



MINNESOTA MARSGRAM



Information for Minnesota Navy-Marine Corps. MARS Members

March, 2005

Volume 9, Number 3

NNN0ALL Minnesota

by NNN0GAZ Tim

My apologies to those of you who were looking for the newsletter a week ago, time and projects took longer than I expected. I've held up production – so don't blame the Editor. My house has been extremely busy over the past few weeks – Christopher, my son, moved on to Boy Scouts from the Cub Scout program – no more Pinewood Derby for me, I've completed a few projects around the house and there has been some Region Five work to get done.

Switch operations have been going well – "knock on wood." The new UPS system has been installed at the Emergency Operations Center – so we are not seeing the sudden, unpredictable outages we experienced over the past three months. Report and analysis programs that we installed on the switch machine in late 2004 allow us to obtain information to prepare our monthly traffic report for the switch. In addition to the switch hours, we also have a program to analyze switch access. Perhaps we will print a summary of this information on a quarterly basis.

If you haven't marked your calendar yet for the Minnesota Area Conference – please do so now – June 11 in Waite

Park. As long as you have your calendar out, please mark down Saturday March 26 – our Minnesota Emergency Communications exercise. Al, NNN0KZC/NNN0GAZ TWO has sent out a broadcast outlining the exercise scenario and preparations.

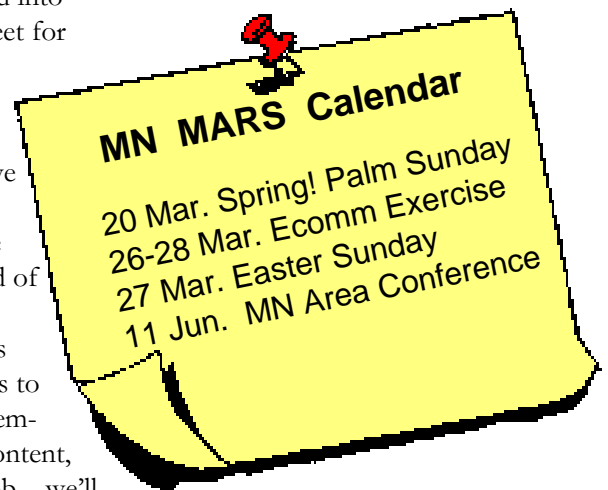
Last month in this column I mentioned our efforts to put together and organizational chart for the portion of the MARS program that directly affects us here in Minnesota. Please be patient, we're still working on it. Bob Reid and I have also ventured into preparing an information sheet for Minnesota MARS members containing useful reference information for communications during emergencies – we will try to complete and post that sheet to the Intranet site before the exercise at the end of the month.

Don't forget – we're always eager to receive contributions to the newsletter from other members. If you have ideas on content, please feel free to contact Bob – we'll try to find material or help you collect material and write an article.

Thanks for your contribution to Minnesota MARS and enjoy this issue of the Minnesota MARSGRAM.

BT OVER

Happy Easter!



MN MARS Calendar

20 Mar. Spring! Palm Sunday
26-28 Mar. Ecomm Exercise
27 Mar. Easter Sunday
11 Jun. MN Area Conference

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
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MARS DATA SYSTEM

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

Mark your calendars...

Who: All Minnesota Navy-Marine Corps MARS members

What: Emergency Communications Exercise

When: Emergency Communications Net 1500Z to 1630Z
26 March 2005 on frequency NCE

During this net NNN0GAZ TWO will review the Essential Elements of Information (EEI) message format, addrees and other EEI related information. We will also cover Situation Report (SITREP) formats, addrees and related material.

All Minnesota MARS members are expected to pass at least **one EEI and one SITREP** during the period 1500Z 26 March to 0100Z 28 March for participation in this exercise.

Scenario: A late March ice storm moves across Minnesota knocking out power and communications statewide. MARS members are to participate in the nets and file applicable (while fictional) EEI and SITREP reports for their area.

