



MINNESOTA MARSGRAM



Information for Minnesota Navy-Marine Corps. MARS Members

May, 2006

Volume 10, Number 5

NNN0ALL Minnesota

by NNN0GAZ Tim

Greetings, amazing what you can get done on a rainy day. Fortunately the rain has arrived in time to help most of the state stay out of a high fire danger.

To all of you who participated in our April emergency communications exercise - Bad Bug, many thanks. Unfortunately we still proved that having an emergency exercise is the equivalent of yelling fire in a theater, yet we don't understand. EEI and SITREP messages are straight forward - easy to write and for the most part easy to transmit - so why are the number of participating stations so low during ecom exercises? Is it the time commitment - we've incorporated the exercise into our evening nets so as to avoid the Saturday morning drills. Our net time is 6:30 PM to 7:30 PM local - members should plan on putting in an hour for an evening net - if we conclude early, bonus for you - if not, you've spent an hour working on the MARS program, is that too much to ask? Our primary mission is to provide emergency communications support - providing a pool of trained communicators for duty in an emergency, how can we do that if we don't have exercises and don't train - and members don't participate? One thing for sure - exercises aren't going

to go away, we don't get to schedule emergencies or disasters - the question is not if something is going to happen, the question is when.

The Armed Forces Day celebration is just about here. The list of military stations participating in Armed Forces Day was covered in Chief MARS message 03-06 parts 1 thru 4. The information can also be found in the May issue of WorldRadio. For your reference, we will post a copy on the Community Zero intranet site. Last year, despite awful propagation conditions, which seem to directly correspond with this event, NAV 4 managed over 500 contacts. This year Chief Jeffries and retired Senior Chief Stundahl along with other members will put NAV 4 on the air again - make it worth their while. Please forward this information to your local club, any nets you may participate in, and your amateur radio friends, your help in spreading the word would be appreciated. Try to make contact with NAV 4 on May 13. The past four years the Central Area has finished ahead of all other military participants in the number of QSOs, lets keep the

tradition going.

Once again the spring season finds me very busy. I've spent time in the classroom teaching Skywarn classes. The local elementary school asked if I would speak to their third graders about severe weather - about 75 third graders spread out over 3 hours and this year I have been asked to speak to several classes in the Middle school about severe weather. Since last year's hurricane season there is renewed interest on the part of several large care facilities to review and revise their emergency plan, so as Northfield's Emergency Management Director I have been asked to provide feedback on their plans. The recent changes in Region Five staff have also contributed to the hectic schedule. In addition, I found myself as one of three people participating in a new First Responder Training program offered at the Red Wing Minnesota State College campus. To all of you, thanks for your patience and to those of you who filled in for me as NECOS and TREP - a big THANK YOU. Your assistance during this time

GAZ cont'd pg. 2

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.

EDITOR: Bob Reid NNN0XYA / NNN0GAZ3

Snail Mail: 13600 Princeton Circle

Savage, MN. 55378-2625

E-Mail: n0bhc@aol.com

Minnesota State Coordinator:

Tim Isom NNN0XEE / NNN0GAZ

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
------	----------	---------------------

MARS DATA SYSTEM

Frequency	
NN0DVD	NCO AFSK/USB
Intranet site	http://www.communityzero.com/mnmars

GAZ *cont'd from pg. 1*

is much appreciated.

Don't forget, the Central Area Conference, at Great Lakes is scheduled for Saturday, June 17. AI, NNN0KZC, is working on the details for a mid-summer Minnesota Area Conference. If you have suggestions for location and agenda, please contact AI. Both the Central Area and Minnesota conference are what you make them – so if you have topics you want to see discussed, please make sure to get them on the agenda. If you won't be attending the Central Area Conference – yet you want a topic on the agenda, please forward your topic to me and I will take it to the conference.

Finally, with warmer weather and the opportunity to spend more hours outside, please don't forget our evening nets. We would like to hear for you during the spring and summer months. Don't miss the opportunity to participate in an evening net, an ecom exercise, you will find that checking in to the evening net to enjoy fellowship with your fellow MARS members is definitely worth the time.

Enjoy this issue of the Minnesota MARSGRAM.

