

Fire & Aviation Management

2019 IR OPS SUMMARY



PROVIDING SAFE, YEAR ROUND, ON DEMAND, IR RECONNAISSANCE

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INFRARED OPERATIONS

June to November



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FIRST FIRE FLOWN:



Elk Fire

12 JUN 2019

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LAST FIRE FLOWN:



Kincade Fire

08 NOV 2019

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2019 IR TRIVIA

- States Flown in 1 Night: 4
 - Most Fires Flown in 1 Night **44z** & 49z : 14 orders
 - Most Fires Flown in 1 Night 1 A/C 49z : 14 orders
 - Largest Fire: Woodbury Fire 123,875 acres
 - Longest Night Mission: 7.8 hours; 2 Fuel Stops
 - Most Southern IR Operation: New Mexico
 - States Flown During This Fire Season:
 - AZ, CA, CO, ID, MT, NM, OR, UT, WA, WY, NV,
 - **144z** and 149z Flight Hours – 502 IR hrs to date
-

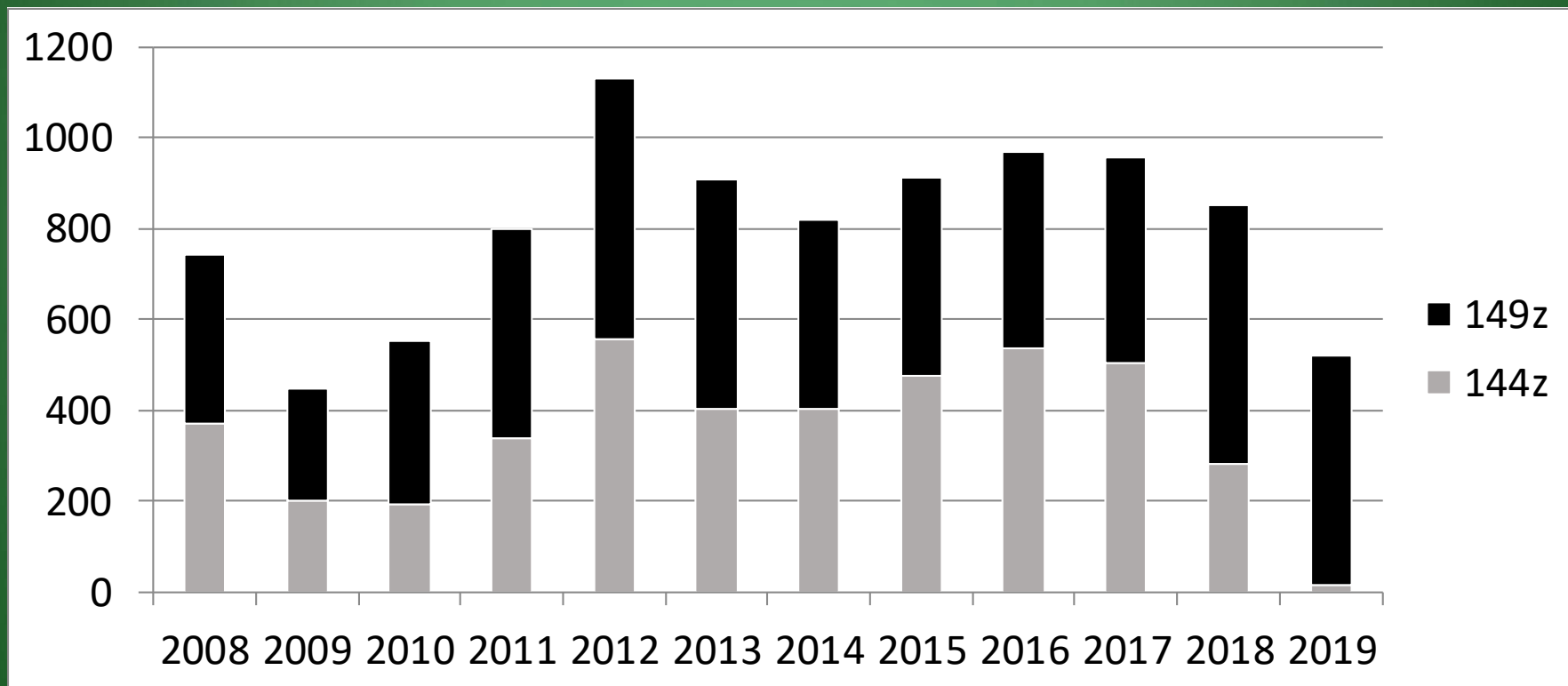
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MILLER FIRE 7/2

