centers funding.

The following chart is the estimated 2001 funding breakdown based on increased costs.



#### 2000 EMPHASIS AREAS FOR FTC:

- Revision of Dispatch Center Board of Directors and oversight responsibilities.
- Implement FTC Fire Duty Officer (FDO) schedule.
- Revision of FTC mob guide in reference to preparedness planning and Multi-agency Coordinating Group use and standards.
- Move to new office for dispatch center at ARF supervisors office.
- Hiring and training of three new permanent dispatch positions.
- Implementation of the new "ROSS" (Resource Order Status System). ROSS is an automated resource ordering system that will "computerize" resource coordination.
- Implementation of National Fire Plan objectives.
- Finalize transition with the Rocky Mountain Area Coordination Center to assume flight following responsibilities for the Jeffco based aircraft (Airtanker, 2 Lead Planes, Cessna 206, and King Air).
- Planning for potential facilities move in 2003/4.
- 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 Estes Park, Boulder, Pickle Gulch, and Sulphur. Installation of new additional station at Corral Creek and preventative maintenance and sensor swaps on existing stations at Larimer and Redfeather.
- Seek additional FTC funding from state entities.
- Radio Frequency Authorizations (RFA's) and interagency licensing.

#### 2000 FIRELINE EDITORIAL:

