

Mich-A-Con RF

Iron Mountain, Michigan

February 2006

In this issue:

Amateur Radio's Role Gets Favorable Mention in Post-Katrina Report

Words from the President

Amateur Radio Class

February Club Activities

Federal Response to Hurricane Katrina: Lessons Learned

FCC Noncommittal on "Morse Code" Proceeding Action

Ham Question Pool Schedule Changes

K7QO Code Course CDs

WinLink 2000 and APRS

EMCOMM and You!

"Tremendously Successful" SUITSAT-1 is SK

Visit the ARRL's web site at:

<http://www.arrl.org>

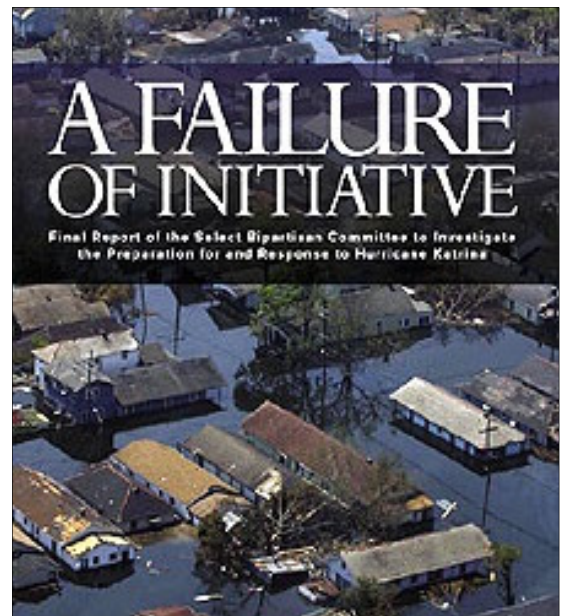
Amateur Radio's Role Gets Favorable Mention in Post-Katrina Report

NEWINGTON, CT, Feb 17, 2006--The Amateur Radio Emergency Service (ARES), the Military Affiliate Radio System (MARS) and the HF digital e-mail system [Winlink 2000](#) all got positive mentions in a post-Katrina report from the US House of Representatives. US Rep Tom Davis (R-VA) chaired the panel. References to ARES, MARS and [Winlink](#) appear in "[A Failure of Initiative](#)"--the final report of the Select Bipartisan Committee to investigate the preparation for and response to Hurricane Katrina.

"Like all levels of government," the 364-page report notes, the National Communication System (NCS), "was not able to address all aspects of the damage to the communications infrastructure of the Gulf States."

MARS was cited for its role as part of the Shared Resources High Frequency Radio Program (SHARES), an emergency federal communication system put into play when other resources are unavailable. The report says that "within days" of Katrina's landfall, NCS called upon more than 430 SHARES stations across the US to, among other things, assist first responders conducting search-and-rescue missions by relaying information to government agencies, by relaying logistical and operational information among FEMA EOCs in Georgia, Mississippi and Louisiana, and by handling health-and-welfare messages between volunteer agencies in Georgia and the American Red Cross national headquarters.

"Additionally, the NCS coordinated the frequencies used by the nearly 1000 Amateur Radio Emergency Service (ARES) volunteers across the nation who served in the Katrina stricken area providing communications for government agencies, the Red Cross and The Salvation Army," the report continued. "Emergency communications were conducted



not only by voice, but also by high-speed data transmissions using state-of-the art digital communications software known as [Winlink](#)."

The report further noted, "In Mississippi, FEMA dispatched Amateur Radio operators to hospitals, evacuation centers, and county EOCs to send emergency messaging 24 hours per day. It further cited comments from Bay St Louis Mayor Edward A. "Eddie" Favre that Amateur Radio operators "were especially helpful in maintaining situational awareness and relaying Red Cross messages to and from the Hancock County (Mississippi) EOC."

According to the report, radio amateurs at airports in Texas and Louisiana "tracked evacuees and notified families of their whereabouts," while the Red Cross "deployed Amateur Radio volunteers

(Continued on page 3)

Words from the President

Tom's (W8JWN) QTH from March 7-17 will be the La Moye Signal Station on Jersey Island in the Channel Islands 14 miles off the coast of France. He will be operating from a WWII German observation post built in 1942 by slave labor. The German occupying forces used it to monitor ship traffic in the English Channel. Today, it has been refurbished and is used by the Jersey Amateur Radio Society as a club station. Tom and three other hams from the US will be operating on all bands 160-6 meters and on all modes. Keep an ear out for MJ/W8JWN.

