This newsletter is intended to enhance communications between CCMs, the BCCM, and the AMS. It is published quarterly to provide information about the on-going activities of the CCM program. All CCMs are reminded that there is a location on the AMS website for a forum to facilitate communication and exchanges between CCMs. The CCM forum can be accessed via the CCM webpage at: http://ametsoc.org/amscert/ccm/index.html

The Chair’s Column

Dear CCM Colleagues:

The Board of Certified Consulting Meteorologists (BCCM) sends greetings to all present and aspiring CCMs, and other readers interested in learning more about the AMS certification program for “consulting” meteorologists (see comments below). The AMS website contains a full description of the program and all the procedural steps the Board follows in administering the process. This Newsletter is also a continuing effort to inform present CCMs of program developments and progress, and to challenge you to participate in strengthening the program. Your Board is committed to maintaining the high standards for running the program that we inherited from our predecessors.

(continued on page 2)

Daubert & Expert Witnesses

Gale Hoffnagle, CCM #152

Daubert is the name of a US Supreme Court case (Daubert v. Merrell Dow Pharmaceuticals) in which the Court established the standards for expert testimony. Those standards are as follows:

(Continued on page 2)

3 CCMs Elected 2013 AMS Fellows

We would like to extend congratulations to the three CCMs who were elected Fellows of the AMS as of the 2013 AMS meeting in Austin, TX:

− John F. Henz, CCM # 270
− Gale F. Hoffnagle, CCM #152
− Vincent R. Sheetz, CCM #547

Be sure to congratulate them at your next opportunity!
The Chair’s Column  
(Continued from page 1)

You may be surprised to know how much discussion has gone into use of the word “consulting” in our program name, Certified Consulting Meteorologist. Certified is reasonably straightforward (though not simple), and Meteorologist should be obvious (though neither is this one all that simple). But that pesky term Consulting has probably been over-thought by some. Merriam-Webster says consulting means: “providing professional or expert advice” – OK so far? Yours truly had the immense fortune to associate with some of the earliest CCMs during the previous millennium and learn why the program was developed, and how the term CCM was simple and obvious to them. Beyond government-funded and academic teaching and research were the few specialists who could understand applied meteorology information needs in commercial fields such as industrial, legal, agricultural and others. It took slightly different knowledge and communication skills than those required for large-scale operational measurements and forecasting, or theoretical and experimental research. These few specialists typically worked alone or in small groups, consulting to attorneys, companies, etc. As the program expanded to meteorologists employed by large companies and within government and academic sectors, the term consulting acquired a broader meaning applying to those working in applied meteorology under many employment structures.

If you are still reading this column, you may consider responding to the challenge mentioned in the first paragraph. Yes, applied meteorology is a dynamic and rapidly evolving field. We believe that professional development is highly important, and it should begin with our applicant testing process. We refreshed the question (and answer) set recently; this needs to be an on-going process. So please send me suggested material for the written and oral exams. Though the Board has grown and represents a good range of expertise, we also must rely on those actively engaged to strengthen our effort.

We established a simple e-mail address that helps me focus efforts on this important topic and could remain for future Chairs: bccm.chair@gmail.com. We would appreciate hearing from you.

Best regards,

Paul M. Fransioli, CCM #291
Chair, Board of Certified Consulting Meteorologists
American Meteorological Society

Daubert & Expert Witnesses
(Continued from Page 1)

Judge is gatekeeper: The task of “gatekeeping”, or assuring that scientific expert testimony truly proceeds from "scientific knowledge", rests on the trial judge.

