



# ARES COMMUNICATOR

## Information for Scott County Amateurs



January, 2010

Accurate, Reliable Emergency Communications

Volume 10, Number 1

### Crashberry ?

Some Blackberry users were referring to their favorite communications device as the Crashberry after two outages within a week in December '09.

There were significant outages on the BlackBerry communications network on December 17<sup>th</sup> and 22<sup>nd</sup>. Research In Motion Ltd., maker of the BlackBerry phone, said the outage affected all users, regardless of their carrier, who rely on RIM's Internet-based service for e-mail delivery instead of corporate servers.



RIM blamed a software upgrade for the problem, which it said was confined to North and South America. BlackBerry users on the Verizon Wireless, Sprint Nextel Corp., AT&T Inc., and Canada's Rogers Communications Inc. networks were all without service.

Past outages have affected businesses and governments worldwide who rely on BlackBerrys to communicate with mobile workers. RIM has sold more than 75 million BlackBerrys since the gadget debuted 10 years ago. It now counts 36 million subscribers around the globe and ranks second in the worldwide market for advanced "smart phones," with a 21 percent share. RIM had about 32 million subscribers globally last fall. RIM counts 500,000 subscribers in the U.S. government.

BlackBerry outages can occur for several reasons: power failures, software bugs, viruses and critical component failures. Many of the BlackBerry service outages have happened as a result of glitches in upgrades.

**Crashberry** *cont'd on page 2*

The ARES COMMUNICATOR is published for the benefit of Amateur Radio Operators in Scott County and other interested individuals.  
EDITOR: Bob Reid, Scott County Emergency Coordinator  
Snail Mail: 13600 Princeton Circle  
Savage, MN. 55378  
E-Mail: N0BHC@aol.com  
Phone: Home 952-894-5178 Portable 612-280-9328

### Super Shot - Jan 16<sup>th</sup>

Scott ARES will be conducting an on-air exercise named Super Shot on January 16th. The exercise scenario involves a county immunization effort. During the exercise ARES volunteers will be simulating communications assistance between various clinic sites and an EOC.

The objectives of the exercise are to measure Scott ARES performance in the following areas:

1. The speed and accuracy of the activation plan.
2. Evaluate Directed Net operating procedures.
3. Evaluate verbal and digital traffic handling skills.



The results of the exercise will help determine the areas we need to improve by practice on our weekly net.

ARES members participating in the exercise will receive a call out via the activation plan. They will then receive detailed instructions via the Scott ARES homepage. Participants will each have a unique clinic site scenario, complete with it's own challenges, during the exercise.

The exercise should be completed within four hours and provide a fun opportunity to test communications skills. This exercise was rescheduled from December '09.

BREAK - OVER

## ARES Activities

**Weekly Net Monday 7 PM 146.535 mhz (s)**

**Breakfast Saturday, January 9th**

**Digital Monday January 11th**

### SELECTED TRAFFIC NETS

| Designator | Freq.    | Local Times    |       |
|------------|----------|----------------|-------|
| MN Phone   | 3.860Mhz | Noon, 5:30pm   | Daily |
| MN CW      | 3.605Mhz | 6:30pm, 9:50pm | Daily |

#### ARES

|             |           |        |        |
|-------------|-----------|--------|--------|
| Scott ARES  | 146.535 S | 7:00pm | Monday |
| Carver ARES | 147.165+  | 8:30pm | Sunday |
| Bloomington | 147.090+  | 9:00pm | Sunday |

#### Neighboring Nets

|              |          |        |       |
|--------------|----------|--------|-------|
| North Dakota | 3.937Mhz | 6:30pm | Daily |
| South Dakota | 3.870Mhz | 6:00pm | Daily |
| Wisconsin    | 3.985Mhz | 5:30pm | Daily |

## Crashberry - cont'd from page 1

Wide-scale outages for the past couple of years appear to take place on an annual basis:

2007 In April 17, 2007, RIM had a major outage, over twelve hours. CEO Jim Balsillie said the outages would never happen again. A poll measuring the prevalence of mobile e-mail at large organizations found that 81 percent of respondents experienced noticeable disruptions in their company's operations

2008 Monday Feb 11, 2008 Research In Motion's ubiquitous BlackBerry experienced a "critical severity outage" on Monday afternoon that left users stranded without wireless e-mail access, its maker said.

