

Subcommittee on Natural Disaster Reduction

Remote Sensing Applications Working Group, Meeting Minutes*

20 November 2002, 10:00 AM to 12:00 Noon, NASA HQ Room 6B51

**approved by co-chairs*

Co-Chairs: Rosalind Helz, USGS
Steve Ambrose, NASA

Attendees:

USGS

John Pallister, USGS
Rosalind Helz, USGS
Brenda Jones, USGS/EROS Data Center

NASA

Craig Dobson, NASA HQ
Jim McGuire, NASA/IPO
John Haynes, NASA HQ
John LaBrecque, NASA HQ
Steve Ambrose, NASA HQ

NSF

Rick Fragaszy, NSF

USDOT

K. Thirumalai, USDOT/RSPA

NOAA/NESDIS

John Pereira, NOAA/NESDIS
Michael Hales, NOAA/NESDIS
Pablo Clemente Colon, NOAA/NESDIS
Richard Barazotto, NOAA/NESDIS
William Pichel, NOAA/NESDIS
Peter Colohan, GRS

I. Call to Order

Rosalind Helz called the meeting to order at 10:15 AM and lead a round of participant introductions. She then gave a brief orientation on SNDR, the Remote Sensing Applications Working Group (RSAWG), and the purpose of the meeting, namely to create a paper advancing the idea of the U.S. launching its own SAR satellite system.

II. Presentations

- A. Weather, Ocean, and Hydrologic Applications for SAR, Pablo Clemente Colon, NOAA/NESDIS
- B. Geologic Applications for SAR, John Pallister, USGS Volcano Hazards Program

III. Background Documents

- A. SAR User Requirements from the Ocean Observer Project, William Pichel, NOAA/NESDIS (Paper and Power Point presentation)
- B. SAR Frequency Trade-offs, William Pichel, NOAA/NESDIS (Paper provided, no discussion)
- C. Draft SAR White Paper, John LaBrecque, NASA (Paper provided)

IV. Discussion of SAR White Paper (Summary)

Rosalind Helz and John LaBrecque led the discussion, beginning with a summary of the Subcommittee's instructions to the RSAWG on the scope and purpose of the white paper. The paper is intended to be a five-page promotional piece with strong graphics and well-focused writing for a target audience of policymakers, including OMB, OSTP, and Congress. The working group will first present its draft to the full SNDR for comments and approval. The goal is to have the paper completed, approved by the full SNDR, and in the hands of OSTP by February. John LaBrecque presented his draft as a straw man, noting that it was open for wholesale change. The group agreed that John's draft was an excellent starting point, and made the following recommendations for enhancing the document:

1. Highlight current (and future, until 2008 at the earliest) U.S. dependence on foreign SAR data sources and the inability to plan temporal coverage.
2. Illustrate the benefits of SAR , in the context of the social and economic impact of disasters. (Assessing the absolute economic value of SAR imagery in terms of dollars saved would be difficult if not impossible.)
3. Highlight SAR's all-weather capability, especially important for near-real-time response.
4. Highlight what SAR imagery adds to the capabilities of existing monitoring systems
5. Highlight SAR benefits for all regions of the country, and benefits/requirements from a wide cross-section of federal agencies.
6. Include colorful charts showing not just federal agency users but possible end users (i.e. Los Angeles water authorities, etc.)
7. Solicit as many application ideas as possible, and highlight that many are applicable to Homeland Security and U.S. commercial activity, including:
 - Wildfires;
 - Nuclear explosions worldwide;
 - Oil spills (at home and in the Persian Gulf, other regions);
 - Transportation planning and threats to transportation infrastructure;
 - Vessel tracking (at home and in the Persian Gulf, other regions);
 - Maritime transport in the Great Lakes;
 - Perma-frost melting and release of methane gas;
 - Crop classification and drought assessments, and soil moisture.

This list is in addition to more traditional uses of SAR imagery for obtaining topography and monitoring surface deformation associated with earthquakes, volcanic activity, other tectonic processes, landslides, and subsidence (or inflation) associated with withdrawal (or recharge) of fluids, such as groundwater, petroleum, and natural gas.

The group then discussed the key federal agencies that should be involved. It was noted that USGS, NOAA, NASA, and NSF all have a direct interest in SAR, but that USDA, DOT, DoD, and the Department of the Army (CoE) should also be involved. Some critical agencies (USFS, other USDA) were not able to send representatives to the meeting. All agencies will be invited to contribute to the draft document, with the idea of focusing on important, politically significant applications.

Rosalind Helz suggested that it would be useful to prepare a SAR presentation for the Senate Natural Hazards Caucus, coordinated by David Applegate. The group concurred that this would be a useful venue to educate Hill staffers on SAR-related issues.

Actions:

- John LaBrecque will head up the writing team, which will include the following volunteers: Steve Ambrose, John Pallister (with input from Gerald Bawden and others at the USGS), Pablo Clemente-Colon, and Bill Pichel. John will task the team over email and have weekly conference calls on progress and deliverables. A draft of the paper should be distributed by January 3, 2003 in time for review at the next meeting of the RSAWG.
- Craig Dobson will work to identify the correct non-USFS USDA participants for this effort (possible candidate: Don Klein).
- Rosalind Helz will contact Jim Whitcomb to be the lead participant from NSF, to make contributions and edits to the document.

- Rosalind Helz will contact David Applegate, and invite him to attend the next RSA working group meeting to discuss a possible Natural Hazards Caucus presentation.
- Rosalind Helz will work with John LaBrecque to prepare a progress report for the December SNDR meeting.

V. Next Meeting

The group agreed to meet again on January 7, 2003 from 1:00 PM to 3:00 PM at NASA HQ, room TBA.

VI. Adjournment

The meeting adjourned at 12:30 PM.