- Relevance and reliability: This requires the trial judge to ensure that the expert's testimony is "relevant to the task at hand" and that it rests "on a reliable foundation". Concerns about expert testimony cannot be simply referred to the jury as a question of weight. The Judge must find it more likely than not that the expert's methods are reliable and reliably applied to the facts at hand.
- Scientific knowledge = scientific method/methodology: A conclusion will qualify as scientific knowledge if the proponent can demonstrate that it is the product of sound "scientific methodology" derived from the scientific method.
- Factors relevant: The Court defined "scientific methodology" as the process of formulating hypotheses and then conducting experiments to prove or falsify the hypothesis, and that it considered relevant for establishing the "validity" of scientific testimony:
  1. Empirical testing: whether the theory or technique is falsifiable, refutable, and/or testable.
  2. Whether it has been subjected to peer review and publication.
  3. The known or potential error rate.
  4. The existence and maintenance of standards and controls concerning its operation.
  5. The degree to which the theory and technique is generally accepted by a relevant scientific community.

These standards apply to all Federal court expert testimony and most State courts. If the other side of the case files a motion requesting the expert not be allowed to testify based on a Daubert determination, the court may grant a separate hearing before the actual trial so that the judge can decide if the expert's testimony is admissible in the trial. If not, the other side can still attack the expert's science or methods at trial but the decision about the expert’s credibility will be left to the jury.

A Daubert motion usually requires an exchange of briefs by the attorneys which outline the challenge to your expertise or methods and a response by your side, in which you will participate, explaining why your qualifications and methodologies are acceptable.

It is clear by reviewing the standard that the expert has (Continued on page 3)
many things to consider in preparing his/her expert report and deposition testimony. Most importantly, do not stray from your qualified expertise. One of the Daubert motions that I had to contend with was based on the fact that I cited a Chemical Engineering text for the equation to calculate emissions from a pinhole leak in a pipe. The plaintiffs argued that I was not a chemical engineer and therefore was not qualified to use the equation. I prepared for the hearing by emphasizing my engineering course work in college and finding the same equation in air quality modeling texts. The issue was not decided in court because the plaintiff’s attorneys did not show up for the hearing and thus their motion was denied.

The next most important advice is to use a standard well recognized method and follow the method assiduously. Errors in following the method or variations in the use of the methodology are points at which the other side will attack. There is very little room for the expert to casually say that the answer is based on professional judgment because of years of experience.

Remember that the job of an expert is to inform the court and the jury of the science behind a conclusion, not to win the case.

In many cases both sides file Daubert motions on the other’s experts. In those cases you will be asked to prepare the briefs on why the other expert did not meet the standard and why you did. In one case, where we had eliminated my expert counterpart, the other side then filed a nuisance Daubert motion on my testimony a week before the trial. The judge held a quick hearing and we went to trial without his ruling. After the trial I asked what the ruling would have been. Counsel requested that the judge comment on the Daubert ruling and graciously the judge replied that he would not have granted the plaintiff’s motion.

Keep to your knitting, don’t get outside of your expertise and don’t get caught up in the lawyers advocacy position. They are supposed to be advocates, you are not.

The American Meteorological Society (AMS) is partnering with Springer to enable the electronic distribution of dozens of AMS’s books and monographs, including out-of-print legacy titles that will be made available through print-on-demand as well.

The twelve titles available as eBooks immediately will grow to approximately fifty in 2013, and three to five frontlist titles will be added each year. The current collection includes key works on climate change and meteorological hazards including Lewis and Clark: Weather and Climate Data from the Expedition Journals and Deadly Season: Analysis of the 2011 Tornado Outbreaks as well as instructional texts like Eloquent Science: A Practical Guide to Becoming a Better Writer, Speaker, and Atmospheric Scientist.

For more details, see http://blog.ametsoc.org/news/ams-ebooks-no-longer-just-icing-on-the-cake/.

