



# MINNESOTA MARSGRAM



Information for Minnesota Navy-Marine Corps. MARS Members

April, 2005

Volume 9, Number 4

## NNN0ALL Minnesota

by NNN0GAZ Tim

Greetings to all,

Wow, two weeks ago I was removing sixteen inches of frozen sunshine from my driveway. Today I was out trimming some trees, picking up the yard and starting all those other springtime rituals. My children have the baseball bug – the gloves are on, the bats are out – this means that opening day of baseball season can't be far off.

A reminder, Severe Weather Awareness Week is April 18-22, 2005. Severe Weather Awareness Day is Thursday, April 21, 2005, don't worry the statewide activation of the outdoor warning systems will serve as a reminder. For further information, have a look at the website of the Minnesota Homeland Security and Emergency Management, specifically <http://www.hsem.state.mn.us/swaw/index2005.asp>.

Bravo Zulu to Al, NNN0GAZ TWO, for conducting the Lost Comm emergency communications exercise, March 26 to 29, 2005. I was happy to see the participation by Minnesota MARS members. We found a number of "teachable" moments for everyone. Lots of traffic moved through the net and the switch, giving all participants plenty of opportunities for practice in formatting, sending and receiving message. Overall a great job by all involved.

Speaking of the switch, NNN0DVD has been on the air now for two years. We've had a few interruptions, but when dealing with computers, transceivers and other associated electronics one has to expect some downtime. A check of the antennas, antenna support and other infrastructure last fall indicated we will need to do some work on our tripod support platform. Seems that two years exposed to the elements has started to take its toll. We will need to take some measurements and design a platform that will weather the elements. Details will follow in later issues. In addition, there is still the possibility of a VHF link to the switch to move the remote administration from HF to VHF.

Don't forget to check out the Minnesota Navy-Marine Corps MARS intranet site at <http://www.communityzero.com/mnmars>. The latest rosters, Minnesota Emergency Communications plan, and the calendar of events are all located at this site for the convenience of Minnesota Navy-Marine Corps MARS members.

Finally, mark your calendar now, save the date, the Minnesota Area

Conference is scheduled for Saturday, June 11, in Waite Park. We have invited Chief Michael Jeffries, our new Central Area Director to attend, we're hoping that he can attend. If you have agenda items, please forward them to Al, NNN0GAZ ONE. I encourage all Minnesota Area MARS members to plan on attending.

Enjoy this issue of the Minnesota MARSGRAM

BT OVER



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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Content Contributions Welcomed and Encouraged

### MINNESOTA TRAFFIC NETS

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

### MINNESOTA ADMIN. NET

5G4A	Pri. NCE	19:00 2nd Sunday
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### MARS DATA SYSTEM

	Frequency
NN0DVD	NCO AFSK/USB

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

## Angel Dcoy



These are photos of an Air Force C-130 releasing flares to repel heat-seeking Missiles. The pattern formed by these “decoys” is how they got their name. Angel decoy. Maneuvers are usually in remote areas and over water, therefore the general public does not get to view these exercises.

### In Memorium

#### Al Ringate NNNOPNV

Albert Charles Ringate, KOJCG/ NNNOPNV, lifelong resident of Minneapolis, passed away March 23 at the age of 77. He is survived by his loving wife of 57 years, Donna; children, Wayne (Bonnie), Laura Hanmer, Lynn Pointner (Troy), Warren (Barb), James, Lisa Sandin (Jeff), Becky; 12 grandchildren; 7 great-grandchildren; sisters, Arline, Marilyn, Joyce, Jane; brother, Tom; stepmother, Lu. Preceded in death by parents, Gilbert & Francis. Albert served in the Merchant Marines during WW II; worked for the Chicago Northwestern Railroad, and retired from the Hennepin County Sheriff's Department. Dearly missed by all his children. Interment Friday, March 25, 2005, Fort Snelling National Cemetery.

Al entered the MARS program 27 April 1980 and became an Associate Member 15 August 1992. This year marked his 25th year as a MARS member.

