

American Meteorological Society Weather Analysis and Forecasting (WAF) Committee 2014 Annual Report

Due to the active involvement and enthusiasm of our members, the AMS WAF Committee had an extremely successful and productive year. The committee was comprised of sixteen members, three student members, and a chair. The committee met in person at the AMS annual meeting. Three formal teleconference meetings of the full committee were also conducted, as well as numerous discussions by the 2015 WAF and NWP conference planning committee. Our largest efforts were planning for the 27th Weather Analysis and Forecast Conference and the 23rd Numerical Weather Prediction Conference (27 WAF/23 NWP), both to be held in the July-August 2015 time frame, and organizing/co-sponsoring a town hall meeting and a symposium for the 95th Annual Meeting in Phoenix .

Here are the specific report details as requested by the STAC Commissioner:

1. Members rotating off the committee after completing six or seven years of dedicated service:
 - a. **Carolyn Reynolds** (Six years, including service as program chair for the 24th Weather Analysis and Forecast Conference and the 20th Numerical Weather Prediction Conference)
 - b. **Bruce Telfeyan** (Chair past 3 years, member for seven total years. Program chair for the 23rd Weather Analysis and Forecast Conference and the 19th Numerical Weather Prediction Conference and co-chair of the Scientific Program Committee for the 46th CMOS Congress, 25th Weather Analysis and Forecast Conference and the 21st Numerical Weather Prediction Conference)
2. New members (subject to AMS Council approval):
 - a. **Justin McLay**, Meteorologist, Naval Research Lab, Monterey, CA
 - b. **Jen Alexander**, Dean of Faculty, USAFA, Colorado Springs, CO
 - c. **Jerry Wegiel**, Numerical Modeler, SAIC, Bellevue, NE
 - d. **Jennifer Tate**, North Carolina State University, (Student member, M.S.)
 - e. **Robert Banks**, Polytechnic University of Catalonia (UPC), Institute of Sustainability, Barcelona, Spain (Student member, PhD)
 - f. **Christopher McCray**, Lyndon State College (Student member, undergraduate)
 - g. **Joseph Slezak**, Rutgers University (Student member, undergraduate)
3. Conferences, symposiums held during 2014:

- a. Our largest activity was the 26 WAF/22 NWP conferences. Our program chairs were Andrew Molthan and Kelly Mahoney. The link to the actual conference program is at:

<https://ams.confex.com/ams/94Annual/webprogram/26WAF22NWP.html>

The program committee reviewed over 300 abstracts! Some details of our 26 WAF/22 NWP conference are as follows:

- 1) Committees and/or Conferences with which we partnered:
 - a) 4th Conference on Transition of Research to Operations
 - 4 oral sessions, 1 poster session
 - b) 22nd Conference on Prob. and Statistics in the Atmospheric Sciences
 - 4 oral sessions, 1 poster session
 - c) Sixth Symposium on Aerosol-Cloud-Climate Interactions
 - 2 themed oral session
 - d) 18th Conference on IOAS-AOLS
 - 4 oral sessions, 1 poster session
 - e) Tenth Annual Symposium on New Generation Operational Environmental Satellite Systems
 - 1 poster session
 - f) 11th Symposium on the Urban Environment
 - 1 oral session
 - g) 30th Conference on Environmental Information Processing Technologies
 - 2 oral sessions
 - h) AMS Board for Operational Government Meteorologists
 - Joint Town Hall Meeting on “NOAA’s Weather Modeling Strategy”
 - 2) We hosted 34 sponsored oral sessions including joint and themed joint sessions, 30 of which were hosted by WAF/NWP. The remaining sessions were hosted by other conferences.
 - 3) We had 165 total oral presentations among all joint sessions, of which 153 were hosted by WAF/NWP. The remaining twelve occurred in other jointly sponsored sessions.
 - 4) We had 135 poster presentations hosted by WAF/NWP and joint with the conferences listed above.
- b. The AMS WAF Committee participated in the AMS 16th Conference on Mountain Meteorology, held 18-22 August in San Diego, CA. **Dr Josh Hacker** and **Derek Mallia** led our WAF effort to jointly sponsor this session. The Mountain Meteorology Committee expressed interest in improving and expanding the numerical prediction content in their meeting. Josh and Derek participated in abstract selection and scheduling of oral and poster presentations, in a WAF co-sponsored session. The result was a set of broad-ranging contributions including

numerical model improvements, simulation results, and forecasting results and challenges with an emphasis on mountainous environments.

