

**INTERDEPARTMENTAL COMMITTEE FOR METEOROLOGICAL
SERVICES AND SUPPORTING RESEARCH (ICMSSR)**

Meeting 2017-2 Record of Actions

1:00 p.m. EDT

June 22, 2017

SSMC 2, Room 7224, 7th Floor Conference Room
1325 East West Highway, Silver Spring, MD 20910

| Members | (T) via telecon | Agency |
|---|-----------------|-----------------|
| DaNa Carlis <i>for Craig McLean (Chair)</i> | | DOD/OAR |
| Louis Uccellini | | DOC/NOAA/NWS |
| Vanessa Griffin, <i>for Steven Volz</i> | | DOC/NOAA/NESDIS |
| Chris Ekstrom, <i>for RADM Gallaudet</i> | | DOD/USN |
| Col Fred Williams <i>for Ralph Stoffler</i> | | DOD/USAF A3W |
| <i>Rickey Petty</i> | | DOE |
| <i>Jonathan Berkson(T)</i> | | DHS-USCG |
| Pat Murphy <i>for Paul Fontaine (T)</i> | | DOT/FAA |
| <i>Mr. Mark Kehrli (T)</i> | | DOT-FHWA |
| Chris Cannizzaro | | DOS |
| Dr. Tsengdar Lee <i>for Dr. Jack Kaye</i> | | NASA HQ/ESD |
| Tom Lee (T) <i>for Sandra Smalley</i> | | NASA HQ/JASD |
| Keith Compton (T) <i>for Scott Flanders</i> | | NRC |
| Dr. Pat Harr, <i>for Dr. Paul Shepson</i> | | NSF |
| Mr. Michael Clark (T) | | OMB |
| Dr. Jacqueline Meszaros (T) | | OSTP |
| Dr. William Schulz | | OFCM |
| Mr. Michael Bonadonna (Secretariat) | | OFCM |
| Invited Participants | | Agency |
| Jennifer Sprague, Brittany Croll, | | DOC/NOAA |
| Jesse Carman, | | DOC/NOAA-OAR |
| LCDR Jason Mansur | | DOC-NOAA OMAO |
| George Jungbluth, Joe Pica, Mike Bilder, | | DOC/NOAA-NWS |
| Mike Stringer, Steve Goodman | | DOC/NOAA-NESDIS |
| Bill Spendley (T) | | DOD-USA |
| Angel McCoy | | DOI-BOEM |
| Tammy Farrar (T), Mike Bettwy, Everett Whitfield (T) | | DOT-FAA |
| Tom Lee (T) | | NASA |
| Capt Erika Sauer | | NGA |
| Linnea Avallone (T) | | NSF |
| Jud Stailey, Erin McNamara, Tony Ramirez, Floyd Hauth (T) | | OFCM |

Date of Issue: 30 June 2017

1. OPENING REMARKS.

On behalf of Mr. Craig McLean (NOAA-OAR) and ICMSSR Chair for 2017, Dr. William Schulz, the Federal Coordinator for Meteorology and ICMSSR Vice-Chair, provided opening remarks and moderated the meeting. Roll call was conducted for participants on site and those using teleconference media. Members approved the agenda and the Record of Action from the last ICMSSR meeting.

2. FEDERAL COORDINATOR'S UPDATE.

Dr. Schulz, the Federal Coordinator for Meteorology provided a summary of several key OFCM/Federal Weather Coordination structure activities, including a proposal to hold the 2nd Observational Data Workshop (ODW). His update provided the following information:

- There have been no changes in the OFCM organizational structure.
- The four member agencies for the Interagency Weather Research Coordinating Committee (IWRCC), NASA, NOAA, NSF and Navy, approved the Terms of Reference.
- The Multifunction Phased Array Radar (MPAR) Working Group roster has been updated and a meeting has been scheduled.
- The 2017 Space Weather Enterprise Forum (SWEF) will be held Tuesday June 27, NTSB Conference Center at L'Enfant Plaza. USAF provided ~\$6K for space rental and logistics for the 2017 SWEF. OFCM is seeking a Federal sponsor for the 2018 SWEF [Action Item 2017-2.1.]
- The Committee for Operational Environmental Satellites (COES) met on 20 June 2017 and plans to brief key activities to ICMSSR at the September meeting.
- The Committee for Operational Processing Centers (COPC) met 2-3 May 2017, and reports that it is:
 - Seeking closer coordination with COES and will brief key activities at the September COES meeting.
 - Implementing new fiber connection between NSOF and NMIC at Suitland, MD (supports NOAA-DoD data stream).
- 2nd National Operational Processing Centers Observational Data Workshop (ODW): A point paper was provided to members prior to the meeting that provided the purpose, background, envisioned participants, proposed agenda, expected outcomes and workshop deliverables for a workshop to be held in September 2017. Members agreed that the proposed workshop was important and should be held but because of concerns regarding other agency meetings and activities they recommended that the workshop be delayed until Jan/Feb 2018. They also suggested that AMS be included because of their recent meeting(s) emphasizing observation initiatives and concerns [**Action Item 2017-2.2.**]

