American Meteorological Society Committee on Weather Analysis and Forecasting (WAF) Annual Report - 2015

Members of the committee remain strongly engaged and involved in numerous activities in support of the Society. In 2015, the Committee was comprised of 22 members, including four student members completing undergraduate or graduate degrees. Members participated in bi-monthly conference calls, a total of six brief discussions regarding the status and direction of the Committee and our activities. In addition, separate calls were held among members and others in our community to organize and execute the 27th Conference on Weather Analysis and Forecasting and the 23rd Conference on Numerical Weather Prediction (NWP) held in Chicago, Illinois from June 29 through July 3. Following the execution of the 27th WAF and 23rd NWP, attention turned to cosponsorship of the Special Symposium on Hurricane Katrina: Progress in Leveraging Science, Enhancing Response, and Improving Resilience, to be held as part of the 96th AMS Annual Meeting in New Orleans, Louisiana, on January 12, 2016.

Activities of the committee, along with key changes in membership, include:

Departing Members

- Or. Kelly Mahoney, who departs the committee after two initial years as a student member and six additional years as a full member, for a total of eight years of service. Kelly served as co-chair of several WAF-led conferences and symposia, including activities at the AMS Annual Meetings in Austin (2013) and Atlanta (2014), other conference organizing committees, including Chicago (2015), and organization of several student presentation award subcommittees.
- Or. Lans Rothfusz, who departs the committee after six years of service, frequently served on WAF subcommittees to guide the selection of recipients for prestigious AMS Awards, and provided guidance to co-chairs of numerous WAF-led conferences by serving as a member of their broader organizing committees.

New Members

- The WAF committee received a tremendous number of volunteers seeking to join us in 2015. Of the 9 new member nominations received, three were selected to replace two outgoing members listed above. Two student member nominations were received, but selections were deferred until 2017. Four student members were appointed or renewed in January 2015.
- Dr. Martin Baxter, a faculty member from Central Michigan University, who has recently supported the WAF committee by helping with the organization of conferences in Atlanta and Chicago.

- Dr. Clark Evans, a faculty member from the University of Wisconsin Milwaukee, who recently supported the WAF committee by aiding the draft and completion of our most recent AMS Statement.
- Dr. Shawn Milrad, faculty member at Embry Riddle Aeronautical University in Daytona Beach, Florida, frequent attendee of WAF conferences, and strong supporter of student and early career engagement within the AMS and his home institution.

Membership Roster

- o Dr. Andrew Molthan, Chair, NASA Marshall Space Flight Center
- o Dr. Rebecca Adams-Selin, AER, Inc.
- o Lt. Col. Jennifer Alexander, U.S. Air Force Academy
- Ms. Cyrena-Marie Arnold, Weather Analytics
- o Dr. James Belanger, Georgia Institute of Technology
- o Dr. Michael Brennan, National Hurricane Center
- o Mr. Walter Drag, NWS Mount Holly, New Jersey
- Dr. Jason Furtado, University of Oklahoma
- o Dr. Joshua Hacker, NCAR/Research Applications Lab
- o Ms. Gail Hartfield-Supina, NWS Raleigh, North Carolina
- o Dr. Kelly Mahoney, NOAA OAR/ESRL/PSD
- Dr. Justin McLay, Naval Research Laboratory
- o Dr. Sam Ng, Metropolitan State College of Denver
- o Mr. Jonathan Porter, AccuWeather
- o Mr. Lans Rothfusz, NOAA/National Severe Storms Laboratory
- o Mr. Brent Shaw, Iteris, Inc.
- o Mr. Alex Tardy, NWS San Diego, California
- o Mr. Jerry Wegiel, Offutt Air Force Base
- o Mr. Robert Banks, Barcelona Supercomputing Center
- Mr. Christopher McCray, McGill University
- o Mr. Joseph Slezak, Rutgers University
- o Ms. Jennifer Tate, North Carolina State University

Conferences and Symposia

- The WAF committee held the 27th WAF and 23rd NWP Conferences jointly at the Hilton Chicago hotel in Chicago, Illinois, from June 30 to July 3. Combined, the two conferences consisted of approximately 350 submitted oral and poster presentations. Thanks to the AMS, the committee was able to award \$1,500 in outstanding oral and poster presentations to each of the conferences, for a total of \$3,000 to support undergraduate and graduate student presentations.
- In early 2016, the committee co-sponsored the Special Symposium on Hurricane Katrina: Progress in Leveraging Science, Enhancing Response, and Improving Resilience, held as part of the 2016 AMS Annual Meeting in New Orleans, Louisiana.

