

Fire & Aviation Management

2020 IR OPS SUMMARY



PROVIDING SAFE, YEAR ROUND, ON DEMAND, IR RECONNAISSANCE

Fire & Aviation Management

INFRARED OPERATIONS

June to November



THE GOLD STANDARD BY WHICH ALL OTHERS ARE MEASURED

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FIRST FIRE FLOWN:



Sawtooth Fire

1 JUN

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LAST FIRE FLOWN:



Cameron Peak Fire

20 NOV

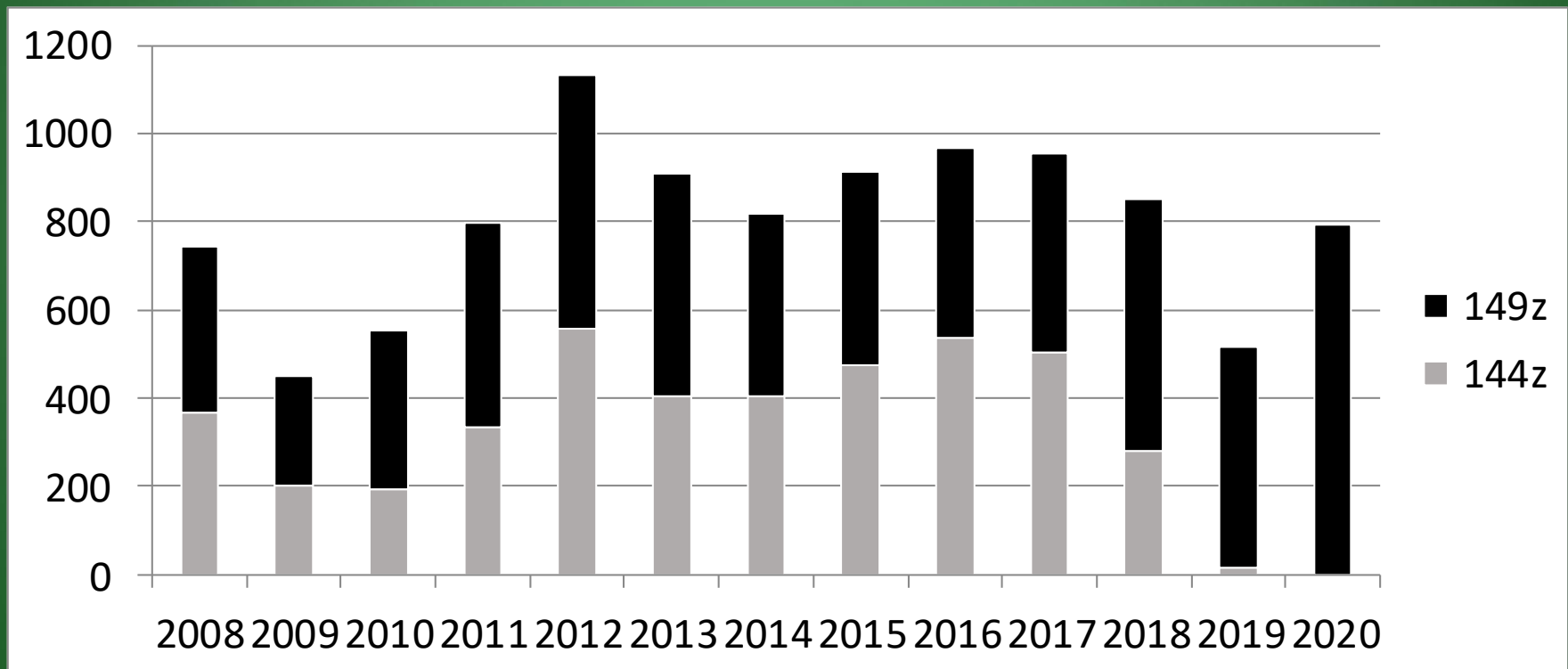
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2020 IR TRIVIA

- States Flown in 1 Night: 4
 - Most Fires Flown in 1 Night -44z & 49z : 20 orders
 - Most Fires Flown in 1 Night 1 A/C 49z : 20 orders
 - Most Percent Flown by 49z in 1 Night : 45% 09/05
 - Longest Night Mission: 8.0 hours; 08/22 64% UTF
 - Most NIROPs Platforms in Operation Single Night: 9
 - States Flown During This Fire Season:
 - AZ, CA, CO, ID, MT, NM, OR, UT, WA, WY, NV,
 - —144z and 149z Flight Hours – 793 IR hrs to date
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Total Flight Hours 2008 - 2020