## Training Corner:

### GUARDING FOR MESSAGES

by Curt NNN0BJJ

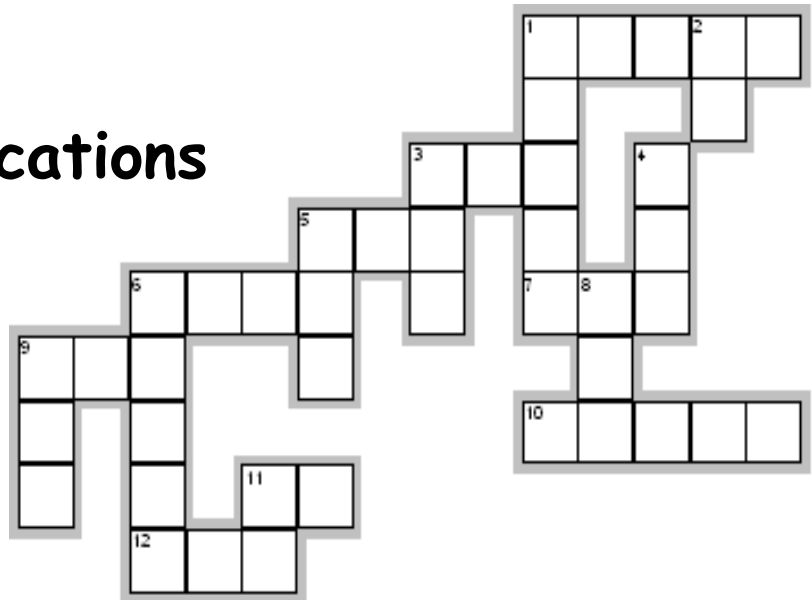
The following points are taken from mini-lesson recently given on the 5G1B net.

1. Message distribution directions are at the discretion of the NECOS.
2. Stations assigned to accept messages for another station may use the term “guarding for” to indicate that if the message addressee has not checked into the net that the NECOS (at his/her discretion) may know that delivery of the message may be made via the “guarding” station.
3. If the net is a state net the NECOS should know as part of his/her job, who holds staff assignments in his/her state. Therefore it is not necessary for the station holding a staff assignment to indicate that he/she will guard for the message listed for that staff position. The NECOS will direct the TREP to transmit the message to the addressee. If the addressee has hard copy a simple “ROGER” will be the addressee's response.
4. If the net is not a state net, i.e. a region net, and you hold a staff position and may expect to be an addressee of messages transmitted on that net you may indicate your staff call sign (or perhaps check in with your staff call sign) so that the NECOS may assign delivery correctly.
5. In the previous paragraph (4), if you are going to guard for some or all addressee's in your state you may advise the NECOS of that responsibility.
6. All this will fail if the TREP does not correctly list the addressee's of the messages. The TREP must provide good information to the NECOS to help him/her direct messages to the proper addressee or relay station. The TREP should review the message before bringing it to the net to determine how to clearly identify the addressee's of the message for the NECOS.

BT OVER



# Digital Communications MARS Style



Created with EclipseCrossword — [www.eclipsecrossword.com](http://www.eclipsecrossword.com)

**Across**

1. Central Area Routing
3. I am net control station
5. I have traffic for...
6. A technique for transmitting digital data using multiple tones, extending the RTTY two tone technique to many tones, usually, but not always, one tone at a time.
7. Automatic Link Establishment
9. I have no traffic
10. Minnesota Area routing
11. Immediate Precedence command to the switch
12. Adding this prefix makes the operating signal a question

**Down**

1. Chief Navy-Marine Corps MARS routing
2. Priority precedence command to the switch
3. Transmit this message to...
4. I report into the net
5. It is necessary to obtain NECOS permission to transmit (Directed net)
6. Indicates a message with multiple addressee to the switch
8. List all traffic to
9. Relay
11. Routine precedence command to the switch

## Test Your MARS Skills

How often are station capability report updates required?

