

# MidWest Severe Storm Tracking Response Center, Inc.



## MidWest Spotter

February, 2007

### Welcome from the frozen tundra of Wisconsin!

*Dale Bernstein, President/CEO  
MidWest 107*

Yes it is indeed a bit chilly outside these days. With all the discussion on global warming, weather cycles, frigid winters followed by hot summers and increasingly violent spring and summer storms, the discussions, theories, studies and opinions of the whys and wherefores continue.

One thing is certain, one factor remains constant, and that is the need for community and organizational volunteers. In my opinion, the volunteer will be an increasingly critical ingredient to the early warning and response to the natural disasters that we have yet to and have experienced in the past.

Let's take a brief look around this great planet of ours and see what Mother Nature has turned up just this past month.

- **January 2007 India:** Cold Snap claims 33 lives and the toll are expected to rise.
- **January 2007 Nepal:** Cold Snap claims 16 lives and the till are expected to rise.
- **January 2007 Central United States:** Snow and Ice Storms claim 70 lives across several states with 23 lost lives in Oklahoma. The combined storms caused sustained power loss to over 170,000 residents in two states.

In 2006, the European Cold Snap left behind a death toll of over 800 lives. Let's be careful out there folks. Respect the cold as much as you respect the severe weather experienced in the spring, summer and fall. Check on the elders, the handicap, friends, and family. If you think someone needs to be checked on, then odds are they do.

Budgets are skyrocketing, and we all know that even with our own personal budgets, that sometimes there just isn't enough money to go around. The fact will remain that volunteer organizations such as MidWest must play a greater role when serving our communities.

The recent Florida disaster again made it crystal clear that weather radios save lives. You will find more information within this news letter regarding the use and necessity of weather radios. As we all know, the Florida event was a nocturnal storm, one of the worst scenarios. I am humbled and proud that MidWest has such dedicated personnel on board and that we essentially operate 24/7. That folks, is an extreme amount of duty for those people who dedicate so much time, energy and personal expense, not only for MidWest, but for their communities as well.

MidWest continues to train, staff and report weather events 365 days a year and we are able to accomplish this because of you the member and the volunteer. We also remain extremely busy working our 2007 schedule of events, meetings and training.

You'll find the MidWest events listed on our web site, [www.midwesstrc.org](http://www.midwesstrc.org) and also within this newsletter. Some of which are listed here.

- **February 26:** MidWest will be attending the Rock County ARES/RACES meeting. MidWest members are encouraged to attend if possible.
- **March 12:** NWS Spotter Class in Janesville, Rock County at 1 PM and then in Clinton, Rock County at 6:30 PM. MidWest members are encouraged to attend and show support.
- **March 15:** NWS Spotter Class in Dodgeville, Iowa County at 6:30 PM. MidWest members are encouraged to attend and show support.
- **March 26:** MidWest WORT Talk/Call in Radio show, 7-8 PM. This is our opportunity to generate additional public interest and awareness, also to promote the remaining NWS Spotter Classes for 2007.
- **April 02:** Dane County Sponsored, MidWest Hosted NWS Spotter Class to be held at the Fitchburg Fire Apparatus Hall. This event will require everyone's assistance to make this yet another special MidWest hosted Spotter Class. Details, planning and action committees will be formed at the February MidWest General Meeting.
- **April 12:** NWS Spotter Class in Sun Prairie at 6:30 PM. MidWest members are encouraged to attend and show support.

As our members travel around the globe they still find the time to check in with MidWest and we are always pleased to receive those reports.

On behalf of MidWest, I personally want to thank each and every one of you, our volunteers and staff for your dedication and continued commitment to your communities!

Remember, let's be safe out there.

Forward!

Dale Bernstein  
President/CEO  
MidWest SSTRC, Inc



### **Congratulations!!!**

The following people are certified in ICS-100, ICS-700:

*Dale Bernstein -- MidWest 107*  
*Tim Shriver -- MidWest 122*  
*Dave Willow -- MidWest 160*  
*Chad Woodward -- MidWest 101*  
*Luke Ziobro - MidWest 116*  
*Heidi R. Nava - MidWest 131*

Want to get certified? <http://training.fema.gov>

The following people recently passed and received their Ham Radio license. Congratulations!!!

Brent Cook



### **MidWest Trivia**

What is the most important thing to remember when reporting severe weather? Answer at top of page 6.

That's just a few of the things that are going on folks. We also continue to hold our on going training, and monthly meetings in Dane and Rock Counties.

## Upcoming Meetings and Events

Steve Fitzsimmons, MidWest 136

### **Dane County** – February 19<sup>th</sup>

General meetings are held on the third Monday of every month at 7PM.

### **Rock County** – February 28<sup>th</sup>

General meetings are held on the fourth Wednesday of every month at 7PM.

