Eastern States Airborne Thermal Infrared Resources

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The National Infrared Operations Group based in Boise, Idaho has offered fire mangers thermal infrared (TIR) mapping services since 1964. Unfortunately, many eastern fire mangers feel that Forest Service Regions 8 and 9 are not well served by NIROPS. There are two reasons given for this belief, first the ferry costs from Boise, ID make infrared flights too expensive, and second that NIROPS aircraft are often unavailable because of national priorities.

The recent advancement in the NIROPS program should mitigate these concerns. This includes the acquisition of N100Z a Cessna Citation Bravo, the Phoenix, the latest versions of the NIROPS dual channel line-scanner and is capable of digital output. Digital output enables NIROPS to utilize long-range data downlink systems for near realtime infrared intelligence delivery, as well as rapid and easy integration into any incident's Geographic Information System (GIS).

Another tool for fire managers is the Infrared Field Users' Guide and Vendor Listings (IFUGL), a publication designed to identify the thermal infrared system (government or commercial) that best suits a fire manager's need. The IFUGVL is published by Remote Sensing Applications Center (RSAC) in cooperation with NIROPS. Presently there are twenty vendors listed in the IFUGVL, six of these vendors' operations are based east of the Mississippi River.

Looking toward the future, NIROPS and RSAC are working with NASA on the development of the next generation multispectral thermal infrared sensors. These sensors are well suited for fire mapping operations. Both systems are being developed in the eastern US; one by Argon ST Ann Arbor, MI, the other by the Rochester Institute of technology (RIT), Rochester, NY. These systems will match the production rate and sensitivity of the current Phoenix line-scanners while incorporating the latest digital technology and real-time processing.

The availability of thermal infrared intelligence to the eastern fire manager has improved significantly. Technological advancement will guarantee that important fire intelligence is available to the ground troops as well as the Incident Command Team. This poster will illustrate these opportunities