4. Plans for future conferences/symposia/town hall meetings:

- 95th AMS Annual Meeting 2015, Phoenix, AZ
 - 1) Update on THM with BOGM and BHE, Wed, Jan 7, 12:15 to 1:15 PM. Check out the website: <http://annual.ametsoc.org/2015/index.cfm/programs-and-events/town-hall-meetings/town-hall-meeting-future-directions-for-employment-for-newly-graduated-meteorologists/>
 - We are in the process of lining up a panel of experts from academia, the private sector, and the government. Topic is on job opportunities for recent graduates. Panel members will be from government, academia, and private sector. Each member will give five minute remarks and then the moderator will open it up to questions from attendees. Panel members so far: John Knox (U. Georgia), Jason Tuell (NWS Eastern Region Director)
 - 2) We are assisting with the First Symposium on High Performance Computing for Weather, Water, and Climate. **Alex Tardy** and **Carolyn Reynolds** are on the program committee and will be chairing or co-chairing sessions. The symposium is for a single day (Thursday, 8 January).
- The 27th Conference on Weather Analysis and Forecasting, 23rd Conference on Numerical Weather Prediction, set for either Nashville, Philadelphia, or Chicago in the June – Aug 2015 time frame. **Sam Ng** is our program chair and **Andrew Molthan** is the co-chair. Our original location choice, Denver, didn't work out as no hotels were available within the AMS price range except for the weeks surrounding July 4th weekend (we decided these were not good weeks for the conference). Brenda Ward is looking into other options (Nashville, Philadelphia, or Chicago). Sam and Andrew are working on putting together a call for papers, which will go out in November.
- 96th AMS Annual Meeting 2016, New Orleans:

Mary Cairns (lead program chair for the 2016 Annual Meeting) contacted me to see if we might be interested in co-sponsoring some sessions (part of a symposium) focused on the 10th anniversary of Hurricane Katrina. She has also reached out to the Satellite Meteorology, Oceanography, and Climatology committee as a possible partner for us. On October 16th, I took part in a planning teleconference with Mary and President-elect Sandy MacDonald. A one day (maybe longer) symposium is in the works, with invited and contributed talks and posters. I recommended that our incoming chair, Andrew, serve as POC, but Andrew can recommend someone else to be point person.
- Justin Small, Chair of Air-Sea Interaction Committee, contacted us about having a joint conference with them. Our conferences are out of sync right now, but the 2017 Annual Meeting might be a possibility or the summer of 2018.

5. WAF Committee meetings:

- a. Our initial meeting of the year was held on Feb 4th (during the AMS Annual Meeting in Atlanta).
- b. Three additional committee meetings were conducted by telephone conferences. These occurred on May 12, July 22, and Oct 18.
- c. Our next meeting will be during the AMS Annual Meeting in Phoenix on January 6, 2015.

6. AMS statement and position papers:

- AMS WAF statement drafting committee continued to work hard on the updated statement throughout the year. Here is the committee membership:

Name	Sector
R. Bruce Telfeyan	Government
Yvette Richardson, PhD	Academia
Jason Martinelli, PhD	Government
Richard Carpenter, Jr., PhD	Private
Martin Baxter, PhD	Academia
Nate Johnson	Social Scientist
Chad Gravelle, PhD	Government
Becky Adams-Selin, PhD	Private
Clark Evans, PhD	Academia
Neil Stuart	Government

- We held an organizational meeting in Atlanta on Feb 6th. There were several conference calls during the year by the four subgroups formed for the statement (Introduction; How Are Forecasts Made; How Reliable Are Today's Forecasts; Users of Weather Information and Forecasts; and Opportunities for Future Improvement.)
- On Oct 14, the AMS Council was given our draft statement and asked to vote on the question, "Do you approve to post online the draft of the AMS Weather Analysis and Forecasting Information Statement for the 30-day member comment period?"
- On Oct 27, the AMS Council approved the thirty day posting of the draft WAF Statement for AMS member comment.
- The writing committee will meet in Phoenix on Jan 8 to review our progress and lessons learned in this lengthy process.

7. Special activities (short courses, outreach ...). None.

8. AMS Award Judging Activities:

- **Exceptional Specific Prediction (ESP) Award Judges:** **Michael Brennan, Brent Shaw, Lans Rothfus** (recused from judging due to having nominated one of the candidates), **Sam Ng, Jonathan Porter, Cyrena Briede, Jason Furtado, Walter Drag, Gail Hartfield-Supina,** and **Alex Tardy.**

- **The Charles L. Mitchell Award:** **Josh Hacker, Andrew Molthan, Carolyn Reynolds, Kelly Mahoney, Rebecca Adams-Selin, James Belanger, Charles Kuster, Derek Mallia,** and **Kathryn Shontz.**

- **Note:** AMS has not received any nominations for this award for the past several years. STAC (Ward Seguin) will work with us later in the year so this will not happen again next year. WAF will need to develop an aggressive, proactive approach to elicit nominations for this award in the future.

- **Francis W. Reichelderfer Award:** **Alex Tardy** and **Jon Porter** served as judges (along with individuals from BOGM, Hydrology, and Coastal Environment Committee).