3. FEDERAL METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH STRATEGIC PLAN AND ANNUAL REPORT.

Dr. Schulz updated ICMSSR on interagency feedback on the draft Strategic Plan and the Annual Federal Report, due for release in July.

Dr. Schulz briefly reviewed the revised format for the Annual Federal Report for Meteorological Services. The new Annual Federal Report will have five sections (A through E) as shown in a Table of Contents example. A preliminary one page draft of NSF's budget input was provided as an example along with NSF's corresponding budget table entry for FY16, FY 17, and FY18.

OMB asked that an internet link to agency FY18 congressional justification submission (and page numbers where feasible) be provided along with the budget narratives that would point the reader to where they can find additional information on an investment/priority. OFCM is collecting FY18 budget data inputs from agencies with a 7 July 2017 deadline. Agencies should submit these inputs as soon as possible [Action Item 2017-2.3.]

The intent is to publish the (transitional version) FY18 Annual Federal Report with only budget narratives and tables and brief explanatory notes in July 2017. OFCM will collect budget data inputs for the inaugural FY19 Annual Federal Report (robust version) from agencies by 28 Feb 2018, depending on PBR release. The FY19 annual report is planned for release in March 2018.

ICMSSR agency approvals for the Strategic Plan are underway. Substantive feedback was received from USAF and NWS. Suggested changes included:

- Emphasize purpose is to “coordinate,” not to direct actions.
- Stress that cooperation with the plan is based on agency’s available resources and compatibility with mission.
- Need OFCM to have clear authority to operate/coordinate.
- Remove/change Objective 1.2 “Conduct (suggested: ‘Provide forums for discussion of’) development, deployment, and sustainment of common-use systems through formalized interagency processes.”

OFCM will revise and re-submit the Strategic Plan to ICMSSR members (~2 weeks). ICMSSR members will review, and provide concurrence/non-concurrence by 15 August. The path forward is for ICMSSR to provide formal approval at their September meeting, and then present the plan for approval from FCMSSR at their October 2017 meeting.

4. GOES-16 STATUS UPDATE.

Mr. Mike Stringer and Dr. Steve Goodman (NESDIS-GOES-R) provided updates on the status of the GOES-16 satellite and the data products that will be available.

Mr. Stringer briefed the GOES program status. The first GOES-R series satellite (GOES-16) was launched on 19 November 2016 and is expected to remain operational through December 2036. The instrument package for the series included: the Advanced Baseline Imager (ABI); the Space Environment In-Situ Suite (SEISS), which includes two Magnetospheric Particle Sensors (MPS-HI and MPS-LO), an Energetic Heavy Ion Sensor (EHIS), and a Solar and Galactic Proton Sensor (SGPS); the Solar Imaging Suite (SIS), which includes the Solar Ultraviolet Imager (SUVI), the Solar X-Ray Sensor (XRS), and the Extreme Ultraviolet Sensor (EUVS); the Geostationary Lightning Mapper (GLM); and the Magnetometer.

GOES West is at 137 degrees west and GOES East is at 75 degrees west (75W). GOES-16 is scheduled to move from its current test location to 75W in November 2017 and replace GOES-13. GOES 16 will not image while relocating so its scheduled relocation could be delayed if hurricane activity is occurring or forecast. Its post-launch test status is on track with issues only involving the solar sensors and magnetometer. There will be an approximately two-week overlap in GOES-16/GOES-13 operations at 75W to accommodate magnetometer assessment and ABI image product comparison with GOES-13.

GOES-S preparations are on schedule and the launch is projected for spring 2018. GOES-T and GOES-U developments are also on track.

Dr. Goodman presented examples of GOES-16 images that demonstrated the color and resolution improvements. He also showed images of the May 8 Denver hail storm (\$1 Billion in damage), a flooding event from severe storms, the West MIMS fire, Saharan dust, a supercell in Oklahoma, fog dissipation in Pennsylvania, and Tropical Storm Cindy. Other examples were shown of the SUVI image of a solar flare, derived total precipitable water, and atmospheric motion vectors.

