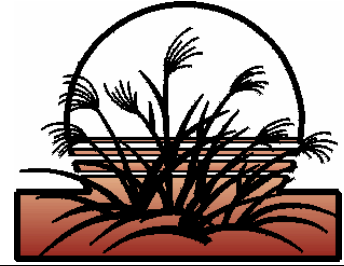




NEWSLETTER  
TWIN CITIES CHAPTER  
AMERICAN METEOROLOGICAL  
SOCIETY  
December, 2007 Vol. 29 No. 4



The meeting of the Twin Cities Chapter of the AMS will be at 6:20 PM Tuesday, December 11th, 2007, KSTP-TV Studios, 3415 University Ave., Saint Paul, MN 55114-2099. Specific directions to the meeting can be found on page 6. AMS chapter members, interested acquaintances and potential members are invited to attend.



*KSTP Visit*



Once again, it's time for our meeting/visit at a TV station, and this year it's KSTP's turn. We have been invited to sit in on the 6:30 p.m. newscast, as well as taking the usual tour of the studios. We are limited to 30 attendees, and, as we did last year, slots will be filled on a first-come first-served basis for members first. (There has to be *some* benefits of membership.) If you would like to bring a nonmember, you may state so, but whether your guests can come or not depends on how many slots are still available.

Please let me know via e-mail ([president@twincitiesams.org](mailto:president@twincitiesams.org)) or via phone (952 469-6425) **before 11:59 p.m. Sunday, December 10**. After that, open slots will be filled with nonmembers in the order their names were received.

So, if you would like **to attend the broadcast, please arrive at the KSTP studios no later than 6:20 p.m.** You might have to wait a few minutes, but please arrive promptly. Since we are imposing upon the staff during their work hours in their offices, I'd like to make it as easy as possible for them. If you don't want to, or can't make the newscast, you can show up for just the tour. **For the tour, please arrive no later than 6:55 p.m.** to allow seating and settling. I will not be able to attend the meeting, nor will any of the other officers, so I have designated Karen Trammell president pro tempore for the evening.



While there, please keep in mind that the weather department is short-staffed due to one of their co-workers being out on leave. And also remember that our hosts need to prepare for another newscast that evening, which will become imperative if the weather turns sour.

**A Graupel Crystal**

<http://www.its.caltech.edu/~atomic/snowcrystals/class/w050207b074.jpg>

## *President's Corner: Chris Bovitz*



Bild: Reifgraupel  
(Bildautor: Bjorn Beyer)

Last week's meeting at Steak and Ale was one of the better ones I've seen. Rich Naistat gave a very interesting and insightful presentation. I don't know whether it was the good food or the talk, which attracted people, but let's just say that it was the talk. A lively crowd provided many interesting topics of discussion before and after Rich's talk.

We've been gaining new members every month, and there were at least two new members at the November meeting. Word continues to

ooze out. There are more than a few people who haven't re-upped with the chapter from last year. If you want to continue to be an active part of this community, let us know! Visit the web site - [twincitiesams.org](http://twincitiesams.org) - for the application. And keep in mind that entries for the forecasting contest will only be accepted through the 15th, so if you're feeling lucky (and/or smart), send in your educated guesses by then!

It looks like our February meeting will be another restaurant meeting with someone from the St. Paul District of the Corps of Engineers. I am not familiar with restaurants in that part of the metro. If you have a good idea for a restaurant for our meeting with moderately priced food and a room in which we can have a meeting, please let me know ([president@twincitiesams.org](mailto:president@twincitiesams.org)).

## *Chapter Poster*

Lisa Schmit has been hard at work creating a poster for presentation to the AMS meeting next (!) month. Since this is our 60th year of existence, it would be great to have pictures of the "olden days" of the chapter. If you have any pictures of AMS people or activities from the past, far or near, please contact Lisa at [poster@twincitiesams.org](mailto:poster@twincitiesams.org).

