



ARES COMMUNICATOR

Information for Scott County Amateurs



May, 2017

Accurate, Reliable Emergency Communications for our Community

Volume 17, Number 5

Last Call!

Really! Last 3 Spotter classes.

Your last three opportunities for SKYWARN spotter training are here! If you did not complete a spotter training / review session in 2016, you should take a class this year.

There are only 3 classes left for this training cycle. They are:

Tuesday, May 9, Medina

Saturday, May 13, Blaine

Wednesday, May 17, Roseville

You should pre-register for the classes to make sure there is enough space to accommodate the class. The Medina class has the most openings at this time. If you are planning on attending this session and if you haven't already signed up, do it NOW!

The Blaine and Roseville sessions have both sold out for pre-registration. A few spots are generally held open, but no promises. The Roseville classroom space is smaller, so there is less flexibility.

If you cannot attend a class you signed up for, please cancel your pre-registrations. One class session had only half of the pre-registrations showed up. Have some consideration for your fellow spotters.

Congrats to everyone who attended classes this year. It was a busier year due to the tornadoes in March.

You can check out the latest class information here: <https://metroskywarn.org/schedule>



BREAK - OVER



The ARES COMMUNICATOR is published for the benefit of Amateur Radio Operators in Scott County and other interested individuals.

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Not So Fast!

New Bands are Not Yet Available

The new 630-meter and 2,200-meter bands are **not yet available for Amateur Radio use**. The effective date of the recent FCC Report & Order (R&O) granting these allocations has not yet been determined, and until the start date has been set, it is *not* legal under an Amateur Radio license to transmit on either band.

The fact that the new rules contain a new information-collection requirement — notification of operation to the United Telecoms Council — complicates the matter of determining an effective date. According to the FCC R&O, the Office of Management and Budget (under the Paperwork Reduction Act) must first approve the information-collection requirements in §97.303(g)(2), which must be in place before radio amateurs can use the new bands.

Once that happens, the FCC will publish a notice in *The Federal Register* “announcing such approval and the relevant effective date,” the R&O said. ARRL will announce the UTC notification procedures and the effective date to use these new bands as soon as these are known.

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ARES Activities

Weekly Net Monday 7 PM 146.535 mhz (s)

Breakfast Saturday, May 13th

Digital Monday, May 15th

ARES Nets

MN ARES Phone Net

6:00PM Sunday Freq: 3.860 mhz

ARRL MN Phone Net

12:00p, 5:30p CST Daily Freq: 3.860 mhz

ARRL MN CW Net

6:30p, 9:50p CST Daily Freq: 3.568 mhz

NETS WITH OUR NEIGHBORS

North Dakota: Daily 3.937 mhz 6:30pm

South Dakota: Daily 3.860 mhz 6:00pm

Wisconsin: Daily 3.985 mhz 5:30pm

Iowa: Daily 3.970 mhz 12:30/5:30pm

First Thursday Net

Metro District Hospital Net

The Association of Emergency Radio Organizations (AERO) sponsors a Metro District ARES net held on the first Thursday of each month. The purpose of the net is to provide an opportunity to exercise Dual-band xcvrs installed at hospitals and clinics in the metro area. The net is open to all amateur radio ops and provides the opportunity to participate in a directed net and practice directed net procedures.



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Everyone is welcome!

- First Thursday of each month
- 12:30PM (lunch time)
- 146.700 - (PL118.8)



Memorial Day
Never Forget
Ever Honor

Scott County ARES Contacts

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N0BHC@arrl.net



Asst Emergency Coordinator
Chad Palm KD0UWZ
Chaska, MN
KD0UWZ at scottares.org



Spotter Appreciation Picnic

Saturday May 20th

The Metro Skywarn Spotter Appreciation Picnic will be on Saturday, May 20th from 1pm to 3pm at the NWS office in Chanhassen.

The National Weather Service is located at: 1733 Lake Drive West, Chanhassen, MN 55317.

IF Mother Nature would rain on the Skywarn Spotter Appreciation Picnic, the rain day is: Sunday, May 21st.