Amateur Radio Class

The Mich-A-Con Amateur Radio Club is conducting a class for anyone interested in learning about Amateur Radio. Instruction will prepare individuals to pass the Technician Class Amateur Radio Exam. The class will meet one night per week for 8 to 10 weeks, beginning on Tuesday, January 24 at the Dickinson County Library at 6:00 PM. There is no charge for the class, but students will have to provide their own course book and class materials (the book "Now You're Talking", can be purchased from Amateur Electronic Supply for \$19.95, phone (800) 558-0411) Twelve students are presently enrolled, but there is room for more. For more information please call 563-8913 or email meyersb@up.net.



Clubhouse of the Jersey Amateur Radio Society

February Meeting

It seems the winter doldrums have set in. There was no business meeting in February due to the lack of attendance.

Tom has received information on safety harnesses from two sources and will forward it to Bob, WA8FXQ, for his review. There will be an emergency exercise in Dickinson county in late May or June to check preparedness for a bird flu pandemic. Tom will forward this information to Dennis, K8SWX, our Dickinson county EC.

March Club Activities

ARES Nets are conducted at 6:30 PM Central Time every Thursday evening on our 2-meter repeater (146.850 MHz.)

Please join us for the Tuesday Night Net on the 7th, 21st and 28th at 6:30 PM on the 2-meter repeater (146.850 MHz) Dennis, K8SWX, is our Net Control Operator.

Monthly meeting on Tuesday the 14th at 6:30 PM in the Grace United Methodist Church, 721 Norway Street in Norway. The meeting room is upstairs next to the sanctuary.

Saturday Morning Breakfast, 9:00 AM on the 18th at the Holiday Kitchen in Iron Mountain, on US-2 across from Econo Foods.

Club Operating Activity

All club members are invited to use the club callsign to help the club attain WAS and DXCC. If you use the club call, please give information required for the log such as: station worked, date and time (UTC), frequency, RST sent and received, mode and power to Mike, K8DDB. Also give a description of the equipment you were using.

mikebray@chartermi.net

VEC Testing at Iron River

The Iron Range Amateur Radio Club VEC makes exams available on a monthly basis on the 3rd Thursday of the month, prior to the start of their club meeting. Examinations must be arranged before hand. Exam time: 6:30 PM (Central), Place: Iron River Lutheran Church (on US-2 next to McDonalds), Contact: Dan Waters, AA9G, (906) 265-4240 dwmwaters@ironriver.tv

Mich-A-Con ARC Activities for March 2006

SUN	MON	TUE	WED	THU	FRI	SAT
			1	2 ARES	3	4
5	6	7 Tnn	8	9 ARES	10	11
12	13	14 Meeting	15	16 ARES	17	18 Breakfast
19	20	21 Tnn	22	23 ARES	24	25
26	27	28 Tnn	29	30 ARES	31	

Amateur Radio's Role Gets Favorable Mention in Post-Katrina Report

(Continued from page 1)

at its 250 shelters and feeding stations, principally in Mississippi, Alabama and Florida."

The Salvation Army, the report pointed out, operates its own system of Amateur Radio volunteers known as [SATERN](#) (Salvation Army Team Emergency Radio Network). "During the Hurricane Katrina response and recovery effort, SATERN joined forces with the SHARES program and received over 48,000 requests for emergency communications assistance utilizing federal frequencies made available via the SHARES program," the report noted.

"The extent of destruction and damage to the communications infrastructure and services caused by Katrina exceeded that of any other natural disaster experienced by the Gulf Coast states,"

the report concluded. "Simply put, Katrina's devastation overwhelmed government resources at all levels."

"A Failure of Initiative" asserted that the loss of power and the failure at various levels of government "to adequately prepare for the ensuing and inevitable loss of communications" hindered the hurricane response "by compromising situational awareness and command and control operations."

"Despite the devastation left by Katrina, this needn't have been the case," the report stressed. "Catastrophic disasters may have some unpredictable consequences, but losing power and the dependent communications systems after a hurricane should not be one of them."