BT OVER



MN Navy-Marine Corps MARS Staff

Minnesota State Director
 NNN0GAZ - Tim Isom - NNN0XEE
 Assistant to the State Director
 NNN0GAZ ONE
 AI Doree - NNN0KZC
 Assistant to the State Director: Em. Comm.
 NNN0GAZ TWO
 AI Doree - NNN0KZC
 Assistant to the State Director: Net Ops/Rpts
 NNN0GAZ THREE
 Bob Reid - NNN0XYA
 Assistant to the State Director: Training
 NNN0GAZ FOUR
 Robert King - NNN0SXU

Minnesota Area Conference Saturday July 29th

By: AI, NNN0GAZ ONE

The Central Area conference is being held on June 17th at Great Lakes. This year we are delaying the Minnesota Conference until after the Central Area event. At this time we are asking all members to reserve Saturday July 29 for the Minnesota Conference.

Please contact AI, NNN0KZC, as soon as possible if this date will work for you and if you plan on attending this year. We can have it at the American Legion in Waite Park again unless there is interest in changing the location this year. Delaying our state conference will allow us to bring back information from the Central Area conference to held at Great Lakes Naval Training Center on June 17th.

If you plan on attending the Central Area Conference, please let Tim, NNN0XEE, know as soon as possible so he can pass your name to the Central Area Director for access to the base.

- BT OVER -

Exercise BAD BUG

By: AI, NNN0GAZ TWO

Thanks to everyone that participated in the surprise exercise BAD BUG during April. There were a total of 16 messages passed including EEI messages, SITREPS, Implementation and Termination messages.

This was meant to be a surprise exercise because accidents are not scheduled. Breaking into an existing net with IMMEDIATE traffic is a fun way to start an exercise.

There were only 6 stations that participated, something that needs to change. Participating in these exercises is a great way to practice emergency procedures we do not use on a regular basis. Don't worry that you might make a mistake. These are called training exercises for a reason. We train in exercises like these so that the correct procedures become second nature in a real emergency. Even if you do not originate a message during an exercise, you can learn valuable information simply by checking in and listening to an emergency net.



- BT OVER -

THE NATURE OF DISASTERS AND IMPLICATIONS FOR AMATEUR RADIO

By Tom Cox VE6TOX

(Editor's Note: This is Part One of a three part series covering a presentation to the Communications Academy 2006, April 1, 2006, Burien WA)

DISASTERS AND EMERGENCIES

Disasters are not simply big emergencies. They are unique and distinct. In trying to learn how to prepare for disasters, we make the mistake of looking at the disaster in retrospect. This leads to the same mistakes being made almost every time and the same "lessons learned" being written for almost every disaster report.

Emergencies are what the emergency services train for and respond to every day. A disaster is something that they rarely train for and may only happen once or twice in a lifetime.

Dictionary definitions for emergencies usually include "a sudden, unforeseen happening which requires action to correct or to protect lives and/or property."

Dictionary definitions for disasters are very similar. For example "A disaster is a tragic event that disrupts the normal routine of life, causing loss of property and life and suffering". There may also be a statement "overwhelming local resources."

The legal definition might humorously be stated as "It isn't an emergency until the government says it is" (Declaration of a state of emergency).

A declaration of a state of emergency is usually done for disasters - not emergencies.

To show the unique character of a disaster, try throwing in more police, fire or ambulance personnel and see if that would make any difference. If not, you are looking at a disaster.

Fast developing local disasters are caused by explosions and tornadoes. Slow developing local disasters are caused by sink holes and water main breaks.

Fast developing regional disasters are caused by earthquakes and tsunamis. Slow developing regional disasters are caused by hurricanes, wildfires and pandemics.

CHARACTERISTICS OF DISASTERS

While the characteristics below are almost invariably found with all disasters, an important caveat must be added that it is possible that some of these things will not occur with any particular disaster.

It is an unusual event. Society learns quickly to cope with usual events and it becomes either routine or an emergency. Disasters, by their nature, are distinct from emergencies because they do not happen all the time. [Unusual, but not unexpected. It is common knowledge that California has frequent earthquakes and Florida has hurricanes.]

Communications fail. This is one of the defining character-

istics that separate an emergency (communications still work) and a disaster. The problem is that there are over 40 different ways that communications fail - many of which Amateur Radio cannot solve or is only of limited assistance. For example:

Equipment failure - repeater off the air, tower destroyed, dispatch center collapse.

Frequency overuse - listening to dozens of firemen calling "Mayday! Mayday! Mayday!" all at once during 9 /11/2001 clearly illustrates that nobody's Mayday were being understood. Very little information aside from "Mayday! Mayday! Mayday!" got over the radios.