Notes from Minnesota State Director...

Gentlemen, Al, NNN0GAZ TWO has created and submitted a scenario to NNN0ASZ – Assistant to Chief Navy-Marine Corps MARS for Emergency Communications, for the necessary approval of the emergency communications exercise on 26 March 2005. I would like to see all members participate in the exercise, remember, the primary mission of the MARS program *“is to provide Department of the Navy and Department of Defense sponsored emergency communications on a local, national, and international basis as an adjunct to normal naval communications.”*

This exercise is not asking members to give up their entire weekend to participate. A morning net will be conducted on Saturday, March 26 for the purpose of reviewing EEI and SITREP message formats. Think of this as the “refresher” course. Following the net, during the Saturday and Sunday 5G1B nets each station can pass their messages. Stations with digital capabilities can use the Minnesota switch to pass their message or we may even try some PSK or MT63 traffic handling.

This is an exercise, an opportunity to practice what we preach...to walk the walk, not just talk. I will be honest, our participation in exercises over the course of the last year has been abysmal, and it is not a result of lack of encouragement or participation by state staff. Why do we do these exercises – yes, you’re right there is an expectation to conduct quarterly exercises but it goes further than that. The next emergency is not an if – it is a when, be it natural or man-made. Its hard to know what to do if we haven’t practiced and during the crisis is not the time to learn – you need to

know what to do beforehand – its called training and exercise. Remember, the military allows us the use of their frequencies, in return they get members who are interested in naval communications and a ready reserve of *trained* communicators. If we don’t conduct and participate in training then we are not keeping up our side of the bargain.

In this age of increasing pressures on radio spectrum, the government or military, could find better and perhaps more profitable uses for the little part of the spectrum we get to use as MARS members. Don’t believe me – look around, BPL, Little Leos, UPS have all gotten a little chunk of the amateur spectrum and there are more where they came from just waiting for a piece of the action. If we don’t use the spectrum and demonstrate our usefulness then we alone are responsible for our destiny. So I encourage you to take the request to participate seriously.

BT OVER



Test your MARS skills: Fills

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.

Answer in the next issue of the Minnesota MARSGRAM

The February Solution

The NECOS of a MARS voice net issues the following instructions to his members: ‘NNN0OBT, THIS IS NNN0ACL. CALL NNN0AS5 TWO, NNN0BUX RELAY TO NNN0AS5 ONE, NNN0GAP RELAY TO NNN0ASG, AND PASS YOUR MESSAGE’. What are NNN0BUX’s responsibilities with regard to this transmission?

- A. He is to copy and receipt for the message transmitted by NNN0OBT and either relay or deliver the message to NNN0ASG ONE.

Osmosis does not bring in new hams.

from CONTACT at arrl.org

We do some pretty strange stuff with radio waves, not obvious to the general public used to static-free, instant communications with premanufactured communications gear. We hams love radio for the sake of radio — building rigs, mountaintopping, reading propagation charts, and tinkering. We must focus on getting out the good works of ham radio one-on-one.

Ever tried Elmering — introducing others to ham radio by personal attention? It's worked for me. Here are some suggestions!