From the ARRL website, Copyright ARRL

The Whitehouse

February 23, 2006

Fact Sheet: The Federal Response to Hurricane Katrina: Lessons Learned

Today, The Administration Released Its Review Of The Federal Response To Hurricane Katrina. The President's charge to evaluate the Federal government's response to the storm resulted in the report and recommendations released today by the Administration, *The Federal Response to Hurricane Katrina: Lessons Learned*. The product of an extensive review, led by the President's Homeland Security Advisor Fran Townsend, the Report identifies deficiencies in the Federal government's response and lays the groundwork for transforming how the Nation - from every level of government, to the private sector, to individual citizens and communities - pursues a real and lasting vision of emergency preparedness and response.

The *Lessons Learned* Report Assesses The Federal Response, Identifies Lessons Learned, And Recommends Appropriate Corrective Actions. The Report identifies the systemic problems in Federal emergency preparedness and response revealed by Hurricane Katrina - and the best solutions to address them. Where actions at the State and local level had bearing on Federal decisions or operations, they are included in order to provide full context. The *Lessons Learned* report includes:

- 17 lessons the Executive Branch has learned after reviewing and analyzing the response to Katrina;
- 125 specific recommendations to the President, which have been reviewed by relevant Federal departments and agencies, and will now enter an implementation process; and
- 11 critical actions to be completed before June 1, 2006 - the first day of the next hurricane season.

The President's Charge: The Government Will Learn The Lessons Of Hurricane Katrina

President Bush Ordered A Comprehensive Review Of The Federal Response To Hurricane Katrina. In his September 15, 2005, address to the Nation from Jackson Square in New Orleans, the President made clear that the Federal government would learn the lessons of Hurricane Katrina so we as a Nation can make the necessary changes to be "better prepared for any challenge of nature, or act of evil men, that could threaten our people."

Hurricane Katrina Was A Deadly Reminder That We Can And Must Do Better In Responding To Emergencies. Hurricane Katrina and the subsequent sustained flooding of New Orleans exposed significant flaws in our national preparedness for catastrophic events and our capacity to respond to them. Emergency plans at all levels of government - including the 600-page National Response Plan that set forth the Federal government's plan to coordinate all its departments and agencies and integrate them with State, local, and private sector partners - were put to the test and came up short.

(Continued on page 4)

The Federal Response to Hurricane Katrina: Lessons Learned

(Continued from page 3)

The Federal Response To Hurricane Katrina: Lessons Learned

We Are Not As Prepared As We Need To Be At All Levels: Federal, State, Local, Community, And Individual. Hurricane Katrina obligates us to re-examine how the Federal government is organized to address the full range of potential catastrophic events - both natural and man-made.

Hurricane Katrina And Its Aftermath Provide Us With The Imperative To Design And Build A Unified System. The *Lessons Learned* Report confirms the imperative of integrating and synchronizing the Nation's homeland security policies, strategies, and plans across Federal, State, and local governments, as well as the private sector, non-governmental organizations (NGOs), faith-based groups, communities, and individual citizens. To achieve this, the Report identifies three immediate priorities:

- First, we must implement a comprehensive National Preparedness System to make certain that we have a fully national system that ensures unity of effort in preparing for and responding to natural and man-made disasters;
- Second, we must create a Culture of Preparedness that emphasizes that the entire Nation - at all levels of government, the private sector, communities, and individual citizens - shares common goals and responsibilities for homeland security; and
- Third, we must implement corrective actions to ensure we do not repeat the problems encountered during Hurricane Katrina.

A Comprehensive National Preparedness System

- **The Existing National Preparedness System Must Be Improved To Minimize The Impact Of Disasters On Lives, Property, And The Economy.** Pursuant to the National Strategy for Homeland Security, the President directed the creation of a comprehensive national preparedness system in Homeland Security Presidential Directive 8 (HSPD-8), starting with a national domestic all-hazards preparedness goal. In response, the Department of Homeland Security (DHS) has developed an Interim National Preparedness Goal. We must now translate this Goal into a robust preparedness system that includes integrated plans, procedures, training, and capabilities at all levels of government. The System must also incorporate the private sector, NGOs, faith-based and other grassroots groups, communities, and individual citizens. The objective of our National Preparedness System must be to achieve and sustain risk-based target levels of capability to prevent, protect against, respond to, and recover from major natural disasters, terrorist incidents, and other emergencies.
- **The Response To Hurricane Katrina Revealed A Lack Of Familiarity With Incident Management, Planning Discipline, And Field-Level Crisis Leadership.** Going forward, the Federal government must clearly articulate national preparedness goals and objectives. It must create the infrastructure for ensuring unity of effort. The Federal government must manage the National Preparedness System for measuring effectiveness and assessing preparedness at all levels of government. The *Lessons Learned* report outlines five elements that are critical for a National Preparedness System:
 1. Building and integrating the Federal government's operational capability for emergency preparedness and response;
 2. Strengthening DHS's capacity to direct the Federal response effort while providing resources to responders in the field;
 3. Ensuring unity of effort and eliminating red tape and delays in providing Federal assistance to disaster areas;
 4. Strengthening homeland security education, exercises, and training programs; and
 5. Ensuring that homeland security assessments, lessons learned, and corrective action programs are institutionalized throughout the Federal government.