Battery failure - batteries get used up at an incredibly fast rate during disasters.

Inability to reach specific organizations, individuals or sites.

Radios for agencies are not frequency agile and couldn't talk to one another.

Passing of incorrect or partially correct information.

Misunderstanding the information presented or not acting properly upon it.

Phones work. They may not work 100%, but they work. If they don't work, they will be fixed soon. If they do work, people won't use Amateur Radio.

The scope or extent is uncertain. With unusual events occurring compounded by communications failure, it is no surprise that disasters invariably result in nobody knowing the full extent of how bad things are.

The worst hit areas are the last to be responded to. Areas slightly affected scream the loudest because they still have phones working or alternate forms of communications. The worst hit areas lose all forms of communications and are simply forgotten due to the noise from elsewhere.

Lack of information - due to the widespread scope of a disaster, EVERYTHING is affected. As a result, there is a tremendous need to find out what roads are out and what roads are intact, what vital services are destroyed and which ones can easily be repaired, where the greatest number of casualties and evacuees are to be found and what buildings are intact for recovery use or have been destroyed. You basically need information on every single aspect of government and business and homes in an instant. Combined with communications failures, you are not going to get the information you need. [What ever you can see, it is never the whole picture.]

Misinformation - it is very, very easy for information to be misconstrued, rumors to be stated as facts and honest

Nature of Disaster *cont'd from pg. 3*

mistakes to become absolute facts when dealing with a disaster. When massive amounts of information are required, it is easy for wrong information to slip in. Disasters are full of examples of “Wrong Information”.

People die. While the emergency services deal with death on a daily or weekly basis, the sheer number of deaths can have a profound and traumatic effect on both responders and those affected. Emergency responders have trouble “switching gears” when faced with body parts and dozens or hundreds of casualties and the public is shocked to see bodies lying on the streets for days.

Emergency services and government will be equally affected. Fire halls are destroyed by tornados. City halls are flooded out. 911 centers collapse. While cases of emergency workers abandoning their posts are extremely rare, it is hard to respond to a disaster when your fire truck is crushed and all the water mains have been broken.

Hospitals will among the most affected. Hospitals are almost invariably affected by the disaster. Whether the disaster damages the building itself, the contents of the buildings are disrupted (few hospitals are earthquake proofed), or staff is unable to get to or from the hospital, the hospitals are the first to feel the effects. Hospitals are expensive to build and many are kept longer than the average building because they are just too expensive to replace. As a result, they can be more fragile.

Things get worse. In emergencies, the arrival of the emergency services usually results in things getting better fairly rapidly. Casualties are taken to hospital, fires put out, bad people are arrested. In disasters, the limited resources of the emergency services and the fact that they have been affected as well usually results in a continuation of things deteriorating. When the fire truck is crushed and the water mains are broken, the arrival of the firefighters has no effect on the disaster and the situation continues to deteriorate.

Things get better or they get worse. Disasters never stay exactly the same. This means your response environment will constantly be changing and the situation you were in an hour ago may be completely different now.

Things will last much, much, much longer than you expect. There is a tendency for everyone to think that after an earthquake or a hurricane or any disaster that things will be cleaned up in a week or two. Months later, as society continues to struggle with rebuilding, they realize that the recovery will be years in the making.

Next month part two of the article will deal with Disaster Response.

BT OVER

Training Corner

How to talk to your Net Control Station

Net Control Stations (NECOS) are the gatekeepers of our traffic, emergency communications and administrative traffic nets. The members who work as NECOS keep track of the stations participating in the net, move traffic, and handle command and control decisions of the net. So how does one talk to net control....

First – when the NECOS station makes a net call (the *net call* is essentially the “green light” to check in) this is when you get to check in to the net. Things to remember at the net call...