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Total Flight Hours 2008 - 2019



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Aircraft 44z Maintenance

- phase maintenance time frame 150 hours
 - 0 hours before 30 hours after
 - 3 to 5 days for each phase longer if damage found
 - 44z Phoenix removal 12/12
 - 44z delivery SGU GTN 750 install 01/08
 - 44z out of service stall/AOA computer 05/07
 - 44z GTN 750 installed 6hr to SGU close 05/28
 - 44z fuel leak 05/29 – 06/27
 - 44z windscreen replace 07/02 – 07/12
 - 44z Phoenix install 06/28
 - 44z out of service - unsafe avionics 5/28 - current
-

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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 out of service amp gauge 04/12 – 04/17
 - 49z Phoenix removal 05/05
 - 49z Phoenix install / calibration 06/04
 - 49z out of service flap replacement 06/05 – 06/12
 - 49z phase maintenance 07/14 – 07/19
 - 49z out of service fuel panel smoke in cockpit 08/12
 - 49z out of service door cable 08/24 – 08/26
 - 49z phase 1 maintenance one day turn 09/16
 - 49z out of service left generator 10/14
 - 49z out of service - landing gear fail - ferry permit OGD 10/29 – 11/02
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Fire & Aviation Management Aircraft Updates

Aging Aircraft

- increased maintenance items
- some maintenance requiring engineering support from manufacturer

44Z Avionics upgrade completion ??

New Aircraft?

2019 projected aircraft rates:

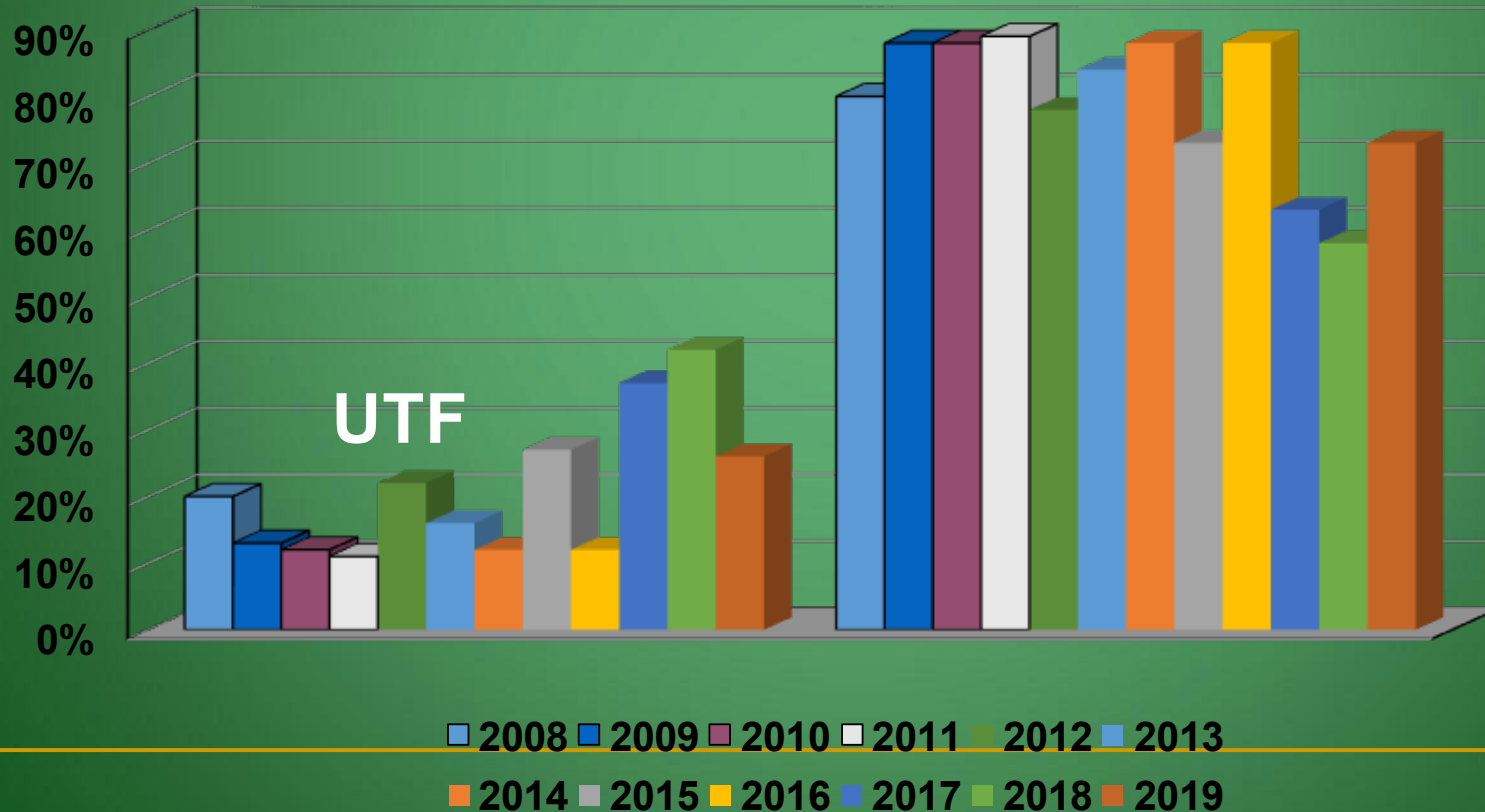
44Z FY2019 \$1620 to FY2020 \$1620

49Z FY2019 \$1150 to FY2020 \$1100

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IR REQUESTS (last 10 years)

FILLED



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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