Hot dogs and drinks will be provided. Please consider a side dish to bring. Register for door prizes when you arrive. You must be present at the 2:30 drawing to win.

Free and family-friendly with games for the kids.

Sign-up link: <https://www.eventbrite.com/e/metro-skywarn-spotter-appreciation-picnic-tickets-33353466115>

Metro Skywarn Spotter Frequencies
146.700- PL 127.3 [WC0HC] N Metro
147.210+ PL 100.0 [W0BU] S Metro
147.000+ [K0LTC] West Metro
442.600+ PL 156.7 Chatter Only

BREAK - OVER

"Never debate with an idiot. They only drag you down to their level and then beat you with experience."

IoT

NBEMS Current Versions

The current version of the Fldigi manual is available at NBEMS Info page at www.scottares.org. Look under the 'Help Sheets' heading.

Now is a good time to check to your digital software to make sure you are running the newest versions. You can find the most recent versions posted at both: www.w1hkj.com/download.html and <http://www.scottares.org/NBEMS.htm>

Here are the most recent releases as of April 18, 2017.

Software	Version
Fldigi	4.0.2
Flwrap	1.3.4
Flmsg	4.0.2
Flamp	2.2.03

The Monday evening training net is a great place to have your digi questions answered and problems solved! Join the Scott ARES group on 146.535 MHz simplex at 7:00pm on Monday evenings.



Amateur Radio License Exam

Want to become a ham? Want to upgrade your license? You can find information and resources to success in ham radio at this page: <http://www.scottares.org/License Info.htm>

If you want to ask questions or find a local Elmer (Mentor) just drop an email to: newhaminfo@scottares.org

The hams in Scott ARES gather for breakfast the first Saturday of the month at the Perkins Restaurant in Savage. Bring you ham radio questions and talk to local amateur radio operators.

Now that you have done the work to study for your upgrade, here is where to find a convenient exam session near you. There is a VE exam search engine at: http://www.arrrl.org/exam_sessions/search

Walk-ins allowed at most sessions however it is always best to check the details at the specific session you are planning to attend. Below is a list of scheduled sessions close to Scott County. Good Luck!

May 10, 2017 Wednesday 7:00 PM

Sponsor: VARC

James C. Rice (612) 384-7709

Email: jrice@danpatch.org

Location: Perkins Restaurant & Bakery

17387 Kenyon Avenue

Lakeville MN 55044-4459

Walk-ins allowed, Pre-reg requested

May 20, 2017 Saturday 7:00 PM

Sponsor: SEMARC

Daniel M. Franz (651) 769-0358

Email: wd0gup@hotmail.com

Location: Zion Lutheran Church

8500 Hillside Trail South

Cottage Grove MN 55016

Walk-ins allowed, Pre-reg requested

May 27, 2017 Saturday 9:00 AM

Sponsor: Bloomington Off/Emergency Mgmt

Daniel J. Royer (952) 888-9756

Location: Perkins Restaurant & Bakery

City Hall-Police Department

1800 W Old Shakopee Rd

<http://www.Bloomington-VE.org>

Bloomington MN 55431

June 3, 2017 Saturday 10:00 AM

St Paul Radio Club

Leon H. Dill (651) 688-9964

Email: w0coc@arrrl.net

Location: Ramsey Co Library Maplewood

3025 Southlawn Dr

Saint Paul MN 55109-1577

Walk-ins allowed, Pre-reg requested

Take a Dip in the General Pool

Time to test your knowledge of the information covered by the General Class license exam. Each month we'll take a look at a selection from the question pool.

Strap on your thinking cap and see what you can recall. Here is this month's sample:

1. Which of the following is a disadvantage of using wind as the primary source of power for an emergency station?
A. The conversion efficiency from mechanical energy to electrical energy is less than 2 percent
B. The voltage and current ratings of such systems are not compatible with amateur equipment
C. A large energy storage system is needed to supply power when the wind is not blowing
D. All of these choices are correct

2. Which of the following causes opposition to the flow of alternating current in a capacitor?

- A. Conductance
- B. Reluctance
- C. Reactance
- D. Admittance

3. Why is impedance matching important?

- A. So the source can deliver maximum power to the load
- B. So the load will draw minimum power from the source
- C. To ensure that there is less resistance than reactance in the circuit
- D. To ensure that the resistance and reactance in the circuit are equal

(Check next month's issue of the ARES Communicator for the answer.)