Creating A Culture Of Preparedness

- **The Creation Of A Culture Of Preparedness Will Emphasize That The Entire Nation Shares Common Goals And Responsibilities For Homeland Security.** A Culture of Preparedness must build a sense of shared responsibility among individuals, communities, the private sector, NGOs, faith-based groups, and Federal, State, and local govern

ments. Our homeland security is built on a foundation of partnerships. The Lessons Learned Report outlines four principles to guide the development of a Culture of Preparedness:

1. A prepared Nation will be a long-term continuing challenge;
2. Initiative and innovation must be recognized and rewarded at all levels;
3. Individuals must play a central role in preparing themselves and their families for emergencies; and
4. Federal, State, and local governments must work in partnership with each other and the private sector.

Ensuring That The Federal Government Does Not Repeat Problems Encountered During Hurricane Katrina

- **Changes Must Be Made Immediately To Prepare For The 2006 Hurricane Season.** The 2006 hurricane season is just over three months away. Even while the process to implement the lessons learned from Katrina is underway, there are specific steps the Federal government can and should take now to be better prepared for future emergencies. The *Lessons Learned Report* recommends 11 critical actions to strengthen Federal response capabilities before June 1, 2006, many of which the Administration has already begun to implement:
 1. Ensure that relevant Federal, State, and local decision-makers, including leaders of State National Guards, are working together and in close proximity to one another in the event of another disaster;
 2. Ensure that for events preceded by warning, we are prepared to pre-position an interagency Federal Joint Field Office (JFO) to coordinate and, if necessary, direct Federal support to the disaster;
 3. Ensure situational awareness by establishing rapid deployable communications, as well as instituting a structure to consolidate Federal operational reporting with DHS;
 4. Embed a single Department of Defense point of contact at the JFO and FEMA regional offices to enhance coordination of military resources supporting the response;
 5. Designate locations throughout the country for receiving, staging, moving, and integrating military resources to ensure the most effective deployment of Federal disaster relief personnel and assets;
 6. Identify and develop rosters of Federal, State, and local government personnel who are prepared to assist in disaster relief;
 7. Employ all available technology to update and utilize the national Emergency Alert System in order to provide the public with advanced notification of and instruction for disasters and emergencies;
 8. Encourage States to pre-contract with service providers for key disaster relief needs, such as debris removal and the provision of critical commodities;
 9. Enhance the mechanism for providing Federal funds to States for preparations upon warning of an imminent emergency;
 10. Improve the delivery of assistance to disaster victims by streamlining registration, expediting eligibility decisions, tracking movements of displaced victims, and incorporating safeguards against fraud; and
 11. Enhance ongoing review of State evacuation plans and incorporate planning for Continuity of Government to ensure the continuation of essential and emergency services.

Transforming The Federal Response To Future Emergencies

Acting On The Recommendations In The *Lessons Learned Report* Will Enable The Federal Government To Respond To Natural And Man-Made Disasters More Effectively And Efficiently. The lessons of Hurricane Katrina cannot be learned and put into action without change. As the Federal government works to implement the near-term critical activities and 125 recommendations, State and local governments, the private sector, NGOs, faith-based and community organizations, the media, communities, and individuals should undertake a review of their respective roles and responsibilities in preparing for and responding to catastrophic events.

Together, We Will Strengthen Our Ability To Prepare For, Protect Against, Respond To, And Recover From Catastrophic Events. The lessons learned from Hurricane Katrina and the recommendations set forth in today's Report will yield preparedness dividends that transcend Federal, State and local boundaries. Their full implementation will help the entire Nation achieve a shared commitment to preparedness.