### **Spotter Training – MidWest Hosted Event**

**April 2, 2007 at 7PM** - Fitchburg Fire Apparatus Hall



### **Weather Alert Radios – Lifesavers when severe weather strikes.**

*Steve Fitzsimmons  
MidWest 136*

If I took a poll of MidWest members, I think it would be a safe bet to say that most of us already have one of these radios. We understand severe weather far more than the average person on the street. We know that severe weather can strike at almost any moment and at any hour. We want to be alerted when this weather is heading our way to help us prepare for it. But there are many people for whatever reason that don't have one of these radios. Two recent tornadic events painfully remind us how important these radios are. Both events took place between 2 and 5AM while most people were sleeping. Both events took innocent lives. I'm talking about the recent Florida tornado outbreak on February 2<sup>nd</sup>, and the tornado to strike Rogers, MN on September 16, 2006.

If you know of a loved one who doesn't have a weather alert radio, maybe you could get them one as a nice gift.

With so many weather radios to choose from, what kind of radio should you get? I recently asked around the club and what kept coming back was it's important to get a radio that has SAME (Specific Area Message Encoding) technology. SAME allows you to pre-program the weather radio and filter out false alarms. There are many good radios available. One of the favorites mentioned was the Weather Alert Radio from Radio Shack.

As you prepare for the 2007 severe weather season, please include getting a weather alert radio for you or a loved one with SAME technology.

#### **Wednesday Night Nets**

Radio check-ins begin at 7pm on the Ham Radio side on 444.375 MHz.

Then again at 7:30PM on the Business Band side on 451.275MHz.

#### **MidWest SSTRC Inc. Mission Statement**

The MidWest Severe Storm Tracking/ Response Center (*MidWest SSTRC Inc.*) is comprised of members whose primary purpose is to assist in providing early detection of severe weather. We communicate this critical information to government officials, other recognized agencies and organizations including the National Weather Service allowing for timely public severe weather warnings and providing emergency response as appropriate.

*MidWest SSTRC Inc. endeavors to assist in any way it can in the protection of life and property from any threat, be it natural or man made.*

MidWest SSTRC Inc. is a 501c3 Non-Profit Corporation

**Rusty Kapela, Warning Coordination  
Meteorologist Speaks During January Meeting**  
*Steve Fitzsimmons, MidWest 136*



For those who could attend our meeting in January, it was quite an event. Rusty gave everyone a sneak preview of the upcoming classes, going over topics such as thunderstorm development, the different cloud types associated with severe storms, radar interpretation, and tornadoes. After the meeting I had a chance to talk with Rusty. He had a lot of praise for MidWest and respect for what we all do here and how we operate. He said the one thing he really needs and appreciates when investigating storm reports is for accurate TLCS information. It's something we practice every Wednesday night, no wonder we are so good at it here! But at the same time, it's something we need to keep practicing too. If you want to attend the next weather spotter class, visit the National Weather Service web site to find a spotter class near you. Here is that link... <http://www.crh.noaa.gov/mkx/?n=spotter-training-schedule>

Also, don't forget our own MidWest sponsored weather spotter training event coming up on April 2<sup>nd</sup>, where Rusty along with area weathermen like our own Gary Cannalte will broadcast live from. We also have numerous tables set up with helpful information on all sorts of weather information.

**Sell/Trade/Buy/Barter**

Do you have something to sell or are you shopping for a good deal? This is your spot! Just send me a note and I will include it below next month.

**Radios for Sale**

*Frank Weisensel, MidWest 103*

If interested in buying radio equipment, please write to me at [freefallfrank88@juno.com](mailto:freefallfrank88@juno.com) & I can set you up with what you need.

**Dane/Rock County Forum Highlights**

<http://groups.google.com/group/midwest-dane-wi?start=0&sa=N>

- 2/7 – MidWest Photo ID's issued @ Feb meeting
- 2/5 – Need for weather alert radios
- 2/2 – Ground hog sees shadow, 6 more wks winter
- 2/2 – Florida tornado outbreak
- 2/1 – Info on phone patch system
- 2/1 – Weather Statement – Arctic blast coming
- 1/30 – Changes to Daylight Savings Time
- 1/29 – Tracker report from Hawaii
- 1/25 – New mapping shows WI ref points
- 1/25 – Next Ham class – 2/24 and 2/25
- 1/24 – Info for GR3 users
- 1/22 – Radios for sale
- 1/22 – Blue Monday – Unhappiest day of year
- 1/21 – Signs of changing climate – Rising insurance
- 1/19 – Forecasters battle over global warming
- 1/18 – Can you help MidWest?
- 1/17 – Monona grants MidWest no fee for room
- 1/14 – Ice storms knock out power to thousands

## Is it a wall cloud? Or a shelf cloud?

by [George E. Hrabovsky](#)  
President, [MAST](#)

This question is one that is absolutely vital to the successful spotter. A wall cloud forms when an updraft (or other vertical forcing mechanism) is strong enough to produce a column of low pressure. Within this column, the lower pressure allows water vapor to condense into cloud matter at a lower altitude than the surrounding updraft base. When air having a higher relative humidity (say, from a nearby rain shaft) feeds into this column, cloud matter will accumulate from the updraft base downward (and towards the source of the humid air). Often this will look like a projection of cloud matter.