2009 Sep.9, 2009 Email and browsing capabilities for some US users for six hours.

2009 Dec. 17, 2009 Email and browsing for users for nine hours.

2009 Dec, 23, 2009 For more than eight hours users were without e-mail and Internet service.

BREAK - OVER

*"In everything there is a hard way and an easy way, and the right way is almost always the hard way"* H. Abif

### Scott County ARES Contacts

Emergency Coordinator  
Bob Reid NOBHC  
13600 Princeton Circle  
Savage, MN 55378  
952-894-5178  
NOBHC@arri.net



Asst. Emergency Coordinator  
Bob Minor WONFE  
5210 West 141<sup>st</sup> Street  
Savage, MN 55378  
952-894-2657  
WONFE@arri.net

Asst Emergency Coordinator  
Daniel Vande Vusse NOPI  
5722 West 141<sup>st</sup> Street  
Savage, MN 55378  
952-440-1878  
NOPI@arri.net



## Test Your NIMS Knowledge

ARES members are familiar with the Incident Command System from their study of the FEMA Institute courses. Now it is time to see how much you remember from those courses! Each month you will have the opportunity to test your ICS knowledge on a questions dealing with one ICS area.

This month we will take a look at some of the concepts from the IS-100 course, Introduction to Incident Command System. This is the first of the FEMA courses all ARES members must complete before participating in any response activities. You can find the course materials at this site: <http://training.fema.gov/EMIWeb/IS/is100.asp>. Now, test your knowledge of the ICS.

Here is the question for this month:

Which General Staff position prepares and documents the Incident Action Plan, collects and evaluates information, maintains resource status, and maintains documentation for incident records?

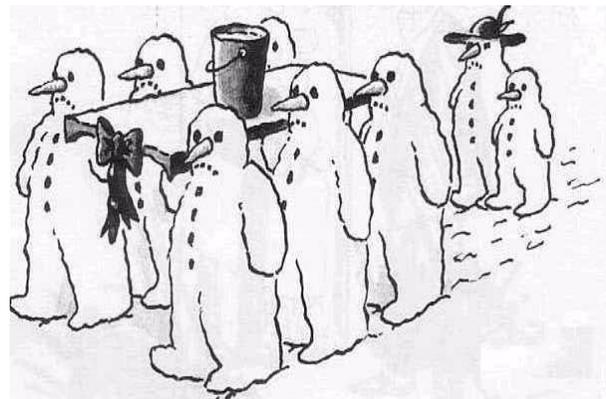
- Planning Section Chief
- Logistics Section Chief
- Finance/Administration Section Chief
- Operations Section Chief

*The answer will appear in next month's newsletter.*

## December Test Your NIMS Solution

The ability to communicate within ICS is absolutely critical. To ensure efficient, clear communication, ICS requires the use of:

- Common terminology



Snowman's Funeral

## ARES Basic Training

### FEMA Courses You Need

The world of emergency communications is constantly changing, hopefully for the better. The development of an organized response to an emergency is one improvement. The Incident Command System (ICS) has become the standard for emergency management. In Minnesota the system is referred to as the MN Incident Management System (MnIMS).

The Minnesota Emergency Management Director's Handbook states, "The Minnesota Incident Management System (MnIMS) is designed to be in use from the time an incident first occurs until the requirements for management no longer exist." The manual goes on to describe the advantages of MnIMS, "the system can be utilized for any type or size of incident, ranging from a minor situation involving a single unit, to a major incident involving several agencies. The MnIMS allows agencies to communicate using common terminology, to share goals and tactical objectives, and to understand the roles and responsibilities of others. It also allows for the combining and management of resources during an incident."

So, how does this impact ARES members? ARES volunteers responding to a request from a served agency need a basic understanding of the overall operation of emergency response. Knowing how all the pieces fit together improves our ability to support the activities of the served agency.

Served agencies are requiring volunteers to show their knowledge by providing evidence of completion of specific training courses provided by FEMA. These courses are available on-line through the Emergency Management Institute (EMI). The self-paced courses are designed for people who have emergency management responsibilities and the general public. All are offered free-of-charge to those who qualify for enrollment.

You can access the courses at the EMI website located at: <http://training.fema.gov/IS/NIMS.asp> The four courses that ARES members need to complete are as follows:

ICS 100, Introduction to the Incident Command System, introduces the Incident Command System (ICS) and provides the foundation for higher level ICS training. This course describes the history, features and principles, and organizational structure of the Incident Command System. It also explains the relationship between ICS and the National Incident Management System (NIMS).