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April General Pool Answers

1. Which of the following is the most likely to cause interfering signals to be heard in the receiver of an HF mobile installation in a recent model vehicle?

- D. The vehicle control computer

2. Which of the following causes opposition to the flow of alternating current in an inductor?

- D. Reactance

3. What happens when the impedance of an electrical load is equal to the internal impedance of the power source?

- D. The source can deliver maximum power to the load

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BREAK - OVER

Armed Forces Day X-band Test

May 13th

The US Army, Air Force, Navy, and Coast Guard will sponsor the traditional military/amateur radio communication tests on Saturday, May 13 to mark the 66th annual Armed Forces Day (AFD). Armed Forces Day is May 20, but the AFD Crossband Military-Amateur Radio event will take place a week earlier in order to avoid schedule conflicts with those attending Hamvention.

Complete information, including military stations, modes, and frequencies, is available on the US Army MARS website at, <http://www.usarmymars.org/home/announcements> .

The annual celebration is a unique opportunity to test two-way communication between radio amateurs and military stations (authorized under Part 97.111 of the Amateur Service rules). It features traditional military-to-amateur crossband SSB voice, CW, practice using legacy interoperability waveforms, and the opportunity for participating hams to utilize more modern military modes, such as MIL-STD Serial PSK and Automatic Link Establishment (ALE). Military stations and Amateur Radio stations are authorized to communicate directly on certain 60-meter interoperability channels - 5,330.5, 5346.5, and 5,371.5 kHz.

These tests give Amateur Radio operators and shortwave listeners a chance and a challenge to demonstrate individual technical skills and to receive recognition from the appropriate military radio station. QSL cards will be available for stations successfully contacting participating military stations.

The Armed Forces Day message will be transmitted via Military Standard radioteletype modes (MIL-STD 188-110A/B). Software is available to demodulate the military serial PSK waveform, and detailed instructions can be downloaded from, http://www.n2ckh.com/MARS_ALE_FORUM/MSDMT.html . Utilizing this mode with soundcard equipment can be challenging; review the instructions carefully.

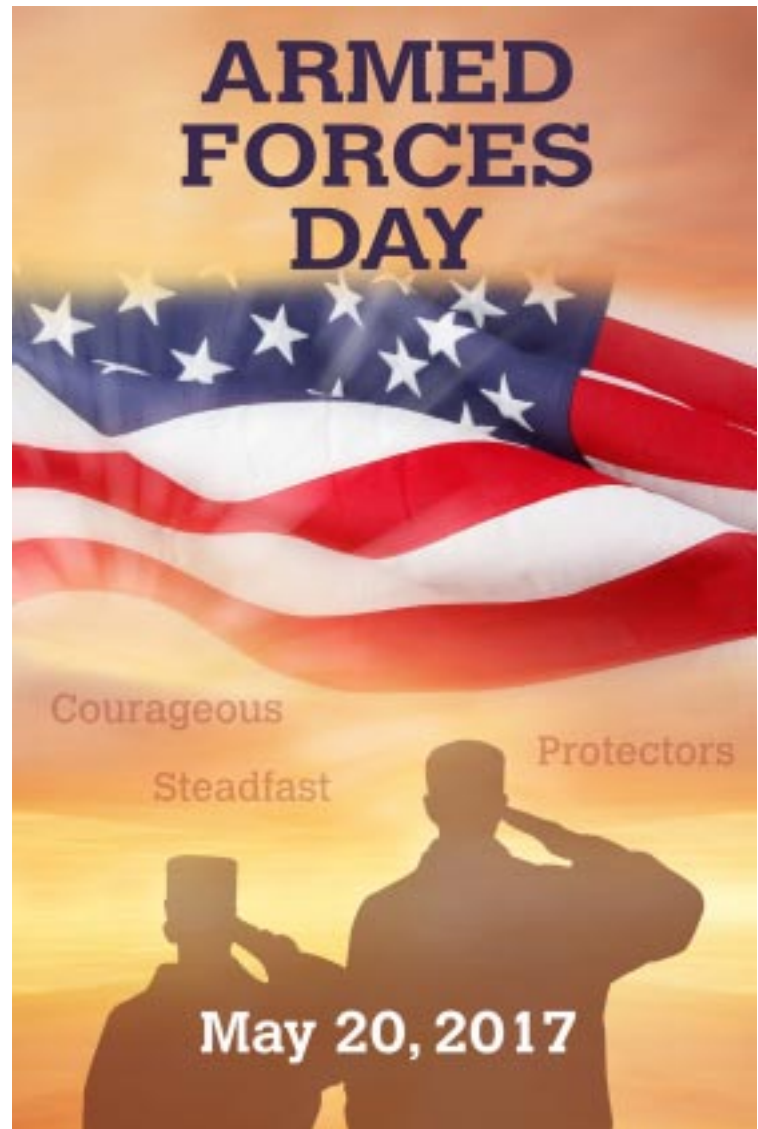
A short practice transmission will be sent at 1930 and 2330 on May 6, 7, 10, and 12 on 13.506.5 MHz USB and 17.443.0 MHz USB.

