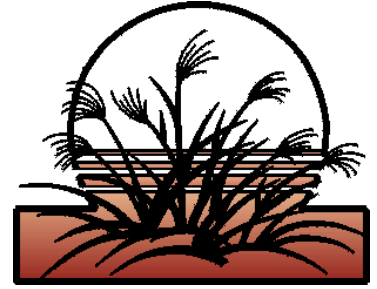


NEWSLETTER
of the
TWIN CITIES CHAPTER
AMERICAN METEOROLOGICAL
SOCIETY
September 2009 Vol. 31 No. 1



The September meeting of the Twin Cities Chapter is at 7 PM, Tuesday, September 15, 2009 at the National Weather Service in Chanhassen. To get a topic on the agenda for the business meeting, please arrive before 7 PM. For more details, see the back page for specific directions to the meeting location including a map and an interactive Google link. AMS Members, interested acquaintances and members of the public are welcome to attend.

September Meeting: Red River Flooding of Spring 2009



Image © Orfield Photography, LLC Matthias Orfield

A forecaster with the North Central River Forecast Center will speak with us about their efforts regarding the Red River Flooding of the Spring of 2009. The flooding impacted a number of communities along the Minnesota and North Dakota border and farther north into Mantioba, including Wahpeton-Breckenridge, Fargo-Moorhead, Grand Forks, and Winnepeg. The flooding from 2009 in Manitoba is the second worst since at least the 1880s. The flooding brought back memories of the flooding just over a decade ago that devastated the Grand Forks area in 1997.

We will be starting a test with a new format for the meeting starting in September. For more details see Chris's comments below.

President's Corner: Chris Bovitz president@twincitiesams.org

I hope everyone had a great summer! With the kids returning to school, it's time for our chapter to start another year. We officers got some good things planned, and we hope you're as excited as us. Things are basically going to be the same, but there will be some differences.

Anyway, here are some things we plan to do differently this year:

- Meetings will be on the **THIRD TUESDAY** of the month unless otherwise noted. This will be different from the past couple of years. Mark your calendars!
- We're going to a more structured meeting. The business part of the meeting will be from 7:00 p.m. to 7:30 p.m. (unless otherwise noted). At 7:30 (or as close as practical), the speaker will begin their presentation.
- There will be a better effort made to have snacks at the meeting.
- Members who attend the meetings are asked to bring a nonperishable food item. These items will be brought to a local food shelf.
- We will be phasing out the paper newsletters. After a study, it was discovered that the cost of a hardcopy newsletters consumed nearly all of that member's dues. Many other organizations have gone to electronic-only newsletters, and I think it's time we do the same. The newsletter is also posted on the website.
- We will be changing the method of membership: Instead of all dues being collected in the fall at the beginning of the chapter year, dues will apply for a 12-month period starting with the month in which you paid. For example, if you pay your dues on December 15, your "dues year" runs from December to December. We will keep track of this and notify you when you need to re-up your membership.

If there is anything that you'd like us to do differently, or if there is a speaker you'd like us to have, please talk with one of the officers. Some of our best ideas have come from the members.

-Cb

Movin' On, Movin' Up, Movin' Out

If you have news in your personal or professional life you would like to announce to the chapter, please send a summary to
newsletter@twincitiesams.org.

News and Notes

A comment from the Webmaster:

You might have noticed our web site hasn't been updated as it has been in the recent past. This is because there were some server problems at where we host our pages (at the national AMS), and I've had to depend on them to update the pages. They say they should have something set up soon to allow us to update our own pages again. I'll keep things as updated as possible.

Newsletter contributors welcome:

We are seeking several members who are interested in contributing material for the newsletter. There are many different opportunities available for those who wish to participate. We have ample room for monthly or bi-monthly columnists. If you want to help but don't think you have enough material for either of those two options we welcome single articles and one-time contributions. If you are interested in helping out please contact Kevin by email at newsletter@twincitiesms.org.

Looking for an Assistant Editor:

We are also looking for an individual to help in compiling the newsletter and assisting in its production. The responsibilities of this person include but are not limited to; proofreading, content production, and research. Members interested in becoming an assistant editor should contact Kevin by email at newsletter@twincitiesms.org for more details.

A Look at Weather History: Balloons & Kites

Anthony Stender
astender@iastate.edu

It isn't all that unusual to look at the sky on a calm summer's or autumn's day and to see a hot air balloon or even a kite floating in the distance. In the early 1780s, Joseph and Etienne Montgolfier were running about the countryside of France testing unmanned hot-air balloons. Fearful that someone else would develop a balloon, too, the Montgolfier brothers demonstrated their balloon to the public during a bout of poor weather on June 4, 1783. Despite their success, a committee of physicists soon declared that balloons were impossible, and they refused to acknowledge the work of the Montgolfier brothers. In the months that followed, the brothers staged first an unmanned and later a manned balloon flight for Louis XVI and Marie Antoinette. The unmanned flight is noteworthy in that it carried a barometer, as well as a duck, a chicken, and a sheep. After these flights, no one could argue that balloons were impossible.

With the recent discovery of hydrogen, some early balloons relied on hydrogen for lift. J.A.C. Charles used

hydrogen to life a balloon to 10,000 feet. But on one of these flights, his balloon frightened the local peasants, and the peasants swiftly destroyed the balloon with muskets and pitchforks. After that incident, proclamations were sent about France to warn the people in advance about these new-fangled contraptions.