- * Leave ham radio magazines in your workplace break room.
- * Carry an HT with you everywhere — to work, at the bus stop, to the park, and to the mall. Most people will misidentify your rig as a fancy cell phone, but a few will ask questions, then you can promote ham radio.
- * Invite non-hams to a hamfest, reminding them that there are other things to shop for, buy, and eat, other than ham radio.
- * Get behind the key and microphone at a museum station, and volunteer! The Arizona Science Center in Phoenix has one excellent demonstration station. Look up W7ASC, and follow the link!
- * Donate a public safety scanner preprogrammed with local popular repeaters to a potential ham. My brother called me to tell me that his friends enjoyed tuning in to the local autopatch on Shaw Butte on 449.525- here in Phoenix. He and his friends were impressed by the excellent audio quality of narrowband FM, and the heft and quality build of the HT's, compared to their tiny, screeching digital cell phones!
- * As tempting as it is...do NOT denigrate CB, FRS, internet, cell phones and other popular telecom modes to promote ham radio as superior. You cannot shame a potential ham into getting a license! My brother worked his first DX on an FRS radio — twenty miles with a half-watt UHF micro-HT, and now he's going for his ham ticket. On the other hand, I once made fun of CB, to prove that ham radio was "superior", and the CB op I was talking to was not happy, since he enjoyed shooting skip and getting directions on his 11M rig.
- * When promoting ham radio at a public gathering, dress like you are going to work, not changing oil in your lawnmower. The first time I saw a ham wear a "Ham Radio — Help All Mankind" t-shirt, it was on his torn and stained undershirt hand lettered with a laundry marker...

I have tried all of the above, and my positive methods work! But, I've also been guilty of making fun of other radio and wired modes to promote ham radio....gotta stop that... When I did that, non-hams looked at me like I was crazy.

Here are some examples of what some of my friends have done that have worked...

- * Tom, the leader of the local Explorer Post 599, heard that my brother was intrigued by ham radio — so he offered to take my brother to meetings.
- * A different Tom, N7RPZ, took me to his engineering class at Glendale Community College. I did a brief talk on ham radio,

cont'd col. 2

World War II Memorial



Washington, D.C. (Mar. 8, 2005) – The Washington Monument is framed between pillars adorned with oak and wheat bronze wreaths at the National World War II Memorial located on the National Mall in Washington, D.C. A 17-foot pillar and bronze wreath represents each State and U.S. territory from the time period. Established by the American Battle Monuments Commission, the memorial honors all military veterans of World War II, the citizens on the home front, the nation at large, and the high moral purpose and idealism that motivated the nation's call to arms. The memorial was officially dedicated on May 29, 2004. U.S. Navy photo by Photographer's Mate 2nd Class Daniel J. McLain

Happy
Easter



Osmosis *cont'd from col. 1*

and Tom followed up with "Now You're Talking". Of his sixteen students that semester, fourteen obtained their Technician class license, and the other two upgraded to General. Tom promoted ham radio as a way to turn the engineering and physics concepts they learned in class to real equipment the students could use in the real world.

What have you done yourself to promote ham radio one-on-one? What works — and what did not?

- BT OVER

When A Real Emergency Strikes, With Whom Will You Communicate?

Bill Sexton, N1IN/AAAA9PC
World Radio, February 2005

Imagine this. A really serious emergency hits the next county. Say, a cluster of F5 tornadoes. Or a catastrophic terrorist assault. There are multiple casualties and heavy damage. Commercial telephone service is disrupted throughout a wide area, along with electric power.

You are a Ham operator belonging to the Military Affiliate Radio System (or Radio Amateur Civil Emergency Service). You have an emergency generator up and running and you're on the air in a MARS (or RACES) emergency net. You're ready to extend long-distance communications support to the response team that is just converging on the disaster zone. So what do you do?

they know beforehand precisely how civil agencies - local, state and federal-gear up in such an unimaginable circumstance. To be effective you have to know in advance where and how to plug in your support, and you won't be able to find out by telephoning the command center, which will be overwhelmed anyway. (Remember? No telephones!)

Now is when you need fairly detailed understanding of something called the Incident Command System (ICS), and how it applies in your locality.