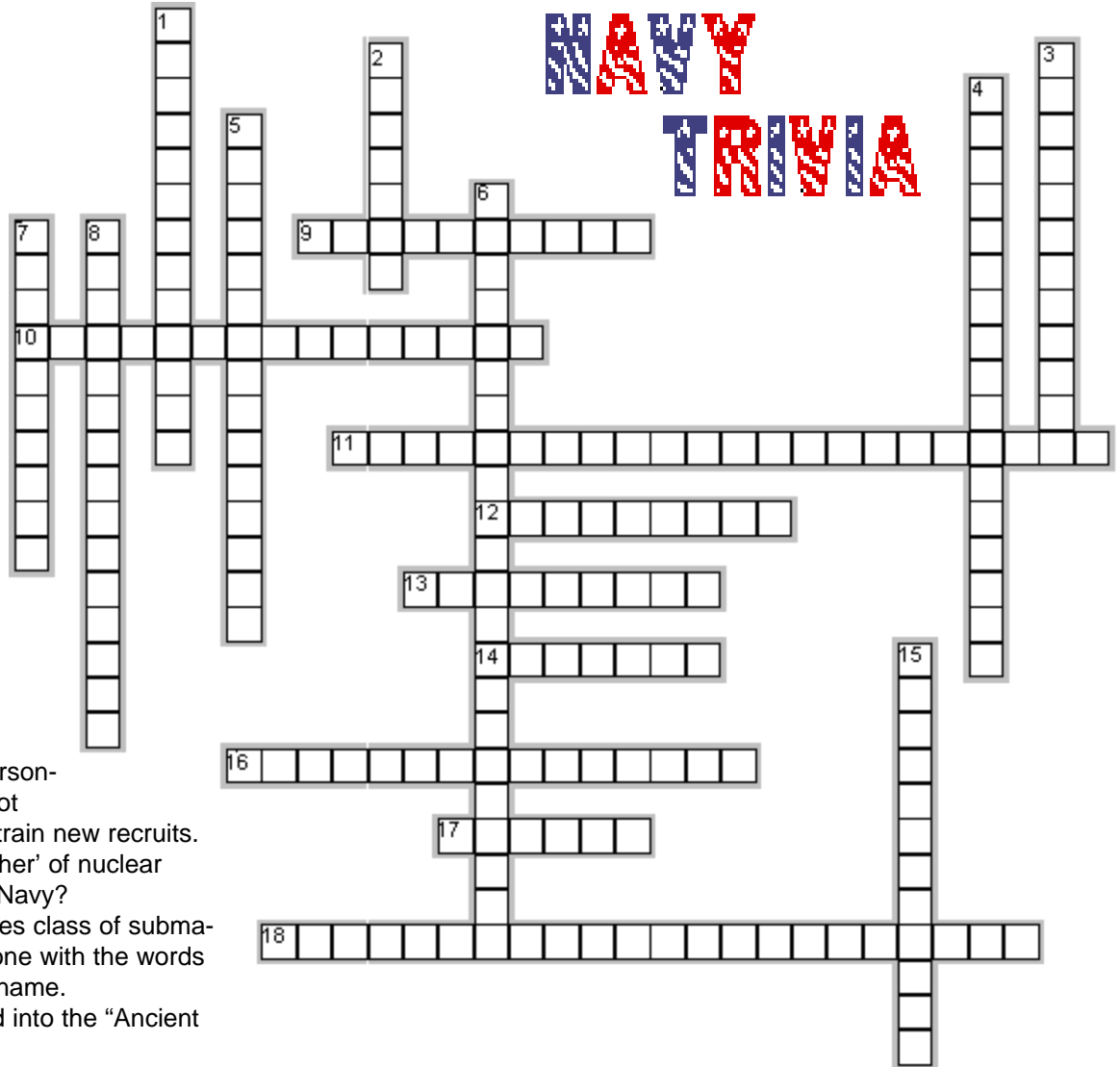
- On *your first check-in* to the net, even if abbreviated callsigns have been authorized prior to your checkin, you must use your full callsign, only after being advised that abbreviated callsigns have been authorized may you use abbreviated callsigns (please see the next item);
- Always address the NECOS station by his/her full callsign;
- If you attempt to check-in when no net call has been made – chances are the NECOS station will completely ignore you – you missed the green light for checkin – you will have to wait for the next “green light”. Missed the net call? Don’t just “butt in” to the net (the equivalent of running a red light) – this is bad operating procedure and quite likely to draw the ire of the NECOS station.
- The only time a net can be interrupted is when the station attempting to check-in has traffic of a higher priority that what is currently being transmitted on the net (think of this as a fire truck approaching a controlled intersection – the fire truck will get the right of way).

Second - Always address the NECOS station by his/her full callsign – never by the abbreviated callsign, even if abbreviated callsigns have been authorized

Bottom line on callsigns is:

- Everyone calls NECOS by the NECOS’ full callsign;
- NECOS can call stations in the net by their abbreviated callsign but must identify himself/herself with his/her full callsign;
- Conversations between stations, those that are not a NECOS station, can use abbreviated callsigns.