Military FSK is Baudot at 850 Hz, 75 baud, low mark, and 2000 Hz center. Most RTTY programs can be set to decode this mode. To achieve low mark while receiving in USB, select reverse shift.

QSL cards are available for individuals that receive the Armed Forces Day test message. To receive a card, copy the printed text of the test message as received from the military station, and include it in your report. No attempt should be made to correct possible errors.

Stations copying Armed Forces Day messages transmitted from US Army and US Navy stations and requesting a QSL

A. Nony Moose



card, can complete the QSL report form online at, <http://www.usarmymars.org/> . Stations copying the Armed Forces Day message transmitted from US Air Force stations and seeking a QSL card should send a request to Armed Forces Day Celebration, Chief, Air Force MARS, 203 W. Losey St, Scott AFB, IL 62225.

Include a transcript of the received text, time observed, frequency observed, military station call sign, your full name and Amateur Radio call sign (if applicable), full mailing address (including ZIP code).

Stations with Automatic Link Establishment (ALE) capability can contact a military station on specific half duplex crossband channels established for this purpose. ALE is a selective calling and linking method utilized by government, military, and amateur radio communications. Military stations will scan and receive certain amateur HFLINK ALE frequencies and transmit on the corresponding military ALE frequency. Military stations will also transmit ALE station identification (soundings) on each military frequency at 30- to 90-minute intervals. Amateur stations

AFD X-band cont'd on page 6

Surf's Up!

Surfing the web for interesting topics related to radio, building, computing, and anything else interesting along the way.

What is Thingiverse?

<http://www.thingiverse.com/>

MakerBot's Thingiverse is a thriving design community for discovering, making, and sharing 3D printable things. As the world's largest 3D printing community, we believe that everyone should be encouraged to create and remix 3D things, no matter their technical expertise or previous experience. In the spirit of maintaining an open platform, all designs are encouraged to be licensed under a Creative Commons license, meaning that anyone can use or alter any design.

Online Calculators

<http://www.66pacific.com/calculators/default.aspx>

Online calculators for designers, engineers, scientists, and the scientifically curious.

- Small Transmitting Loop Antennas
- Full-Wave Loop Antennas
- Quarter-Wave Vertical Antennas
- Coil-Shortened Vertical Antennas
- Dipole Antenna Length
- Coil-Shortened Dipole Antenna
- Coil Inductance
- Toroid Coil Winding
- Wire Gauge & Diameter
- Capacitance (Capacitor Design)
- Capacitive Reactance (X_c)
- Inductive Reactance (X_L)

Common Mode Chokes

http://www.qsl.net/in3otd/ham_radio/CM_chokes/CM_chokes.html

Some measurements on common-mode chokes for antennas measures the effectiveness of several variations on the standard design.