## *Movin' On, Movin' Up, Movin' Out*

If you've heard some news about a member, send it to Kurt ([newsletter@twincitiesams.org](mailto:newsletter@twincitiesams.org)).

If you have big changes in your personal or professional life you would like to announce to the chapter, please send a summary to [newsletter@twincitiesams.org](mailto:newsletter@twincitiesams.org).

## **Member Sign-up and the Member Page**

This year, we have a new and improved [member application page](#) to support our new [member page](#). You can fill out the page on-line and send the information to the secretary/treasurer, or you can print it out and send it in, too. Either way, we need your dues, dependent on how you want your newsletter delivered.

We're going to have a list on the web of our members. You can see it at <http://twincitiesams.org/members.html>. This will be a list that the public will see, so if there's something you don't want to be seen, denote that when you fill out the membership form. I know that web spiders are out there and can pull e-mail addresses out of web pages. To fix that, I will make e-mail addresses images, making them harder to see by these web-page-searching programs. And if you don't want any information of yours listed, let us know.



## *Minutes of the November 2007 meeting*

The November 2007 meeting of the Twin Cities chapter of the American Meteorological Society was called to order at 7:43 pm on November 13, 2007, by President Chris Bovitz. Vice President Lisa Schmit and Secretary/Treasurer Lori Bovitz were also in attendance along with nearly 20 members and potential members.

Introductions were made and the secretary and treasurer reports were read.



Our chapter was a sponsor of the Northern Plains Winter Storm Conference in St. Cloud. Members Karen Trammell, Rich Naistat, and Chris Bovitz presented at the conference. Several attendees said the program this year was a good operational conference and improved from last year. The chapter plans to be a sponsor again next year.

A report on the chapter poster planned for the national meeting was given by Lisa Schmit. She has submitted the abstract and is in the process of bringing it all together. Since this is the 60<sup>th</sup> year of the chapter, Lisa has requested old pictures of the chapter to help celebrate our history.

The meeting next month will be the annual TV station tour. The meeting will be December 11<sup>th</sup> at KSTP studios. Chris Bovitz will be checking to see if there will be a limit to the number of attendees. The presenters will likely be Dave Dahl and Rob Koch.

[http://blog.lib.umn.edu/hgrot/eva/innergeek/cat\\_minnesot\\_a.html](http://blog.lib.umn.edu/hgrot/eva/innergeek/cat_minnesot_a.html)

Upcoming meetings include a presentation in January by Bill Sites. He will describe his experiences aboard a NOAA Corps ship. In February, there will be a presentation by the Army Corp of Engineers and in March, Julie Westerlund of the Minnehaha Creek Watershed District will discuss the implications of climate change on stormwater runoff.

Bovitz reminded us that the web site will always have the most up-to-date information about upcoming meetings and other events.

The business portion of the meeting was adjourned at 7:55 p.m.

After the meeting, Rich Naistat, former SOO of the Twin Cities WFO, discussed his impressions of the Department of Commerce Inspector General Report of the Rogers, MN, tornado of September 16, 2006. He reminded us that these impressions were his alone.

To give a frame of reference, Rich described the inspection done by the Department of Commerce Inspector General (IG) in 2001. Then he went into the investigation done by the IG after the Rogers tornado.

The tornado occurred at 9:54 p.m. and resulted in the fatality of a child. There was no tornado warning before the tornado struck and the information from the WSR-88D was inconclusive whether a tornado was forming. Five minutes before the tornado, there was no tornadic signature on the WSR-88D. A severe thunderstorm warning was issued for the storm that created the tornado.

After the event, Senator Dayton requested an investigation by the IG. The NWS conducted their own service assessment and the conclusions indicated the office did what they could with the technology they had.

The IG investigation still went forward despite the results of the service assessment. Some of the questions that were asked included, do you have the state of the art technology? What would you need to do a better job?

One of the recommendations included having access to real-time data from the FAA's terminal Doppler radar site in Woodbury. This radar showed a signature indicating the possible development of a tornado a few minutes before the tornado touched down.