FCC NONCOMMITTAL ON "MORSE CODE" PROCEEDING ACTION

Just when the FCC will act on the "Morse code" proceeding, WT Docket 05-235, remains hazy. The Commission released a Notice of Proposed Rule Making and Order (NPRM&O) last July proposing to eliminate the Element 1 (5 WPM) Morse code requirement for all license classes. The Amateur Radio community has filed more than 3800 comments on the proceeding, and additional comments continue to show up, even though the formal comment deadline was last October 31 (with reply comments by November 14). The next--and most-anticipated--step for the Commission is to formally adopt any revisions to its rules and conclude the proceeding with a Report and Order (R&O) that spells out the changes and specifies their effective date.

"There really is no news," an FCC Wireless Telecommunications Bureau staffer told ARRL this week on background. "We certainly hope to release WT Docket 05-235 sometime this year, but we're not making any predictions at this time. We certainly are not saving up any big announcements for Dayton Hamvention."

Beyond eliminating the Morse requirement, the FCC declined proposing any other suggested changes to the Amateur Service.

The proceeding began with 18 petitions for rule making--many just calling for the elimination of the Morse requirement but some asking for more far-reaching changes in the Amateur Service rules. The various petitions attracted a total of some 6200 comments. The FCC subsequently consolidated the petitions--including one from the ARRL asking the FCC to establish a new entry-level license class and to retain the Morse requirement only for Amateur Extra class applicants--into a single proceeding designated WT 05-235.

The FCC has not proposed extending HF privileges to current Technician licensees who have not passed a Morse code examination. In its NPRM&O the FCC suggested that in a no-Morse-requirement regime, "codeless Techs" could gain HF access by taking the Element 3 General class written examination.

Any FCC decision to eliminate the 5 WPM Morse code requirement for HF access would have *no* impact on either the current HF CW-only subbands or on the CW privileges of Amateur Radio licensees.

Before it releases an R&O on the Morse code proceeding, however, the WTB wants to wrap up action in another Amateur Radio-related docket--the "Phone Band Expansion" (or "Omnibus") NPRM in WT Docket 04-140, released April 15, 2004. A dozen petitions for rulemaking, some dating back to 2001, were consolidated in the Omnibus proceeding.

In that NPRM, the Commission proposed to go along with the ARRL's Novice reformatting plan aimed at reallocating the current Novice/Tech Plus subbands and expanding portions of the 80, 40 and 15 meter phone bands. The FCC also agreed with an ARRL proposal to extend privileges in the current General CW-only HF subbands to present Novice and Tech Plus licensees (or Technicians with Element 1 credit). WT 04-140 further proposed to essentially do away with FCC rules prohibiting the manufacture and marketing to Amateur Radio operators of amplifiers capable of operation on 12 and 10 meters.

Ham Question Pool Schedule Changes

The new Technician class (Element 2) question pool will become effective July 1, 2006. The current Technician pool is valid until June 30, 2006.

The new General Class (Element 3) pool will be released December 1, 2006 and will become effective July 1, 2007. The current General pool is valid until June 30, 2007.

The Amateur Extra Class (Element 4) pool will be released December 1, 2007 and will become effective July 1, 2008. The current Extra pool will be valid until June 30, 2008.

Barring any major rules changes, subsequent updates to all pools will follow the traditional 4 year cycle.

K7QO Morse Code Course

Mike, K8DDB, still has free CD ROMs of Chuck Adams' K7QO Morse Code Course. Any member desiring a copy should contact Mike at mikebray@chartermi.net or (906) 563-7020.

License Study Materials Available from the ARRL:

Technician Class:

Now You're Talking - 5th edition - Order No. 8810 \$19.95

ARRL's Tech Q&A - 3rd edition - Order No. 8829 \$12.95

ARRL Technician Class Video Course - 4th ed.

DVD Course No. 9116
VHS Course No. 8837
\$149 each + \$12 s&h

General Class:

ARRL General Class License Manual - 5th ed.

Valid beginning July 1, 2004 - Order No. 9205 \$16.95

ARRL's General Q&A

Valid beginning July 1, 2004 - Order No. 9213 \$12.95

Your Introduction to Morse

Code - Pass 5 wpm test
Cassettes No. 8322
Audio CD No. 8314
\$14.95 each

Ham University - Complete

Edition - Learn Morse code with this easy to use software.