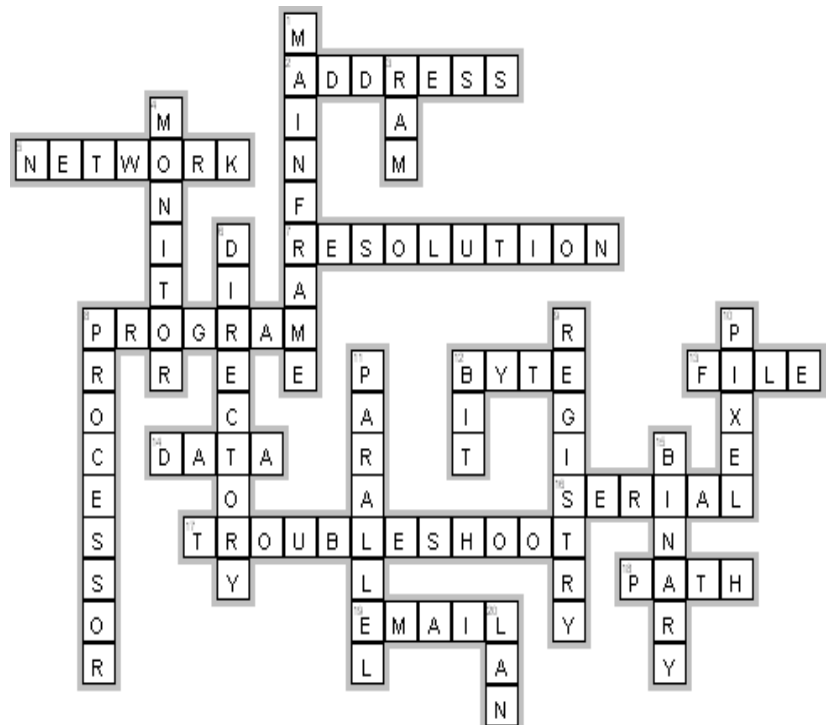
- A. Any time there is a substantial change in your station's capabilities.
- B. Only when you first enroll in MARS.
- C. Once per quarter.
- D. Once per calendar year.

See the May05 newsletter for the answer.

The March MARS Skill test:

In obtaining a fill, what prowords can be used to point to the information that you need?

- A. SAY AGAIN WORD BEFORE...
- B. SAY AGAIN FROM ... TO.
- C. SAY AGAIN WORD AFTER ...
- D. SAY AGAIN ALL AFTER...
- E. All of the above.



Created with EclipseCrossword — [www.eclipsecrossword.com](http://www.eclipsecrossword.com)

# Enterprise Network Deploys Overseas

Lessons learned from Navy/Marine Corp. Intranet facilitate installation process.

With updated cabling and server farms in place, the U.S. Navy is making way on a government-owned, government-operated information technology initiative that ultimately will affect more than 41,000 users in Europe, the Middle East and the Far East. During the coming months, sailors stationed at bases outside the continental United States, beyond the scope of the Navy/Marine Corps Intranet, will be coming aboard their own enterprise wide network.

The Naval Network Warfare Command (NETWARCOM), Norfolk, Virginia, is now leading the effort to establish the non-U.S. pillar of FORCEnet by creating a common and secure information technology network on Navy installations outside the continental United States (OCONUS). The OCONUS Navy Enterprise Network, or ONE-NET, will provide state-of-the-art technical capabilities at 16 major OCONUS fleet bases and stations: nine sites in the Far East, six in Europe and one in Bahrain. In addition, ONE-NET will help meet the increased demand for secure Internet protocol router network (SIPRNET) access for forward deployed and support forces.

Although similar in its functionalities to the Navy/Marine Corps Intranet (NMCI) in the United States, ONE-NET differs from the NMCI in one essential way: It is a government-owned and -operated network. General Dynamics

Systems, Needham Heights, Massachusetts, is under contract for the actual installation; however, NETWARCOM will oversee the day-today operation and maintenance of the network, and active duty military personnel, Navy civilians, U.S. contractors and host nations' citizens will staff the support centers.

Improvements to the infrastructure of the overseas network began in 2001 under the Base Level Information Infrastructure (BLII) program, which was administered by the program executive office for command, control, communications, computers and intelligence, Space and Naval Warfare Systems Command, San Diego. Discussions about moving responsibility for ONE-NET to NETWARCOM began in December 2003, and the command officially assumed the network in October 2004. Personnel and funding are in the final phases of realignment, which is scheduled to be complete by the beginning of fiscal year 2006.

The security advantages of having a single network was

one of the reasons the Navy decided to move to the NMCI more than four years ago. But ONENET resembles the NMCI in a number of other ways. As with the intranet, users will have standardized hardware and software, a centralized help desk, a standardized e-mail address and increased SIPRNET connectivity. In addition, they will be able to access an OCONUS e-mail directory.

Also analogous to the NMCI, ONENET is being established incrementally. To date, the Naval Support Activity in Bahrain has migrated onto ONENET services, and the cutover was scheduled to take place in Yokosuka, Japan, by the end of February. The initial rollout throughout the OCONUS area is planned to be complete by September 2007.