He summarized his involvement with the GOES-R Post Launch Airborne Science Cal/Val Field Campaign (March 21 to May 17, 2017) and noted that the GOES-R ABI & GLM Field Campaign primary objectives were achieved.

Members of the ICMSSR commended Dr. Goodman for his contributions to this program and especially his lightning detection sensor/program work.

5. IMPLEMENTING THE WEATHER RESEARCH AND FORECASTING INNOVATION ACT: SECTION 402.

Per ICMSSR direction, OFCM conducted a meeting of a new Joint Action Group to explore implementation options for Section 402 of the Weather Research and Forecasting Innovation Act of 2017. Dr. Schulz summarized the discussion from the Joint Action group meeting and informed the Committee about the JAG's intended way ahead.

The new directives on coordination included formation of an Interagency Committee for Advancing Weather Services (ICAWS) to improve coordination of relevant weather research and forecast innovation activities across the Federal Government.

The JAG identified these issues:

- Some overlap with FCMSSR/ICMSSR missions.
- Opportunity to streamline or encumber weather coordination bureaucracy.
- Potential for a mandate/"official encouragement" for agencies to coordinate.

The initial draft is being reviewed by the JAG and comments are due 23 June 2017. The draft plan has OSTP issuing formal guidance delegating FCMSSR to carry out Interagency Committee for Advancing Weather Services (ICAWS) - assigned duties (which will require re-chartering FCMSSR) and includes section 402(a)(2) status as part of annual Federal Report (to be drafted by a new Working Group).

The next steps for the JAG following review of the draft are to:

Seek legal guidance from several agencies' OGCs.

- Brief recommendations to ICMSSR, seek approval. (September)
- Brief recommendations to FCMSSR, seek approval. (October)
- Present recommendations to OSTP. (TBD)

Members discussed whether there were other alternative approaches to meet the intent of the Congressional directive. Other concerns were expressed about this committee's role in setting research priorities and budget implications.

The members agreed for the JAG to continue work on the Actions/Proposed path but to note ICMSSR's concerns.

6. THE INTERAGENCY COORDINATING COMMITTEE FOR AIRBORNE GEOSCIENCE RESEARCH AND APPLICATIONS (ICCAGRA).

As Chair of the Interagency Coordinating Committee for Airborne Geoscience Research and Applications (ICCAGRA), Dr. Linnea Avallone (NSF) described the group, its purpose and possible consideration for ICMSSR collaboration.

The Interagency Coordinating Committee for Airborne Geosciences Research and Applications (ICCAGRA) was established to improve cooperation, foster awareness, and facilitate communication among sponsoring agencies having airborne platforms and instruments for research and applications, and serve as a resource to senior level management on airborne geosciences issues. The Committee addresses interagency cooperation issues as they pertain to the use of airborne platforms and instrument payloads for individual investigators as well as national and international field campaigns.

The primary purpose of the ICCAGRA is to increase the effective use of the Federal airborne fleet in support of airborne geoscience research programs conducted by the individual agencies. Examples of some successes include:

- Member agencies promoting the use of UAS for scientific research.
- NOAA and NASA joint work on the Global Hawk UAS; NOAA, USCG, DOE joint work in the Arctic.
- Airborne fleet: information, resource and asset sharing:
 - multi-agency support of NOAA's hurricane surveillance mission
 - sharing of information about P-3 re-winging (applies to NOAA, NASA and NRL)
 - sharing of information about Gulfstream aircraft Interagency collaboration for observing complex weather and climate phenomena (Deep Convective Clouds and Chemistry (DC3) mission).
- Interagency collaboration to develop new capabilities.

Current projects include facilitating resource sharing among agencies, sharing best practices for UAS policies and operations, Gulfstream "users group", and dropsonde operations over land.

7. OPEN DISCUSSION.

No additional significant issues.

8. ACTION ITEM REVIEW.

The Secretariat reviewed the status of current and previously taken Action Items.

