Highlights from the 2014 AMS Washington Forum (AWF)

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Agenda

- The AMS Board on Enterprise Economic Development (BEED)
- The AMS Washington Forum (AWF)
- Highlights from the 2014 AWF
- Preview of the 2015 AWF
- Summary/Questions
AMS Commission on the Weather, Water & Climate Enterprise (CWWCE)
AMS Board on Enterprise Economic Development (BEED)

- Purposes of the AMS BEED:
  - Promote growth in the economic base of the weather, water and climate enterprise
  - Promote quantification of the economic value of the enterprise, including risk

- The BEED fulfills these purposes by bringing together the providers and users of weather, water and climate data, technology and services

- Engagement among these stakeholders has multiple benefits:
  - Promotes understanding of user needs
  - Socializes current and future applicable technologies and trends
  - Matches solutions and services with user needs
  - Facilitates business opportunities
AMS BEED Membership and Major Activities

- The BEED typically consists of 10-12 members with 3-year rotations of service and representation across the major sectors (public, private, academia)

- Chairs of BEED committees also remain engaged with the board’s activities as ex officio members

- BEED committees are charged with maintaining progress in their specific assigned areas and report status back to the board

- The largest activity of the BEED itself is planning and conducting the annual AMS Washington Forum
AMS Washington Forum (AWF): A 3-Day Event Each Spring

- **Purpose:**
  - To provide an opportunity for members of the weather, water, and climate community to meet with senior Federal agency officials, Congressional staff, and other community members to hear about the status of current programs, learn about new initiatives, discuss issues of interest to our community, identify business opportunities, and speak out about data and other needs.

- **Who Should Attend:**
  - All members of the weather, water, and climate community are encouraged to attend, as well as end users of weather, water, and climate information.

- **The AWF runs under a modified Chatham House Rule:**
  - Participants are free to use the information received at the AMS Washington Forum, but attribution of remarks of speakers (including panelists and attendees) by other people is not permitted.
  - Away from the meeting, speakers are free to quote themselves.
  - AMS will post the slide presentations to the AMS website after the event, for which the presenter must provide explicit approval to the AMS.
2014 AMS Washington Forum: Theme and Sessions

- Theme:
  - Leveraging the Enterprise: Strengthening Our Value to Society

- Interactive Session List:
  - Theme Session
  - Commercialization of Weather and Climate Data
  - Impacts of the Changing Arctic
  - Congressional and Executive Staffers
  - Impacts of Extreme Weather and Climate Events on Health
  - Space Weather Mitigation: Recovering from a Carrington Event
  - Federal Agency Leads
  - Some Current Capabilities and Future Plans for Surface Transportation Weather Support
  - Water-Energy Nexus
  - Typhoon Haiyan
2014 AMS Washington Forum: Additional Speakers and Events

- Additional Speakers:
  - Kathryn Sullivan, Undersecretary of Commerce for Oceans and Atmosphere
  - Antonio Busalacchi, Director, Earth System Science Interdisciplinary Center (ESSIC), University of Maryland
  - Sharon Parrott, Vice President for Budget Policy and Economic Opportunity, Center on Budget and Policy Priorities
  - Bill Gail, Current AMS President
  - Alexander (Sandy) MacDonald, Future AMS President

- Other Events:
  - Reception and Dinner (Busalacchi was the dinner speaker)
  - Student Dinner (~25 students from several universities in the DC vicinity)
  - Book Signings

- Website:
2014 AWF Sample Content: Theme Session

When all ice melts
212 ft (65 m)
Present Sea Level

47th Floor
Miami Tower
“Bank of America”
30th Floor

390 ft (120 m)
20,000 years ago
Last Ice Age
**2014 AWF Sample Content: Impacts of the Changing Arctic**

### Arctic Sea Route Navigability

#### Bering Strait (BS) (483 NM)

<table>
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<th>2012</th>
<th>2020</th>
<th>2025</th>
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<td>4</td>
<td>5</td>
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<td>Seasons</td>
<td>Mid Jun</td>
<td>Mid Sep</td>
<td>Mid Dec</td>
<td>Late Aug</td>
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#### Transpolar Route (TPR) (4,170 NM)

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<td>Seasons</td>
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<td>Early Oct</td>
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#### Northern Sea Route (NSR) (4,740 NM)

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<td>Seasons</td>
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#### Northwest Passage (NWP) (5,225 NM)

