



MINNESOTA MARSGRAM

Information for Minnesota Navy-Marine Corps MARS Members



March, 2011

Volume 16, Number 3

NNN0ALL Minnesota

by NNN0GAZ Tim

Greetings. Since the last newsletter, I've participated in two more Spring Flood outlook webinars hosted by the National Weather Service in Chanhasen. Each outlook paints a clearer picture – this year it is not a matter of if there will be flooding, it is a matter of when the melt begins. As more snow arrives and the temperature remains low – the probability of wide spread serious flooding increase. That said, I would encourage all members to review the EEI procedures and establish some contacts with your local emergency managers.

As I said last month, with the Memorandum of Understanding between the Navy-Marine Corps MARS and Coast Guard Auxiliary, it is entirely possible that we will see increased traffic and involvement in emergency communications this spring. For those members new to the program, complete your training – that includes those stations entering the program under agency agreements. Effective emergency communications is only carried out when you know what, when and where to communicate your message. Training a new member or refresh one's training during an actual event or exercise is not appropriate. Knowing

what to do and when is the member's responsibility.

Remember the 5G1B meets every evening at 2330Z. Don't miss the opportunity to participate in an evening net, an ecom exercise, or just a friendly round of comments and conversation with your fellow MARS members.

As always, thank you for your participation and support of MARS program in Minnesota. Enjoy this issue of the Minnesota MARSGRAM.

BTOVER



Coming Soon!

by: NNN0KZC AI

The 1st quarter exercise for 2011 will take place March 23, 2011. The Scenario will be flooding in Minnesota code name "Tall Water".

As everyone knows by now, experts expect there

will be considerable flooding in most rivers in Minnesota this spring due to the heavy snowfalls we have had.

Our goal with this exercise is to place emphasis on the proper addressing and formatting of the SITREP's and EEI messages. Your messages should be brief in your descriptions of the flooding in your area. We all need to try and improve the formatting our messages.

Think about the spring flooding prospects in your area and pick a river or lake in your area that may experience flooding.

More information on the proper addressing and formatting of messages will be provided prior to the actual exercise.

For this exercise, your SITREP's should be addressed to NNN0GAZ ONE, and AI will transmit a consolidated SITREP at the proper time and to the proper people. As usual, the higher the participation the better. Thanks for your support and remember to keep your power dry!

BTOVER



The MINNESOTA MARSGRAM is published for the benefit of Amateur Radio Operators in Minnesota and other interested individuals. The contents DO NOT reflect official Navy positions.
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MINNESOTA TRAFFIC NETS

Designator	Frequency	Local Times
5G1B	Pri. NCE	18:30 Daily
	Sec. NBG	
	Ter. NAR	

MINNESOTA ADMIN. NET

5G4A	Pri. NCE	19:00
		2nd Sunday

Website <http://www.mnmars.org>

Intranet site <http://www.communityzero.com/mnmars>

Test Your NIMS Knowledge

Each month we take a look at a topic covered in the FEMA on-line courses required of all emergency communications volunteers. See how much you recall from the course.

Which Command Staff position monitors safety conditions and develops measures for assuring the safety of all assigned personnel?

- A. Public Information Officer (PIO)
- B. Liaison Officer
- C. Resource Officer
- D. Safety Officer

Check in next month's MARSGRAM for the answer.

BTOVER

February NIMS Solution

At which incident facility are primary logistics and administrative functions coordinated and administered?

- B. Camp

BTOVER

"Never let yesterday use up today!"

Ahm Sarri



What was the first U.S. Navy aircraft carrier?

Check for the answer elsewhere in this issue.

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NNN0GAZ FOUR

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Scouts and ARRL Team Up

After working together for nearly a century to provide Scouts with the ability to learn radio communication skills, Boy Scouts of America and the American Radio Relay League (ARRL), the national association for Amateur Radio, have officially teamed up by signing a memorandum of understanding (MOU). This MOU designates the ARRL as a key resource for K2BSA and Radio Merit Badge training at the BSA National Scout Jamboree and establishes the ARRL as the go-to source for Scouts interested in learning about and becoming involved in radio communication.