ICS 200 is designed to enable personnel to operate efficiently during an incident or event within the Incident

Command System (ICS). ICS-200 provides training on and resources for personnel who are likely to assume a supervisory position within the ICS.

IS-700.a NIMS An Introduction, introduces and overviews the National Incident Management System (NIMS). NIMS provides a consistent nationwide template to enable all government, private-sector, and nongovernmental organizations to work together during domestic incidents.

IS-800.B National Response Framework, introduces participants to the concepts and principles of the National Response Framework.

Once you complete a course you will receive an email notification that contains a link to a course completion certificate. You should print the certificate and save the email as evidence of your work. Once you have completed the four courses you can request a printed record of your FEMA courses. Select the "ISP Transcript Request" link from the EMI website, listed above, and print the form.

Compete the form and mail to the address provided. Within about a week you will receive a list of all the EMI courses you have completed. This mailing will serve as evidence you have completed ARES Basic Training! Make sure you send a copy of the form to the Emergency Coordinator who will maintain a file for the served agency to review if needed. If it has been a couple of years since you completed the courses it is a good idea to review the material from time to time just to keep the terminology and descriptions in mind.

BREAK - OVER

## Digital Contest Calendar PODXS 070 Club

<http://www.podxs070.com>

### Ninth Annual 070 Club Pskfest

Sponsored by the Penn-Ohio DX Society (PODXS)

DATE: 0000Z-2400Z, 09 January 2010

EXCHANGE: Call sign, signal report and state/province/country (SPC). Call "CQ PSKFEST".

BANDS: 80 thru 10 meters, no WARC bands. Work each station once/band. All contacts must be 2-way PSK31.

### 2010 Valentine Sprint

Sponsored by the Penn-Ohio DX Society (PODXS)

MODES: PSK31 only

DATE: Friday, 12 February 2010, 2000 - 0200 (YOUR LOCAL TIME).

This event features a "rolling start" based on your local time to help equalize band conditions for all contest participants. (Note: this Sprint is not actually on Valentine's Day - we figured that wouldn't go over too well.)