2019

Total Assigned= 405

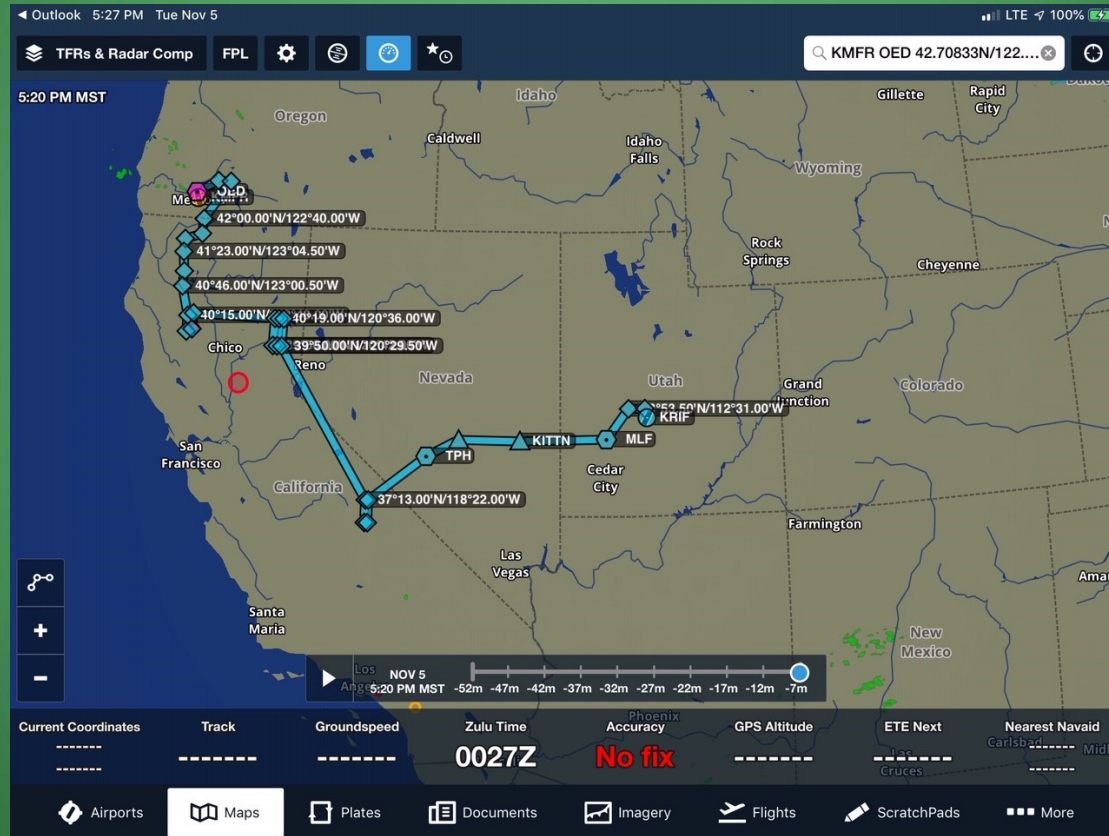
UTF= 147

25% UTF rate

13% non-weather UTF

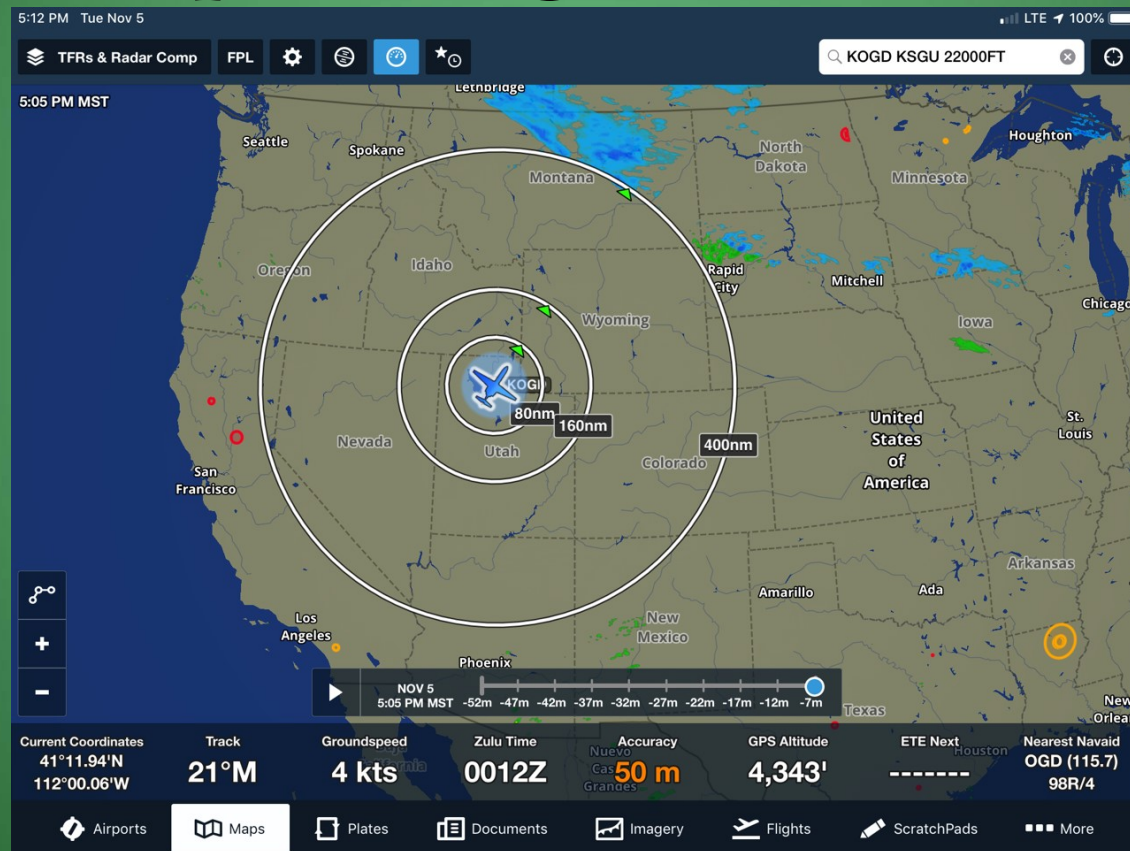
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Typical Flight Track 49z August