Sgt Pepper Photos

<https://sgtpepperphotos.wordpress.com/>

Discovering the source photos for The Beatles' 1967 album Sgt Pepper's Lonely Hearts Club Band

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Test Your NIMS Knowledge

This month we begin our review of ICS-200. This course is designed to enable personnel to operate efficiently during an incident or event within the Incident Command System (ICS). ICS-200 provides training on and resources for personnel who are likely to assume a supervisory position within the ICS.

Check your recall of the course material with this question.

1. When command is transferred, then all personnel with a need to know should be told:
 - A. The qualifications of the incoming Incident Commander
 - B. The limits of the Incident Commander's scope of authority
 - C. The effective time and date of the transfer
 - D. The Incident Commander's cell phone number

Check next month's ARES Communicator for the solution

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April NIMS Knowledge Solution

Select the TRUE statement:

- A. ICS organizational structure should include only the functions and positions needed to achieve the incident objectives

BREAK - OVER

May 13, 2017



Weekly ARES Net

Scott ARES Training Net

The Scott ARES net meets every Monday evening at 7:00 PM either on 146.535 simplex or on the first Monday of the month the WBORMK repeater 147.165 (PL 107.2).

The net is in a directed net format and provides the opportunity to practice working in an emergency net style.

There is help available in setting up and using NBEMS digital messaging software and generally a weekly digital message for practice.

Everyone is welcome to check in and contribute two cents worth!

AFD X-band Test - cont'd from page 4

may scan military frequencies and monitor the soundings to build the LQA database or select the channel manually. Amateur stations will call military stations using ALE selective calling on one of the paired cross band channels.

ARMY STATIONS:

AAC / BARROW ARMY RESERVE CENTER, KY

(13 MAY 1300Z - 14 MAY 0100Z)

Freq	Mode	Band
5,346.5 kHz	USB	60M
7,360.0 kHz	USB	40M
13,963.5 kHz	USB	20M
20,920.0 kHz	USB	15M

AAZ / FT HUACHUCA, AZ

(13 MAY 1500Z - 2359Z)

Freq	Mode	Band
5,330.5 kHz	USB	60M
14,438.5 kHz	USB	20M
14,512.5 kHz	USB	20M
18,211.0 kHz	USB	17M

ABH / SCHOFIELD BARRACKS, HI

(13 MAY 1600Z - 2300Z)

Freq	Mode	Band
5,357.0 kHz	USB	60M
14,438.5 kHz	USB	20M
18,272.0 kHz	USB	17M
20,997.0 kHz	USB	15M

ADB / CAMP FOSTER, OKINAWA

(13 MAY 1500Z - 14 MAY 0100Z)

Freq	Mode	Band
14,487.0 kHz	USB	20M
17,545.0 kHz	USB	17M
20,994.0 kHz	USB	15M

ALT / CAMP MABRY, TX

(13 MAY 1300Z - 14 MAY 0200Z)

Freq	Mode	Band
5,357.0 kHz	USB	60M
14,512.5 kHz	USB	20M
18,293.0 kHz	USB	17M
20,997.0 kHz	USB	15M

WAR / PENTAGON WASHINGTON, DC

(13 MAY 1200Z - 2400Z)

Freq	Mode	Band
5,357.0 kHz	USB/CW	60M
13,963.5 kHz	USB/CW	20M
18,211.0 kHz	USB/CW	17M
24,760.0 kHz	USB/CW	12M

WUG-2 / ARMY CORPS OF ENGINEERS, TN

(13 MAY 1300Z - 15 MAY 0200Z)

Freq	Mode	Band
5,403.5 kHz	USB	60M
13,910.5 kHz	USB/CW	20M
18,293.0 kHz	USB/CW	17M
20,973.5 kHz	USB/CW	15M

AIR FORCE STATIONS:

AIR / ANDREWS AFB

(13 MAY 1200Z - 2400Z)

Freq	Mode	Band
4,517.0 kHz	USB	80M
7,305.0 kHz	USB	40M
15,807.0 kHz	USB	20M
20,740.0 kHz	USB	15M

AGA2SY / HANCOCK FIELD, NY

(13 MAY 1200Z TO 2400Z)

Freq	Mode	Band
4,575.0 kHz	USB	80M
7,540.0 kHz	USB	40M
13,993.0 kHz	USB	20M

AGA5SC / SCOTT AFB, IL

(13 MAY 1600Z TO 2300Z)

Freq	Mode	Band
3,308.0 kHz	USB	80M
4,872.0 kHz	USB	80M
7,545.0 kHz	USB	40M

AGA9TR / TRAVIS AFB, CA

(13 MAY 1600Z TO 2300Z)

Freq	Mode	Band
4,575.0 kHz	USB	80M
7,915.0 kHz	USB	40M
14,411.0 kHz	USB	20M

COAST GUARD STATIONS:

NMC1 / COAST GUARD ISLAND, ALAMEDA, CA

(13 MAY 1400Z - 14 MAY 0030Z)

Freq	Mode	Band
7,542.0 kHz	USB	40M
15,740.5 kHz	USB	20M
22,924.5 kHz	USB	15M

NAVY STATIONS:

NIIW / USS MIDWAY CV-41 SAN DIEGO, CA

(13 MAY 1500Z - 14 MAY 0500Z)

Freq	Mode	Band
4,003.5 kHz	USB	80M
7,360.0 kHz	USB	40M
14,441.5 kHz	USB	20M
18,211.0 kHz	USB	17M
20,997.0 kHz	USB	15M

AFD Crossband - cont'd from page 6

NWKJ / USS YORKTOWN CV-10 CHARLESTON, SC

(13 MAY 1200Z-14 MAY 0030Z)

Freq	Mode	Band
4,000.0 kHz	USB	80M
7,360.0 kHz	USB	40M
14,663.5 kHz	USB	20M
18,272.0 kHz	USB	17M
20,940.0 kHz	USB	15M

NEPM / USS IOWA BB 61 LOS ANGELES, CA

(13 MAY 1500Z-2359Z)

Freq	Mode	Band
4,043.5 kHz	USB	80M
6,903.5 kHz	USB	40M
14,463.5 kHz	USB	20M
24,803.5 kHz	USB	12M

NMN / CAMSLANT, CHESAPEAKE VA

(13 MAY 1400Z - 14 MAY 0030Z)