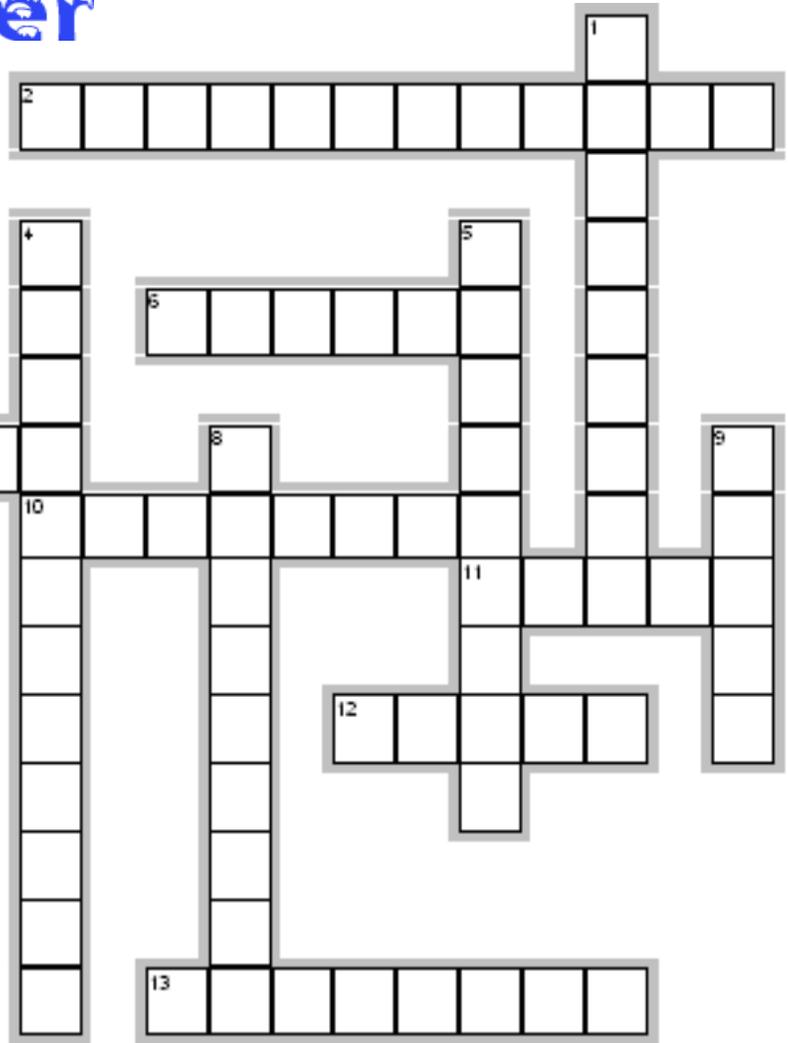
# Winter Weather

## Across

2. An uneven distribution of snowfall or existing snow caused by strong surface wind.
6. A condition occurring over a large area when the surface air temperature remains below 32 degrees Fahrenheit for an extended period of time possibly leading to the damage of certain crops.
7. Precipitation composed of white or translucent ice crystals. Forms in cold clouds by the direct transfer of water vapor to ice.
10. Winter weather \_\_\_\_\_ is issued for winter weather situations that may cause significant inconvenience and, if caution is not exercised, could lead to life threatening situations. Issued when events are occurring, imminent or highly likely to occur. Issued when a combination of 5 inches or less of snow, freezing precipitation and/or sleet is expected.
11. Precipitation consisting of transparent pellets of ice, 5 millimeters or less in diameter. Forms when snow enters a warm layer of air above the surface and melts and then enters a deep layer of sub freezing air on the surface and refreezes.
12. A covering of ice on exposed surfaces when the air temperature falls below the temperature to which air must be cooled to in order to be saturated below freezing.
13. Sustained wind or frequent gusts to 35 miles an hour or greater and considerable falling and/or blowing snow, expected to prevail for a period of 3 hours or longer.

## Down

1. White ice crystals that have combined in a complex branched hexagonal form.
3. Winter storm \_\_\_\_\_ is issued when hazardous winter weather is occurring, imminent or highly likely over part or all of the area including but not limited to heavy snow, blizzards, ice storms, freezing rain or drizzle and sleet.



4. Issued when snowfall is expected to exceed 2 inches but not expected to exceed 5 inches.
5. Generally means snowfall accumulating to 4" or more in depth in 12 hours or less or snowfall accumulating to 6" or more in depth in 24 hours or less.
8. A measure of the effect of increased wind speeds accelerating heat loss from exposed skin.
9. Winter Storm \_\_\_\_\_ is issued when hazardous winter weather may develop in a few days. This is issued to provide information to those who need considerable lead time to prepare for winter weather.



## Digital First Down

### How Do They Do That?

The 1st and Ten™ line—the famous yellow line that shows television viewers how far the team with the ball must go to make a first down—has become part of the culture of watching professional or college football on TV. Sportvision, a New York based company, introduced the 1st and Ten line in 1998.

The virtual, yellow 1st and Ten line makes use of Sportvision's patented *video overlay technology* to create the illusion that a yellow first-down line is painted on the field, allowing players to cross over and stand on it. The line is only visible on TV; the players do not see it. (*That's funny, running backs seem to trip over the line all the time!*)

Since a football field is not flat, a laser—placed in the center of the field—is used to collect data on the various elevation points of the field. That information is used to draw a 3D computer map of the contours of the field, and the map is adjusted and overlaid onto the camera's view of the actual field. Anywhere from three to five separate broadcast cameras are outfitted with custom Sportvision sensors and encoders to capture camera movement data. As cameras pan, tilt, and zoom, this data enables the virtual line to follow suit, staying in perspective and getting larger and smaller, as needed.

A crew of four, equipped with at least seven computers, coordinates the efforts. Two crew members, one inside the stadium, and one in front of a computer, communicate the location of the real first down line in order to locate it properly on the TV screen.

A third crew member serves as a troubleshooter, while the fourth monitors the various colors that make up the color palette onto which the yellow line is drawn. Operators tell the computers what colors to draw on (grass or dirt), and what not to draw on (skin or uniforms) through a sophisticated process of color keying.

As a result, the line appears to be painted on the field underneath the players. The only pixels that change are the ones that are the same color as the field—typically several shades of green. When one team's uniform color nearly matches the color of the field, or the color of field changes due to rain, snow, or mud, color matching becomes more difficult.

Finally, after adding the precise location of the first down marker to the system, the yellow line appears on your TV screen, like magic! In recent years, the system has been upgraded to add more features.