Anyone who has worked with a major wild fire in the West will understand the term. ICS is the standard blueprint for civil response to any major emergency. Many states have

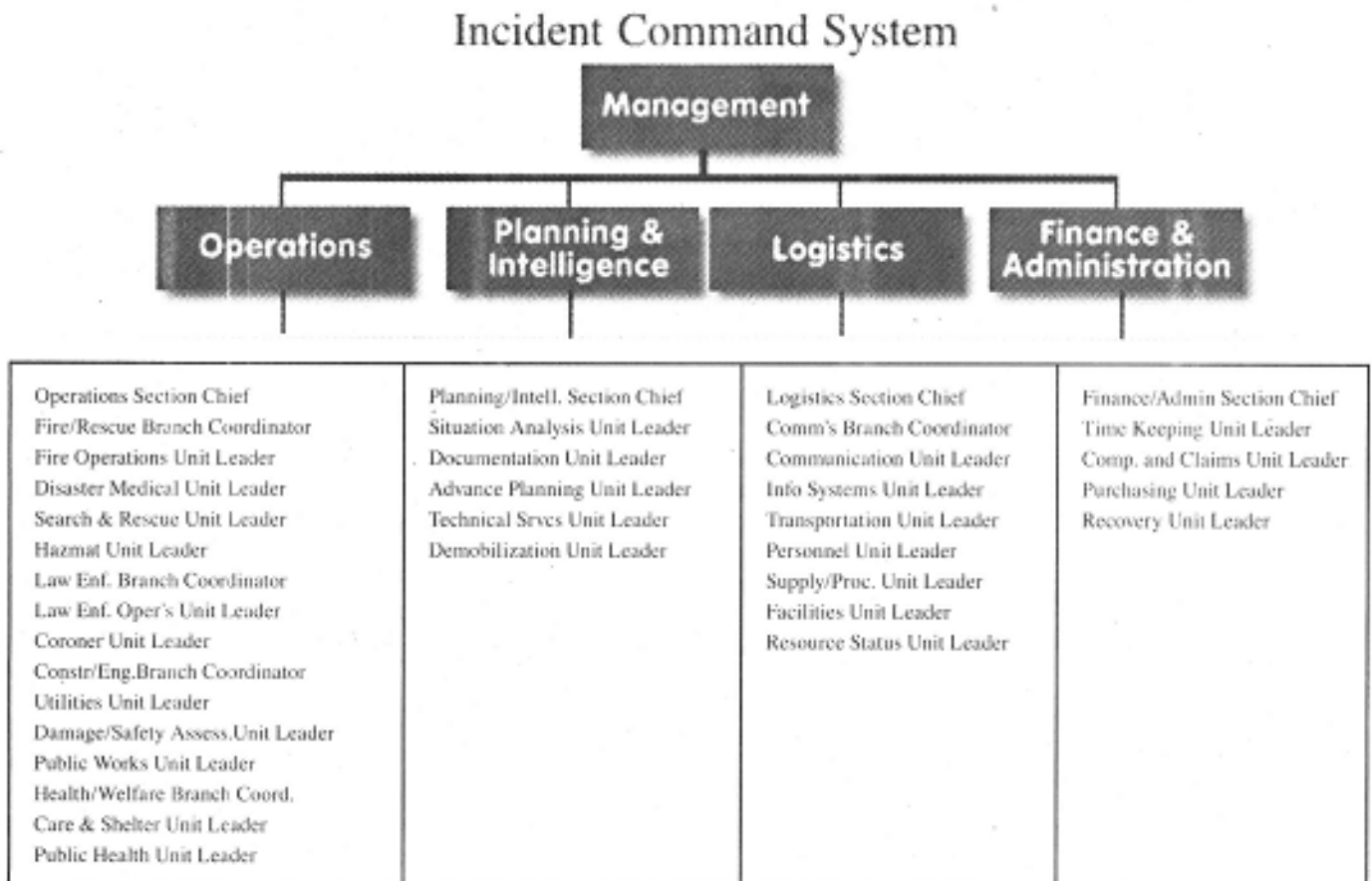


Chart compiled by Gary Allen, editor, DISPATCH Monthly Magazine, from official documents.
Reproduced by permission.

Actually, you'd better have done it already, well before the disaster struck.

The grim reality is that Amateur Radio operators won't necessarily be of much immediate use in a catastrophe unless

officially adopted it; federal regulation mandates it wherever hazardous materials come into play; it's the foundation of FEMA response.

