

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

Meeting 2017-1 Record of Actions

**1:00 p.m. EDT
March 24, 2017**

Office of the Federal Coordinator for Meteorology
SSMC 2, Suite 7130, 1325 East West Highway
Silver Spring, MD 20910

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

Members	(T) via telecon	Agency
<i>Mr. Craig McLean (Chair)</i>		DOD/OAR
<i>Dr. Louis Uccellini</i>		DOC/NOAA/NWS
Vanessa Griffin, for Dr. Steven Volz		DOC/NOAA/NESDIS
Dr. Chris Ekstrom, <i>for RADM Gallaudet</i>		DOD/USN
Col Fred Williams <i>for Mr. Ralph Stoffler</i>		DOD/USAF A3W
<i>Mr. Rickey Petty</i>		DOE
<i>Dr. Jonathan Berkson</i>		DHS-USCG
<i>Mr. Paul Fontaine (T)</i>		DOT/FAA
Mr. Paul Pisano (T), <i>for Mr. Mark Kehrli</i>		DOT-FHWA
<i>Dr. Rohit Mathur (T)</i>		EPA
<i>Dr. Steve Clarke</i>		NASA HQ/HPD
<i>Dr. Jack Kaye</i>		NASA HQ/ESD
<i>Dr. Cynthia Jones (T)</i>		NRC
Dr. Pat Harr, <i>for Dr. Paul Shepson</i>		NSF
<i>Mr. Michael Clark (T)</i>		OMB
<i>Dr. Jacqueline Meszaros (T)</i>		OSTP
<i>Mr. Mark Brusberg (T)</i>		USDA
<i>Dr. William Schulz</i>		OFCM
<i>Mr. Michael Bonadonna (Secretariat)</i>		OFCM
Invited Participants		Agency
Dr. John Ten Hoeve, Mr. Sim James, Mr. John Ogren, Mr. Mark Miller, Mr. David Misio, Dr. Ming Ji, Dr. DaNa Carlis		DOC/NOAA/NWS
LCDR Jason Mansur		DOC-NOAA OMAO
Mr. Bill Spendley (T)		DOD-USA
Lt Col Steve Davis, Mr. TC Moore		DOD-USAF
Mr. David McCarren, Mr. Frank Baker, Capt. Chris Gabriel, CDR Christi Montgomery, Mr. Ray Chappel		DOD/USN
Maj James Reusse		DOD-USMC
Mr. Rick Heuwinkel		DOT-FAA
Mr. Jud Stailey, Mr. Donell Woods, Ms. Erin McNamara (T)		OFCM
Mr. Kenneth Barnett, Mr. Tony Ramirez,		OFC
Mr. Floyd Hauth (T)		OFCM

Date of Issue: April 19, 2017

1. OPENING REMARKS

Mr. Craig McLean NOAA-OAR, ICMSSR Chair for 2017, provided opening remarks. He welcomed attendees and conducted a roll call for those in the room and on the phone. He reviewed the agenda and no new items were added. (The meeting briefing slides and ROA will be posted on the OFCM website.)

Mr. Michael Bonadonna, ICMSSR Executive Secretary, reviewed the status of current Action Items from the FCMSSR and ICMSSR. Two FCMSSR AIs and eight ICMSSR AIs remain open; two were subject for closing after presentations to the ICMSSR at this meeting.

Open FCMSSR Action Items

AI #	Responsible Office	Text	Comment	Status	Due Date
2016-2.4	OFCM	Forward preliminary SENSr weather requirements documents to the FCMSSR.		Open	11/22/16
2016-2.5	ICMSSR	Proceed with the new process for quadrennial Federal Meteorological Coordination Strategic Plan and Annual reports and deliver the first Strategic Plan to the FCMSSR for approval in spring 2017.	On track	Open	04/25/17

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. Secure funding support from the ICMSSR agencies.	Planning in progress. Federal and corporate funding secured	Open	06/27/17
2016-2.2	OFCM, NWS, FAA, DHS	Continue interagency engagement on MPAR and the related radio-frequency spectrum auction. Regularly present updates to the ICMSSR and FCMSSR.	Will remain open until executed regularly	Open	Quarterly

AI #	Responsible Office	Text	Comment	Status	Due Date
2016-3.2	OFCM	Complete coordination of the draft GOES-R spectrum interference letter with OSTP and OMB then clear through NOAA HQ and send to NTIA.	On hold	Open	03/17/17
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 next ICMSSR Mtg	Open	02/10/17
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. Resuspense to June ICMSSR mtg	Open	06/15/17
2016-4.6	ICMSSR Members	ICMSSR members provide feedback to OFCM on NWS Evolve standards for Meteorologist workforce education/experience and career progression.	On the agenda for ICMSSR 2017-1 mtg	Pending Closure	03/24/17
2016-4.7	USAF, USN	Brief USAF and USN Meteorologist workforce requirements and development processes at the next ICMSSR.	On the agenda for ICMSSR 2017-1 mtg	Pending Closure	03/24/17

2. FEDERAL COORDINATOR'S UPDATE

Dr. Schulz provided a summary of key OFCM/Federal Weather Coordination structure activities. Topics included the ICMSSR Charter approval, updates on the Federal Plan, TCORF, and MPAR.