In the final report, the office performance was considered to be good to above average as compared to the rest of the region and nation.



Theodore Gray

### *Upcoming AMS Chapter Meetings and Other Events*

2007-2008 Chapter Year		
Date & Time	Event	Location
Starting November 30, 2007 6:00 pm	<a href="#">Skywarn Recognition Day</a>	
Tuesday, December 11 7:00 pm	Tour of <a href="#">KSTP</a>	<a href="#">KSTP-TV Studios</a> St. Paul, MN <a href="#">(map)</a>
January 2008 7:00 pm	January meeting Speaker: Bill Sites Topic: Life aboard a NOAA Corps ship	<a href="#">Twin Cities WFO</a> Chanhassen, MN <a href="#">(map)</a>
January 20-24	<a href="#">88th Annual Meeting of the American Meteorological Society</a>	New Orleans, LA
February 12, 2008 7:00 p.m.	February meeting Speaker: someone from the St. Paul District, U.S. Army Corps of Engineers Topic: tbd	tbd
Tuesday, March 18 7:00 p.m.	March meeting Speaker: Julie Westerlund, Education Coordinator, <a href="#">Minnehaha Creek Watershed District</a> Topic: Implications of climate change on stormwater management	<a href="#">Minnehaha Creek Watershed District</a> Deephaven, MN <a href="#">(map)</a>
April 2008 7:00 pm	April meeting Speakers: Seniors at St. Cloud State University Topics: Their senior theses	<a href="#">St. Cloud State University</a> St. Cloud, MN
Tuesday, May 20, 2007 7:00pm	May meeting Picnic, recap of the year, elections, and planning for next year	<a href="#">Twin Cities WFO</a> Chanhassen, MN <a href="#">(map)</a>



## *A Look at Weather History: December 1944 – January 1945*

Anthony Stender

When Germany launched its last-ditch offensive in the Ardennes on December 16, 1944, the weather played a very key role in the outcome of the battle. In previous battles, armies tended to avoid the Ardennes area due to its difficult terrain and poor weather. To the east of the Ardennes is the Eifel, a plateau region with rolling hills, heavy forests, and many small villages dotting the landscape. This area proved to be an effective area for staging German troops in the month preceding the attack. The Ardennes itself is open and rolling in the north, and it becomes more of a high plain with isolated hilltop forests in the south. Needless to say, the terrain is highly variable and surrounded by rivers, providing a good reason for armies to bypass the area. The terrain could easily restrict an army's ability to maneuver, despite the abundance of good roads and railways in the region.

Germany was convinced that large forces could traverse the region quite easily from east to west based on previous maneuvers through the area during the war. They also understood that the region typically encounters heavy rains in November and December, followed by heavy snows. The ground in the region is primarily clay, so it wouldn't support tank movements during the rainy period. But once the ground freezes, tanks can almost move at will. Those reasons convinced the Germans to plan their counterattack for the Ardennes.

Hitler wanted the Germans to hold off their attack on the Allies until a 10-day period of bad weather could be expected. This was no easy task, since most of the region's weather moves in from the British Isles and the Atlantic. Poor weather from mid-November on allowed Germany to concentrate her forces undetected. To the Germans' continued good fortune, fog and mist during the opening days of the battle kept the Allies from providing air support to her troops. But a combination of wet weather and fluctuating temperatures created muddy conditions that hampered tank movements on both sides. After seven days, on December 23, cold and dry air moved in, bringing with it clear skies. Finally, the Allies were able to bring in the air support and the supplies that were desperately needed. Moreover, the ground finally froze hard enough to allow the movement of tanks, which played to the Allies' advantage. During this same stretch of time, drifting snow hindered German troop movements in the Eifel region.