ICS *cont'd from pg. 4*

HOW it works

ICS is a marvelous anomaly: a blueprint for emergency operations that is minutely detailed in the jobs to be done, but absolutely open as to who will perform those jobs. It's pretty much first come, first serve.

In other words, this concept puts emergency personnel to useful work as fast as they arrive, in whatever order, whether firemen in an operational task force or catering personnel in a food unit. It does this without assuming which particular individuals or organizations will be available at a given time or place. Yet it leaves no doubt as to chain of command for all the inter-related tasks as manpower arrives on the scene. And its flexibility accommodates the escalation of response as local agencies are joined by regional, state and federal reinforcements.

A FEMA regional administrator may replace the local fire chief as Incident Commander, but the chain of command is intact. Army units may join Forest Service firefighters on the front line of operations, but the communications channels are unchanged. Hams may well be drafted to help operate a Communications Unit, but ICS traffic procedures and message forms will continue in use.

Check out the adjoining organizational chart. If you think it has a distinctly military look, you'd be absolutely correct. Just one clarification: "Incident Commander" would be a more accurate label for the "Management" box at the summit.

Although still not familiar to the general public, ICS actually dates back to 1978 when the chaotic response to a California wildfire convinced everyone involved that there had to be a better way. The better way has-been evolving ever since.

Sadly, this tried-and-proven system was not in effect in New York when 9/11 happened, with the result that police and fire units were almost totally uncoordinated in the initial hours. Lack of intercommunication has been blamed for substantial loss of life. ICS would have provided that intercommunication by routing all command and information flow through the Incident Commander.

Becoming familiar with ICS operation isn't difficult. There may be an experienced MARS member available to conduct training, like Jim Colonies, AAT1AW. As a city fireman in Shrewsbury Mass. and communicator-on-call for the National Disaster Medical Service, he has participated in a number of actual-incident ICS operations including the 9/11 recovery in New York.

Local emergency authorities can provide trainers, too, such as Chuck Johnston, fire mediation specialist of the Sarasota County (Fla.) Fire Department. He's a veteran of major

wildfire operations in the West as well as across vulnerable central Florida, and he conducts lively, anecdote-filled ICS familiarization for RACES and ARES (Amateur Radio Emergency Service) members.

For a basic introduction, the Texas Army MARS web site can't be beaten (<http://www.txarmymars.org/icsl.htm>). More detailed information is available at <http://www.fema.gov/> (search "Incident_Command_Systems"). Needless to say, ICS provides for detailed communications planning so that fire, police, medical and other responders can talk to each other.

The role of amateurs

It's important to note that ICS doctrine does not contemplate Amateurs participating in up-front tactical operations. Emergency units bring their own VHF and UHF systems, including at the federal level, transportable repeaters. As Sarasota's Chief Johnston puts it forcefully, Hams are not First Responders.

Rather, the connecting point for MARS and other Amateurs is located in the ICS Logistics Section - a real-life example being the 9/11 role of Hams linking Red Cross evacuation centers and shelters in New York. The accompanying chart shows the command structure for an ultimate emergency. (Smaller incidents would mobilize only those elements required in the specific circumstances.)

DISPATCH Monthly Magazine, a periodical for emergency service personnel, compiled a checklist of ICS responsibilities based on FE-MA, State of California and other official documents.

A key function for the Communications Branch Coordinator, the magazine's listing notes, is to "mobilize and coordinate Amateur Radio resources to augment primary communications systems as required." Individual Communications Unit Leaders are charged to "assign Amateur Radio Operators as needed to augment primary communications networks."

A task for Army (*Navy-Marine Corps.*) MARS

One potential role in any situation would be establishing HF links (including phone patches) for relaying traffic between an Incident Commander at the scene and agencies beyond VHF range-that is, the outside- organizations that are providing relief personnel and supplies, or tactical units beyond the reach of line-of-sight radios. This role would be particularly crucial in the first hours after a disaster, before FEMA's own communications units can be deployed.