In terms of hardware and software, ONE-NET users receive Dell computers that feature a 3.2-gigahertz processor, a 40-gigabyte hard drive, 512 megabytes of memory, a compact disc rewriteable/digital versatile disc drive and a two-piece stereo speaker system. Laptop computers with similar features also are available.

Users are provided with a workstation baseline software configuration that includes. The Windows XP Professional operating system, Office XP, Internet Explorer, Adobe Acrobat Reader, Visio Viewer, Symantec Corporate Client Edition and a number of multimedia programs. The current plan is to refresh the desktop equipment every three years and the back-room technologies every five years. "That's a major change from how things are done now because now the age of the computers depends on the command's budget. So, some have state-of-the-art computers, and some have very old computers," Eric Markland, consultant for Booz Allen Hamilton, Hampton Roads, Virginia, says.

Like the NMCI, only job-related applications will be allowed on the network and must pass through the same filters as are used for the NMCI. They must be secure, funded and interoperable, the commander explains. "The key is that we're drawing down the number of applications. This is done in coordination with on-station personnel as well as with NETWARCOM. It depends on who the functional area manager is-who is paying for that application-but if it's going to reside on ONE-NET, we care about it," Cmdr. Teresa Bandur-Duvall, USN, deputy chief

## Enterprise Net

*cont'd from pg. 4*

information officer, NETWARCOM explains.

Despite the similarities, ONE-NET differs from the NMCI in several significant ways. The commander points out that because the intranet is commercially owned and operated, many of the implementation and management decisions are business-based. "If you look at the total cost of ownership, there's a certain element of the business end to NMCI. A government-owned, government-operated network allows us to take what we learned from a contractor-owned, contractor-operated system, look at it holistically, take the benefits and implement them under the NMCI technique, then use the benefits overseas. Plus, we can use the Status of Forces Agreement to employ in-country personnel to help maintain the system. That allows us to retain civilians in the area and government and military personnel to work on the system," she states.

The commander notes other benefits as well. "Think about how changes are made. If you want to add a person to the network or look at new technologies, with a government-owned, government-operated network, you don't have to renegotiate like in NMCI. And, if there's a mission-critical issue that needs to be addressed immediately, we can look at that right away as a government-owned, government-operated system," she offers.

Markland points out that the ability to be responsive is one of the reasons it was important to put NETWARCOM in charge of the ONE-NET program. "The command's mission is to own and operate the networks. We have NMCI here at the command, and we truly have been using lessons learned from NMCI and applying those to make ONE-NET a success.

"Legacy applications are a perfect example. We've been through the pain of what it takes to certify, accredit and test these applications. We came up with a policy about a year ago that says, 'If you are an approved application on NMCI, you are approved on ONE-NET.' And we're able to do that because the architecture that ONE-NET was built on matches NMCI," Markland says. As a result of this policy, the only application issues that need to be resolved are those that are specific to the host nation, he adds.

The commander notes that other lessons were learned from the NMCI project. For example, she believes that the intranet demonstrates that the concept of an enterprise network is a smart idea. "So, one of the lessons we learned was that we weren't going to have legacy systems out there. We're providing centralized information assurance, intrusion detection, network monitoring, reporting tools and processes. These are all the things that are NMCI-like. We'll be able

to see any attempts to get into the system now," she says. The ONE-NET initiative benefited from the NMCI program in other ways. For example, NMCI implementers found out rather quickly that educating upcoming and new users about the intranet was essential to both usefulness and acceptance. As a result, the ONE-NET team organized a "road show" to explain the enterprise network and processes to its customers. Cmdr. Bandur-Duvall notes that the information was presented not only to flag officers but also to commanders as well as to end users.

The team also asked for information or change agents within the command who would be knowledgeable about ONE-NET. "They won't pick up the phone and call the help desk, but when someone says, 'Why can't I have this on my computer?' or 'What will it do to my screen?' they will get the word out. And they may say, 'Pick up the phone and call,'" the commander relates.

Although ONE-NET is following an incremental rollout process similar to that of the NMCI, Markland explains that this is another area where experience has been a good teacher. ONE-NET will be installed theater by theater. The commander emphasizes that ONENET uses standardized hardware and software. "We weren't trying to go off on our own and be rebels. We're trying to ensure that we're following joint direction through the Defense Department standards and following it through this interoperable network to ONE-NET. So it's connectivity from the ground up and then from the senior level down. It will be interoperable with NMCI and IT-21," she states.