BT OVER



Across

- 9. Senior enlisted personnel who returns to boot camp to instruct and train new recruits.
- 10. Who was the 'father' of nuclear propulsion in the US Navy?
- 11. Of the Los Angeles class of submarines this is the only one with the words 'City of' as part of its name.
- 12. A person initiated into the "Ancient Order of the Deep".
- 13. One who has never crossed the equator
- 14. To throw something overboard
- 16. What is the oldest commissioned US Navy ship?
- 17. Ballistic missile submarine
- 18. The Naval Fleet Auxiliary Force is run by this organization.

Down

- 1. World's first nuclear powered aircraft carrier
- 2. Aircraft carrier
- 3. This person issues provisions to the cooks as needed
- 4. Submarines: what is the difference between an SSN sub and an SSBN?
- 5. Another name for "Battle stations"
- 6. Ship having a hull number beginning with DDG are what type of ship?
- 7. The first US nuclear submarine
- 8. Which US President depicted on Mt. Rushmore does NOT have a US aircraft carrier named after him?
- 15. Minor infractions, such as AWOL, insubordination, etc., by enlisted sailors are heard here.

Test Your MARS Skills - April Solution

Your Region Director has sent NNN0ALL (your State) a message setting COMCON I. As a MARS operator, what are your responsibilities under CONCOM I?

ANSWER

B. MARS members should suspend all normal operations, as required, activate emergency (ECOM) networks and the ECOM plan, as necessary, and take appropriate precautions to ensure their own safety as well as that of their families or others for whom they share responsibility.

- BT OVER



Lighthouse Knowledge Crossword Solution

Across

2. Cape Hatteras - Tallest lighthouse in the United States at 191 feet.
6. Charleston - Newest shoreside lighthouse as the second most powerful lighthouse in the world and most powerful in the Western Hemisphere.
8. Makapuupoint - Which American lighthouse has the largest lens?
11. Cannon - In 1719 the first fog signal was installed at Little Brewsters Island lighthouse, what was it?
12. Alcatraz - First American-built West Coast lighthouse.
13. St Georges Reef - Most expensive lighthouse, adjusted cost, in the United States.

Down

1. Pharos of Alexandria - One of the Seven Wonders of the Ancient World was a lighthouse, it is the first one that is recorded in history and was built about 280 BC.
3. Statue of Liberty - Which was the first American Lighthouse to use electricity?
4. Minots Ledge Light - The flashes (1-4-3) from which lighthouse do romantics interpret to signal "I Love You"?
5. Boston - First lighthouse in the United States, built in 1716.
7. Cape Mendocino - Highest lighthouse above sea level in the United States at 515 feet above sea level.
9. Sandy Hook - Oldest original lighthouse in service in the United States, located in New Jersey.
10. Michigan - Which U. S. State has the most lighthouses? BT OVER

Armed Forces Day 2006

The Army, Air Force, Navy, Marine Corps, and Coast Guard are co-sponsoring the annual Military/Amateur Radio communications test in celebration of the 56th Anniversary of Armed Forces Day. Although the actual Armed Forces Day is celebrated on Saturday, May 20, 2006, the Armed Forces Day Military/Amateur crossband communications test will be conducted one week earlier on May 13, 2006. The reason is so that the AFD Military/Amateur crossband communications test will not conflict with the Dayton Hamvention (19-21 May 2006) which is on the same weekend as the actual Armed Forces Day.

The annual celebration features traditional military-to-amateur crossband communications SSB voice test and the Secretary of Defense message receiving test. These tests give amateur radio operators and shortwave 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 are available to those making contact with

Test Your MARS Skills Listing Traffic

Your State traffic net has just begun. The NECOS of the net is NNN0ZMT. He has asked for stations 'with traffic to indicate precedence and destinations of messages when checking aboard'. You hold one message for the Marine Corps Recruit Depot, San Diego, California. Your call sign is NNN0WBTT. Which is the correct transmission to make when checking into this net?

A. NNN0ZMT THIS IS NNN0WBTT. I HAVE ONE OUTBOUND MESSAGE. OVER.

B. NNN0ZMT (un-key and listen)THIS IS NNN0WBTT. I LIST ONE ROUTINE SAN DIEGO CALIFORNIA. OVER.

C. NNN0ZMT (un-key and listen) THIS IS NNN0WBTT. I HAVE ONE MESSAGE FOR THE MARINE CORPS RECRUIT DEPOT. OVER.

D. NNN0ZMT (un-key and listen) THIS IS NNN0WBTT. I HAVE ONE MESSAGE. OVER.

Answer in next month's MARSGRAM

BT OVER



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.