Includes a written exam quiz generator with all three question pools. CD-ROM for Win95-XP
Order No. 8735 \$39.95

Phone: 1-888-277-5289

or

<http://www.arrl.org/catalog/lm/>

<http://www.arrl.org/catalog/8330/>

<http://hamuniversity.com>

Winlink 2000 and APRS

Winlink 2000, APRS join forces with APRSLink: Following the Amateur Radio response to some recent disasters, Bob Bruninga, WB4APR, proposed using the Automatic Position Reporting System (APRS) to enable mobile and remote APRS users to access their Winlink 2000 e-mail accounts under emergency or unusual conditions. In response, the Winlink 2000 development team came up with APRSLink. APRSLink monitors all APRS traffic gated to the Internet and watches for special commands that allow APRS users to read or send short e-mail messages to and from other Winlink 2000 users, perform e-mail maintenance, receive notices of pending Winlink 2000 e-mail via APRS and query the APRSLink server for information on the closest Telpac gateway or Winlink participating station. Details are on the APRSLink Web page <<http://www.winlink.org/aprslink.htm>>.

From the HARA Standing Wave newsletter, March, 2006

**Dickinson County ARES Net**

The Dickinson County ARES Net meets every Thursday at 6:30 PM on the 146.850 repeater. Dennis, K8SWX, EC for Dickinson county, is the net manager.

EMCOMM and You!**MARS—Military Affiliate Radio System**

By Lou, KG8NK, Marquette County AEC

I have been featuring the various organizations that involve amateur radio operators in emergency situations. One of these organizations is MARS, the Military Affiliate Radio System which is a Department of Defense sponsored program. MARS is operated by the Army, Navy-Marine Corps and Air Force. MARS members are volunteer licensed amateur radio operators who are interested in providing emergency communications to local, national and international emergency and safety organizations as an adjunct to normal communications.

The primary concept of MARS is to train for any communications emergency and to be flexible in order to provide for rapid expansion. Some of the training includes conducting daily traffic and training nets, drills and critiques to train operators and to test the systems readiness to handle demands during an emergency.

There are many benefits of membership in MARS, such as becoming part of a worldwide communications team, increasing your communications skills and capabilities, operating on specially assigned military radio frequencies in SSB, SSTV and various Digital modes of communications.

In order to become a member of MARS you must be 18 years of age or older, a US citizen or legal resident alien, possess a valid amateur radio license, and possess a station capable of operating on the MARS HF frequencies (2.0 – 30 Mhz).

Web address:

<http://navymars.org/national/mission.htm>

From the HARA Standing Wave newsletter, February, 2006

Training for Emergency Operations

Requests for assistance during emergencies from served agencies contains a price tag, called training, that has to be documented and available for the served agency. At the present time there are no training requirements for the ARRL to take certain training as this would go against the original intent of the statement in the Public Service Communications Manual for ARES.

Unfortunately served Agencies (FEMA, American Red Cross, Salvation Army, etc.) now realize that a trained operator in many forms or discipline is a much better asset to them than an untrained one. The Department of Homeland Security is requiring all first responders, including volunteers, to complete training in the NIMS (National Incident Management System) and ICS (Incident Command System), by 2007. Technically this means that we have a responsibility to be aware of the concepts expressed in these systems. There is an Independent Study course from FEMA (IS-700). You can find this and other courses at: <http://www.training.fema.gov/EMIweb/IS/crslist.asp> You can take the course on-line or download the material. It takes about 3 hours and there is a final exam on-line, and all courses are free. This is government issue not an ARRL or Amateur Radio issue. We serve at the discretion of the served agency.

To meet the skill requirements, amateurs performing operational roles should consider the following training: Regular participation in Public Service events such as Ore to Shore bike race or UP 200 dog sled race, ability to construct and use emergency antennas, knowledge of alternative power sources to list a few of the skills necessary. In addition, for RACES Operations, you may want to complete the FEMA IS-22 course, FEMA 18-5, IS-7, IS-195, IS-288, and Red Cross Damage Assessment course (FEMA courses are on the FEMA web site).

New legislation will replace the existing MCL 750.508 (Michigan Scanner Law) and will include an exemption for amateur radio operators from any restrictions on carrying a receiver capable of monitoring Public Safety frequencies. The Governor is expected to sign this bill by the end of February.

Lyle Willette AB8CB has been appointed to the position of District Emergency Coordinator for the Marquette and Alpena National Weather Service offices. With this change, Michigan will now have specific DECs assigned to coordinate amateur radio efforts with each of the Michigan-based NWS facilities.