*BT OVER*

*Excerpted from an article written by Maryann Lawlor in SIGNAL Magazine, March 2005 [www.afcea.org/signal](http://www.afcea.org/signal).*



Indian Ocean (Mar. 16 2005) - The Military Sealift Command (MSC) hospital ship USNS Mercy (T-AH 19) sits off the coast of Banda Aceh, Indonesia, preparing for their return home. Mercy has remained off the coast of Banda Aceh, Indonesia for six weeks, providing disaster relief and medical care to victims of the Tsunami that devastated the coastal areas of northern Sumatra, Indonesia. Mercy will continue to provide humanitarian relief in the South Pacific en route to her homeport of San Diego, Calif. U.S. Navy photo by Photographer's Mate 2nd Class Jeffery Russell (RELEASED)

## Armed Forces Day Activity

May 14, 2005

The Army, Air Force, Navy, Marine Corps, and Coast Guard are co-sponsoring the annual military/amateur radio communications tests in celebration of the 55th anniversary of armed forces day (AFD). Although the actual armed forces day is celebrated on Saturday, May 21, 2005, the armed forces day military/amateur crossband communications test will be conducted one week earlier on May 14, 2005 (local). The reason is so the AFD military/amateur crossband communications test will not conflict with the Dayton Hamvention (20-22 May 2005), which is on the same weekend as the actual armed forces day.

The annual celebration features traditional military to amateur cross band communications SSB voice test and the secretary of defense message-receiving test. These tests give amateur radio operators and short wave listeners an opportunity to demonstrate their individual technical skills and receive recognition from the secretary of defense and/or the appropriate military radio station for their proven expertise.

QSL cards will be provided to those making contact with the military stations. Special commemorative certificates will be awarded to anyone who receives and copies the digital armed forces day message from the secretary of defense.

Military-to-amateur cross band SSB test contacts. Military-to-amateur cross band operations will take place on the dates/times in zulu (UTC), and frequencies listed below for each station. Voice contacts will include operations on single sideband voice (SSB). Some stations may not operate the entire period, depending on propagation and manning. Participating military stations will transmit on selected military mars frequencies and listen for amateur radio stations in the amateur bands indicated below. The military station operator will announce the specific amateur band frequency being monitored. Duration of each voice contact should be limited to 1-2 minutes. The following stations will be transmitting on mars frequencies listed below which are provided as 'window/dial frequency' in KHZ.

STATION: AAZ (14 MAY 1300Z - 15 MAY 0200Z)

4038.9 KHZ LSB 80M  
6913.0 KHZ LSB 40M  
7424.0 KHZ USB 40M  
13741.5 KHZ USB 20M  
13993.0 KHZ USB 20M  
18211.0 KHZ USB 17M  
18639.0 KHZ USB 17M  
20219.5 KHZ USB 15M  
20810.0 KHZ USB 15M  
24760.0 KHZ USB 12M  
27788.5 KHZ USB 10M

Location: Fort Huachuca, AZ  
Address: Commander Netcom/9th ASC  
Attn: Netcom-OPE-M (Mars) (31)  
2133 Cushing Street  
Ft. Huachuca, AZ 85616-7070

STATION: AAC (14 MAY 1400Z - 2100Z)

3348.9 KHZ LSB 40M  
13910.5 KHZ USB 20M  
Location: Lexington, KY  
Address: HQ 1st BDE, 100th Div (It) Mars Station  
Barrow Army Reserve Training Center  
1051 Russell Cave Pike  
Lexington, KY 40505

STATION: ABH (14 MAY 1800Z - 15 MAY 0400Z)

3195 KHZ LSB 80M  
3360 KHZ LSB 80M  
4440 KHZ LSB 80M  
4466 KHZ LSB 80M  
7360 KHZ LSB 40M  
7720 KHZ LSB 40M  
8040 KHZ LSB 40M  
8094.5 KHZ LSB 40M  
14483.5 KHZ USB 20M  
14489.5 KHZ USB 20M

17443.0 KHZ USB 17M  
17592.5 KHZ USB 17M  
20978.0 KHZ USB 15M  
20559.0 KHZ USB 15M

Location: Schofield Barracks, HI  
POC: Cpt Ellie Vance  
Commander, 396th Signal Company  
30th Signal Battalion, 96857