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Aircraft 44z Maintenance

- 44z GTN 750 installed 6hr to SGU close 05/28/2019
 - 44z out of service - unsafe avionics 5/28/2019 – current
 - 44Z is a 2001 Cessna Citation that is unavailable for missions due to chronic avionics issues and requires immediate replacement.
 - investment required to return 44Z back to service for the remaining aircraft lifecycle is estimated at \$2.28M
 - avionics replacement and installation
 - engine replacement within the next 500 hours
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Aircraft 49z Maintenance

- HUIP, High Use Inspection Plan:
 - Routine due every 200 hours, typical completion 1 day
 - Phase due every 400 hours, typical completion 3-5 days
- 20 hours before 20 hours after

- 49z right fuel gauge inop deferred 06/11 – present
- 49z stall heat inop 06/29-06/30
- 49z phase maintenance 07/02 (completed one day)
- 49z phase maintenance 08/13-08/16
- 49z left wing fuel leak 08/31
- 49z stall heat inop 09/23 (found wire arcing/short)
- 49z out of service right engine trend Yellow 10/08
- 49z out of service overfly left engine 3600+198 10/18-11/04
- 49z return to service left engine loaner installed & phase maintenance 11/05 (used 27.1 hours)

- 49z phoenix sensor removed for winter maintenance 12/01

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Aircraft Updates

Aging Aircraft

- increased maintenance items

44Z Avionics faulty upgrade

- Beechcraft King Air 250 to replace 44z

New Aircraft?

- Business case submitted FY-20
- Two Beechcraft King Air 250 Replacements Approved

2021 aircraft rates:

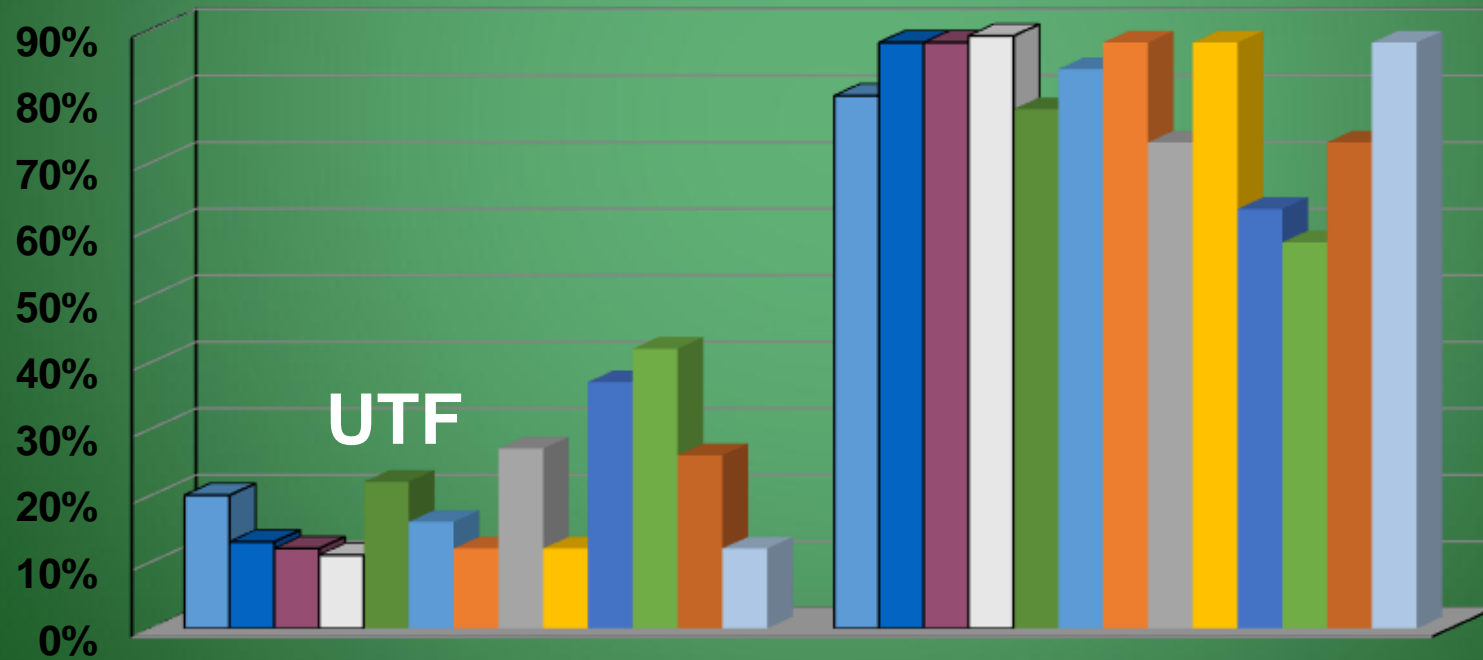
44Z FY2019 \$1620 to FY2020 \$1620

49Z FY2020 \$1100 to FY2021 \$1100

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IR REQUESTS (last 13 years)