Readiness for such a role requires familiarity with the

ICS *cont'd from pg. 5*

people who operate local emergency response - people like Chuck Johnston in southwest Florida - and also with the facilities (including modes and frequencies) available for interconnecting Ham nets with ICS nets. That kind of know-how can't be acquired in the predictable chaos after disaster strikes.

What's an easy first step in getting ready? Visit that Texas MARS web site. Then start learning the ICS language. ICS has at least as many abbreviations and acronyms as Ham Radio, and you'll need them in an emergency.

BT OVER

Glossary of Acronyms

List list of acronyms will be useful in deciphering the ICS literature or operational plans.

CONPLAN - Concept of Operations Plan
 DEST - Domestic Emergency Support Team
 DOD - Department of Defense
 DOE - Department of Energy
 DOJ - Department of Justice
 EM - Emergency Management
 EMS - Emergency Medical Services
 EOC - Emergency Operations Center
 EPA - Environmental Protection Agency
 ERT - Evidence Response Team (FBI)
 FBI - Federal Bureau of Investigation
 FCO - Federal Coordinating Officer
 FEMA - Federal Emergency Management Agency
 FRP - Federal Response Plan
 HAZMAT - Hazardous Materials
 HHS - Department of Health and Human Services
 HMRU - Hazardous Materials Response Unit
 JIC - Joint Information Center

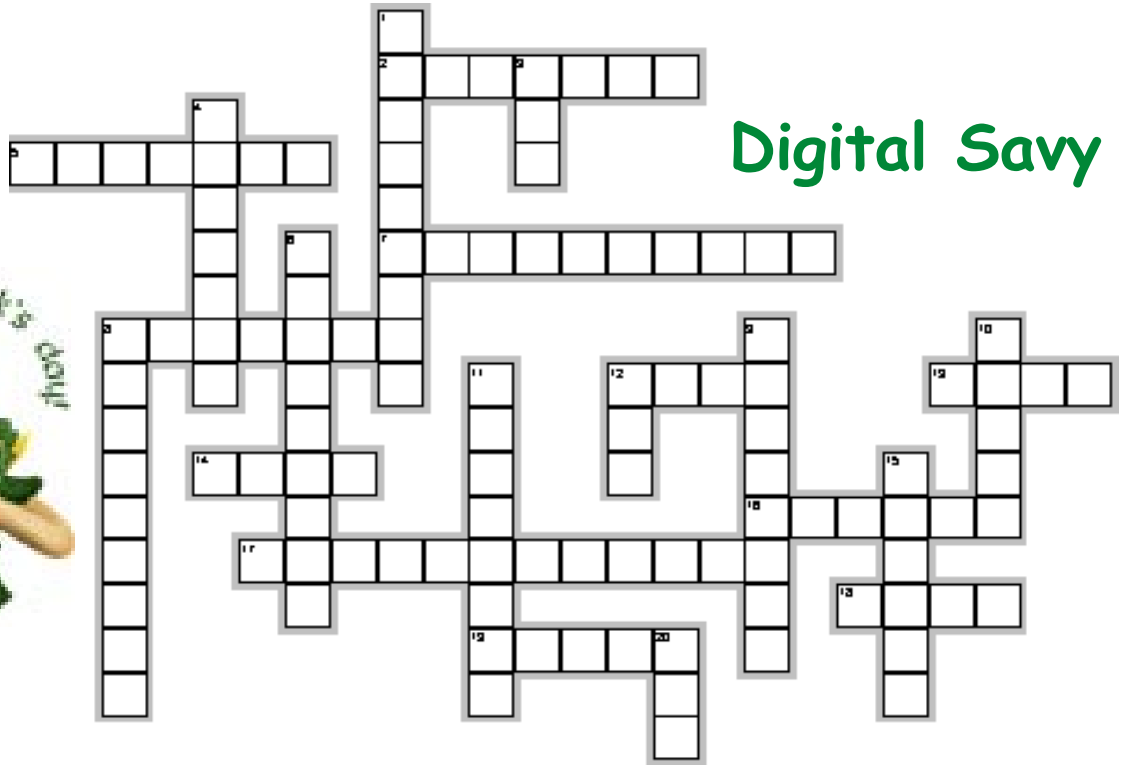
JIISE - Joint Interagency Intelligence Support Element
 JOC - Joint Operations Center
 JTTF - Joint Terrorism Task Force
 ICS - Incident Command System
 LFA - Lead Federal Agency
 NCP - National Oil and Hazardous Substances Pollution Contingency Plan
 NOC - Negotiations Operations Center
 OSC - On - Scene Commander or Coordinator
 PIO - Public Information Officer
 PDD - 39 - Presidential Decision Directive 39
 ROC - Regional Operations Center
 SAC - Special Agent - in - Charge
 SFO - Senior FEMA Official
 SIOC - Strategic Information and Operations Center
 STOC - Sniper Tactical Operations Center
 TOC - Tactical Operations Center
 UC - Unified Command
 USCG - United States Coast Guard
 WMD - Weapon of Mass Destruction