Freq	Mode	Band
7,528.6 kHz	USB	40M
14,459.6 kHz	USB	20M
19,221.6 kHz	USB	17M

cont'd col. 2

Combined Broadcast Stations By Time

13 MAY/1400Z MIL STD 188-110 FSK 13,506.5 kHz USB AGA2SY
13 MAY/1410Z MIL STD 188-110 SERIAL PSK 13,506.5 kHz USB AGA2SY
13 MAY/1420Z MIL STD 188-110 FSK 13,506.5 kHz USB WAR
13 MAY/1420Z MIL STD 188-110 FSK 17,443.0 kHz USB AGA2SY
13 MAY/1430Z MIL STD 188-110 SERIAL PSK 13,506.5 kHz USB WAR
13 MAY/1430Z MIL STD 188-110 SERIAL PSK 17,443.0 kHz USB AGA2SY
13 MAY/1440Z MIL STD 188-110 FSK 13,506.5 kHz USB AAC
13 MAY/1440Z MIL STD 188-110 FSK 17,443.0 kHz USB WAR
13 MAY/1450Z MIL STD 188-110 SERIAL PSK 13,506.5 kHz USB AAC
13 MAY/1450Z MIL STD 188-110 SERIAL PSK 17,443.0 kHz USB WAR
13 MAY/1500Z MIL STD 188-110 FSK 17,443.0 kHz USB AAC
13 MAY/1510Z MIL STD 188-110 SERIAL PSK 13,506.5 kHz USB AAZ
13 MAY/1510Z MIL STD 188-110 SERIAL PSK 17,443.0 kHz USB AAC
13 MAY/1530Z MIL STD 188-110 SERIAL PSK 17,443.0 kHz USB AAZ
14 MAY/0300Z CW-25WPM 4,007.0 kHz USB NWVC
14 MAY/0300Z CW-25WPM 6,913.0 kHz USB NWVC
13 MAY/1800Z MIL STD 188-110 FSK 13,506.5 kHz USB AGA2SY
13 MAY/1810Z MIL STD 188-110 SERIAL PSK 13,506.5 kHz USB AGA2SY
13 MAY/1820Z MIL STD 188-110 FSK 13,506.5 kHz USB WAR
13 MAY/1820Z MIL STD 188-110 FSK 17,443.0 kHz USB AGA2SY
13 MAY/1830Z MIL STD 188-110 SERIAL PSK 13,506.5 kHz USB WAR
13 MAY/1830Z MIL STD 188-110 SERIAL PSK 17,443.0 kHz USB AGA2SY
13 MAY/1840Z MIL STD 188-110 FSK 13,506.5 kHz USB AAC
13 MAY/1840Z MIL STD 188-110 FSK 17,443.0 kHz USB WAR
13 MAY/1850Z MIL STD 188-110 SERIAL PSK 13,506.5 kHz USB AAC
13 MAY/1850Z MIL STD 188-110 SERIAL PSK 17,443.0 kHz USB WAR
13 MAY/1900Z MIL STD 188-110 FSK 17,443.0 kHz USB AAC
13 MAY/1910Z MIL STD 188-110 SERIAL PSK 13,506.5 kHz USB AAZ
13 MAY/1910Z MIL STD 188-110 SERIAL PSK 17,443.0 kHz USB AAC
13 MAY/1930Z MIL STD 188-110 SERIAL PSK 17,443.0 kHz USB AAZ
13 MAY/1930Z RTTY 7,540.0 kHz USB AGA2SY
13 MAY/1930Z RTTY 7,545.0 kHz USB AGA5SC
13 MAY/1930Z RTTY 7,915.0 kHz USB AGA9TR
13 MAY/2030Z MT63 7,540.0 kHz USB AGA2SY
13 MAY/2030Z MT63 7,545.0 kHz USB AGA5SC

NWVC / LST-325 EVANSVILLE, IN

(13 MAY 1200Z-14 MAY 0400Z)

Freq	Mode	Band
4,007.0 kHz	USB/CW	80M
6,913.0 kHz	USB/CW	40M
13,974.0 kHz	USB/CW	20M
24,782.0 kHz	USB/CW	12M

NSS / US NAVAL ACADEMY ANNAPOLIS, MD

(13 MAY 1300Z-14 MAY 0200Z)

Freq	Mode	Band
4,038.5 kHz	USB/CW	80M
7,533.5 kHz	USB/CW	40M
14,487.0 kHz	USB/CW	20M
17,545.0 kHz	USB/CW	17M
20,994.0 kHz	USB/CW	15M

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Armed Forces Day Message Test

The Armed Forces Day message will be transmitted via Military Standard radio teletype modes described in MIL-STD 188-110A/B and listed below.

MIL-STD 188-110 A/B Serial PSK.

Software to demodulate the military Serial PSK waveform and detailed instructions can be downloaded at:

http://www.n2ckh.com/MARS_ALE_FORUM/MSDMT.html

Utilizing this mode with soundcard equipment can be challenging and we recommend Amateur stations review the instructions carefully.

A short practice transmission will be sent at 1930Z and 2330Z on the 6th, 7th, 10th, and 12th of May 2017 on:

13,506.5 kHz USB 17,443.0 kHz USB

FSK in accordance with MIL-STD 188-110A/B

Military FSK is Baudot at 850 Hz, 75 baud, low mark, and 2000 Hz center. Most RTTY programs can be set to decode this mode. To achieve low mark while receiving in USB, the reverse shift is selected. The Armed Forces Day message can be received from the stations listed below. All times in Zulu (UTC).

