## How much is this IR Flight Going to Cost?



A common question asked is how much an incident will be charged for an IR flight using NIROPS assets. This brief provides information that can help give an idea of the costs but it is not intended to allow the calculation of the actual cost. The cost of a flight to an incident is made up of various parts the hourly rate for the NIROPS planes, crew salaries and per diem, size of the fire, as well as what other fires are being flown. Actual costs are calculated nightly and available for review once entered into the Aviation Management Information System (AMIS) by R4 Aviation personnel (approx. every 2 weeks).

The hourly rate for the NIROPS planes for 2019 is $\$ 1550 / \mathrm{hr}$ for the Citation (144Z) and $\$ 1150 / \mathrm{hr}$ for the King Air (149Z). This includes the cost of fuel. While the Citation is more expensive per hour, it can fly faster so transit time between fires is less. Aircraft rates are adjusted annually according to a formula addressing a three year moving average, accounting for utilization, scheduled aircraft maintenance, and replacement costs. The price can change within a year due to fuel costs.

There is no on-call charge or "making shade" charge for the aircraft. Only actual flight time is charged. This includes flight time to the fires and back. The total flight time for an evening is divided up proportionally among all the incidents that are flown.

Examples of time to fly fires of varying sizes (assuming 30\% overlap between passes): Note that for smaller fires most of the flight cost will be for transit time to and from the fire:

| Fire Size (acres) | Time for Citation <br> (minutes @ 250 KIAS*) | Time for King Air <br> (minutes @ 220 KIAS*) |
| :--- | :--- | :--- |
| 1,000 (single pass) | 2.7 | 3 |
| 10,000 (2 passes) | 5 | 7 |
| 50,000 (3 passes) | 19 | 22 |
| 150,000 (4 passes) | 32 | 36 |

*Knots-Indicated Air Speed
Examples of cost to get a plane to different areas of the country:

| OGD-Ogden, UT to <br> Destination | Direct Distance (One <br> way) | 144z <br> $\mathbf{( \$ 1 5 5 0 / h r ~ x ~ T i m e ) ~}$ | 149Z <br> $\mathbf{( \$ 1 1 5 0 / \mathbf { h r ~ x ~ T i m e ) ~ }}$ |
| :--- | :--- | :--- | :--- |
| FAI-Fairbanks, AK | 1900 miles | $\$ 1550 \times 6 \mathrm{hrs}=\$ 9,300$ | $\$ 1150 \times 8 \mathrm{hrs}=\$ 9,200$ |
| JAX-Jacksonville, FL | 1600 miles | $\$ 1550 \times 5.5 \mathrm{hrs}=\$ 8,525$ | $\$ 1150 \times 7.5 \mathrm{hrs}=\$ 8,625$ |
| ELO-Ely, MN | 950 miles | $\$ 1550 \times 3 \mathrm{hrs}=\$ 4,650$ | $\$ 1150 \times 4 \mathrm{hrs}=\$ 4,600$ |
| SAN-San Diego, CA | 570 miles | $\$ 1550 \times 1.75 \mathrm{hrs}=\$ 2,712$ | $\$ 1150 \times 2.5 \mathrm{hrs}=\$ 2,875$ |

Crew costs (salaries plus per diem) add approximately $\$ 2500$ per shift (based on a 12 hour shift) to the total cost. Crew costs are divided up proportionally among all the incidents that are flown, similar to flight time.

## Bottom line: In terms of cost, NIROPS assets provide the most economical aerial infrared resource for incidents.