- Upcoming Conferences and Symposia
 - The committee has also begun plans for their next conferences: the 28th WAF and 24th NWP conferences, to be held in conjunction with the 2017 AMS Annual Meeting in Seattle, Washington. Rebecca Adams-Selin and Alex Tardy have agreed to serve as co-chairpersons, and a program committee has been formed to draft and release a Call for Papers. Of special note, the 28th WAF Conference will include a special named session honoring the late Mr. Ron Przybylinski, former Science Operations Officer at the NWS Weather Forecast Office in St. Louis, Missouri. In honor of Mr. Przybylinski's interests in elevated convection, papers will be solicited regarding recent field campaigns and forecasting efforts on the topic. Other sessions will build upon the named session by highlighting advances in severe weather and related topics.
 - Following the Seattle meeting, the next set of WAF/NWP conferences would be tentatively planned for the spring/summer of 2018, following the AMS Annual Meeting in Austin, Texas.

WAF Committee Meetings

Meetings were held every on the second Tuesday of every other month, beginning with February 10, 2015. As these meetings were scheduled well in advance, attendance was strong throughout the year. Times were rotated between morning and afternoon to ensure that members could participate as available. Several committee members participated in additional, bi-monthly calls through June 2015 to assist with plans for our conferences in Chicago.

• AMS Statement and Position Papers

 The AMS Statement on Weather Analysis and Forecasting was completed in 2014 and officially adopted by the AMS Council on March 25, 2015. It remains in force through March 2020 unless superceded by another statement adopted by the AMS Council.

Special Activities

- Members of the committee served on AMS Award nomination committees for Exceptional Specific Prediction and the Mitchell Award. Members also participated on a multi-committee selection process for the Reichelderfer Award.
- The committee nominated and the AMS Council approved of a Named Session honoring Mr. Ron Przybylinski, for upcoming WAF and NWP conferences held in Seattle, January 2017.
- Committee member Brent Shaw continued to lead our involvement in updates to the AMS Glossary of Meteorology. Through Brent's leadership, support from his fellow committee members, and external partners in our community, the following definitions were revised with input from the WAF membership:
 - <u>Weather System</u> (3/23/2015)
 - Pogonip (11/28/2015)

- Road Weather (11/18/2015)
- Hypsometric Equation (11/18/2015)
- Members of the WAF Committee have maintained a strong presence through social media engagement via Facebook and through use of Twitter and hashtags during our recent Chicago meetings. Committee members volunteered to promote weather-related items via Facebook during each month of the year, and helped to contribute other items even outside of their month's assignment:
 - January James Belanger
 - February Michael Brennan
 - March Sam Ng
 - April Rebecca Adams-Selin
 - May Kelly Mahoney
 - June Christopher McCray
 - July Joseph Slezak
 - August Gail Hartfield-Supina
 - September Joseph Slezak
 - November Jennifer Tate
 - December Sam Ng
- Our web presence has been maintained as a vehicle for documenting our service to the Society, with content updated as needed by the following committee members:
 - Robert Banks, Joseph Slezak, and Jennifer Tate

In summary, the AMS Committee on Weather Analysis and Forecasting has provided significant contributions to the Society and its membership through the aforementioned activities, benefitting greatly from the dedication and enthusiasm of our committee members.

Respectfully submitted on behalf of the Committee,

Andrew Molthan Chair, AMS Committee on Weather Analysis and Forecasting