This favorable weather lasted through Christmas until the 28<sup>th</sup>. Arctic air dropped into the area at that point, bringing with it blizzard conditions, heavy snow, and poor visibility. The Allies began their final counterattack on January 3, just in time for another bout of poor weather. This time, the culprit was a fog that persisted for most of a two-week period. This round of weather hindered air support, but the Battle of the Bulge was essentially over, as the Allied ground troops finally managed to overwhelm the German forces.

### **Sources:**

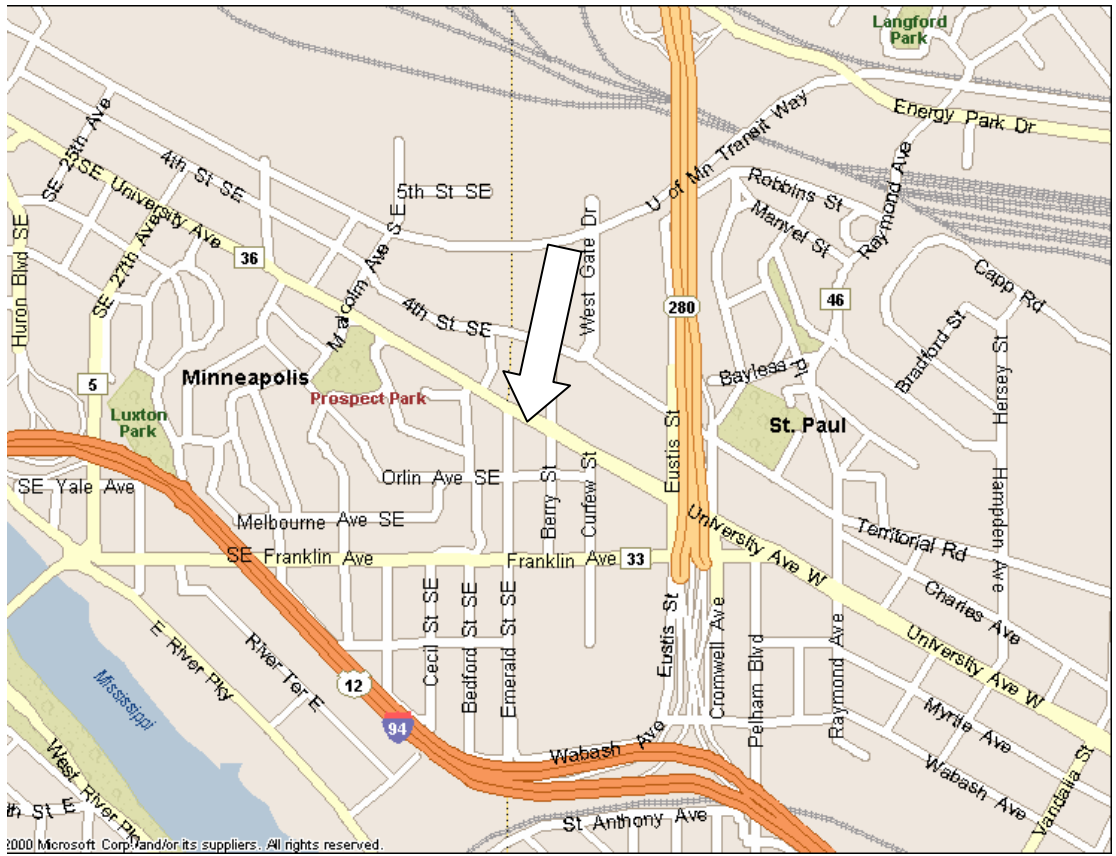
Cole, Hugh M. *The Ardennes: Battle of the Bulge*, U.S. Army in World War II Series Vol. 8, The European Theater of Operations. Dept. of the Army, 1965, 720 p.

Fuller, John F. *Thor's Legions: Weather Support to the U.S. Air Force and Army, 1937-1987*. AMS, 1990, p.103-5.

### ***AMS on the WWW***

Please check <http://www.twincitiesams.org> for lots of interesting information, changes and updates.

