

TITILX



Fire & Aviation Management



2010 INFRARED OPERATIONS REVIEW







2010 INFRARED OPERATIONS This is a Fire!







FIRST FIRE FLOWN: Beaver Fire Colorado – May 24. 2010







Last Fire October, 02 Utah Twitchell & Coffee Pot Fire







2010 IR TRIVIA:

- Number of Different States Flown in 1 Night: 3
- Number of Different Fires/Complexes Flown in 1 Night: 7
- Longest Duration Flight 8 hours Ogden to Fairbanks
- Most Northern IR Operation: Alaska
- Most Southern IR Operation: Texas
- States / Provinces Flown During 2010 Fire Season:
 - AK, AZ, CA, CO, ID, MT, NM, OR, TX, UT, WA, British Columbia, Alberta
- Total Combined Flight Hours 460
- Below Normal Fire Season





2010 Percentages of I.R. filled 44z & 49z: Total Number 436

Data Source Nirops Summary



Note: IR Requests for AK included as one flight in above Summary.





2006 - 10 & Comparison filled: Total Number 2010 (384) (52)

Data Source Nirops Summary

IR requests processed by NICC



Multiple IR Requests for Alaska single entry in the above summary.



2006 - 10 & Comparison Percentage filled:

Data Source Nirops Summary



IR requests processed by NICC

IR Requests for Alaska shown as single order in the above summary.





2010 ORDERS: Distribution per Aircraft







2010 British Columbia Operations 49z Total Number Fires Flown: 75

Hours Flown – 70.4 Total Operating Cost - \$ 149,548.78 Total Acres Flown:

Alberta = 73,500

BC = ?





N149Z 2010 STATISTICS





N149Z:

Hours Flown – 300 Total Aircraft Operating Cost - \$276,000.00



Aircraft Hourly Flight Rate 2010: Aircraft Hourly Flight Rate 2011 Projected:

\$978.00 **\$990.00**



N149Z:

- April 24 May 21, Left Engine Hot Section
- May 24, Scanner Install
 - May 25, Phoenix Calibration check flight BOI
 - May 28, Dispatch to AK
 - June 12, ATG 5000 Install / continue to ELP
- June 19-24, FCU
- July 26-30, Phase II
 - Removed from service to complete Maintenance,
 - All IR coverage provided by 44z



N149Z:

- August 26, WOW switch landing Gear
- October 02 04, Fuel Check Valve / AC
- October 21, Scanner Removal
 - October 22, AirCell Subscription Termination
- Time Remaining till next phase 44.5







N144Z:

Hours Flown – 160.0 Total Aircraft Operating Cost - \$214,400.00



Aircraft Hourly Flight Rate 2010:\$1340.00Aircraft Hourly Flight Rate 2011 Projected:\$1680.00





N144Z:

- April 15, Scanner Install
 - Phoenix Calibration check flight BOI
 - April 27, ATG 5000 install
- July 01, Right Generator
 - Recover OGD 1 fire UTF
 - July 26, right Generator 1 fire UTF
 - August 09 Replace GCU
- September 23 October 05, Phase I & II
- Time Remaining till next inspection 102.2
- January 2012, Engine Replacement





Aircell Down Link



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Fire & Aviation Management

New ATG 5000





Diminished Personnel Risks

- Travel exposure to Aircraft (IRIN)
- Drive Time Expense
- Reduced File Access Delay
 - quicker access to the fire files for crews OTG
- Air Crew Low Level Exposure
- Eliminate need for Air Drop
 - no air drops in 2 years





Aircell ATG5000

Increased Mission Data Efficiency Time 2010

- **26 KB** average down stream to FTP site
- 208 kbits / sec average or downstream to FTP
- Typical Phone Modem
 - □ 48 kbits / sec upstream / receive
 - □ 40 kbits / sec downstream to FTP
- This is 4 x faster than standard modem speed
- This is 2 x faster than a INMAR Sat four modem configuration



27.0E+3

Transfer Rate

28.0E+3

30.0E+3

26.0E+3

0.00

25.0E+3





Infrared Pilot Staff 2010



USDA Forest Service

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Fire & Aviation Management







National Infrared Operational Guide

CHAPTER 4 - Policies

4.2 FLIGHT AND DUTY LIMITATIONS

Flight and duty limitations for IR aircraft are specified in <u>FSH</u>, sec. 11.27a, 15.12, and National Mobilization Guide 24.16.





Pilot Flight and Duty Limitations

- 14 hour duty day
- 10 hours rest before beginning next duty day
- 8 hours flight time in a day
- 36 hours flt time in 6 consecutive days = following day off
- 42 hours flt time in 6 consecutive days max
- 2 days off in any 14-consecutive day period





Pilot Start Time for Fire Season

Early Season/ Low Activity Normal/High Activity

1130-1230 (duty day ending 0130-0230) 1330-1500 (duty day ending 0330-0500)



Duty Day Can be Adjust for Specific Incidents?





Considerations for Adjusting Aircraft Crew Duty Start Time

- Can take up to 24 hours to facilitate change
- Ability to make change dependent on other fire activity





REVIEW ITEMS

- Staffing:
 - Pilot Staff
 - **2011 Hiring**
 - Pilot Schedule
 - http://fsweb.r4.fs.fed.us/unit/faa/aviation.htm
- I.R. Operations:
 - Canada
 - NAFTA operating certificate
 - Sensor Grid BOI
 - Nirops Ordering
 - Delivery Time (Define)





REVIEW ITEMS

- Nirops Guide Update:
 - Operational
 - Review Update for 2011

Any Questions?