During Fox broadcasts, for example, down and distance appears on the field inside an arrow pointing toward the

*cont'd col. 2*

## ICS 100 Basics Crossword Solution

### Across

1. INCIDENT—An occurrence or event, natural or manmade, that requires a response to protect life or property. Incidents can, for example, include major disasters, emergencies, terrorist attacks, etc.
4. RECOVERY—A plan developed to restore the affected area or community.
7. AGENCY—A division of government with a specific function offering a particular kind of assistance.
8. BASE—The location at which primary Logistics functions for an incident are coordinated and administered. There is only one per incident.
9. ASSESSMENT—The evaluation and interpretation of measurements and other information to provide a basis for decision-making.
11. CAMP—A geographical site within the general incident area that is equipped and staffed to provide sleeping, food, water, and sanitary services to incident personnel.
12. FUNCTION—Refers to the five major activities in the Incident Command System: Command, Operations, Planning, Logistics, and Finance/Administration. The term is also used when describing the activity involved.
13. LOGISTICS—The Section responsible for providing facilities, services, and material support for the incident.

### Down

2. EMERGENCY—Any incident, whether natural or manmade, that requires responsive action to protect life or property.
3. COMMUNICATIONS—Process of transmission of information through verbal, written, or symbolic means.
5. COMMANDSTAFF—Consists of Public Information Officer, Safety Officer, Liaison Officer, and other positions as required, who report directly to the Incident Commander.
6. HAZARD—Something that is potentially dangerous or harmful, often the root cause of an unwanted outcome.
10. STAGING—Ares established for the temporary location of available resources in which personnel, supplies, and equipment can be temporarily housed or parked while awaiting operational assignment.

## Digital First Down *cont'd*

offensive team's end zone. On CBS, a color-coded chart showing a field goal kicker's success at various distances may appear. Moreover, some television broadcasts display a second computer-generated line (usually blue or red in color) to indicate the line of scrimmage.

BREAK - OVER

## MSWord Modified

### Court: Microsoft Violated Patent; Can't Sell Word

A federal appeals court upheld a \$290 million judgment against Microsoft Corp. and issued an injunction that will prevent the sale of its popular Word software.

The court injunction is set to go into effect Jan. 11. Microsoft has said such a bar would prohibit the sale of all currently available versions of Microsoft Word and Microsoft Office.

Microsoft had appealed a Texas jury verdict in favor of i4i Inc., a Toronto company. The jury found recent versions of Microsoft Word infringed on a software patent.

Microsoft already has a patch available that strips out XML technology the company is barred from using after Jan. 11, in Word 2007 and Office 2007, according to a Microsoft Web site. The patch targets large computer makers that factory-install Microsoft Office on new PCs before they're shipped to dealers or customers.

The Microsoft OEM Partner Center now includes a prominent notice and a link to a 13MB update. "Microsoft has released a supplement for Office 2007 (October 2009)," the site reads. "The following patch is **required** [*emphasis in original*] for the United States. "After this patch is installed, Word will no longer read the Custom XML elements contained within DOCX, DOCM, or XML files," the notice continues. "These files will continue to open, but any Custom XML elements will be removed."

With respect to Microsoft Word 2007 and Microsoft Office 2007, Microsoft has been preparing for this possible change since the District Court issued its injunction in August 2009 and have put the wheels in motion to remove this little-used feature from these products. Microsoft expects to have copies of Microsoft Word 2007 and Office 2007, with this feature removed, available for U.S. sale and distribution by the injunction date."

Microsoft is not obligated to modify already-purchased copies of Word via a software update, but only to remove the i4i technology from the programs sold starting Jan. 11.

Although Microsoft will be responsible for revamping Word and Office for retail distribution, then swapping out new copies for those on shelves, many computer makers pre-load the popular suite on their PCs. They would need time to get the revised Word and Office onto new machines, and those machines into their retail and distribution channels.

BREAK - OVER

## 48 Core Chip

### Intel Researchers Deploy Experimental Chip

Packing more computing engines onto a single piece of silicon has been the modus operandi for Intel and its rivals in recent years in the search for more powerful, but less power-hungry chips.

At least in the lab, Intel researchers have taken things to the next level. Intel said it has demonstrated a "concept chip" with 48 cores — the separate processing engines within a single computer chip — and plans to release about 100 of the new devices to researchers and industry partners in order to speed the development of software needed to take make gains in energy efficiency and performance.

Intel calls the new processor a "single-chip cloud computer" for its similarity to the huge data centers, or clouds, that use thousands of servers working in tandem to handle massive computing problems.