"Throughout the years, going all the way back to the Wireless Merit Badge in 1918, the ARRL has worked hand-in-hand with Boy Scouts of America to help teach Scouts the skills and joys of radio communication," said Chief Scout Executive Bob Mazzuca. "Today, we are making official a relationship that has been beneficial for both of our organizations for nearly a century."

The BSA, by virtue of its active membership and its outdoor program, represents a significant source of potential new radio operators looking to utilize Amateur Radio for emergency communications while in the field as well as for education, experimentation, and friendship. As part of this strategic alliance, BSA will encourage Scouts and Scouters to become familiar with opportunities for public and community service, learning and personal growth through involvement in Amateur Radio.

"We're excited by the opportunity to make official a relationship that has existed informally for many years," said ARRL President Kay Caigie. "Scouts and Scouters have been some of the strongest proponents and practitioners of radio communication, and we know they will continue to help foster a love and understanding for the essential nature of radio communication for generations to come."

In addition to its National Scout Jamboree involvement, ARRL will continue to promote participation in the annual Jamboree on the Air (JOTA) event. ARRL will serve as contributing editor to the Radio Merit Badge publication, will assist with the review, creation and modification of requirements as necessary, and will assist in developing course material, lesson plans, and other resources for teaching the Radio Merit Badge to Scouts. ARRL also will contribute to the content of the Electricity, Electronics, and Emergency Preparedness and Communications merit badge publications.

BTOVER

Training Corner

WHAT DO I DO ? – Part 2

by: Bob, NNN0GAZ FOUR

In the February, 2011, MARSGRAM Training Corner article, the first action taken by the Mars operator was to prepare and send an actual incident EEI. Sometime later he was asked by the City Manager if Navy Marine Corp Mars could render communication assistance. He responded that he must report the request to CHNAVMARCORP MARS. The report is the "Implementation Report".

NTP8 (D) ANNEX D, Para. 710 provides:

Upon implementing any portion of this Annex (except EEI submission of per article D900) by a MARS member station, a report shall be made by an immediate precedence message to Chief, NAVMARCORMARS (NNN0ASA), the Assistant to CHNAVMARCORMARS for Emergency Communication (NNN0ASZ), the cognizant area, region and state directors, using the following message format:

DE (station call sign)(station serial number)

O DTG Z (MO.) (Yr.)

FM NNN0—

TO NNN0ASA VA

NNN0ASZ GA

NNN0ASG MI

NNN0AS5 MN

INFO NNN0ASG ONE IL

NNN0ASG TWO SC

NNN0AS5 ONE MN

NNN0AS5 TWO OH

NNN0GAZ MN

NNN0GAZ ONE MN

NNN0GAZ TWO MN

BT

UNCLAS

SUBJ: EMERG COMM IMPLEMENTATION

1. Circumstances requiring implementation.

2. MARS services requested (yes/no). If yes, requested by name and title of the requestor.

3. Additional communication support required (yes/no). If yes, to what extent and scope. (Note: If additional support indicated within)

A. State - action to be taken by State director.

B. Region-action to be taken by Director

C. Outside Region –action to be taken by Chief

CHNAVMARCORMARS

BT

You, as the recipient of the request for assistance made by the City Manager, should take responsibility for the Implementation Report. You have on the scene knowledge of the emergency. You can obtain any additional information

needed for the report from the City Manager. THE MINNESOTA AREA EMERGENCY COMMUNICATIONS PLAN provides:

4. IMPLEMENTING AN ECOM Net

3B401 When a request for emergency communications is made by competent bonafide authority (i.e., FEMA, Office of the Governor, Minnesota Department of Emergency Management, Red Cross, County Disaster Officials, etc.) an ECOM Implementation Message shall be carefully composed by the station notified.