From the HARA Standing Wave newsletter, March, 2006

ARISS MAKES IT OFFICIAL:

"TREMENDOUSLY SUCCESSFUL" SUITSAT-1 IS SK

SuitSat-1 is now a confirmed "Silent Key." So says its sponsor, the Amateur Radio on the International Space Station (ARISS) program. In operation for more than two weeks, SuitSat-1--designated AO-54--easily outlasted initial predictions that it would transmit for about one week. ARISS International Chairman Frank Bauer, KA3HDO, says the mission captured imaginations around the world, despite a much-lower-than-expected signal strength.

"The outreach, press requests and visibility of SuitSat were absolutely amazing and appear to be unprecedented for a ham radio event," Bauer said. "While the press requests are just now starting to wane, we expect that you will continue to see SuitSat status reports and pictures in magazines, Web sites and other literature over the next few months." The more than nine million hits at the SuitSat Web site attest to the level of interest in the SuitSat-1 experiment, Bauer noted, calling the tally "quite impressive indeed!"

Bob King, VE6BLD, in Alberta posted the last confirmed reception of SuitSat-1's voice audio, Saturday, February 18, at 0332 UTC. Richard Crow, N2SPI, in New York received the last confirmed telemetry, which indicated the battery voltage dropping precipitously to a low of 18.3 V before the novel satellite ceased to transmit.

Hearing SuitSat-1's puny signal strength generally required gain antennas, but Bauer says he heard SuitSat with a 3-element Arrow antenna and a handheld radio. Bauer's daughter Michelle recorded the English-language voice identification. Another challenge to signal reception, he said, was the very deep fading due to the suit's rotation in orbit.

"One great positive that came from these issues is that it challenged the ham radio community worldwide to improve their station receive capabilities so that they could pull every bit of signal from SuitSat," Bauer remarked.

Bauer says reports that SuitSat-1 was non-operational and that the battery was frozen shortly after deployment are false. "This never occurred," he stressed. "As the telemetry has shown, temperatures within the suit were a somewhat comfortable 12-16 degrees C during the entire mission."

So, he adds, is the tale of SuitSat-1's early demise and resurrection. "It was alive and operated flawlessly, except the signal strength issue, from the time the crew flipped the switches until the battery power was used up," he said.

Bauer says he's also not ready to buy into an AMSAT calculation that the transmitter may have been putting out between 1 and 10 mW. "It is entirely possible that the radio output could have been at 500 mW, and the feed line, connector or the antenna caused the problem," he said, adding that the SuitSat team has only just begun studying what might have caused the weak signal.

The AMSAT/ARISS team already is looking forward to a SuitSat-2. "Correcting the signal strength issue would be a top priority for this flight," Bauer said. "So would be a longer-term power generation device, like solar arrays."

Although no longer transmitting, SuitSat-1 could continue orbiting Earth for another 70 to 120 days, depending on atmospheric drag, Bauer said.

More information on the SuitSat-1 project, including QSL information, is available on the AMSAT Website: <http://www.amsat.org/> and on the SuitSat Website: <http://www.suitsat.org/>

From The ARRL Letter, February 24, 2006

FOR SALE:

TS-520S Complete HF Station, very nice condition. Includes the following items: TS-520S transceiver—160-10 meters, CW filter installed, AT-200 matching antenna tuner, matching station speaker, MC-50 desk microphone.

All for \$500

Paul, KB0P

E-Mail: kbop@kbop.com (906) 485-5447

WANTED:

ICOM IC-28H Transceiver Call or write:

Dennis Royce, K9GIR

673 W. North St.

Eagle Harbor, MI 49950-9658

E-Mail: garoyce@up.net (906) 289-4251

Club Apparel:

Our club apparel is supplied by:

Shirt Tails

408 S Stephenson Ave.
Iron Mountain, MI 49801

Phone: (906)774-3370
or
finleyd@up.net

Prices:

Jacket with liner \$45
(Tall add \$5, 2X or 3X add \$5,
to add your name or call sign
on the front is \$5)

T-Shirt - \$10
(2X or 3X add \$1)
Sweatshirt - \$16
(2X or 3X add \$2)

If you wish to have the club
logo printed on an item of
clothing that you have
purchased elsewhere, there is
charge of \$6.

Club patches are available
from:

Tom Martin, W8JWN
812 West B Street
Iron Mountain, MI 49801

They are 3 inches in diameter
and sell for \$3.00 each. If
ordering by mail, please
include a SASE along with
your payment.



