

**Tactical Fire Remote Sensing Advisory Committee**  
**April 27 - Meeting Minutes**  
**Sheraton Hotel, Salt Lake City**

**Participants:**  
(See attached list)

**Agenda:**

- 1) Introductions and Review of TFRSAC goals, structure, schedule [Everett, Vince]
- 2) Summary of NASA Activities since last TFRSAC [Vince]
  - a. Sensor status
  - b. Caravan flights
  - c. Western States Mission planning
- 3) Plans for the Spring Demo at Hunter Liggett [Everett/Vince]
  - a. UAS systems selected [Everett]
  - b. Performance and product expectations [Tom Z.]
  - c. Fort Hunter Liggett burn plans [Vince]
  - d. Logistics, i.e., make your reservations [Susan]
  - e. Evaluation matrix [Susan]
- 4) Update on other activities – NIFC, RSAC, RipComm
- 5) Update on international activities
- 6) Plans for the next year [Vince, Everett]

**Welcome and Introductions**

Everett Hinkley opened the meeting and reviewed the agenda, which was not followed in order. Participants introduced themselves.

**Small UAV Demo – Fort Hunter Liggett Garrison, California**

Copies of the invitation to the demo were circulated to any who might not have received one. The logistics were reviewed so that participants could make their travel and accommodation arrangements.

The five UAVs that were selected for demonstration were reviewed:

- Aerosonde
- Aerovironment PUMA
- Intelletech Vector P
- ACR Silver Fox
- InSitu Scan Eagle / partnered with Evergreen

There will be both day and night flights to view imagery under these different conditions.

The evaluation matrix was reviewed; what will we note about each system? It was pointed out to make sure to note how the team works, cooperation, etc. Susan, working with Tom Z. to provide a revised matrix to the team.

There was a brief discussion about media coverage and Vince mentioned that the press release was in NASA's Public Affairs Office for review.

### **Western States Mission update**

Vince gave a brief update on progress for the Western States mission. The wildfire sensor had just flown successfully on the Caravan, so the instrument is ready to go. The pod is still under construction. The contract with GA calls for at least four long flights, so there should be opportunity to cover the likely fire areas of interest to the group.

Several members reiterated their interest in fire dynamics, i.e., images at successive times, either by loitering or returning to a fire location. If possible, make sure to get accompanying met data from the fire site.

A MODIS underpass is still of great interest and will be attempted. For planning purposes, the team will work to schedule within two weeks of the flight.

Data from the flights will be sent to fire camp, if appropriate. It would also be ideal to coordinate with a manned IR flight, just for comparison.

### **Requirements discussion – Steve Dunagan**

Steve Dunagan led a discussion to clarify requirements for the Collaborative Decision Environment (CDE) visualization client which will be operating during the mission. It will include mission planning tools, appropriate maps and other data sets, real-time video, and a scheduler (where is the plane headed). The screen will be viewable via internet at Grey Butte, NIFC, Ames, HQ (NASA, USFS), and fire camp.

The map base is Google Earth. Other items will include the COA maps, MODIS location, GOESS weather, and possibly an updated map of fire danger ratings.

It should be possible to show not only the flight track, but where imagery was acquired, processed and uploaded to the internet (ftp site). The imagery will consist of 1) a thermal composite, 2) false color with SWIR band, 3) natural color.

### **NIFC/RSAC Update**

The transition of aircraft from Boise to Ogden has gone smoothly enough. Pilots are being trained. The sensor lab will continue to be located in Boise. The on-line flight request system is at RSAC.

### **International Update**

Everett read a note from Dr. Andrew Matthews in Australia about activities there. It is attached. Ken Dutchak gave an update on activities in Canada. The terms of reference developed at the UVS / Banff meeting last fall are attached. Agoston Restas spoke briefly about experiences in Hungary. He had previously made a presentation at the Remote

Sensing Conference and his presentation is available in the proceedings. Agoston will send copies of the European UAVNET roadmap.

### Plans

The fall TFRSAC meeting will likely be held in conjunction with the IR season close-out meeting in Boise.

### TFRSAC PARTICIPANTS – APRIL 27, 2006 - SALT LAKE CITY

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