During the same era, kites were also quite popular. Thomas Melvill and Alexander Wilson began a series of experiments with kites near Glasgow in 1749. First, they designed a kite that could fly up to the clouds, and it required more than one person to hold onto the string. Later on, they learned how to attach thermometers to the kites, and they were able to drop the thermometers back to earth without bringing down the entire kite. However, they did not attempt



Image © [George Thomas](#)

to learn anything about electricity with their kites. That was left for Franklin and others to attempt in the early 1750s.

In 1895, the U.S. Weather Bureau looked into developing kites that could fly up to 10,000 feet with the purpose of recording temperature, moisture, pressure, and wind data. Similar experiments were also tried in England in the 1880s. As of the 1890s, the best kite was still unable to reach 4,000 feet. Meanwhile, tethered and non-tethered weather balloons were gaining popularity in Europe. The beauty of the weather balloon was that it could rise to high altitudes at a high velocity. As an aside, even at this early date, the Europeans were attaching notices to the balloons, offering a reward for the return of the recovered balloons. By the start of World War I, weather balloons gained popularity in the U.S. as well, and weather kites fell by the wayside.

Works Cited:

- Kim, M.G. 2004. Balloon mania: news in the air. *Endeavour*, 28(4): 149-155.
- Marvin, C. F. 1896. Kite experiments at the weather bureau. *Monthly Weather Review*, 24(4): 113-123.
- Gaffney, J. S. and N. A. Marley, 2003. Chemist and meteorologist – Antoine Lavoisier, 5th Conference on Atmospheric Chemistry.
<http://ams.confex.com/ams/annual2003/techprogram/paper_56568.htm>

Minutes of the May 21, 2009 meeting

President Chris Bovitz called the May 2009 meeting of the Chapter to order at 7:03pm on May 21, 2009. Secretary-Treasurer Bryan Howell and Newsletter Editor Kevin Huyck were in attendance along with 11 members. The meeting convened at the National Weather Service Forecast Office in Chanhassen, MN following a picnic outside the building.

The meeting opened with the customary introductions and was followed by a reading of the April meeting minutes by Secretary-Treasurer Bryan Howell. A motion was made by Nicolle Morock to accept the minutes with a second by Craig Edwards. The motion passed. Following the minutes was the Treasurer's report. Secretary-Treasurer Bryan Howell went over the finances from the past month and over the past chapter year. Kevin Huyck moved to accept the reports with a second from Chuck Schoeneberger. The motion passed.

President Chris Bovitz next announced the winners of the winter contest. Bill Enderson came in first for snowfall with Craig Edwards in a close second. Mike Bardou was first in the temperature category. President Bovitz then presented the prizes to the winners that were in attendance.

Officer elections were next on the agenda. Nominations were opened for each position with a reading of the position duties as found in the chapter constitution. One person was nominated for each position with the membership casting white ballots in the candidate's names. The officers for the 2009-2010 chapter year are:

President: Chris Bovitz
Vice-President: Matt Friedlein
Secretary-Treasurer: Bryan Howell
Newsletter Editor: Kevin Huyck

In addition to the election of officers, there were a few positions that needed to be filled as well. First up was Science Fair Coordinator. Matt Friedlein agreed to continue to serve in this position with possible assistance from Diane Cooper. This position will be revisited in the fall to see if there is any more interest. The second position was for the

chair of the newly created By-laws committee. Kevin Huyck volunteered to chair this committee, which will consist of the officers and any other interested parties. Meeting information will be forthcoming.

One of the constitutional amendments was briefly discussed next, but no action could be taken since the language was not complete and the no action was taken at the last meeting to put the process in motion. The language for the amendment to the elections article was finalized and will be ready to act on in the fall.

President Bovitz next spoke about the chapter activities over the past year and some ideas for the future. Following this Secretary-Treasurer Howell then spoke briefly about the AMS Local Chapter Handbook and a few of the items listed within that would be of interest to the chapter as they addressed a few of the topics that had been under discussion over the past few meetings. President Bovitz then thanked everyone for a great year. Craig Edwards followed with a motion to adjourn the business meeting with a second from Mike Bardou. The membership approved the motion and the business meeting was adjourned at 7:57 PM.

The evening's speaker was member Craig Edwards. Craig retired as Meteorologist-in-Charge at the Twin Cities WFO in 2007 and then went to Minnesota Public Radio to start weather programming. Craig regaled the members with stories of his years in the NWS and made comments on how much technology has changed the way things are done in that time. For example, when he started, the radar that was used at the Milwaukee office was located in Neenah, WI and the data had to be faxed in, which by that time was 5 minutes old. He wrapped his presentation up with a case study on how the forecast changed through one day with an incoming MCS from September 1981 when he was at the Indianapolis office.

- Bryan J. Howell
Secretary/Treasurer
sectreas@twincitiesams.org



AMS on the WW W and now on Facebook, too!

Please check <http://www.twincitiesams.org> for lots of interesting information, changes and updates. If you're on Facebook, check out our group at ...

<http://www.facebook.com/group.php?gid=50494792025>

The September meeting begins sharply at 7pm Tuesday, September 15, 2009 at the National Weather Service in Chanhassen. We will start building the agenda for the business meeting at 6:45 with adoption and opening of the business meeting at 7pm. The Red River Flooding presentation will begin after a short break around 7:30pm. Click the link below for a Google Map to the meeting location. Get directions by selecting the "Get Directions" option from the text box on in the middle of the map.

[http://maps.google.com/maps?q=1733+lake+drive+west+55317+\(National+Weather+Service\)](http://maps.google.com/maps?q=1733+lake+drive+west+55317+(National+Weather+Service))