FILLED



2008 2009 2010 2011 2012 2013 2014
2015 2016 2017 2018 2019 2020

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2016

Total Assigned= 1406

UTF= 185

13% UTF rate

5% non-weather UTF

2017

Total Assigned= 1888

UTF= 703

37% UTF rate

27% non-weather UTF

2018

Total Assigned= 1574

UTF= 1131

42% UTF rate

33% non-weather UTF

2020

Total Assigned= 554

UTF= 43

12% UTF rate

6% non-weather UTF

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INFRARED PILOTS 2020

Dan Johnson Supervisor

08/2006

44Z & 49Z

**Carl
Helquist
05/2019**

49Z

VACANT

**Don Boyce
R4 STANDS PILOT
05/2007**

44Z & 49Z

VACANT

VACANT

USDA Forest Service

Caring for the land and serving people



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2020	PP 01+		PP 02+		PP 03+		PP 04+		PP 05+		PP 06+		PP 07+		PP 08+		PP 09+		PP 10+		PP 11+		PP 12+		PP 13+		PP 14+	
	PP 15+		PP 16+		PP 17+		PP 18+		PP 19+		PP 20+		PP 21+		PP 22+		PP 23+		PP 24+		PP 25+		PP 26+					
	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
PP 17	8/16	8/17	8/18	8/19	8/20	8/21	8/22	8/23	8/24	8/25	8/26	8/27	8/28	8/29														
149Z																												
149Z	Don	Don	Carl	Carl	Carl	Carl	Carl	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don
Don	149Z	149Z	149Z	149Z	IN	O	O	149Z	149Z	149Z	149Z	149Z	IN	O	O	149Z	149Z	149Z	149Z	IN	O	O						
Don	149Z	149Z	O	O	149Z	149Z	149Z	149Z	149Z	149Z	O	O	149Z	149Z	O	O	149Z	149Z	149Z	149Z	149Z	149Z	149Z	149Z	149Z	149Z	149Z	149Z
Carl	O	O	149Z	149Z	149Z	149Z	149Z	O	O	149Z	149Z	149Z	149Z	149Z														
Pilot 1																												
Pilot 2																												
Pilot 3																												
Jeff																												
Detail 1																												
Detail 2																												
tech 1 Mike										149z	149z	149z	149z	149z														
tech 2 Jill																												
tech 3 Brian	149z	149z	149z	149z	149z	149z	149z	149z																				
tech 4 Kelli																												
PP 18	8/30	8/31	9/1	9/2	9/3	9/4	9/5	9/6	9/7	9/8	9/9	9/10	9/11	9/12														
149Z																												
149Z	Don	Don	Carl	Carl	Carl	Carl	Carl	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don	Don
Don	149Z	149Z	149Z	149Z	IN	O	O	149Z	149Z	149Z	149Z	149Z	IN	O	O	149Z	149Z	149Z	149Z	IN	O	O						
Don	149Z	149Z	O	O	149Z	149Z	149Z	149Z	149Z	149Z	O	O	149Z	149Z	O	O	149Z	149Z	149Z	149Z	149Z	149Z	149Z	149Z	149Z	149Z	149Z	149Z
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TYPICAL FLIGHT SCHEDULE BUT WITH ONLY 3 PILOTS

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What did we learn..

- **IR reconnaissance demand exceeded capacity**
 - **Aging aircraft requiring more MX**
 - **RTB OGD essential 49z to remain in service**
 - **RTB OGD also eliminated 6/36 duty limits**
 - **Sensor upgrades (Kaz/Mike will brief improvements)**
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Thanks to the

- **IR Coordinators**
 - **IR Technicians**
 - **IRINS**
 - **GTAC & Aircraft 3**
 - **Contract Aircraft & CO / COR**
 - **NICC**
 - **WO**
 - **MAINTENANCE STAFF**
 - **SUPPORT STAFF**
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What's Next ...

- **49z winter maintenance 12/02 – ??**
 - **6th Engine rebuild x 2 estimate \$600k / 3600hr**
 - **Exterior paint \$50k**
 - **Anticipate more maintenance requirements for aging aircraft**
 - **49z manufactured 1985 18,000 plus hours**
 - **Aircraft replacement for 44z & 49z - 2021**
 - **Address pilot shortage**
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Any Questions?