Gather ALL information required for the implementation message. Care should be given to document the facts.

Continue to monitor your source of information.

The Emergency Communication Implementation message format for an ACTUAL emergency can be found in Annex E, Page 4.

As required by the situation, it is absolutely necessary that you also provide for your own safety and that of your family.

3B403 Once the implementation message has been composed it must be communicated. Communication of an ECOM event is your FIRST PRIORITY. The implementation message initiates the ECOM. The station that originally receives the traffic, "Originating Station", must pass or relay it to an Action Addee.

This message must be delivered. Alert NNN0GAZ, NNN0GAZ ONE, NNN0GAZ TWO and/or NNN0GAZ THREE via the most expedient means. Relay efforts to any absent addees must also be addressed.

3B405 If a Net is NOT in process, the primary method to initiate an EMERGENCY ECOM Implementation is via the telephone. The Originating Station shall call NNN0GAZ, NNN0GAZ ONE, NNN0GAZ TWO or NNN0GAZ THREE. Once an ECOM Staff Officer has been notified, it will be their responsibility for the execution of the MINNESOTA Call-up Tree (see Annex A). If these stations are not available via telephone, the originating station is directed via this ECOM Plan to move to the designated emergency calling frequency(ies) specified in the Frequency Assignments - Annex G and get this message to NNNOASA ASAP. (Additional addees are NNNOASZ GA, NNNOASG MI, NNNOASG TWO SC, NNNOAS5 MN, NNNOAS5 TWO OHV). If radio contact can not be directly made, 'call in the blind' for any station that may be monitoring. As a last resort, use the MARS Region Data system, the FAX machine or email but use whatever means are available to get the word out. Do not give up until you've accomplished your task.

3B406 Procedure for "calling in the blind";

If there is no net in progress, tune to one of the specified frequencies listed in Annex H and call:

Training cont'd on pg. 4

New CEPT Country

Addition to Reciprocal Agreement for Amateurs

On Monday, February 7, the FCC released a Public Notice (DA 11-221), adding a new country to the CEPT reciprocal operating arrangements for US citizens who hold an FCC-issued General, Advanced or Amateur Extra class Amateur Radio licenses. US hams may now operate in Montenegro, as well as the other countries covered by the European Conference of Postal and Telecommunications Administrations (CEPT), subject to the regulations in force in the country visited, to operate in those countries.

US amateurs with a General class license will be granted CEPT Novice Radio Amateur License privileges, in accordance with ECC Recommendation (05)06 (as amended), which can be found on the web at, http://www.erodocdb.dk/doks/implement_doc_adm.aspx?docid=2136.

US amateurs holding an Advanced or Amateur Extra class license will be granted CEPT Radio Amateur License privileges in accordance with CEPT Recommendation T/R 61-01 (as amended), which can be found on the web at, http://www.erodocdb.dk/doks/implement_doc_adm.aspx?docid=1802.

US hams who will be traveling to CEPT countries can now go to these links and see if any new countries have been added to the reciprocal agreements.

While operating an amateur station in a CEPT country, the US amateur must have a copy of the Public Notice, proof of US citizenship and evidence of their FCC license in their possession. They must show these documents to proper authorities upon request.

BT OVER

Daylight Savings Time

Spring Ahead Sunday March 13th



Training *cont'd from pg. 3*

ANY STATION THIS FREQUENCY ANY STATION THIS FREQUENCY

THIS IS NNN0 (CALL SIGN) NNN0 (CALL SIGN) WITH IMMEDIATE TRAFFIC. OVER

The possible loss of telephone service points up the importance of equipping your station with HF Winlink. If telephone service, and the internet, is available being equipped with Telnet would be very helpful.

The next step in the implementation process is the Implementation of the ECOM Net. Stay tuned for next month's continuing coverage.