BT OVER



Naval Submarine Base Groton, Conn. (Feb. 19, 2005) - The crew of Seawolf-class nuclear-powered attack submarine USS Jimmy Carter (SSN 23) prepare to man the ship during her commissioning ceremony. Jimmy Carter is the third and final submarine of the Seawolf-class. A unique feature of the Jimmy Carter is a 100-foot hull extension called the Multi-Mission Platform, which provides enhanced payload capabilities, enabling the submarine to accommodate the advanced technology required to develop and test a new generation of weapons, sensors and undersea vehicles. U.S Navy photo by Photographer's Mate 2nd Class Roadell Hickman (RELEASED)

Digital Savy

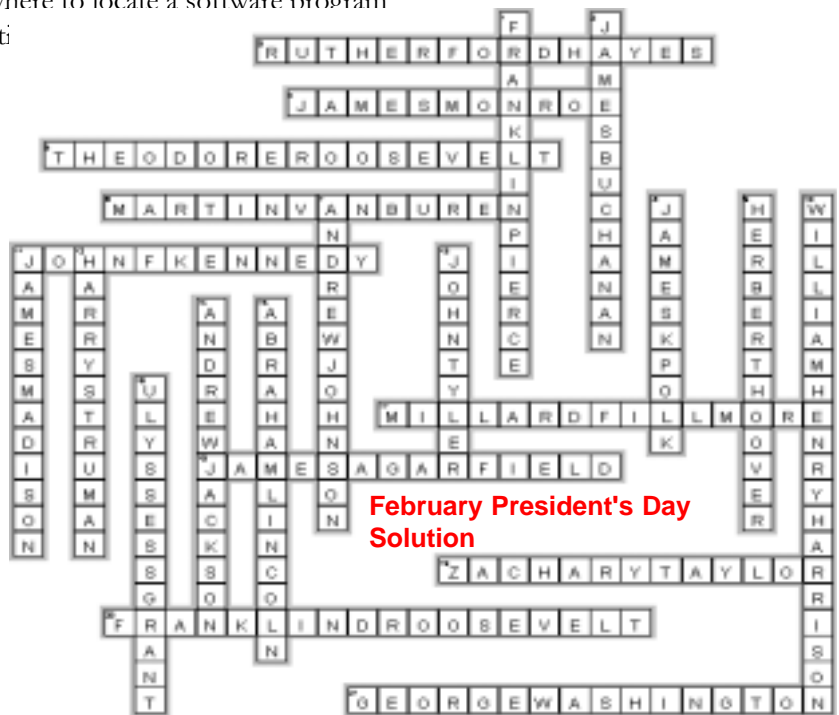


Across

- 2. Used to identify a storage location in main memory
- 5. Two of more computers joined together
- 7. Refers to how clearly the text, graphics and video are displayed on a computer screen
- 8. Set of operations
- 12. Eight bits
- 13. Collection of data that has a unique name
- 14. Term used to describe numbers, characters and symbols that can be stored and processed by a computer
- 16. Data transferred one bit at a time
- 17. To look for the source of a problem
- 18. A DOS command that tells the computer where to locate a software program
- 19. Widely used form of electronic communication