*Photograph is copyrighted 2004 by MAST*

Here is a wall cloud from the Madison Tornado of 23 June 2004. See the way it juts downward and the bottom tilts towards the rain shaft off to the right of the photo.

A shelf cloud, on the other hand, is created when a cool mass of air rushes outward from a storm causing existing warm moist air to rise suddenly. This is like a miniature cold front. When the warm moist air reaches the cloud condensation level it begins to form cloud matter. This cloud formation occurs along a sheet. Because this rising air produces a low pressure sheet along the direction the air is spreading into, the sheet of cloud matter will seem to descend towards the ground (in a way

that is quite similar to the wall cloud). Thus you get a shelf of cloud matter tilting downward towards the ground.



*Photograph is copyrighted 2004 by MAST*

Here is an example of such a shelf of cloud material.

The wall cloud is a well-defined and isolated object. The shelf cloud extends along the entire region of out-rushing air. The wall cloud will hold its position relative to the thunderstorm, since the updraft drives the storms and this is where the wall cloud will sit. The shelf cloud will stay with the out-flowing air and can actually detach from the thunderstorm (this is a good sign that the storm has become outflow dominant and will soon dissipate; what we call, "Gusting out.").

I hope this has been helpful to you, and I look forward to our next session.

MAST is Madison Area Science and Technology, a non-profit science education and research organization. We do research in all areas of science, including severe weather meteorology. We have numerous educational and research programs for the severe weather enthusiast. We can be reached at our web site [www.madscitech.org](http://www.madscitech.org) or by calling 608-276-6832 and talking to one of us or leaving a message.

**MidWest Trivia Answer**

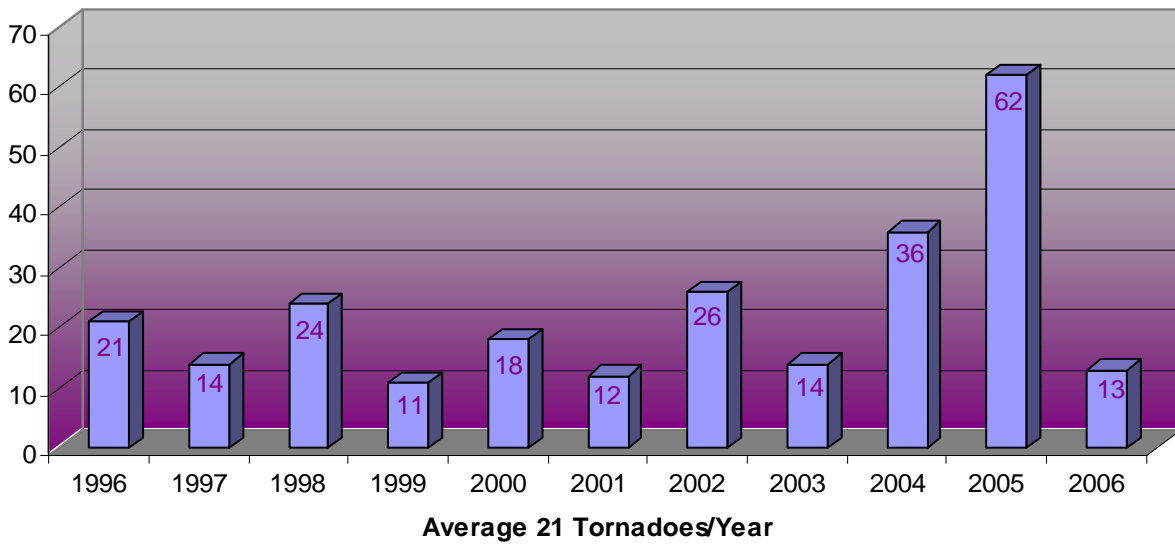
The most important thing to remember is to report in TLCS format. Note the **Time**, **Location**, **Condition** and **Source** - who is reporting the event. Write the information down if you cannot report the event right away to preserve accurate details for later investigative follow-up. Thank you!




**Did you Know?**

Flash floods are the #1 thunderstorm-related killer in the U.S. Nearly half of all flash flood deaths are auto related.

**Wisconsin Tornadoes 1996 - 2006**



2007 Stats		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Dane	0											
	Rock	0											

**MidWest Spotter Newsletter**

A monthly publication produced to communicate MidWest activities and events to our members and the community. Comments always welcome. Please send your comments to Dale Bernstein at [dale.bernstein@midwestsstrc.org](mailto:dale.bernstein@midwestsstrc.org).