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Typical Flight Track 44z





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INFRARED PILOTS 2019

Dan Johnson Supervisor
08/2006
44Z & 49Z

**Carl
Helquist**
05/2019

49Z

VACANT

Don Boyce
R4 STANDS PILOT
05/2007

44Z & 49Z

VACANT

VACANT

ORGANIZATION CHART

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	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+
2019	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
PP 16	8/4	8/5	8/6	8/7	8/8	8/9	8/10	8/11	8/12	8/13	8/14	8/15	8/16	8/17
144Z						Don			Don					
149Z	Don	Don	Don	Don	Don	Don	Don	Don	Carl	Dan	Dan	Dan	Dan	Don
	Carl	Carl	Carl	Carl	Carl	Dan	Don	Don	Carl	Carl	Carl	Carl	Carl	Carl
Dan	O	O	IN			144Z	140Z	140Z	140Z	140Z	140Z	140Z	140Z	T
Don	140Z	140Z	140Z	140Z	140Z	140Z	140Z	140Z	144Z	M	M	T		140Z
Carl	140Z	140Z	140Z	140Z	140Z	66	66	T	140Z	140Z	140Z	140Z	140Z	140Z
Caragh	T												M	M
Pilot_b														
Pilot_c														
Jeff														
Detail_a														
Detail_b														
tech 1 Kristi			140z	140z	140z	140z	140z	140z	140z	140z	140z	140z	140z	140z
tech 2 Mike			140z	140z	140z	140z	140z	140z	140z					
tech 3 Rob	140z	140z												
tech 4 Brian		UNA	UNA	UNA	UNA	UNA	UNA	UNA	UNA	UNA	UNA	UNA	UNA	UNA
PP 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	8/30	8/31
144Z									Don					
									Don					
149Z	Don	Don	Don	Don	Don	Don				Dan	Dan	Dan	Dan	Don
	Carl	Carl	Carl	Carl	Carl	Dan				Carl	Carl	Carl	Carl	Carl
Dan	O	O	IN			140Z		O	144Z	140Z	140Z	140Z	140Z	
Don	140Z	140Z	140Z	140Z	140Z	140Z			144Z	O	O	T		140Z
Carl	140Z	140Z	140Z	140Z	140Z	O	O	T		140Z	140Z	140Z	140Z	140Z
Caragh														
Pilot_b														
Pilot_c														
Jeff														
Detail_a														
Detail_b														
tech 1 Kristi	140z	140z	140z	140z	140z	140z				140z	140z	140z	140z	140z
tech 2 Mike			140z	140z	140z	140z				140z	140z	140z		
tech 3 Rob														
tech 4 Brian	UNA													

TYPICAL FLIGHT SCHEDULE BUT WITH ONLY 3 PILOTS

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What did we learn..

- **IR reconnaissance demand exceeded capacity**
 - **Completed speed vs altitude flight test in both aircraft (Kaz will brief data)**
 - **Aging aircraft requiring more MX**
 - **Relief Pilots Essential for crewing**
 - **Jeff Watts Maintenance Inspector**
-

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Thanks to for a successful season....

- **IR Technicians**
 - **IRINS**
 - **GTAC & Aircraft 3**
 - **NICC**
 - **WO**
 - **MAINTENANCE STAFF**
 - **SUPPORT STAFF**
 - **TRAVEL Approvers**
-

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What's Next ...

- **Avionics upgrade 2019 44z 01/07 – ??**
 - **New Telemetry \$\$ 1.5 million allocated**
 - **Address pilot shortage**
 - **Renew pilot developmental detail**
 - **Anticipate more maintenance requirements for aging aircraft**
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What's Next ...