STATION: AIR (14 MAY 1200Z - 2400Z)

4026.5 KHZ LSB 80M  
6894.5 KHZ USB 40M  
7316.5 KHZ LSB 40M  
13985.0 KHZ USB 20M  
13996.0 KHZ USB 20M

Location: Andrews AFB, DC  
Address: 789 Cs  
Andrews AFB, DC

STATION: AIR-2: (14 MAY 1500Z - 15 MAY 0300Z)

4488.5 KHZ USB 80M  
6994.5 KHZ USB 40M  
13983.5 KHZ USB 20M  
14387.5 KHZ USB 20M  
27983.5 KHZ USB 10M

Location: Las Vegas, NV  
Address: Nellis AFB NV

STATION: AIR-3: (14 MAY 1800Z - 15 MAY 0600Z)

4023.5 KHZ USB 80M  
7358.5 KHZ USB 40M  
14528.5 KHZ USB 20M  
20873.0 KHZ USB 15M

Location: Hilo, HI  
Address: HIANG, 291 CBCS  
Hilo, HI

STATION: NAV (14 MAY 1200Z - 15 MAY 0400Z)

4010.0 KHZ LSB 80M  
7348.0 KHZ LSB 40M  
14478.5 KHZ USB 20M  
20994.0 KHZ USB 15M

Address: HQ NAVMARCORMARS Radio Station  
NAV  
Cheatham Annex Bldg. 117  
108 Sanda Ave  
Williamsburg, Va 23185-5830

STATION: NAV-3 (14 MAY 1200Z - 15 MAY 0400Z)

FREQUENCY EMISSION AMATEUR BAND  
4014.0 KHZ LSB 80M  
7394.5 KHZ LSB 40M  
13974.0 KHZ USB 20M  
20997.0 KHZ USB 15M

Address: NAVMARCORMARS RADIO STATION  
9035 OCEAN DRIVE SUITE 3A  
CORPUS CHRISTI, TX 78419-5234

STATION: NAV-4 (14 MAY 1200Z - 15 MAY 0400Z)

FREQUENCY EMISSION AMATEUR BAND  
4011.5 KHZ LSB 80M  
7376.5 KHZ LSB 40M  
14467.0 KHZ USB 20M  
21758.5 KHZ USB 15M

Address: NAVMARCORMARS RADIO STATION  
615 PREBLE AVENUE  
CAMP BARRY BLDG. 153  
GREAT LAKES, IL 60088-2850  
POC: ITC (SW/AW) JEFFRIES

**AFD Activity** *Cont'd from Pg. 6*

STATION: NBL (14 MAY 1200Z - 15 MAY 0400Z)  
 FREQUENCY EMISSION AMATEUR BAND  
 4041.5 KHZ LSB 80M  
 7371.5 KHZ LSB 40M  
 14391.5 KHZ USB 20M  
 20623.5 KHZ USB 15M  
 Address: NAVMARCORMARS RADIO STATION  
 PO BOX 161 NAVAL SUBMARINE BASE  
 GROTON, CT 06349-5161

STATION: NPL (14 MAY 1500Z - 15 MAY 0400Z)  
 FREQUENCY EMISSION AMATEUR BAND  
 4003.0 KHZ LSB 80M  
 7351.5 KHZ LSB 40M  
 14463.5 KHZ USB 20M  
 20936.0 KHZ USB 15M  
 Address: NAVMARCORMARS RADIO STATION  
 937 NORTH HARBOR DRIVE  
 SAN DIEGO, CA 92132-5100

STATION: NUW (14 MAY 1500Z - 15 MAY 0400Z)  
 FREQUENCY EMISSION AMATEUR BAND  
 4044.0 KHZ LSB 80M  
 7381.5 KHZ LSB 40M  
 13528.5 KHZ USB 20M  
 20952.5 KHZ USB 15M  
 Address: NAVMARCORMARS RADIO STATION  
 260 W. PIONEER FSC BLDG.  
 NAS WHIDBEY ISLAND, WA 98277

STATION: WAR (14 MAY 1300Z - 2300Z)  
 FREQUENCY EMISSION AMATEUR BAND  
 4020.9 KHZ LSB 80M  
 7504.0 KHZ LSB 40M  
 13512.5 KHZ USB 20M  
 20518.5 KHZ USB 15M  
 LOCATION: FT DETRICK, MD