Participating military stations will transmit on selected MARS frequencies and listen for Amateur Radio stations in Amateur bands indicated. Military station operators will announce specific amateur frequencies being monitored. Duration of each voice contact should be limited to 1-2 minutes.

Transcripts of the RTTY, PACTOR, AMTOR, PSK-31or 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, and include the name, call sign, and complete address of the individual submitting the entry. This information must appear on the sheet 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 certification.

BT OVER

Armed Forces Day 2005 Stations and Frequencies

Operation is May 13-14, 2005. All frequencies in kHz. Operation is cross-band. Listen on listed frequencies for information on where in the amateur bands to transmit.

AAZ:1300Z 13 May to 0200Z 14 May
 LSB: 4038.9 (80M), 6913.0 (40M)
 USB: 7424.0 (40M), 13741.5 (20M), 13993.0 (20M), 18211.0 (17M), 18639.0 (17M)
 RTTY: 13509.5 (20M), 7639.5 (40M)
 Point Of Contact: Mr. Dwayne Smith
 Location: Fort Huachuca AZ
 Address: ATTN: NETCOM-OPE-M (MARS) (31)
 2133 CUSHING STREET
 Ft. Huachuca, AZ 85616-7070

AAC: 1400Z 13 May to 2100Z 13 May
 LSB: 3348.9 (80M), 7363.0 (40M)
 USB: 13910.0 (20M)
 Point of Contact: Barry Jackson
 Address: HQ 1st BDE, 100th Div (IT) MARS STATION
 Barrow Army Reserve Training Center
 1051 Russell Cave Pike
 Lexington, KY 40505

ABH: 1900Z 13 May to 0500Z 14 May
 LSB: 3195(80M), 3360(80M), 4440(80M), 4466(80M), 7360(40M), 7720(40M), 8040(40M), 8094.5(40M)
 USB: 14483.5(20M), 14489.5(20M), 17443.0(17M), 17592.5(17M), 20978.0(15M), 20559.0(15M)
 Point of Contact: CPT Ellie Vance
 Location: Schofield Barracks, HI
 Address: Commander, 396th Signal Company
 30th Signal Battalion, 96857

AIR: 1200Z 14 MAY to 2400Z 14 May
 LSB: 4026.5 (80M), 7316.5 (40)
 USB: 6894.5 (40M), 13985.0 (20M), 13996.0 (20M)
 Point of Contact: Mr. Van Evans
 Location: Andrews AFB, DC
 Address: 789 CS
 Andrews AFB, DC 20762-6116

AIR-2: 1500Z 13 May to 0300Z 14 May
 USB: 4488.5 (80M), 6994.5 (40M), 13983.5 (20M), 14387.5(20M), 27983.5 (20M)
 Point of Contact: Mr. Ken Mulkey
 Location: Las Vegas, NV
 Address: Nellis AFB, NV

AIR-3: 1800Z 13 MAY - 0600Z 14 MAY
 USB: 4023.5 (80M), 7358.5 (40M), 14528.5 (20M), 20873.0 (15M)
 Point of Contact: Maj Harvey Motomura
 Location: Hilo, HI
 Address: HIANG, 291 CBCS
 HILO HI

WAR: 1300Z 13 May to 2300Z 14 May
 LSB: 4020.9 (80M), 7504.0 (40M),
 USB: 13512.5 (20M), 20518.5 (15M)
 Point of Contact: Mr. Larry Solarczyk
 Location: Ft. Detrick, MD
 Address: Commander, 302D Signal Battalion
 1671 Nelson St
 Ft Detrick MD 21702
 ATTN: MARS Station, BLDG 1678

WUG-231: 1300Z 13 May to 0300Z 14 May
 LSB: 4032.9 (80M), 6826.0 (40M), 7363.0 (40M)
 USB: 14486.0 (20M), 14663.5 (20M), 20973.5 (15M)
 Point of Contact: Mr. Jim Pogue
 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