- **continued development of new sensor
spring 2020 deployment / testing**
 - **15 April one aircraft FMC
(crew, equipment, aircraft)**
 - **replacement aircraft ??**
-

Any Questions?



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VIEW FROM THE OFFICE



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44Z AVIONICS INSTALL



44z avionics install 3 weeks prior to SGU runway closure

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NIGHT VISION VIEW

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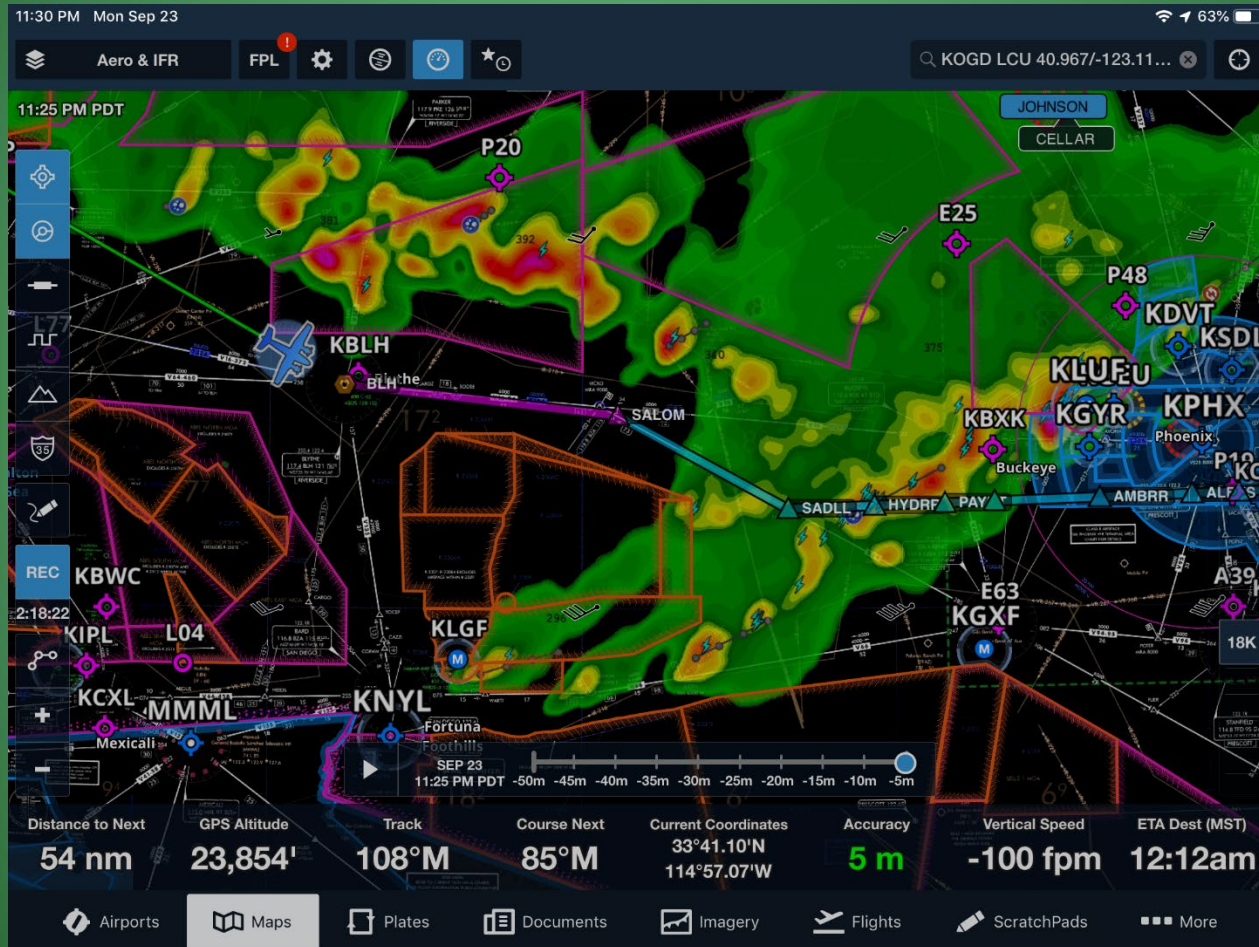
WEATHER GOING TO MESA