BT OVER

ARRL Asks Members to Write in Opposition to HR 607

The ARRL is asking its members to contact their US representatives in opposition to the sections of HR 607 that could affect the Amateur Radio Service allocation at 420-440 MHz. HR 607 — *The Broadband for First Responders Act of 2011* — would address certain spectrum management issues, including the creation and maintenance of a nationwide Public Safety broadband network. It was introduced into the US House of Representatives February 10.

ARRL Regulatory Information Manager Dan Henderson, N1ND, clarified that the League opposes HR 607 *in its present form*. "We do not oppose the concept of dedicated spectrum for the development of a Public Safety infrastructure and wireless network. We object to the bill because of the inclusion of 420-440 MHz as part of the spectrum to be swapped and auctioned to commercial users." You can find a sample letter, "How to Find your Representative" and the contact information for ARRL's legislative consultant, Chwat & Co, at the ARRL website: www.arrl.org/sample-letters.

BT OVER

MARCH DIGITAL CONTESTS

North American Sprint, RTTY

0000Z-0400Z, Mar 13

RTTY Bands: 80, 40, 20m

Exchange: [other station's call] + [your call] + [serial no.] + [your name] + [your state/province/country] More info: <http://www.ncjweb.com/sprintrules.php>

EA PSK31 Contest

1600Z, Mar 13 to 1600Z, Mar 14

PSK31 Bands: 80, 40, 20, 15, 10m

Exchange: RST(signal report) + Serial no

More info: <http://www.ure.es/contest/428-ea-psk31-contest-english-version.html>

St. Patrick's Day Contest

0000 - 2359 UTC, 17 March 2011 - St. Patrick's Day

PSK31, All HF Bands 160M - 6M (no WARC bands).

Exchange: Name, S/P/C and your Ø7Ø Member Number.