- The ICMSSR Chair called for concurrence to forward the ICMSSR charter to the FCMSSR Chair for signature. Although concurrence was secured, the US Army and US Air Force members noted that foundational authority for OFCM and the Federal Coordinating Infrastructure needs to be reexamined and reestablished. This has been an ongoing issue and will continue to be pursued by OFCM. **See Action Item 2017-1.1.**
- OFCM is nearing Terms of Reference finalization with the Interagency Weather Research Coordination Committee and the Climate Services Coordination Committee. The ToR for Committee for Operational Environmental Satellites has been signed.
- By mutual agreement of the participants, OFCM deactivated the Working Group for Multifunction Phased Array Radar (WG/MPAR). ICMSSR members discussed whether this action was premature since MPAR technology supports research needed to develop

new radar capabilities that may not be addressed the SENSr initiative. **See Action Item 2017-1.2.**

- The Tropical Cyclone Operations and Research Forum '17 was held in Miami March 14-16. The Forum included a meeting of the Working Group for Hurricane and Winter Storm Operations and Research, which considered changes to the National Hurricane Operations Plan (NHOP). An updated version of the NHOP will be published by May 1, 2017.
- OFCM continues to provide management support for the Space Weather Operations, Research, and Mitigation Subcommittee (SWORM SC) and its six subordinate working groups. OFCM is also developing the "SWORM.GOV" website which will provide public access to SWORM documents and information. The website should be online by this summer.
- OFCM is monitoring progress on H.R. 353/S.570, specifically section 402 which calls for the establishment of an Interagency Committee for Advancing Weather Services under OSTP and identifies the Federal Coordinator for Meteorology to serve as a co-chair of this new Committee.

3. FEDERAL METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH STRATEGIC PLAN

Dr. Schulz presented an update on the revision of process for developing the Federal Plan for Meteorological Services and Supporting Research required by P.L. 87-843. He noted that following direction from the FCMSSCR, the proposed Plan has been substantially streamlined and quadrennial Strategic Plan for Federal Weather Enterprise Coordination has been added. The four-year cycle for a strategic plan and an abbreviated annual report should significantly reduce the workload to produce the documents. Dr. Schulz quickly stepped through the Strategic Plan's goals and objectives. Feedback from NESDIS with alternative wording for the first objective under the first goal was accepted. HQ USAF A3W expressed concern about institutional issues with strategic documents that may commit resources, and asked for additional time for coordination. **See Action Item 2017-1.3.**

Dr. Schulz proposed that since this year's annual report is transitional, it could contain the revised spreadsheets but not the section on progress by agencies toward strategic plans goals and objectives. The intent would be to have all the changes incorporated into next year's Federal Plan. Members agreed to this approach. **See Action Item 2017-1.4.**

4. 1340 METEOROLOGIST QUALIFICATION STANDARD

Dr. John Ogren presented a review of how NWS is evolving and the workforce qualifications that are part of the five key ways NWS will evolve by:

- Better serving partners by enhancing quality and consistency of IDSS at all levels of the organization, in all current locations because analysis shows 94% of partners are local partners – no office closures.
- Improving effectiveness of forecasting in support of IDSS through a collaborative process that makes the best use of technology, reduces duplication, and ensures consistency of the forecast.
- Matching workforce to workload across the organization and building a healthy organizational structure to better meet the needs of NWS partners.

- Building a workforce the NWS needs to deliver science-based service: both through enhancing skills today and hiring for tomorrow.
- Supporting critical science, research, technology and innovation to best meet the NWS mission.

Dr. Ogren discussed possible changes in the criteria for 1340/1341 meteorologist and meteorology tech position descriptions and qualifications. These changes could have significant impact on human resource and personnel situations in many Federal Weather Enterprise organizations.

Meteorologists must meet OPM's GS 1340 standards. Most recent hires have an MS degree. Meteorologist Technicians must meet OPM's GS 1341 standards however, there has been limited hiring of technicians in recent years.

Dr. Ogren proposed that a competency-based GS 5-12 Meteorologist career development model would support the whole office concept and meet the objective of "Building a flexible and nimble workforce the NWS needs to deliver science-based services: both through enhancing skills today and hiring for tomorrow." This career development model creates a single career progression from GS 5 to GS 12.

The workforce team has developed competencies associated with each of five dimensions which range from information management to the integration of science and technology.

A survey of NWS Meteorologists-In-Charge showed strong support for a 5-12 career progression and competency model. In addition, 92% of the approximately 50 Professors at the AMS Heads and Chairs Meeting supported the proposed NWS curriculum changes to the 1340 qualifications. The changes in curriculum for a degree included math, meteorology, interdisciplinary earth sciences, elective courses including social science and communication. Experience would also be a factor in career progression.