New CCMs

Since the last newsletter was published, the following meteorologists completed all requirements for certification and were added to the roll of active CCMs:

Megan Linkin, Armonk, NY CCM 688
Tye Parzybok, Windsor, CO CCM 689
Joseph (John) Feldt, Fayetteville, GA CCM 690
Brent Shaw, Norman, OK CCM 691

Be sure to make them feel welcome to the CCM ranks at your next opportunity!
2013 AMS Meetings of Interest

12th Conference on Polar Meteorology and Oceanography, 29 April-2 May 2013, Seattle, WA

19th Conference on Atmospheric and Oceanic Fluid Dynamics, 17–21 June 2013, Newport, Rhode Island

17th Conference on the Middle Atmosphere, 17–21 June 2013, Newport, Rhode Island

41st Broadcast Meteorology Conference, 26–28 June, 2013, Nashville, TN

Second Conference on Weather Warnings and Communication, 26–28 June 2013, Nashville, TN

15th Conference on Mesoscale Processes, 6–9 August 2013, Portland, Oregon

36th Conference on Radar Meteorology, 16-20 September 2013, Breckenridge, CO

AMS 19th Satellite Meteorology, Oceanography and Climatology Conference and the 2013 EUMETSAT Meteorological Satellite Conference, 16–20 September 2013, Vienna, Austria

10th Symposium on Fire and Forest Meteorology, 15–17 October 2013, Bowling Green, KY

Other Meetings of Interest in 2013

The following meetings are hosted by separate organizations.

National Oceanic and Atmospheric Administration (NOAA) Satellite Conference for Direct Readout, GOES/POES, and GOES-R/JPSS Users, 8–12 April 2013, College Park, Maryland

11th Annual Climate Prediction Applications Science Workshop (CPASW), 23–25 April 2013, Logan, Utah

19th International Conference on Nucleation and Atmospheric Aerosols (ICNAA), 23–28 June 2013, Fort Collins, CO


AMS Award Nominations

Consider making a nomination for one of the society’s annual awards that will be bestowed in 2013. The call for AMS Awards and Fellows Nominations has been issued and information is available at http://www.ametsoc.org/awards.

New Fellows are elected each year by the AMS Council at its fall meeting from a slate submitted by the Fellows Committee of not more than two-tenths of 1 percent of all AMS Members.

Among the society’s annual awards available to be presented are the Henry T. Harrison award for outstanding service by a consulting meteorologist. The Harrison award was established to recognize a consulting meteorologist for outstanding contributions to the profession, clients, and society. Nominees should demonstrate expertise in weather or climate and their applications, adherence to ethical behavior, and a high level of service to clients and/or the weather and climate enterprise.

Since self-promotion for personal recognition and gain is a character trait that is not admired in our culture, it falls to co-workers, managers, and students to initiate the awards process for a deserving person. The nomination process requires a nomination letter and three letters of support, along with other background material. Preparing this material is obviously a burden for those wishing to offer a name to receive an award, but without the willingness of society members to do this for deserving colleagues, the awards process could not exist, so give serious consideration to participating in the process. There is no satisfaction like that of seeing someone that you nominate actually being selected to receive an award and knowing that your effort made it possible.

We encourage you to nominate scientists, practitioners, broadcasters and others you believe are deserving of one or more of 30 prestigious awards. The awards are open to all sectors of the Society - academia, government, and industry. Please visit the website for more information or contact:

Melissa Weston for Awards, mw Weston@ametsoc.org, (617) 226-3904;

Anne McDonough for Fellows, acdonough@ametsoc.org, (617) 226-3903.

Nomination Deadlines:

-- Online Awards and Fellows: 1 May 2013

-- Honorary members: 1 July 2013

-- Lecturers: 1 October 2013

For details about these meetings see the AMS Bulletin or check the AMS website at: http://www.ametsoc.org/MEET/meetinfo.html
The Board of Certified Consulting Meteorologists

Members who will be serving on the board during 2013 are:

**Terms Expiring 2014:**
- Timothy Scott Dye, CCM 619
- Paul M. Fransioli, CCM 291, CCM Board Chair
- H. Michael Mogil, CCM 391, CBM 334