Address: COMMANDER, 302D SIGNAL  
 BATTALION  
 1671 NELSON STREET  
 FT DETRICK, MD 21702  
 ATTN: MARS STATION BLDG. 1678

STATION: WUG-231 (14 MAY 1300Z - 15 MAY 0300Z)  
 FREQUENCY EMISSION AMATEUR BAND  
 4032.9 KHZ LSB 80M  
 6826.0 KHZ LSB 40M  
 14486.0 KHZ USB 20M  
 14663.5 KHZ USB 20M  
 20973.5 KHZ USB 15M  
 LOCATION: MEMPHIS, TN  
 Address: USACE MEMPHIS DISTRICT OFFICE  
 ATTN: JIM POGUE  
 PUBLIC AFFAIRS OFFICE ROOM B-202  
 167 N. MAIN ST.  
 MEMPHIS, TN 38103-1894

**Secretary Of Defense Message Test Via Digital Modes.**

The secretary of defense message will be transmitted via digital modes including RTTY, PACTOR, AMTOR, clover, PSK-31 and MT63 from the stations listed below, including frequencies, mode, and date/time in zulu (utc). All frequencies are listed for center of intelligence. Offset as appropriate for your TNC. (note: not all stations may necessarily operate on all the frequencies listed, depending on propagation and available equipment.)

STATION: AAZ  
 FREQ MODE DATE/TIME  
 6988.0 KHZ RTTY 15 MAY/0110Z  
 PACTOR FEC 15 MAY/0130Z  
 CLOVER 15 MAY/0200Z  
 MT63 15 MAY/0220Z  
 PSK-31 15 MAY/0250Z  
 14402.0 KHZ RTTY 15 MAY/0110Z  
 PACTOR FEC 15 MAY/0130Z  
 CLOVER 15 MAY/0200Z  
 MT63 15 MAY/0220Z  
 PSK-31 15 MAY/0250Z

STATION: NAV-3  
 FREQ MODE DATE/TIME  
 7393.0 KHZ RTTY 14 MAY/2340Z  
 AMTOR FEC 15 MAY/0010Z  
 MT63 15 MAY/0040Z  
 13975.5 KHZ RTTY 14 MAY/2340Z  
 AMTOR FEC 15 MAY/0010Z  
 MT63 15 MAY/0040Z

STATION: NPL  
 FREQUENCY MODE DATE/TIME  
 7350.0 KHZ RTTY 15 MAY/0240Z  
 PACTOR FEC 15 MAY/0310Z  
 AMTOR FEC 15 MAY/0340Z  
 14465.0 KHZ RTTY 15 MAY/0240Z  
 PACTOR FEC 15 MAY/0310Z  
 AMTOR FEC 15 MAY/0340Z

STATION: NAV  
 FREQ MODE DATE/TIME  
 7346.5 KHZ RTTY 14 MAY/2340Z  
 AMTOR FEC 15 MAY/0010Z  
 MT63 15 MAY/0040Z  
 14480.0 KHZ RTTY 14 MAY/2340Z  
 AMTOR FEC 15 MAY/0010Z  
 MT63 15 MAY/0040Z

STATION: NAV-4  
 FREQ MODE DATE/TIME  
 7375.0 KHZ RTTY 15 MAY/0240Z  
 AMTOR FEC 15 MAY/0310Z  
 MT63 15 MAY/0340Z  
 14468.5 KHZ RTTY 15 MAY/0240Z  
 AMTOR FEC 15 MAY/0310Z  
 MT63 15 MAY/0340Z

STATION: NUW  
 FREQ MODE DATE/TIME  
 7380.0 KHZ RTTY 15 MAY/0240Z  
 PACTOR FEC 15 MAY/0310Z  
 AMTOR FEC 15 MAY/0340Z  
 13530.0 KHZ RTTY 15 MAY/0240Z  
 PACTOR FEC 15 MAY/0310Z  
 AMTOR FEC 15 MAY/0340Z

STATION: NBL  
 FREQ MODE DATE/TIME  
 7370.0 KHZ RTTY 14 MAY/2340Z  
 PACTOR FEC 15 MAY/0010Z  
 AMTOR FEC 15 MAY/0040Z  
 14393.0 KHZ RTTY 14 MAY/2340Z  
 PACTOR FEC 15 MAY/0010Z  
 AMTOR FEC 15 MAY/0040Z

STATION: WAR  
 FREQ MODE DATE/TIME  
 6988.0 KHZ RTTY (NOTE 1) 14 MAY/2315Z  
 PACTOR FEC 14 MAY/2330Z  
 14440.0 KHZ PACTOR FEC 14 MAY/2345Z  
 AMTOR FEC 14 MAY/2400Z  
 NOTE 1: 170 HZ SHIFT AT 45 BAUD.