More Info: www.podxs070.com

North Dakota QSO Party

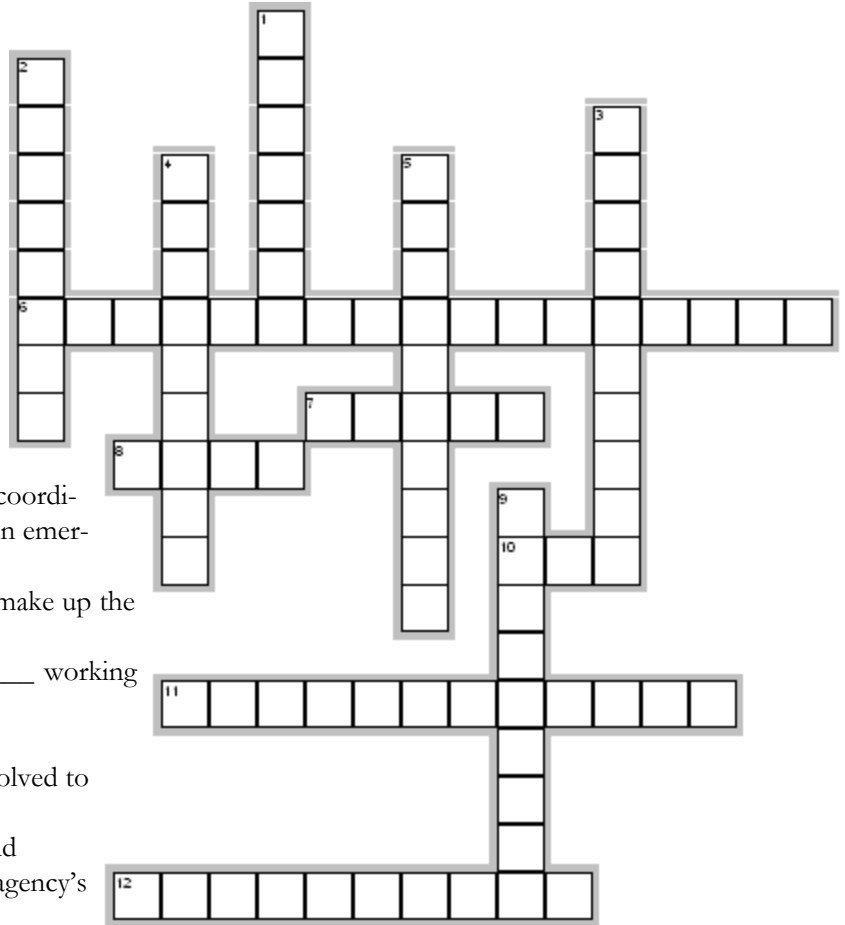
1800Z, Mar 19 to 1800Z, Mar 20

All modes, Bands: 160, 80, 40, 20, 15, 10, 6, 2m

Exchange: RS(T) + (state/province/country)

More info: www.w0cq.com/ndqso2011.pdf

INCIDENT COMMAND SYSTEM



Across

- 6. Under the ICS, the one person in charge is always called the _____ ?
- 7. Each operating section has its own _____ ?
- 8. Incident command system used in Minnesota.
- 10. A model tool for the command, control, and coordination of resources and personnel at the scene of an emergency.
- 11. The Information, Safety, and Liaison Officers make up the IC's _____?
- 12. Operating sections may have various _____ working on specific goals.

Down

- 1. The section that uses staff from each agency involved to track the cost of the disaster.
- 2. Section responsible for information gathering and dissemination and working out the details of each agency's response.
- 3. Section involving Police, Fire, Public Works, Red Cross and relief agencies who are actually in the field doing the work to protect the public.
- 4. The section that provides services only for the responding agency personnel, not the general public.

- 5. _____ tasks in the ICS are performed under the overall direction of a single Incident Commander (IC) in a coordinated manner.
- 9. Firefighting Resources of California Organized for Potential Emergencies - early ICS organization.



February Crossword Solution

Across

- 1. GROUNDPLANE—A vertical antenna built with the central radiating element one-quarter-wavelength long and several radials extending horizontally from the base. The radials are slightly longer than one-quarter wave, and may droop toward the ground.
- 6. BALUN—Balance to unbalance, a device used to couple a balanced antenna to an unbalanced feed line (e.g., dipole to coax).
- 7. JPOLE—Consists of a half-wavelength radiator fed by a quarter-wave matching stub. This antenna does not require the ground plane that 1/4-wave antennas do to work properly.
- 8. DIPOLE—The basic antenna consisting of a length of wire or tubing, open and fed at the center.
- 11. BEAM—An antenna that gives a directional beam pattern.
- 12. BALANCEDLINE—A feed line with two conductors having equal but opposite voltages, with neither conductor at ground potential.
- 13. ANTENNA—A device that intercepts or radiates radio frequency energy.

- 14. LADDERLINE—An open wire transmission line — 600, 450 ohm characteristic impedances are typical.

Down

- 2. DRIVENELEMENT—Antenna element that connects directly to the feed line.
- 3. PARASITICELEMENT—Part of a directive antenna that derives energy from mutual coupling with the driven element, not connected directly to the feed line.
- 4. CLOUDWARMER—An antenna which radiates most of the transmitted energy nearly straight up.
- 5. ANTENNATUNER—Impedance-matching device that matches the antenna system input impedance to the transmitter, receiver, or transceiver output impedance.
- 9. REFLECTOR—An element behind the driven element in an Yagi and some other directional antennas.
- 10. YAGI—A directional antenna consisting of a dipole and two additional elements, a slightly longer reflector and a slightly shorter director.

Future Country of Southern Sudan

As reported widely in the world press, the results of the recent referendum on the future of the Southern Sudan region are now public, and with an overwhelming majority, the people have readied the way for another independent state. Also, the current mother country, the Republic of Sudan, has agreed to honor the referendum results while the President of the United States has pledged U.S. recognition of the new country in July, 2011.