Navy-Marine Corps MARS Stations

NAV: 1200Z 13 May to 0400Z 14 May
 LSB: 4010.0 (80M), 7348.0 (40M)
 USB: 14478.5 (20M), 20994.0 (15M)
 Point of Contact: Bo Lindfors
 Location: Williamsburg VA
 Address: HQ NAVMARCORMARS Radio Station NAV
 Cheatham Annex Bldg 117
 108 Sanda Ave
 Williamsburg VA 23185-5830

NAV-3: 1200Z 13 May to 0400Z 14 May
 LSB: 4014.0 (80M), 7394.5 (40M)
 USB: 13974.0 (20M), 20997.0 (15M)
 Point of Contact: Bob Conley
 Address: NAVMARCORMARS Radio Station
 2562 Bauman Avenue
 Omaha, NE 68112-3314

NAV-4: 1200Z 13 May to 0400Z 14 May
LSB: 4011.5 (80M), 7376.5 (40M)
USB: 14467.0 (20M), 21758.5 (15M)
Point of Contact: ITC(SW/AW) Jeffries
Location: Great Lakes IL
Address: NAVMARCORMARS Radio Station
615 Preble Ave
Camp Barry, Bldg 153
Great Lakes, IL 60088-2850

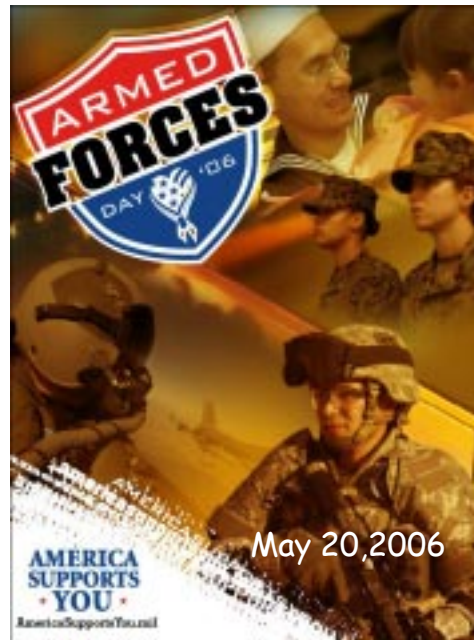
NBL: 1200Z 13 May to 0400Z 14 May
 LSB: 4003.0 (80M), 7371.5 (40M)
 USB: 14463.5 (20M), 20936.0 (15M)
 Point of Contact: ITC(SW) Dever
 Location: Groton CT
 Address: NAVMARCORMARS Radio Station
 PO Box 161 Naval Submarine Base
 Groton, CT 06349-5161

Armed Forces Day Stations *cont'd*

NPL: 1500Z 13 May to 0400Z 14 May
 LSB: 4003.0 (80M), 7351.5 (40M)
 USB: 14463.5 (20M), 20936.0 (15M)
 Point of Contact: ITC(SW) Thomason
 Location: San Diego CA
 Address: NAVMARCORMARS Radio Station
 937 North Harbor Drive
 San Diego, CA 92132-5100

NUW: 1500Z 13 May to 0400Z 14 May
 LSB: 4044.0 (80M), 7381.5 (40M)
 USB: 13528.5 (20M), 20952.5 (15M)
 Point of Contact: Mr. Digger O'Dell
 Address: NAVMARCORMARS Radio Station
 260 W. Pioneer FSC Bldg
 NAS Whidbey Island WA 98277

BT OVER



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.)

Stations copying **AAZ** or **WAR** send entries to:
 Armed Forces Day Celebration
 CDR. NETCOM/9th ASC
 Armed Forces Day Celebration
 ATTN: AFSC-OPE-MA (MARS)(31)
 Fort Huachuca, AZ 85613-5000