Submission Of Secretary Of Defense Test Message Entries.  
 Transcripts of the RTTY, PACTOR, AMTOR, clover, PSK-31, and MT63 receiving test should be submitted 'as received.' no attempt should be made to correct possible transmission errors. Provide time, frequency and call sign of the military station copied, including name, call sign, and address (including zip code) of individual submitting the entry. Ensure this information is placed on the paper containing the test message. Each year a large number of acceptable entries are received with insufficient information, or necessary information was not attached to the transcriptions and was separated, thereby precluding issuance of a certificate. Entries must be sent to the appropriate military address as follows:

AAZ or WAR send entries to:  
 Armed Forces Day Celebration  
 Commander Netcom/9th Asc  
 Attn: Netc-Ope-Ma (Mars) (31)  
 Fort Huachuca, Az 85613-5000

NAV, NAV-3, NAV-4, NBL, NPL or NUW send entries to:  
 Armed Forces Day Celebration  
 Chief, Navy-Marine Corps Mars  
 Cheatham Annex Bldg. 117  
 108 Sanda Ave  
 Williamsburg, Va 23185-5830

## 5G1B Net Schedule

6:30PM 4007 kHz USB

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

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.

## Saturday NECOS / TREP Schedule

	NECOS	TREP
Apr 2	ACY	???
Apr 9	XYA	XEE
Apr 16	XEE	XEE
Apr 23	KZC	KZC
Apr 30	BQH	BQH
May 7	SXU	SXU

### *The Sailor's Creed*

*I am a United States Sailor.*

*I will support and defend the Constitution of the United States of America, and I will obey the orders of those appointed over me.*

*I represent the fighting spirit of the Navy and those who have gone before me to defend freedom and democracy around the world.*

*I proudly serve my country's Navy combat team with honor, courage and commitment.*

*I am committed to excellence and the fair treatment of all.*



Center for Surface Combat Systems Learning Site Great Lakes, Ill. (Mar. 15, 2005) - Students attending Quartermaster "A" School class 05060, at the Center for Center for Surface Combat Systems Learning Site Great Lakes, recite the Sailor's Creed at the beginning of the training day. The Creed was first developed in 1993 by a Blue Ribbon Panel to reflect the Navy's Core Values. Rear Adm. Ann Rondeau of Naval Personnel Development Command instituted the policy in December 2004 to instill a daily sense of pride in the Navy they serve. U.S. Navy photo by Fire Controlman 2nd class Jason J. Mosher

# HAPPY BIRTHDAY

NNN0XYA	Bob Reid	4/18
NNN0KWS	Bill Strong	4/25
NNN0KZC	Al Doree	4/27

## Service Recognition

NNN0YLC	Weston Ingram	40yrs
NNN0PNV	Albert Ringate	25 yrs
NNN0XYA	Robert Reid	24 yrs
NNN0YWH	Robert Olson	21 yrs
NNN0AFU	Michael Cherney	2 yrs

**Don't forget your paperwork!**

## Test Your Analytical Skills

### A blink of an Eye

Cecil Flock

Courtesy of *The Electron*, Cleveland Institute of Electronics

A blink of an eye takes  $1/5$  of a second, and a person blinks 25 times per minute. If you average 50 mph on a 500 mile trip, how many miles will you drive with your eye closed.

Answer in the next issue of the Minnesota MARSGRAM

## The March Test Solution Value of Each Resistor

We have 4 series connected resistors. R2 is twice as large as R1. R3 is 1.5 ohms greater than R2, and R4 is 0.5 ohms greater than twice R2, and the total resistance is 11 ohms. Find the value of each resistor.

**Answer:** Algebra showed  $R1 = 1\text{ohm}$ ,  $R2 = 2\text{ ohms}$ ,  $R3 = 3.5\text{ ohms}$  and  $R4 = 4.5\text{ ohms}$  for a total resistance of 11 ohms.