Mich-A-Con Amateur Radio Club
Membership Application/Renewal Form

Please remit dues to:
Dennis Beurjey, K8SWX
612 Balsam Street
Kingsford, MI 49802

Name: _____
Address: _____
City, State, Zip: _____
Call Sign: _____
Email Address: _____
Phone: _____
ARRL Member? Yes _____ No _____

Annual dues are due in January—Please make checks payable to Mich-A-Con ARC
Annual dues for Full Membership - Single \$20 ____ * Family \$30 ____ * Repeater-Only - \$10 ____**

If family membership, please list additional names and call signs:

* The dues for NEW members are prorated - you only pay for the remainder of the year! Please remit \$1.67 per month for a Single membership or \$2.50 per month for a Family membership.

**If you are an occasional or seasonal user of the repeater, please consider our Repeater-Only-Membership.

Exam Schedule

City: Iron Mountain
Location: Dickinson County Library
Room: Conference Room
Time: 9:30 AM Central Time
Contact: Mark Lewis, N8UKD
Telephone: (906) 774-6598

Exam Date: May 6, 2006
Exam Date: Aug 5, 2006
Exam Date: Nov 4, 2006
Exam Date: Feb 3, 2007

Examinees should bring 2 pencils, a pen for the official paperwork, the originals AND copies of any previous credit that you have earned (Certificates of Successful Completion or current license), 1 photo ID (usually a driver's license) and 1 other ID. (usually a birth certificate or SS card), a calculator if needed (make sure your memories are cleaned out), and the test fee (2006 fee is \$14).

Mich-A-Con RF is published by the Mich-A-Con Amateur Radio Club of Iron Mountain.

Items for Mich-A-Con RF should be in the editor's hands by club meeting day (2nd Tuesday of the month) to be included in that month's edition. Please consider writing an article related to Amateur Radio to share with your fellow members. Send the article in plain text and attach any photos, etc., don't worry about format, that's the editor's job.

Send to:
mikebray@chartermi.net
(906) 563-7020

Permission is hereby granted for the reproduction of material found in Mich-A-Con RF unless otherwise noted, provided that proper credit is given to the author and Mich-A-Con ARC.

Repeaters

The club maintains two repeaters, which are located on Pine Mountain in Iron Mountain, with tower and facilities provided by the Wisconsin Electric Power Co.

Identifier: WA8FXQ/R IMT

Output	Offset	PL Tone
146.850 MHz	minus	—
444.850 MHz	plus	100

Both repeaters have an auto patch with a toll restriction. The auto patch on the 2-meter repeater can be used with permission. The 440 auto patch is for club use only.

A club net is held on the 2-meter repeater every Tuesday at 6:30 PM except the 2nd Tuesday of the month, which is club meeting night.

Mich-A-Con RF

Mich-A-Con ARC
c/o Michael F. Bray
W3821 Waucedah Road
Vulcan, MI 49892-8483

Mich-A-Con RF

Club Meetings

The Mich-A-Con Amateur Radio Club meets on the second Tuesday of the month at 6:30 PM in the Grace United Methodist Church (upstairs in the room next to the sanctuary), 721 Norway Street in Norway, Michigan. Visitors and prospective members are always welcome!

The URL for the Mich-A-Con ARC web site is:

<http://www.qsl.net/ka1ddb/>

Previous editions of Mich-A-Con RF can be accessed by a link on the news page.

The ARRL DX Bulletin on the Upcoming Activities page is updated each Thursday and the contests section is updated on a monthly basis.

CLUB OFFICERS

President:

Tom Martin, W8JWN
(906) 774-5463
tmartin@chartermi.net

Vice President:

Mike Boileau, N9NBN
(715) 251-3137
n9nbn@netnet.net

Secretary:

Mike Bray, K8DDB
(906) 563-7020
mikebray@chartermi.net

Treasurer:

Dennis Beurjey, K8SWX
(906) 771-1996
dbeurjey@msn.com

Reminders

Club dues for the year 2006 were payable on January 1st. Please use the Membership Application/Renewal form on page 9 of this newsletter. Checks should be made payable to Mich-A-Con ARC and sent to our new Treasurer, Dennis Beurjey, K8SWX, at the address listed on the form. Thank you for supporting our club!

The monthly meeting for March is on TUESDAY the 14th at 6:30 PM in the Grace United Methodist Church, 721 Norway Street, Norway, Michigan. (Upstairs in the room next to the sanctuary.)