Stations copying **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

Freq	Mode	Date/Time	Freq	Mode	Date/Time	Freq	Mode	Date/Time
AAZ			NAV			NBL		
6988.0	RTTY	15 May/0110Z	7346.5	RTTY 75 Baud	13 May/2340Z	7370.0	RTTY	13 May/2340Z
	PACTOR FEC	15 May/0130Z		AMTOR FEC	14 May/0010Z		PACTOR FEC	14 May/0010Z
	MT63	15 May/0220Z		MT63	14 May/0040Z		AMTOR FEC	14 May/0040Z
	PSK-31	15 May/0250Z	14480.0	RTTY 75 Baud	13 May/2340Z	14393.0	RTTY	13 May/2340Z
14402.0	RTTY	15 May/0110Z					AMTOR FEC	14 May/0010Z
	PACTOR FEC	14 May/0010Z						
	PACTOR FEC	15 May/0130Z		MT63	14 May/0040Z		AMTOR FEC	14 May/0040Z
	MT63	15 May/0220Z	NAV-3			NPL		
	PSK-31	15 May/0250Z	7393.0	RTTY	13 May/2340Z	7350.0	RTTY	14 May/0240Z
WAR				AMTOR FEC	14 May/0010Z		PACTOR FEC	14 May/0310Z
6988.0	RTTY	14 May/2315Z		MT-63	14 May/0040Z		AMTOR FEC	14 May/0340Z
	PACTOR FEC	14 May/2330Z	13975.5	RTTY	13 May/2340Z	14465.0	RTTY	14 May/0240Z
14440.0	PACTOR FEC	14 May/0310Z	14 May/2345Z				AMTOR FEC	14 May/0010Z
	PACTOR FEC	14 May/0310Z						
	AMTOR FEC	14 May/2400Z		MT63	14 May/0040Z		AMTOR FEC	14 May/0340Z
			NAV-4			NUW		
			7375.0	RTTY	14 May/0240Z	7380.0	RTTY	14 May/0240Z
				AMTOR FEC	14 May/0310Z		PACTOR FEC	14 May/0310Z
				MT63	14 May/0340Z		AMTOR FEC	14 May/0340Z
			14468.5	RTTY	14 May/0240Z	13530.0	RTTY	14 May/0240Z
				AMTOR FEC	14 May/0310Z		PACTOR FEC	14 May/0310Z
				MT63	14 May/0340Z		AMTOR FEC	14 May/0340Z

(Frequencies listed in kHz)

5G1B Net Schedule

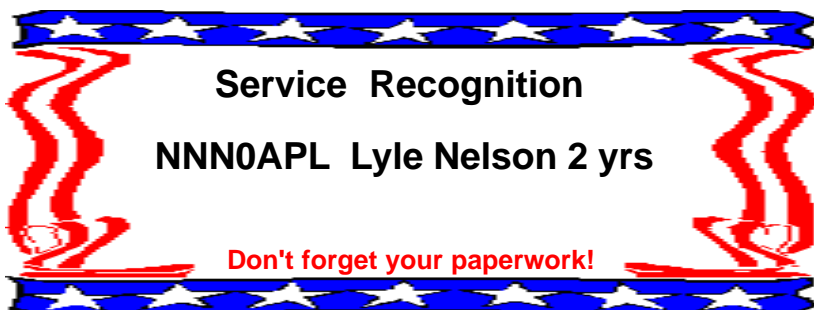
6:30PM 4007 kHz USB

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



NNN0APL Lyle Nelson 5/16



Service Recognition

NNN0APL Lyle Nelson 2 yrs

Don't forget your paperwork!

Saturday NECOS / TREP Schedule

	NECOS	TREP
May 6	KZC	KZC
May 13	BQH	BQH
May 20	SXU	SXU
May 27	ACY	OCF
Jun 3	XYA	XEE
Jun 10	XEE	XEE



Test Your Analytical Skills

Stopping for a Cool Drink

By Joe Risse

Several groups of professional people dropped into a local place of refreshment for a cool drink. There were four different groups of people. There were 50 technicians, 40 engineers, 36 public relations directors, and 24 purchasing agents.

Altogether they spent \$266.00.

Percentage wise, 10 technicians spent as much as 8 engineers, 24 engineers spent as much as 18 PR directors, and 12 purchasing agents.

How much did each group spend?

Answer in the next issue of the Minnesota MARSGRAM

Trees – How Far Apart - April Solution

- Armond T. ringer, Norman, Okla.
Courtesy of Parade, Ask Marilyn

A math teacher on vacation was driving along a country road to visit an ancient castle when she noticed that the passing trees had been planted an equal distance apart. So she glanced down at her clock when the car was midway between trees and counted the number that she passed in a minute. "How interesting!" she said to herself afterward. "When I multiply the number of trees by 10, the result equals the speed of my car in miles per hour." Assuming that the speed of the car was constant and that the minute ended midway between trees, how far apart were they?
Answer: if X is the number of trees passed in a minute, 60X is the number passed in an hour. As we know the care is traveling 10X miles per hour, we also know that in 10X miles it will pass 60X trees. So, in one mile, the car will pass $60X \div 10X$ (trees per hour \div by miles per hour) trees. That number is 6: the trees are $1/6^{\text{th}}$ of a mile apart.