National INFRARED Operations

Fire and Aviation Management
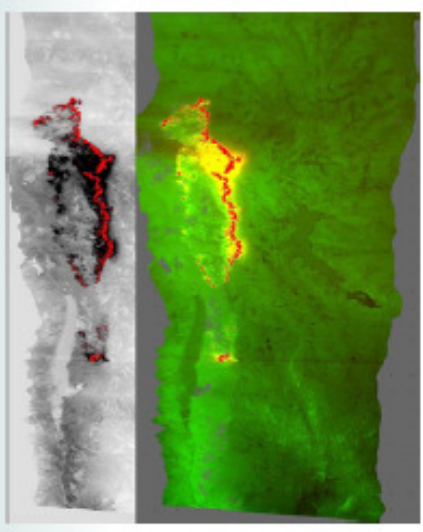
Project Report
Liaison and Special Projects

United States
Department of Agriculture
Forest Service—Engineering

Remote Sensing
Applications Center

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RSAC-1309-RPT3

Infrared Field Users' Guide and Vendor Listings

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Infrared Field Users Guide & Vendor Listings

Update

Status

- Updated guide is now posted on NIROPS site under Reports
  - Still draft
  - Previous version removed from site
- RFI was posted on FedBizOps in May
  - Delayed due to Forest Service access issues to site
- Poor response to RFI and direct emails
  - Responses from only eight vendors
  - Some vendors out of the business or asked to be removed

Future

- Post RFI again in 2009
  - Remove vendors who have been unresponsive through multiple years

- Split existing guide into two documents
  - IR Field Users Guide
  - Vendor Listing
    - Link through NIROPS website front page

CalFire Remote Sensing Matrix

- One page guide for Plans and Ops personnel
- RS assets listed in matrix are those that were used in the last two CA fire sieges
  - Oct. 2007 and June/July 2008
- Post on NIROPS site

Vendor	Response Time (hours from resource request to arrival at incident)	Delivery Time (hours from sensor to ICP)	Delivery Method (ftp, hard maps, web app, ...)	Deliverables (lines, polygons, points, imagery, video)	Supported Software (Terrain Navigator Pro, ArcGis, Google Earth...)	Geo-referenced	Flight Frequency (# of missions from 0600-1600)	Positional Accuracy (Above or below 40' accuracy)	Mission Type (IA, Continuing Incident, Detection-large area, Mop-up, heavy smoke)	Order Point	Contract	Need IRIN
TYPE: Space-based, Multiple Fires												
MODIS	Real time	Real	ftp, web	Images,	ArcGIS, GE	Yes	2	1Km	Large fire	N/A	N/A	No
GOES	Real time	Real	Web	Image,	ArcGIS	Yes	Constant	1Km	Large fire	N/A	N/A	No
AVHRR	Real time	Real	Web	Image,	ArcGIS	Yes	1	1Km	Large Fire	N/A	N/A	No
Landsat	8 days	Real	Web	Images	ArcGIS	Yes	1	39ft	Rehab	N/A	N/A	No
ANG Eagle Vision	3-4 days (disaster)	3 hours	ftp	Images	ArcGIS	Yes	1	15-30ft	Large fire, Rehab	State	No	Yes
TYPE: Airborne, Multiple Fires												
NIROPS	10-12	4-6	ftp	Polygon, imagelin	ArcGIS, PDF, GE	Yes	1-2	12.5ft.	Detection, large	NICC	Exclusive	Yes
Firemapper	4-6	1-3	GE, Web	Polygon,	ArcGIS, GE	Yes	3-5	18ft.	Large fire, detection, large	NICC	Exclusive use	No
Kolob Air	10-12	5-8	ftp	point line	ArcGIS, PDF, GE	Yes	1-2	15-20 ft.	Detection, large fire, smoke	NICC	Yes	Yes
Range and Bearing	1-2 days	1-3 hours	ftp	Imagery, polygons	ArcGIS, PDF, GE	Yes	3-5	<40	Large fire, smoke	NICC	Yes	No
ArgonST	1-2 days	4-6	ftp	Imagery, polygons	ArcGIS, PDF, GE	Yes	1-2	20-40ft	Large fire, smoke	NICC	Yes	Yes
Firehawk	24	4-6	ftp	Polygon, point line	ArcGIS, PDF	Yes	1	<40	Detection, large fire, smoke	NICC	Exclusive use	No
Title 10 Global Hawk	Disaster	10-12	ftp	Lines	ArcGIS	Yes	1	<40	Large fire	N/A	N/A	Yes
Title 10 U-2	2-5 days	12 hours	ftp	Aerial photos	ArcGIS	No	1	<3ft	Large fire, rehab, damage	N/A	N/A	
TYPE: Airborne, Fire Line Mapping and Mop-up												
Fireball	4-6	1-3	Hard, GIS	Points, lines	ArcGIS	Yes	1-3	<40	Detection, heat,	GACC	Yes	No
RAM Systems	4-6	1-3	Hard,	Points, lines	ArcGIS	Yes	1-3	10ft	Detection, heat,	GACC	Yes	No
VETS	4-6	1-3	Hard,	Points, lines	ArcGIS	Yes	1-3	10-50ft	Detection, heat,	GACC	Yes	No
TYPE: Airborne, Situational Awareness												
ANG RC-26	1-2 days	Real time w/	Video	Still and video	N/A	No	Many	<40	Tactical	State	No	No
ANG Helicopter	1-2 days	Real time	Video	Still and video	N/A	No	Many	<40	Tactical	State	No	No
Firewatch	4-6	Real time	Video, downlin	Still and video	ArcGIS	Yes	Many	3-6ft	Tactical	GACC	Exclusive use	No
ANG C-130	1-2 days	Real time	Video	Still and video	N/A	No	Many	<40	Tactical	State	No	No
Title 10 P-3	1-2 days	Real time	Video	Still and video	N/A	No	Many	<40	Tactical	N/A	No	No

Questions?

Dripping Springs Fire, NM