9. Glossary of Meteorology (GoM) support: The committee provided recommendations on five proposed additions to the GoM. **Brent Shaw** served as the committee coordinator for these reviews assisted by many other WAF members:

- a. Correction to the formula for Equivalent Potential Vorticity;
- b. Correction of the definition of the term Gas Constant;
- c. Correction of the definition of the term Saturation Equivalent Potential Temperature;
- d. Addition of the term Flash Heat;
- e. Correction of the term Turbosphere; and
- f. Revision of the definition of Precipitable Water.

10. Member recognitions and awards:

- a. **Andrew Molthan** was selected to serve as the new chair of the Weather Analysis and Forecast Committee starting in January, 2015.
- b. **Gail Hartfield-Supina** received the Isaac Cline Award for Hydrometeorology, for work in successfully transitioning the Raleigh NWS Office to AWIPS2.
- c. **Lans Rothfus** continued to serve as the Acting Deputy Director of NOAA's National Severe Storms Laboratory (July 2013 to present).
- d. **Lans Rothfus** received the National Weather Association's 2014 Operational Achievement Individual Award for "passion and dedication to the science of meteorology which have led to numerous innovations in the NWS throughout his

career, and for maintaining a visionary influence on the future of operational meteorology.”

11. Student member recognition and award:

- None to report this year.

12. Issues you would like to see the STAC and/or the Council to consider:

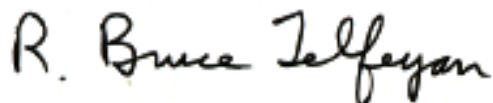
- WAF members are in agreement that AMS Student Travel Funding is a wonderful program and opportunity. However, members feel that the existing prohibition on funding for students who are presenting at the Annual Meeting or conference should be removed.

13. Additional items:

- a. We continue to actively maintain our WAF Committee Facebook page that contains basic information about the committee and a link to the committee's AMS website. It is at this link: <https://www.facebook.com/WAFcommittee>. We rotate the responsibility to provide new posts to our page on a monthly basis among committee members who have Facebook accounts. Here is the schedule for the past year and upcoming months:
 - March **2014: Jason Furtado**
 - April: **Cyrena-Marie Briedé**
 - May: **Gail Hartfield-Supina**
 - June: **Alex Tardy**
 - July: **Charles Kuster**
 - August: **Katy Shontz**
 - September: **Derek Mallia**
 - October: **Bruce Telfeyan**
 - November: **Jonathan Porter**
 - December: **Brent Shaw**
 - January **2015: James Bellanger**
 - February: **Michael Brennan**
 - March: **Sam Ng**
 - April: **Becky Adams Selin**
 - May: **Kelly Mahoney**
- b. From this committee, one Fellows nomination was submitted this year (and the individual was selected). Also, there is:
 - one active Reichelderfer nomination submitted by a member of this committee, and

- One active Exceptional Specific Prediction Award nomination submitted by a member of this committee.
- c. We updated our AMS website to the new standard template (<http://www2.ametsoc.org/stac/index.cfm/committees/committee-on-weather-analysis-and-forecasting/>). Dr. **Sam Ng** serves as our committee webmaster and kept the website current. In addition to the standard entries, our site contains our Terms of Reference, photographs of committee members, information about upcoming WAF Committee events, the past five years of annual reports, the minutes of recent WAF Committee meetings, and thanks to the efforts of **Jon Porter**, a complete listing of our past conferences and future planned events. Shortly, we will be adding WAF Committee member photographs. **Cyrena Briedé** and new student member **Robert Banks** will assume webmaster duties in 2015.
- d. We developed our first Five Year Plan as per guidance from STAC. Our plan is perhaps too mechanical in nature, though it does provide excellent reminders of recurring events. Having now viewed similar plans from other STAC committees, we will strive in the next year to incorporate goals to expand the outreach of our committee into appropriate areas consistent with the AMS vision.
- e. The WAF Committee plans to designate a Vice Chair when **Andrew Molthan** assumes the chair position in January. We are still working to identify a member willing to serve in this capacity.
- f. We will continue to encourage our student members to apply for AMS travel grants. Also, at our conferences, we will continue to award the maximum of \$1,500 total in student cash awards for exceptional presentations at each conference. We did receive approval from AMS (Claudia Gorski and Ward Seguin) that we are eligible for \$1,500 allocations for student awards for both our conferences (WAF and NWP). Previously, we only qualified for a single \$1,500 allocation.

Respectfully submitted,



R. BRUCE TELFEYAN

Chair, AMS Weather Analysis and Forecast Committee



Committee Photo, 94th AMS Annual Meeting, Atlanta, GA.

Left to right: Carolyn Reynolds, James Belanger, Jon Porter (back), Kathryn Shontz (front), Andrew Molthan, Bruce Telfeyan, Charles Kuster, Brent Shaw, Edward Szoke, Sam Ng, and STAC Commissioner Ward Seguin