*The December meeting will be held at 6:20pm (see comments on first page for all options), on December 11th, 2007, KSTP, 3415 University Ave, St. Paul, Minnesota*



**Directions**

From I-94, take the 280 exit and immediately take the University Ave. exit. Proceed north (about 2 blocks) to University. Turn left (west) on University. You will go over 280. Proceed two blocks further to Berry St.; turn right (north) then left on Territorial Road to the parking lot in the back of the KSTP complex. Use the employee entrance, which is open 24 hours. A security guard will meet you with your personalized visitor tag.

Please fill out this form - either online or printed - and send it in with your annual Chapter dues (only by regular mail), whether or not you are entering the forecast contest. This information is used for Chapter purposes only, and only your name will be listed on the Chapter website, unless you tell us otherwise.

- ♣ information required for membership
- ◆ information which be posted on the member page unless you tell us otherwise

♣ **Type of membership desired**

Regular member (dues: \$20/year with hardcopy of newsletter, \$18 with electronic copy)

Student member (dues: \$6/year with hardcopy of newsletter, \$5 with electronic copy)

### Personal information

♣ ♦ Name: \_\_\_\_\_  Don't publish my name

♣ Street address: \_\_\_\_\_

♣ ♦ City: \_\_\_\_\_  Don't publish my city

♣ ♦ State/Province: \_\_\_\_\_  Don't publish my state/province

♣ ZIP/Postal code: \_\_\_\_\_

♦ Country (if not USA): \_\_\_\_\_  Don't publish my country

Telephone number: \_\_\_\_\_

♣ ♦ E-mail address: \_\_\_\_\_  Don't publish my e-mail address

♦ Occupation/job title: \_\_\_\_\_  Don't publish my job

♦ Place of work: \_\_\_\_\_

You may also send us a picture of yourself for the [member page](#). Please limit the size to at most 200 pixels on a side. Attach it to the e-mail that pops up when you submit your application, or [create a new message](#) and attach it to that. Pictures (and other information) will be screened, so don't try to get cute. Okay, maybe a little.

If you've never been a member of our chapter before, how did you hear about us?

\_\_\_\_\_

Suggestions for meeting topics or speakers:

\_\_\_\_\_

Other ideas for the chapter:

\_\_\_\_\_

You may also send e-mail to [info@twincitiesams.org](mailto:info@twincitiesams.org) if you need to elaborate more than what there is room for here.

After submitting this form, send a check (payable to **Twin Cities AMS**) with the correct amount of dues (as noted above), to

Twin Cities AMS  
c/o Lori Bovitz  
20716 Hurley Ave.  
Lakeville, MN 55044

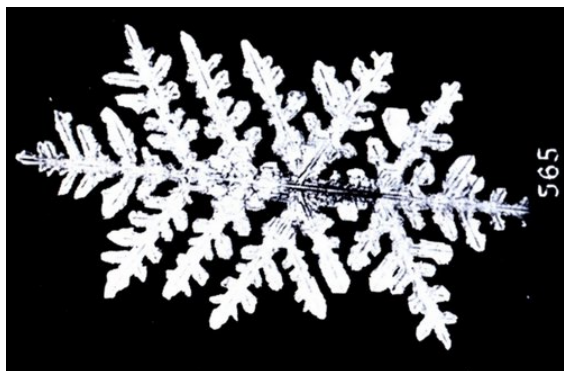
### Weather forecast contest entry

Entries for the weather contest will be accepted through December 15, 2007. We must receive your dues by then for your entry to qualify.

in = Total snowfall from December 1, 2007, to May 1, 2008,  
as recorded at the MPX WFO in Chanhassen, MN

°F = Coldest temperature for the winter (December 22, 2007, through March 20, 2008)  
as recorded at MSP International Airport

°F = Tiebreaker: Warmest temperature for the winter (December 22, 2007, through March  
20, 2008)  
as recorded at MSP International Airport



Wilson A. Bentley

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