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WEATHER GOING TO MESA

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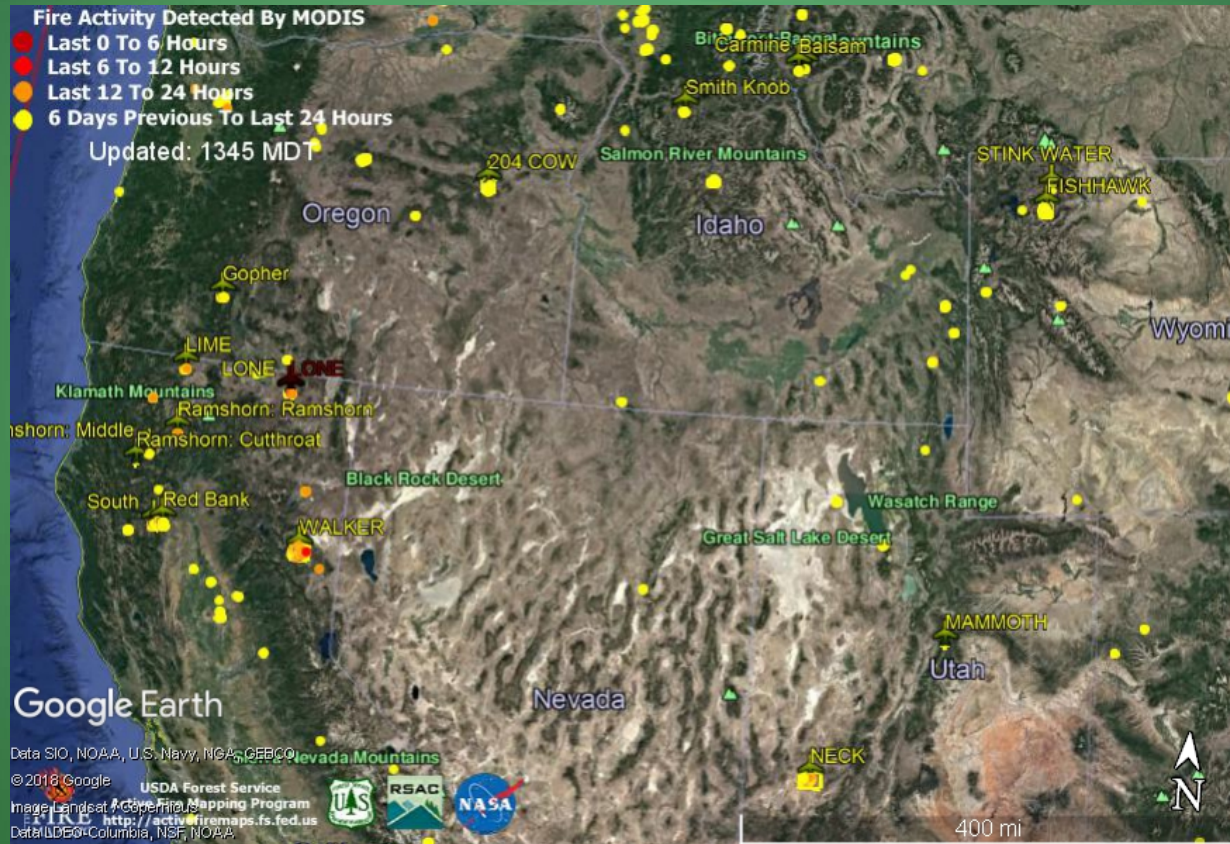
THE FIRE GODS WERE REALLY ANGRY THIS DAY

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WOODBURY FIRE FROM THE HOTEL ROOM

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BEFORE DARK

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MEDFORD OREGON ON THE WAY OUT WITH SMOKE IN THE AIR



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In the third grade, our teacher, said, "Quit staring out the window, because when you grow up, no one will pay you to sit there and just look out the window"..

Guess I showed her.....