The current plan calls for that country to declare its



independence on July 9 this year, likely to be followed by its well-prepared entry to world organizations, such as the United Nations. Several alternative names for the new republic are still under consideration – probably the name Sudan will not be part of the new republic's nomenclature.

With that scenario in mind, a working group has been established to enable Amateur Radio to enter the scene with a professional, supportive role in the context of introducing the new country to the world of Amateur Radio. It should be noted that this potential new country is emerging with a limited administrative structure, and the first Amateur Radio activation should - prior to the operation - be accompanied with a well-thought-out plan prepared in partnership with Southern Sudan's relevant authorities, such as telecommunications, security and education.

The group of Alex, 5Z4DZ/PA3DZN; Robert, S53R and Martti, OH2BH has organized such an effort in discussions with Southern Sudan's institutions and other related parties in the region.

As public interest in Southern Sudan will run high over the next several months, this group has invited Bernie, W3UR to be its spokesman in dealings with the Amateur Radio community. The group will also be holding discussions about the provision of potential help to Southern Sudan's prospective Amateur Radio Service with several entities, such as NCDXF, in addition to obtaining resources from Japan.

-BT OVER

**Happy
St. Patrick's Day**

GEAR UP!

Warmer temps (hopefully) and melting snow mark the beginning of the annual severe weather season. Along with hope of spring comes the opportunity to refresh your SKYWARN Spotter training. News broadcasts increasingly carry stories about anticipated spring flooding. A noted weather forecaster has predicted a more active severe weather season this spring. All these add up to an increased change that your emergency communications skills might be needed to help your friends and neighbors this spring.

Now is the time to take a look at your Go-kit. Did you replace that coax you grabbed for field day? How are the batteries in the flashlight? How about the alkaline batteries in your HT back-up battery pack? When was the last time you tested the power and antenna cables?

That just takes care of a few radio related items. What about the laptop? Do you have a spare battery? How about a vehicle power adapter for that computer? Is the software up to date on your Thumb Drive? (You do have a dedicated USB thumb drive loaded with your Ecom Plans and soundcard software, don't you?) Have you tested the soundcard/radio interface? Have you changed computers of radios since you last fired up the system? Have you tested the equipment to make sure everything works well together?

So many questions, so little time! The first SKYWARN activation will be here sooner than you realize. Take the time now to update your training and make sure your equipment is ready to go. Who knows, you might find that there is some new piece of equipment that you must have!

BT OVER



GUANTANAMO BAY, The U.S. Coast Guard Cutter Bear (WMEC-901) pulls into Naval Station Guantanamo Bay, Cuba, to take on fuel and stores. Bear is deployed to conduct counter narcotics and migrant operations in the Caribbean region. Naval Station Guantanamo Bay is the logistical hub for all platforms operating in the U.S. 4th Fleet Caribbean region.

End of the Internet ?

Sometime in February, the organization that oversees net addresses in the Asia Pacific region put in a request for more addresses. When these are handed over the central pool of net addresses will be down to its last five blocks of 16 million addresses each.

When those five run out, probably this coming fall, there will be no more of the current generation of addresses available.

The request for addresses was made by the Asia Pacific Network Information Centre



(APNic) as it has almost come to the end of its current allocation of IP Version 4 (IPv4) addresses.

A policy drawn up by the Internet Corporation for Assigned Names and Numbers (Icann) states that when only five blocks of addresses remain they will be quickly distributed to regional agencies. A ceremony to mark the handing over of the last five blocks of addresses, known as /8s, was scheduled to take place on February 3rd.

Drawn up in the 1970s, IPv4 has room for about 4.3 billion addresses. The rapid growth of the net has quickly depleted that stock and the entire address space is expected to be exhausted by September 2011.