Open FCMSSR Action Items

| AI # | Responsible Office | Text | Comment | Status | Due Date |
|----------|-----------------------|--|---|--------|----------|
| 2017-1.1 | OFCM, FCMSSR Agencies | Form a JAG to review the Weather Research and Forecasting Innovation Act of 2017 and develop options to implement the Section 402 requirements for the Interagency Committee for Advancing Weather Services. | JAG/402 convened on 5/17/17. Drafting ToR | Closed | 05/12/17 |
| 2017-1.2 | ICMSSR | Present proposals to FCMSSR to implement Weather Research and Forecasting Innovation Act of 2017 Section 402 requirements for the Interagency Committee for Advancing Weather Services. | | Open | 10/24/17 |
| 2017-1.3 | ICMSSR, OFCM | Produce the FY18 Annual Report on Federal Weather Coordination (the replacement for the Annual Plan for Meteorological Services and Supporting Research) as presented during the 26 April 2017 FCMSSR Meeting. | | Open | 08/31/17 |
| 2017-1.4 | ICMSSR, OFCM | Produce the Strategic Plan for Federal Weather Coordination. | | Open | 10/24/17 |

Open ICMSSR Action Items

| AI # | Responsible Office | Text | Comment | Status | Due Date |
|----------|---------------------|---|--|--------|-----------|
| 2015-1.6 | OFCM | Update the Terms of Reference documents for all Committees, Working Groups and Joint Action Groups subordinate to the ICMSSR to include formalized engagement with OSTP. | Work in progress | Open | 05/17/17 |
| 2015-2.3 | OFCM | Plan to conduct the next Space Weather Enterprise Forum in May 2017. | On track for SWEF 2017 on 6/27 | Open | 06/27/17 |
| 2016-2.2 | OFCM, NWS, FAA, DHS | Continue interagency engagement on SENSUR and the related radio-frequency spectrum auction. Regularly present updates to the ICMSSR and FCMSSR. (replaces ICMSSR AI 2015-1.2) | Will remain open until executed regularly | Open | Quarterly |
| 2016-4.2 | OFCM | Provide a copy of the Terms of Reference for the new Committee on Climate Services (CCS) for ICMSSR review. | Draft ToR will be sent prior to the ICMSSR Mtg | Open | 02/10/17 |

| AI # | Responsible Office | Text | Comment | Status | Due Date |
|-------------|---|---|---|---------------|-----------------|
| 2016-4.5 | OFCM, NWS/OOE | Develop a proposal for ICMSSR consideration on how OFCM and the FWE engage in Information Decision Support System (IDSS) interagency coordination. | Work in progress. NWS/OOE is continuing to formulate a concept for interagency engagement | Open | 06/15/17 |
| 2017-1.1 | OFCM | Send the ICMSSR Charter to FCMSSR Chair for signature. | 6/13/2017: Sent for signature | Closed | 06/22/17 |
| 2017-1.2 | OFCM, ICMSSR agencies with WG/MPAR members, WG/MPAR | ICMSSR members validate their membership on the WG/MPAR. Re-convene the WG/MPAR to a) review the WG Terms of Reference, b) brief ICMSSR on ToR applicability and on WG activities, and c) seek ICMSSR guidance going forward. | WG roster updated. Save-the-date email sent for meeting | Open | 06/07/17 |
| 2017-1.4 | OFCM | Establish a Joint Action Group to review OPM 1340 standards and make a presentation to the ICMSSR with recommendations. | No action taken | Open | 06/07/17 |
| 2017-1.5 | OFCM | Publish the current version of Federal Meteorological Handbook -1 "Surface Observing" (FHM-1). | | Closed | 04/30/17 |
| 2017-1.6 | OFCM | Convene an exploratory meeting to determine whether the Federal Meteorological Handbooks should be prescriptive or descriptive in nature. | Mtg scheduled | Closed | 04/28/17 |

Members requested that in the next meeting OFCM should list the status of all groups and whether their ToRs have been updated [Action Item 2017-2.5].

9. NEXT STEPS/CLOSING COMMENTS/ADJOURN

The ICMSSR Chair made closing comments and adjourned the meeting at 2:57 P.M.

Target dates for future ICMSSR meetings are: September 13, and December 6, 2017.

**Interdepartmental Committee for Meteorological Services and Supporting Research
Meeting 2017-2
Action Items**

ICMSSR Action Item 2017-2.1. Secure a government sponsor and funding source for the 2018 SWEF.

Responsible Office: OFCM

Due Date: September 30, 2017

ICMSSR Action Item 2017-2.2. Schedule a date for the 2nd Observational Data Workshop.

Responsible Office: OFCM

Due Date: July 30, 2017

ICMSSR Action Item 2017-2.3. Provide budget input for the FY18 Federal Plan/Annual Report, to include an internet link to agency's FY18 congressional justification submission and page numbers where feasible (additional information on an investment/priority).

Responsible Office: ICMSSR organizations

Due Date: July 7, 2017

ICMSSR Action Item 2017-2.4. Provide updates on the status of Terms of References of all FWE groups.

Responsible Office: OFCM

Due Date: September 30, 2017