**Terms Expiring 2015:**
- Buddy A. Richie, CCM 648
- Jason Shafer, CCM 662
- Dick Westergard, CCM 632

**Terms Expiring 2016:**
- Joseph Chia-Yung Chang, CCM 553
- Esmaiel Malek, CCM 667
- Jay Rosenthal, CCM 602

**Terms Expiring 2017:**
- Mitchell Baer, Ph.D., CCM 474
- Jennifer Call, CCM 674
- Mark Wenclawiak, CCM 631

**Ex Officio Members:**
- Jay J. Trobec, CCM 665, AMS Commission on Professional Affairs.
- Kelly Savoie, AMS Manager, Marketing/Special Programs

2013 BCCM Committees

**Broadcast Committee:** The function of this committee is to work with the Certified Broadcast Meteorologists (CBM’s).

  Tim Dye, Mike Mogil

**Candidate Grading Committee:** This committee is charged with identifying opportunities for organizing and conducting regional oral examinations and assisting the Chair in the organization of the Annual Meeting Oral Examinations.

  Mike Mogil, Buddy Ritchie, Esmaiel Malek

**Written / Oral Test Committee:** This committee is charged with updating the questions used for the written and oral exams to reflect all aspects of current professional consulting and ethical challenges. This committee is in charge of soliciting and editing new exams for the CCM written exam. It is important to keep exam questions current with our rapidly changing field.

  Jay Shafer, Dick Westergard, Esmaiel Malek, Jay Rosenthal

**Newsletter:** This committee solicits articles and news items for the quarterly CCM Newsletter, edits the submitted material, and formats the Newsletter for publication on the CCM Web site.

  Dick Westergard, Jennifer Call

**Professional Status and Marketing Committee:** This committee oversees the growth and development of the CCM Forum at the Annual Meeting; develops conference links with the National Council of Industrial Meteorologists, the National Weather Association and AMS committees with similar interests; and develops a relationship with the AMS Executive Board to ensure the CCMs can participate in the review of crucial AMS Policy Statements before they are released.

  Mike Mogil, Tim Dye, Dick Westergard, Joe Chang, Mark Wenclawiak

(continued on page 6)
2013 BCCM Committees
(Continued from page 5)

**Professional Development Committee:** This committee oversees the Professional Development portfolios and their content. The committee will additionally look into existing programs such as the UCAR COMET training modules for use in maintaining proficiency.

  Buddy Ritchie, Esmaiel Malek

**Social Media Committee:** This committee is to keep up on the CCM Facebook and LinkedIn sites.

  Tim Hall (CCM not on Board), Jay Shafer, Jennifer Call

**Grading Guidelines:** This committee is charged with keeping the CCM grading guidelines current and preparing these guidelines for the CCM Board.

  Jay Rosenthal, Tim Dye, Jason Shafer, Esmaiel Malek

**Henry Harrison Award Nominations Committee:** The purpose of this committee is to solicit and review the Henry T. Harrison Award nominations.

  Mitchell Baer

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2013 AMS Meeting
Austin, TX

Thank you to everyone who volunteered and attended the 2013 AMS Meeting in Austin, TX! The recorded presentations are now available and posted to the AMS website at https://ams.confex.com/ams/93Annual/webprogram/start.html.

Thank you to all who participated in the *Sixth Annual CCM Forum: Certified Consulting Meteorologists: Taking prediction beyond climate and weather: The CCM’s tools for providing solutions to real world problems.*
BCCM New Members

Three CCM’s were welcomed onto the board at this year’s meeting in Austin, TX. Dr. Mitchell Baer, Jennifer Call, and Mark Wenclawiak are excited to serve in this capacity.

Dr. Mitchell Baer

Dr. Baer is the director of Office of Oil and Gas Analysis, within the Office of Policy and International Affairs at the Department of Energy. He has been with the Department of Energy for over 12 years. The Office of Oil and Gas Analysis is responsible for the review and analysis of legislative initiatives and enacted bills, regulatory rulemakings, and implementation program plans related to the energy sector, including oil, natural gas, LNG, refined petroleum products and alternative and renewable energy resources. The Office is also responsible for policy reviews and analyses concerning environmental legislation and regulations that impact the energy resource sectors and facilities. The Office works closely with other DOE program offices, including the Energy Information Administration (EIA) and the Office of Fossil Energy, as well as other Federal and State agencies and industry organizations.