A replacement scheme, IPv6, has been drawn up that has trillions of addresses available but progress towards using it has been slow. "The future growth and innovation of the internet is now reliant on deployment of IPv6," said Axel Pawlik, managing director of Ripe, which oversees net address in Europe.

"It is now more vital than ever that ISPs, organizations, governments and all other internet stakeholders begin to deploy IPv6," he said.

BTOVER

PSKMail Server

Vince, NNN0BIH, has set up a jPSK Mail server on NDE. If you wish to experiment with this digital mode, you can find more information at: www.pskmail.wikispaces.com or contact Vince.

BTOVER

Hackers Target Reputable Sites

Visiting reputable websites can still result in malware being downloaded on to users' computers

The proportion of websites secretly harboring malware has reached one in 3,000 according to security firm Kaspersky.

It found a surge in the number of web-based attacks in 2010, with more than 580 million incidents detected.

Risk was no longer focused on sites with illegal content, such as pirate films and music, the report said.

Instead, criminals were increasingly using legitimate websites, such as shopping and online gaming.

The malware writers target vulnerable web servers, with owners often unaware of the attack, said Ram Herkanaidu, senior security research at Kaspersky Lab.

"They will put a piece of Java code, for example, onto a website and scramble it so it is hard to notice.

"The Java code runs when you visit the site and redirects the user to malware," he said. "Previously you could avoid these attacks by not visiting dodgy websites. "Today the malware writers are targeting legitimate sites," added Mr Herkanaidu.

Kaspersky's figures are based on reports from customers who have joined its security network. The rise in incidents of web-based attacks far outstripped the number of new members in 2010, indicating the increasing threat, said Mr Herkanaidu. "It has become the cyber crooks' attack of choice," he said.

The threat from cyber crime is being taken increasingly seriously by government officials. Last week, the UK government published figures estimating that cyber crime costs the economy £27 billion a year.

Earlier this month, European Union researchers said almost a third of computer users had been infected by malware in the past year.

BTOVER



Mysterious Rumble of Thundersnow

February 24, 2011: NASA atmospheric scientists got an unexpected chance to study a curious phenomenon called “thundersnow” when a recent storm unleashed it right over their heads.

Walt Petersen and Kevin Knupp have traveled far and wide to study winter storms. They never dreamed that the most extraordinary one they’d see – featuring freakish thundersnow, a 50-mile long lightning bolt, and almost a dozen gravity waves — would erupt in their own back yards. The storm hit Huntsville, Alabama, on the evening of January 9th. “This incredible storm rolled right over the National Space Science and Technology Center where we work,” says Knupp. “What luck!”

Snowstorms usually slip in silently, with soft snowflakes drifting noiselessly to Earth. Yet this Alabama snowstorm swept in with the fanfare of lightning and the growl of thunder.

Eyewitness Steve Coulter described the night’s events: “It was as if a wizard was hurling lightning behind a huge white curtain. The flashes, muted inside thick, low hanging clouds, glowed purplish blue, like light through a prism. And then the thunder rumbled deep and low. This was one of the most beautiful things I’ve ever experienced.”

It was a once-in-a-lifetime scene for anyone lucky enough to see it, but especially enthralling to scientists seeking the keys to nature’s unique displays of power. Petersen and Knupp, with the help of graduate students from the University of Alabama-Huntsville, had their research equipment primed and ready.

From his at-home workstation, Petersen can monitor lightning detector networks and control radars, which he used to measure and record the storm. But when the storm first hit his response was a little less scientific: “I was so excited that I ran outside in my house slippers to take pictures,” he recalls. At around 10:30 p.m., he heard the first rumble of thundersnow. “My first thought was, ‘excellent, a bonus!’”

What made this snowstorm act like a thunderstorm? Petersen explains: “You rarely have lightning in a snowstorm. But in this case, some unique conditions set the stage for it. Moist air at the bottom of the storm was lifted up, rapidly forming snow and ice. Some of the snow even grew in pellet forms called ‘graupel,’” he says.

