

USDA Forest Service

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Fire & Aviation Management

2021 IR OPS SUMMARY



PROVIDING SAFE, YEAR ROUND, ON DEMAND, IR RECONNAISSANCE

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INFRARED OPERATIONS

May to October 2021





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N149Z 2021 Summary

First Mission Flown: May 26

Last Mission Flown: September 12

N149Z Unavailable after September 12

Final NIROPS Mission: October 30



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2021 IR STATS

- Total Flight Time: 440 hours
 - Total Nights Flown: 81
 - Total fire scans completed: 381
 - Total Nights cancelled due to weather: 12
 - Total Nights cancelled due to mechanical: 68
 - (for the period form May 26 to October 30)
-



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Significant Maintenance Events

Solving aircraft deficiencies was a central theme to 49Z's 2021 season.

Season Kick-Off:

- Air Conditioning
 - One night of unavailability while the initial problem was identified.
 - 9 nights continued operation without A/C under MEL with extensive troubleshooting during multiple days before each flight.
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Significant Maintenance Events

Half Time Show:

- Engine Oil Filter Initial Discovery
 - The problem was discovered during the first routine inspection after engine overhaul. The left engine oil filter was found to have been installed backwards at the contract overhaul facility.
 - One night unavailability while issue was evaluated.
 - Engine Oil Filter Stud Replacement
 - Studs that secure the left engine oil filter were damaged during the incorrect oil filter installation.
 - Two weeks unavailability during the last two weeks of July while left engine was removed for repair.
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Significant Maintenance Events

3rd Quarter Action:

■ Gear Door Bushing

- During post flight inspection the left gear door actuator was found unattached and trailing the gear door.
 - One night unavailability waiting on replacement bushing
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Significant Maintenance Events

Final Minutes of the Game:

- Left Engine ITT Excursion
 - 9/10 mission cancelled shortly after departure when left engine ITT showed an un-commanded increase.
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Significant Maintenance Events

Season Ending Injury:

- Right Engine Torque Anomaly
 - While returning from the 9/12 mission, the right engine torque dropped on the right engine with no warning or apparent cause.
 - N149Z taken out of service until safe continued flight could be assured.
 - Subsequent troubleshooting continued through October and into November, effectively ending availability for the season.
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N149Z Maintenance Key Points

- N149z Manufactured 1985 18,000 hours on airframe
 - N149z original engines rebuilt for 6th time 2021
 - N149z in service 16 years past planned 20 year replace cycle
 - Increased maintenance requirements trend has been noted in past years. This was not a surprise.
 - Safety margin eroding as we continued to demand high use from an old aircraft.
 - Maintenance workload unduly increased as one aircraft demanded increased attention.
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N149Z Maintenance Kudos

Region 4 Aircraft Maintenance Organization deserves credit and thanks for putting in long hours. They stuck with it through difficult problems that resisted all attempts toward resolution.

Thank you:

Jeff Watts

Ivan Elmy

Levi Bryan

Kevin Bailey

Without your efforts N149Z would have had even more down time. Thank you for keeping the pilots and technicians aboard 49Z safe.



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Aircraft Updates

New King Air 260GT aircraft scheduled for 2022 delivery

Sensor capabilities on new aircraft:

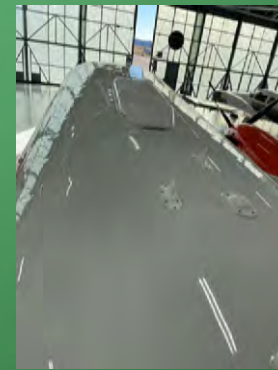
New Phoenix

Overwatch TK9

AMS

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New Aircraft Updates





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INFRARED PILOTS 2021

Dan Johnson Supervisor
08/2006

Carl Helquist
05/2019

VACANT

Don Boyce
R4 STANDS PILOT
05/2007

VACANT

Makalina Seavy
??/2022



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Thanks to for a successful season....

- IR Technicians
 - IRINS
 - GTAC & Aircraft 3
 - NICC
 - WO
 - MAINTENANCE STAFF
 - SUPPORT STAFF
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What's Next ...

- Hire additional pilots to cover 2 aircraft
 - Integrate new avionics and sensor capabilities into our operation
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Any Questions?





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12:11 PM Wed Aug 25 gsauctions.gov LTE 100%

Item Information

2001 CITATION 550 CESSNA AIRCRAFT

Sale-Lot Number: 91QSC121381301

City, State: Ogden, UT

Current Bid: 551,000 USD (Reserve Not Met)

Bidders: 10

Close Time: 08/25 10:00 AM CT (Closed)

Time Remaining:

Item Photos

[Description](#) [Bidding Details](#) [Bid History](#) [Item Location](#)

Note: When "Compatible" bidding occurs (two or more bids of the same amount are submitted), the "high bid" is determined by GSA Auctions system's evaluation, based on the time of submission and/or by proxy.

To enhance bidder privacy, and protect GSA Auctions users from fraudulent emails, GSA Auctions has changed how User IDs are displayed on the bid history page. Only you can view your User ID, all other members will see anonymous user IDs, such as Bidder*.

As of February 14, 2009 bidders will be assigned the actual bidder number for the sale/lot based on when they placed their bid, if you are the first bidder for this sale you will see Bidder#1, if you are the second bidder you will see Bidder#2.

Bidders in the Auction (Current top 10 bidders)

Bidder	Bid Amount	Date-Time
Bidder#10	(Reserve not met) 551,000 USD	08/25/2021 09:44:37 AM CT
Bidder#6	548,000 USD	08/25/2021 09:43:57 AM CT
Bidder#9	526,000 USD	08/24/2021 05:19:10 PM CT
Bidder#7	500,000 USD	08/23/2021 09:59:21 PM CT

44z MFR Year 2001 - GSA Auctioned closed / sold 08/25/2021 \$551,000

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VIEW FROM THE OFFICE

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NIGHT VISION VIEW

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BEFORE DARK



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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.....