Prior to his tenure with the Department of Energy, Dr. Baer held positions with the American Petroleum Institute, several environmental consulting companies and with the Department of the Interior. His undergraduate degree is in Chemistry; he has a Master’s Degree in Atmospheric Sciences, Meteorology and his Ph.D was awarded in Environmental Science and Public Policy.

Jennifer Call

Ms. Call is a senior meteorologist with the Tennessee Valley Authority (TVA). She has over ten years experience providing meteorological support across the agency including work for Nuclear Power, Fossil Power, National Environmental Policy Act, River Operations and other various support areas. Currently her focus is providing routine technical support for estimating dose exposure due to airborne releases from nuclear plants by determining transport and dispersion conditions. She is a member of the TVA Radiological Environmental and Meteorological Instrumentation Committee (REMIC) which provides oversight of the nuclear meteorological program; and a member of the Nuclear Radiological Emergency Preparedness Team, filling the meteorologist position by providing meteorological data summaries and plume vector plotting and analysis, as well as forecasting meteorological conditions in preparation for emergencies involving TVA nuclear plants or nuclear transportation accidents.

Ms. Call is a co-chair of the ANSI/ANS-3.11 “Determining Meteorological Information at Nuclear Facilities” Working Group for the 2015 revision, and is on the steering committee of the Nuclear Utility Meteorological data Users Group (NUMUG). She holds a B.S. and a M.S. in Geosciences from Mississippi State University.

Mark Wenclawiak

Mr. Wenclawiak received a B.S. in Meteorology from Pennsylvania State University, and an M.S. in Environmental Science (air pollution focus) from Drexel University. Mark obtained his CCM certification in 2006 with specialties in regulatory permits and applications; consulting services; and air pollution. He has more than 19 years of professional consulting experience providing air quality services comprising regulatory applicability evaluations; permitting; auditing; ambient air and meteorological monitoring; air dispersion and deposition modeling; and, environmental program management. Mark’s experience includes nation-wide projects in various manufacturing sectors such as pulp and paper; Portland cement; power generation; surface coating; metals; food and beverage; life sciences; and, higher education.

Mark currently is a Technical Manager with All4 Inc. in their Atlanta, Georgia, office (www.all4inc.com).

CCM Program Questions?

If you have any questions about the CCM program— including questions from others interested in applying for certification—you can either refer them to the AMS web site: (http://www.ametsoc.org/amscert/index.html#ccm)
or, if they are looking for someone to actually talk to, feel free to refer them to BCCM members listed on page 5 of this newsletter. If the board member is unable to directly answer specific questions they will either refer the questioner to the chair or help them find the answer.
CCM & Social Media Update

LinkedIn

The LinkedIn page is becoming more active so if you have not joined, please do! The LinkedIn page will be accessed and open only to CCM’s. As of writing this article there are currently 53 members of the LinkedIn page. You must join LinkedIn (it is free) first before requesting to join the Certified Consulting Meteorologists’ page. Once you join LinkedIn (or if you are already a member) then just type in “Certified Consulting Meteorologist” in the search box on the top right to search for our group. We anticipate the LinkedIn site as being an easy way for CCMs to communicate with each other and keep us all abreast of new news, developments and items of interest to CCMs.

Facebook

For all CCMs, colleagues and the general public, we have a CCM Facebook page. It can be found by searching in Facebook for “Certified Consulting Meteorologist (CCM)”. This page needs much more interest generated and this can begin with each CCM “liking” the page (currently 102 likes).

Jen Call, Tim Hall and Jay Shafer are the CCM social media committee and are all very up to date on the latest and greatest social media tools. Please contact one of them for any additional information.