Snowflakes and ice pellets of different sizes ascended at different rates—and they began to exchange charges. The

process isn’t fully understood, but it could be a result of particles rubbing together (like wool socks on carpet). As the cloud charged up, it began to act less like an ordinary winter snowstorm and more like a summer thunderstorm.

It’s no coincidence that the thundersnow was accompanied by massive roller coasters of air known as gravity waves. These waves are similar to waves in the ocean, but roll through the air instead of water.

“There was a nearly constant, uniform progression of gravity waves, starting at Monte Sano, a small mountain a few miles east of us, and moving westward, right over our building,” says Knupp, who spent most of the storm’s duration with his eyes riveted on instrument displays inside the team’s mobile X-band radar van. “An easterly flow of air on the other side of the mountain ridge bumped into and was pushed over Monte Sano, forming 11 separate waves, about one per hour.”

He believes the clockwork up and down motion of the waves created variations in the updrafts responsible for the heavy snow, leading to the charge separation that generated lightning. Unfortunately, he was knee-deep in computer displays instead of snow when the storm’s most impressive lightning bolt set the sky aglow.

“This bolt reached from the tower on Monte Sano Mountain all the way to Molton, Alabama, about 50 miles away,” says Knupp. “And I missed it.” Was he disappointed? “I felt cheated, but it was worth the trade off. I learned some interesting things.” Spoken like a true scientist.

BTOVER



PACIFIC OCEAN An MV-22 Osprey assigned to Marine Medium Tiltrotor Squadron (VMM) 166 approaches the amphibious assault ship USS Makin Island (LHD 8). This is the first time an Osprey has conducted flight operations on a west coast amphibious assault ship since being introduced to the fleet.

5G1B Net Schedule

6:30PM 4007 kHz USB

Day	NECOS	Tfc Rep
Sun.	XYA	XEE
Mon.	XEE	XEE
Tue.	BQH	BQH
Wed.	KZC	KZC
Thu.	SXU	SXU
Fri.	???	???

Sat. Rotating Duty (see below)

Don't be bashful, if the net has not been called by the net control station within 2 minutes, jump in and start things rolling.



No birthdays this month!



Service Recognition

NNN0BJJ	Curtis Dahleen	38 yrs
NNN0VEU	Neil McMillin	28 yrs
NNN0AWF	George Fisher	5 yrs

Don't forget your paperwork!

Saturday NECOS / TREP Schedule

	NECOS	TREP
Mar 5	BQH	BQH
Mar 12	KZC	KZC
Mar 19	SXU	SXU
Mar 26	XYA	XEE
Apr 2	XEE	XEE
Apr 9	BQH	BQH



The Langley, commissioned in 1922

Test Your Analytical Skills

Arithmetic Riddle

To those who have successfully outgrown their early dread of arithmetic, coded computations are usually interesting and rather easy puzzles. The following multiplication in which each letter stands for a different digit is an example of this sort of problem.

This can be deciphered with no further clues, but there is one too good to conceal. When the letters are arranged in the order of the numbers they represent they spell out a phrase which makes a very keen observation on the art of puzzle solving.

For what number does each letter stand?

SOE
UPE
NTRE
OOAO
NSHU

Answer in the next issue of the Minnesota MARSGRAM

Solution for February Skills Test

The Correct Letter

Choose the correct letter for each clue in the rhyme below. When put in order, the four letters will spell the answer to the riddle.

My first is the some but not all.
My second in into but not in tall
My third in the little but not in the big
My fourth in pork but not in pig
My Whole is made in nature's way
For clothing, rugs used every day.

Answer: Silk

BTOVER



GULF OF ADEN The Arleigh Burke-class guided-missile destroyer USS Barry (DDG 52) conducts an operational check of the countermeasure wash down sprinkler system. The countermeasure wash down system washes the ships exterior in case of chemical, biological or radiological contamination.