Down

- 1. Industry term for large computer
- 3. Random Access Memory
- 4. Part of the computer system that looks like a television set
- 6. File structure component
- 8. Logical circuitry that responds to instruction set
- 9. Stores Windows configuration info
- 10. Name for individual dot that is used to make up what is displayed on a computer screen
- 11. Data transferred multiple bits at the same time
- 12. Single binary value
- 15. Base Two
- 20. Network confined to one site



February President's Day Solution

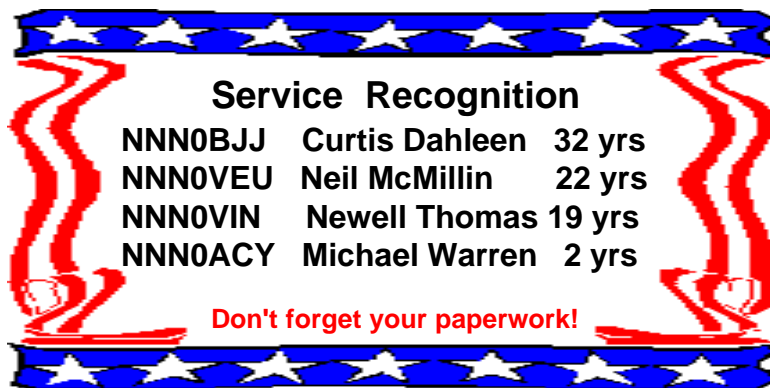
5G1B Net Schedule

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
Mar 5	KZC	KZC
Mar 12	XEE	XEE
Mar 19	BQH	BQH
Mar 26	SXU	SXU
Apr 2	ACY	OCF
Apr 9	XYA	XEE

Test Your Analytical Skills

Feb Solution: Related Numbers

Find the pattern in each line of three numbers (horizontal).

What goes in the blank?

1	2	9
3	4	20
5	6	12
17	12	_?_

Answer: Put the first two numbers into word form.

Seventeen twelve

Multiply the number of letters in each number.

Seventeen (9 letters), twelve (6 letters) = $6 \times 9 = 54$

17 12 54

54 is the answer.

Memorable Advertising

There are some advertisements that stick with you. A catchy tag line can instantly bring a brand, and what it represents to mind. Here's a quick test to prove the point. Name the brand associated with the tag line or slogan.

Tag line answers:

1. The New York Times (1896)
2. Maxwell House (phrase originally coined by Teddy Roosevelt in 1907 and adopted by the brand in 1926)
3. Wheaties (1933)
4. Wendy's (early 1980s)
5. Nike (1988)
6. Avis (1962)
7. Burger King (1973)
8. United Airlines (1966)
9. Kentucky Fried Chicken (1952)
10. AT&T (1979)
11. BMW (1975)
12. Bounty (1971)

Fill-in-the-blanks answers:

1. "Got Milk?" National Milk Processor Promotion Board (1993)
2. "A diamond is forever." De Beers (1948)
3. "Nothing runs like a Deere." John Deere (1972)
4. "You're in good hands with Allstate." (1956)
5. "Please don't squeeze the Charmin." (1964)
6. "I'd walk a mile for a Camel." (1921)
7. "Which twin has the Toni?" (1946)



Test Your Analytical Skills

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 in the next issue of the Minnesota MARSGRAM

After the Net

This is the first of a semi-regular feature suggesting frequencies to visit after the evening net has secured. Almost everyone operating in the MARS net has a general coverage receiver so let's spin that dial and see what else is out there.

