Welcome to the:
Thirty-First Tactical Fire Remote Sensing Advisory Committee (TFRSAC) Meeting

Hosted By:

NASA Applied Science Program: Vince Ambrosia
USDA-Forest Service: Everett Hinkley

29-30 May 2019
NASA Ames Conference Center (NACC)
NASA / Ames Research Park
Moffett Field, CA.
Meeting Logistics

Please sign-in each day on the attendance sheet in back of room (on table);

NASA Guest Wireless Access Info available on back of name badge;

Continental breakfast/ Lunch / break snacks / drinks provided both days.

Presentations will be made available to all participants (author permitting) after the meetings. We will provide a link to the access point.

POCs:
Vince Ambrosia cell: 408-666-7609
Everett Hinkley cell: 801-455-8764
Introductions: All

Name:

Organization Affiliation:

Role at Meeting: (Presenter, Cheerleader, etc.)
OBJECTIVES

• Share on EO of wildfire by community partners; both from airborne and orbital assets; Help to increase awareness of use of data / information;
• Inform on partner affiliated programs (NASA, USFS, JFSP, DOI, DoD / Intelligence Community, Universities, Private orgs., etc.);
• Encourage Collaborations!

GOALS

• Build new relationships / knowledge;
• Be exposed to new ideas / concepts; Learn something new today and tomorrow!
• Walk away from the meeting with a sense of accomplishment and excitement for the coming year!
• Be relaxed and casual while learning!!
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<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>8:25AM</td>
<td>Meeting start</td>
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<tr>
<td></td>
<td>Welcome and Introductions / Logistics (15)</td>
<td>Hinkley / Ambrosia</td>
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<tr>
<td></td>
<td>NASA Outlook (25)</td>
<td>Vince Ambrosia</td>
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<td></td>
<td>National Infrared Operations Update (20)</td>
<td>Tom Mellin</td>
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<td></td>
<td>U.S.F.S. (Beltway) Update (20)</td>
<td>Everett Hinkley</td>
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<td></td>
<td>CalFire Update (25)</td>
<td>Phil SeLegue</td>
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<tr>
<td>10:15 AM</td>
<td>Break (15 min)</td>
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<td></td>
<td>Canadian Fire / WildFireSat (15)</td>
<td>Josh Johnston</td>
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<td></td>
<td>Fire Imaging Missions to Support Wildland Fire Ops (25)</td>
<td>Evans Kuo</td>
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<td>DoI UAS Program Update (25)</td>
<td>Rich Thurau</td>
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<td>USFS UAS Program Update (25)</td>
<td>Brad Quayle</td>
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<td>Wildland Fire Vis. And 1st Responder Location (15)</td>
<td>Bailey Farren</td>
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<tr>
<td>12:15 PM-1:15 PM</td>
<td>Lunch</td>
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TFRSAC Schedule: 29 May (PM)

1:15 PM
- Fire Immediate Response System (FIRS) Wksp (25):
  - Ambrosia
- DHS Wildland Urban Interface Fire Initiative (20):
  - Everett Hinkley
- Status Update: Operational GOE-R Fire Products (25):
  - Chris Schmidt
- Auto Scheduling of Agile Spacecraft Constellations for Rapid Response Imaging (20):
  - Sreeja Nag
- Update on GeoCollaborate (15):
  - Dave Jones

3:00 PM Break (15 minutes)

3:15 PM
- Thermal Working Group Update:
  - Phil Mead
- Tactical Information Technology Portal (20):
  - Davd Bernat
- FASMEE Update (20):
  - Adam Watt
- SBIR Update (15):
  - Phil Mead
- Machine Learning for Smoke Detection (15):
  - Kinshuk Govil

5:00 PM Adjourn
Dinner – Tied House

6:30 PM
Reservation Name: NASA TFRSAC Meeting
954 Villa Street, Mountain View, CA.

- Exit NASA-Ames Main Gate (Moffett Blvd.)
- Proceed 1.4 miles towards Downtown Mountain View (Moffett changes names to Castro St.)
- Pass over Central Expy and RR tracks.
- Proceed 1 block and turn RIGHT on Villa Street
- Tied House is just past next short block, on RIGHT on Villa Street (954 Villa Street).
- Parking across street or behind Tied House
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<tr>
<td>8:30 AM</td>
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<tr>
<td></td>
<td>Wednesday Recap (10)</td>
<td>Hinkley / Ambrosia</td>
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<td>VALUABLES Cost Effectiveness Study (20)</td>
<td>Richard Bernknopf</td>
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<td>Wildfire &amp; Radar / Active Remote Sensing (20)</td>
<td>Nicholas McCart</td>
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<td>R/T Fire Detection &amp; Results of Suppression (25)</td>
<td>David Fuhr</td>
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<td>10:15 AM</td>
<td>Break (15 min)</td>
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<tr>
<td>10:30 AM</td>
<td>Apps of R/T Tactical Intelligence on Wildland Fires (30)</td>
<td>Hart Drobish &amp; Pat Basch</td>
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<td>Update: TBIRD &amp; TMAS TIR Systems (25)</td>
<td>John Green</td>
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<td>11:30-12:30</td>
<td>AM/PM Open Discussion</td>
<td>All</td>
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<tr>
<td>12:30 PM</td>
<td>Lunch and Close of Meeting</td>
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TFRSAC Recap: 5-29-19

- Partner Agency Status Updated
- Evans Kuo update on requirements matrix, understanding requirements from for management community, then helping to then drive development of capabilities;
- UAS activity updates;
- Fire science mission / campaign updates (FASMEE & FIRE-AQ)
- GOES update (Goes-E / GOES-W) for early fire detection;
- Development of a fire Application for public / law enforcement use to provide info to the community;
- Fire towers / camera developments towards early detection and “sensor web” considerations.
- Swarm / sensor web (Sreeja Nag) for fire disaster monitoring from small sats;
- Geocollaborate cross-platform data sharing system;
- NASA UTM and using the fire scenario as a test bed for UAS low altitude integration into airspace.