

## FIRE INTEGRATED REAL-TIME INTELLIGENCE SYSTEM

The Fire Integrated Real-Time Intelligence System (FIRIS) is a 150-day pilot program that is intended to significantly improve situational awareness for first responders, and regional and state emergency operation centers during the first hours of a wildfire, and through the extended attack, to protect lives and property.

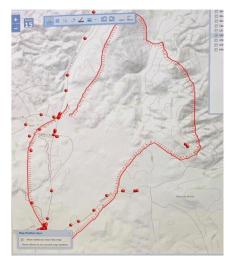
The system combines a dedicated fixed-wing aircraft operated by Courtney Aviation equipped with sensors capable of providing enhanced intelligence, surveillance and reconnaissance (ISR), a super computer-based fire prediction system and situational awareness software into one platform to support commanders and decision makers.

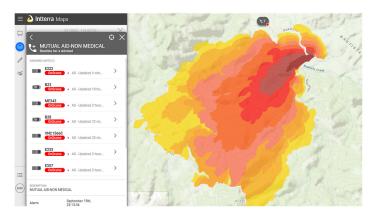
The program, that began September 1, is available in the counties of Orange, Los Angeles, Riverside, Ventura and San Diego. It is funded through the 2019-20 state budget (AB 74) whereby Assemblywoman Cottie Petrie-Norris (D-Laguna Beach) secured \$4,500,000.

## What does FIRIS provide?

FIRIS provides critical information to decision makers with the delivery of a real-time fire perimeter map delivered within five minutes of the aircraft arriving on scene to assess the size, scope, and impact of developing wildfires. This data helps decision makers allocate resources, communicate with community members and decide on evacuations.

The aircraft is capable of providing high-definition real-time video, and hot spot detection. All these technologies enable personnel involved in a wildfire to have a common operating picture.





The University of California San Diego WIFIRE super computer provides real-time fire modeling and predictions which combines data from weather stations, known topography, existing fuel models and the FIRIS aircraft to perform rapid, accurate predictions of fire activity.

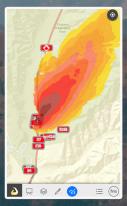
The WIFIRE modeling projects where and how large the fire will become over a 6-hour time period, if no suppression is provided.

Intterra has an interactive platform that distributes perimeter map data and fire prediction models to decision makers and fire personnel.

The Southern California Wildfire Fusion Center (SCWFC), based in Los Angeles, directly supports the integration of WIFIRE, Courtney Aviation and Intterra.



Distributes critical data to increase situational awareness



UCSD super computer provides real-time fire modeling predictions over a 6-hour period



## INCIDENT COMMANDER

Allocates resources, provides information for communities and helps determine evacuations



**GIMBAL**High-definition, infra-red camera



AIR TACTICAL GROUP SUPERVISOR

Conducts mapping and data collection



REPEATER PLANE

Provides cellular connectivity to FIRIS plane, when necessary, to deliver data



**FUSION CENTER** 

Southern California Wildfire Fusion Center to support pilot program