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<tbody>
<tr>
<td>Vessels</td>
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<td>4</td>
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<tr>
<td>Seasons</td>
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<td>Early Oct</td>
<td>Mid Sep</td>
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</table>

### Notes
- > 40% sea ice
- Shoulder Season: 10-40% sea ice
- Open Water: < 10% sea ice

**Polar routes will gradually open. Transit season is short. Maritime activity growth only 2-4% of global shipping. Will not replace the Suez or Panama Canals as primary shipping routes.**
2014 AWF Sample Content: Congressional and Executive Staffers

- House of Representatives Bill 2413 (HR2413, The Weather Forecasting Improvement Act of 2014)

- HR2431, National Integrated Drought Information System (NIDIS) Reauthorization Act of 2014

- General discussion about the difficulty in legislating improvements to forecasting intermediate time scales that straddle weather and climate
  - Example provided: bad winter in Chicago led to a lot of train delays, which propagated across the nation and subsequently impacted things like ethanol production and grain storage)
Carrington Event in 1859: induced currents made it possible to run the telegraph lines without batteries.

The following is a transcript between Portland and Boston (1859):

- Portland: “Please cut off your battery, let us see if we can work with the auroral current alone”
- Boston: “I have already done so! How do you receive my wiring?”
- Portland: “Very well indeed -- much better”
2014 AWF Sample Content: Federal Agency Leads

Weather-Ready Nation: “Can’t Do It Alone”
National Water Center

MISSION: Deliver state-of-the-science, summit-to-sea, treetop-to-bedrock hydrologic analyses, forecast information, and decision support services to address the Nation’s growing water resources challenges.

VISION: Serve as the Nation’s premier site for integrated water resources science and services and the most trusted and authoritative source for water resources information.
2014 AWF Sample Content: Surface Transportation

Expanding Data Sets

- Mobile platforms being explored to fill data gaps and detect hazards
- Mobile weather data are being assimilated into Univ. of Utah system to test data impacts on analyses
- Mobile data could eventually be included within RTMA

A mobile platform transit pinpoints geography along interstate 68 in West Virginia with sub-freezing air temperature – and a risk for icing.
2014 AWF Sample Content: Water-Energy Nexus
2014 AWF Sample Content: Typhoon Haiyan
Preview of the 2015 AWF

- The next AWF is April 21-23, 2015, at the American Association for the Advancement of Science (AAAS) Building, 1200 New York Avenue NW, Washington, D.C.

- Theme:
  - Applied Decision Support: Meeting User Needs

- Sessions planned:
  - Theme Session
  - Congressional and Executive Staffers
  - Federal Agency Leads
  - Hospital Preparedness
  - Rail/Trucking and Marine Transportation
  - Water Resources and Users
  - Commercial Weather and Satellites
  - Intersection of Science and Legal Issues
  - Interstate and International Water Issues

- Look for the ad in BAMS each month →
- Registration coming soon at AMS website
Thank You!

- Questions?

- You can also contact the Program Committee Chair at shawn.w.miller@raytheon.com
Acronyms

AMS: American Meteorological Society
AWF: AMS Washington Forum
BEC: Board on Enterprise Communications
BEED: Board on Enterprise Economic Development
BEST: Board on Enterprise Strategic Topics
BGS: Board on Global Strategies
BOEM: Bureau of Ocean Energy Management
CGS: Common Ground System
COEIS: Committee on Open Environmental Information Sources
CVD: Congressional Visit Data
CWCE: Commission on the Weather and Climate Enterprise
DOC: Department of Commerce
DOI: Department of the Interior
DSS: Decision Support Services
ESSIC: Earth System Science Interdisciplinary Center
FWCRM: Financial Weather and Climate Risk Management
HR: House of Representatives
ITS/ST: Intelligent Transportation Systems/Surface Transportation
JPSS: Joint Polar Satellite System
NASA: National Aeronautics and Space Administration
NIDIS: National Integrated Drought Information System
NOAA: National Oceanic and Atmospheric Administration
NWS: National Weather Service
OAR: Oceanic and Atmospheric Research
PCW: Polar Communications and Weather
RFI: Request for Information
RTMA: Real-Time Mesoscale Analysis
SDD: Service Description Document
UCAR: University Corporation for Atmospheric Research
USAID: United States Agency for International Development
USGS: United States Geological Survey
USVI: United States Virgin Islands
WEEET: Weather Enterprise Economic Evaluation Team