Paul Fransioli CCM#291, Chair of CCM Board
Elizabeth Austin, Ph.D., CCM#572

It has come to our attention that some of our members may benefit from some instructions on how to join these social media sites and connect with the CCM group / page. We will attempt to outline the basic steps below.

LinkedIn:

Go to http://www.linkedin.com/

New users - fill out the registration information found on the home page & click “Join Now”.

Returning users - sign in with your current user name and password at the top of the home page.

Once logged in, type Certified Consulting Meteorologist in the search box (upper right corner).

Request to join the group. Please provide CCM# and state where you reside so that we can cross-check your CCM status with the AMS CCM Directory.

Once your request had been accepted, you should be notified either via email (to the email address you have tied to your LinkedIn account) or in the notifications section of LinkedIn (found at the top of the page denoted by an icon that looks like a flag).

You should now be able to start discussions, comment on others posts, etc. within the group!

Facebook:

Go to https://www.facebook.com/

New users - fill out the registration information found on the home page & click “Sign Up”.

Returning users - sign in with your current user name and password at the top of the home page.

Once logged in, type Certified Consulting Meteorologist (CCM) in the search box (at the top of the page). Please note, there are two Certified Consulting Meteorologist pages. Be sure to select the one with (CCM) after the full name. At the time of this article there are slightly more than 100 people that “like” this page. The other page is simply a Wikipedia posting and is not maintained by our board.

Then click on “Like” under the banner picture (near the top right corner).

You now should receive notifications when we post material to the CCM Facebook page, and be able to comment on posts!
CCM Professional Development Reminders

In 2004, the Council of the American Meteorological Society approved a professional development component for all of the Society’s certification programs. AMS Certified Consulting Meteorologists (CCMs), Certified Broadcast Meteorologists (CBMs), and Sealholders must submit a professional development portfolio consisting of 28 points every 5 years. As a means of evaluating the program, no more than 5% of the CCM portfolios submitted each year are randomly chosen to be audited.

AMS Headquarters sends reminder letters out in the summer to those certification holders whose portfolios will be due at the end of year. A final reminder letter will be sent the following February to CCMs whose portfolios are past due. The 28 professional development points must be submitted through the AMS online tracking system at http://www.ametsoc.org/PDTS/. A table of acceptable activities may be found on the AMS Web site at http://www.ametsoc.org/amscert/ccmpointstable.cfm. Your online membership profile credentials are used to log into the tracking system. You may enter activities as you complete them since the system saves entries until they are ready to be submitted for review.

CCMs do not need to submit proof of completion of their activities; however, it is a good idea to keep this information on file in case their portfolio is chosen to be audited. Individuals may be contacted by the Chair of the Board of Certified Consulting Meteorologists (CCM) for additional information if their portfolio is chosen during this audit. Results of the audits will be mailed to those individuals whose portfolios were selected.

In order to retain active CCM status, certification holders must pay their renewal fees each year and complete the professional development requirement every five years.

Professional Development Tips

Establish an online membership profile (http://www.ametsoc.org/memb/account/index.cfm) and keep your login credentials handy.

Log into the tracking system and check to see when your next professional development portfolio is due.

Review the table of activities so that you are aware of what is acceptable.

Enter activities into the online system within one or two weeks of completion.

If you judge science fairs, mentor students, or engage in office sponsored training programs, keep a log of names, dates, and locations for easy reference.

Email ccmpdts@ametsoc.org if you have a question on whether an activity is acceptable.

When you are ready to submit your points for review, make sure to go to the “summary” tab in your portfolio and then hit the “submit for review” tab at the bottom of the page. Entering the required points into the system does not mean that your portfolio has been submitted.

All CCMs are encouraged to submit items for this quarterly newsletter. We would like at least one article from a CCM about what they are doing for each issue. To submit items please forward them to one or both of the editors:

Dick Westergard at: dick.westergard@shadetreemeteorology.com or Jen Call at: Jennifer.M.Call@gmail.com.