The chip won't be ready for commercial production for years, but by creating a chip with dozens of cores, Intel will give partners the chance to start tackling some of the software and hardware challenges that the new technology creates.

Currently, Intel and rival Advanced Micro Devices are selling chips with six or so cores. By packaging more of these separate processors on a chip, they can raise the processing power while keeping heat and power use in check.

"Depending on how you count, we're really only three or four years into the multi-core era, and we haven't even launched our first many-core product," said Intel Chief Technology Officer Justin Rattner. "If using a large number of simpler processors is going to work, you have to keep them all busy," he said. "It's strength in numbers."

Others have created chips with dozens of cores before, but they were aimed at specialized systems. Sun Microsystems, for instance, sells a system with 32 cores, though the cores are spread over more than one chip. AMD and Nvidia make graphics cards with dozens of cores as well, though those chips are better for processing massive amounts of similar data, and are mostly used today for video-intensive programs. Intel also created an earlier experimental chip with 80 cores in 2007.

But Intel's latest chip is similar to chips running the vast majority of the world's computers, making it more familiar to software developers and compatible with their current tools.

The chip could herald new applications that take advantage of the increased processing power and efficiency. For

**48 Core** cont'd on page 7

## Winter Hazard Awareness Week Photo Contest

### Show Us What Winter In Minnesota Means To You!

The Minnesota Winter Hazard Awareness coalition is looking for good photos of how Minnesotans enjoy their winters! Send us your original digital photographs of beautiful nature scenes, holiday pictures, your winter sports or how you or your kids enjoy winter. We will post the best submissions on a weekly basis and award prizes for the best shots in each category at the end of the contest.

Sponsored by the Minnesota Department of Public Safety (DPS), is open to all amateur photographers. The contest starts November 9th and ends February 28, 2010. There are two age divisions and four categories, and entry is free. Any person may submit up to six photographs. Age divisions are: 15 and younger (Youth) and 16 and older (Adult).

Photo categories are: 1) Mother Nature, 2) Winter Holidays, 3) Kids in Winter and 4) Outdoor Winter Sports. I wonder if winter antenna projects would be considered as Winter Sports or Kids in Winter?

Only Digital Files are Acceptable. You can find all the contest details on the web at [http://www.winterweather.state.mn.us/whah\\_photocontest.asp](http://www.winterweather.state.mn.us/whah_photocontest.asp)

BREAK - OVER



### 48 Core - cont'd from page 6

example, Intel said future laptops could have the processing capability to “see” objects and motion with the same precision as the human eye.

But researchers need to figure out efficient ways to get all of those chips working together, particularly when it comes to passing data between different parts of the system or making sure the chips are efficient in dividing up workloads.

“There are a lot of problems figuring out how to get software to use it,” says Nathan Brookwood, a chip analyst with Insight64. “Software developers will sit around over a cup of coffee or a beer and talk about these challenges. But until you put a piece of hardware in front of them and say, ‘Here, now do something with it,’ it’s more of an abstract problem.”

BREAK - OVER

## Railroad Depots on the Air

Railroad Depots on the Air (RRDOTA) is a new group whose purpose is to “activate” railroad depots, that is to set up a ham radio station at the station and make contacts from there. It was founded by Rob, W0JRM, who was inspired by the work of the Islands on the Air (IOTA) and Amateur Radio Lighthouse Society (ARLHS)

As an incentive to amateurs to activate railroad depots and for other amateurs to work them, RRDOTA issues awards for various combinations of depots worked. These include Worked All States, which will be awarded when an operator successfully confirms contacts with railroad depots in all 50 states, and Worked All of (State), awarded when an operator confirms an entity in every county which has an entity in a particular state. Of course, since this group is just getting started, there are “entities” only in a few states at this time.

When someone activates an entity, the activation will be listed on the RRDOTA home page and on the mailing list. You will not only find activation notifications there, but also interesting discussions about railroad stations in general.

You will find more information about Depots on the Web at: <http://w0jrm.homelinux.net/rrdota/index.php>

BREAK - OVER



### ARES Breakfast

Saturday January 9th  
7:30AM  
Perkins Restaurant  
Savage, MN

### NECOSSchedule January 2010

4 Jan N0PI Dan  
11 Jan W0NFE Bob  
18 Jan KB0FH Bob  
25 Jan KC0YHH Tony  
1 Feb KD0IUA Paul  
8 Feb N0PI Dan  
15 Feb W0NFE Bob