CDR Christi Montgomery, Commanding Officer, Naval Meteorology and Oceanography Professional Development Center, Gulfport, MS, described the Navy's Aerographer's Mate and Oceanography Officer Career Progression.

The Aerographer's Mate Education and Training Career Path includes initial technical schooling followed by assignments to gain experience. Advanced courses and training manuals prepare them for analyst and forecasting positions and more senior enlisted assignments. They can also receive semester hours through college partnerships and can come out of 20 years of service with an associate or bachelor's degree.

Officers have a college degree when they are commissioned and are usually assigned to operational commands. They can then be assigned to Naval Postgraduate School followed by advanced technical or higher level command support billets.

CAPT Gabriel briefed the location and use of 1340 and 1341 billets in the Navy. Approximately 45% of all 1340s are involved in research and development at Naval Research Laboratories, and approximately 45% are at operational commands, with most involved in NWP modeling and only a fraction serving as forecasters. The remaining 1340s are at system commands. Most 1341s are employed at the Fleet Weather Centers. He stated that the current job description for these billets is adequate for the Navy.

Col Williams briefly described the AF weather education, training, and career development processes.

Members discussed the changing education requirements for their work forces as science and technology developments require more and different backgrounds and skills. It was decided to convene a meeting to discuss OPM 1340 standards. **See Action Item 2017-1.5.**

5. FEDERAL METEOROLOGICAL HANDBOOK-1

Dr. Schultz stated that a revised FMH-1 has been completed and is ready to be published. ICMSSR approved its release. **See Action Item 2017-1.5.** It was also agreed to convene an exploratory meeting to determine whether the Federal Meteorological Handbooks should be prescriptive or descriptive in nature. **See Action Item 2017-1.6.**

6. EXASCALE COMPUTING CHALLENGES

Dr. Pat Harr, National Earth Systems Prediction Capability Executive Steering Group, highlighted the potential challenges required to fully exploit exascale computing. Exascale computing refers to computing systems capable of at least one exaFLOPS, or a billion billion calculations per second. The Exascale Computing Project (ECP) aims to transform the HPC ecosystem and make major contributions to the nation. It will develop applications that will tackle a broad spectrum of mission critical problems of unprecedented complexity with unprecedented performance, contribute to the economic competitiveness of the nation, and support national security.

Dr. Harr shared his perspectives on High-Performance Computing for Earth-System Modeling. He noted that we are on the cusp of a new computing paradigm and emphasized that to support national needs and resilience, agencies need a voice in the development of exascale computing. DoE is investing in exascale hardware and software, however other agencies (NOAA, DoD, NASA, NSF) need to invest in architectures that support overall Earth-system modeling and other agency-specific needs.

He discussed perspectives from an Earth-system modeling viewpoint, from a computing viewpoint, and from a combined modeling and computation viewpoint. When comparing data density versus computational intensity we are in the gap of large scale data-driven modeling and simulation.

Exascale requires a new computing ecosystem with advances in workforce development, software design, and model efficiency. This community needs to coordinate strategies and at least a partial computing technology that would simplify the migration to exascale.

7. ACTION ITEM REVIEW NEXT STEPS/CLOSING COMMENTS/ADJOURN

Mr. Bonadonna briefed several potential Action Items from this meeting. A coordinated listing is provided at the end of this ROA.

8. NEXT STEPS/CLOSING COMMENTS/ADJOURN

Mr. McLean thanked all the meeting participants. The meeting adjourned at 3:38P.M. The next meeting will be in June 14th. Target dates for future ICMSSR meetings will be September 13, and December 6, 2017.

**Interdepartmental Committee for Meteorological Services and Supporting Research
Meeting 2017-1
Action Items**

ICMSSR Action Item 2017-1.1. Send the ICMSSR Charter to FCMSSR Chair for signature.

Responsible Office: OFCM

Due Date: 4/24/2017

ICMSSR Action Item 2017-1.2. 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.

Responsible Office: OFCM, ICMSSR agencies with WG/MPAR members, WG/MPAR

Due Date: 6/7/2017

ICMSSR Action Item 2017-1.3. Provide a decision on USAF/US Army concurrence or non-concurrence with the draft Strategic Plan.

Responsible Office: USAF A3W

Due Date: 6/1/2017

ICMSSR Action Item 2017-1.4. Establish a Joint Action Group to review OPM 1340 standards and make a presentation to the ICMSSR with recommendations.

Responsible Office: OFCM

Due Date: 6/7/2017

ICMSSR Action Item 2017-1.5. Publish the current version of Federal Meteorological Handbook -1 "Surface Observing" (FHM-1).

Responsible Office: OFCM

Due Date: 4/30/2017

ICMSSR Action Item 2017-1.6. Convene an exploratory meeting to determine whether the Federal Meteorological Handbooks should be prescriptive or descriptive in nature.

Responsible Office: OFCM

Due Date: 4/28/2017