13 MAY/2030Z MT63 7,915.0 kHz USB AGA9TR
 13 MAY/2100Z MFSK 7,540.0 kHz USB AGA2SY
 13 MAY/2100Z MFSK 7,545.0 kHz USB AGA5SC
 13 MAY/2100Z MFSK 7,915.0 kHz USB AGA9TR
 13 MAY/2130Z RTTY 13,993.0 kHz USB AGA2SY
 13 MAY/2130Z RTTY 14,392.5 kHz USB AGA5SC
 13 MAY/2130Z RTTY 14,411.0 kHz USB AGA9TR
 13 MAY/2200Z MIL STD 188-110 FSK 13,506.5 kHz USB AGA2SY
 13 MAY/2200Z MIL STD 188-110 SERIAL PSK 14,487.0 kHz USB ADB
 13 MAY/2210Z MIL STD 188-110 SERIAL PSK 13,506.5 kHz USB AGA2SY
 13 MAY/2210Z MIL STD 188-110 SERIAL PSK 20,994.0 kHz USB ADB
 13 MAY/2220Z MIL STD 188-110 FSK 13,506.5 kHz USB WAR
 13 MAY/2220Z MIL STD 188-110 FSK 17,443.0 kHz USB AGA2SY
 13 MAY/2230Z MIL STD 188-110 SERIAL PSK 13,506.5 kHz USB WAR
 13 MAY/2230Z MT63 13,993.0 kHz USB AGA2SY
 13 MAY/2230Z MT63 14,392.5 kHz USB AGA5SC
 13 MAY/2230Z MT63 14,411.0 kHz USB AGA9TR
 13 MAY/2230Z MIL STD 188-110 SERIAL PSK 17,443.0 kHz USB AGA2SY
 13 MAY/2240Z MIL STD 188-110 FSK 13,506.5 kHz USB AAC
 13 MAY/2240Z MIL STD 188-110 FSK 17,443.0 kHz USB WAR
 13 MAY/2250Z MIL STD 188-110 SERIAL PSK 13,506.5 kHz USB AAC
 13 MAY/2250Z MIL STD 188-110 SERIAL PSK 17,443.0 kHz USB WAR
 13 MAY/2300Z MFSK 13,993.0 kHz USB AGA2SY
 13 MAY/2300Z MFSK 14,392.5 kHz USB AGA5SC
 13 MAY/2300Z MFSK 14,411.0 kHz USB AGA9TR
 13 MAY/2300Z MIL STD 188-110 FSK 17,443.0 kHz USB AAC
 13 MAY/2310Z MIL STD 188-110 SERIAL PSK 13,506.5 kHz USB AAZ
 13 MAY/2310Z MIL STD 188-110 SERIAL PSK 17,443.0 kHz USB AAC
 13 MAY/2330Z MIL STD 188-110 SERIAL PSK 17,443.0 kHz USB AAZ

Automatic Link Establishment

Amateur Stations with Automatic Link Establishment (ALE) capability can contact a military station on specific half duplex "cross band" channels established for this purpose. ALE is a selective calling and linking method utilized by government, military, and amateur radio communications.

Military stations will scan and receive certain Amateur HFLINK ALE frequencies, and transmit on the corresponding military ALE frequency. Military stations will also transmit ALE station identification (soundings) on each military frequency at 30 to 90 minute intervals. Amateur stations which are capable may scan the military frequencies and monitor the soundings to build the LQA database or select the channel manually. Amateur stations will call military stations using ALE selective calling on one of the paired cross band channels.

Amateur stations seeking more information about ALE go to <http://hflink.com>

Military stations participating in ALE are listed below:
(Callsign - ALE Addy)

AAZ - AAZ WAR- WAR AGA2SY - 2SYAGA

ALE FREQUENCY LIST

Channel	Amateur	Military
X75US	3,996.0 USB	4,000.0 USB
X60INT	5,371.5 USB	5,371.5 USB
X40US	7,296.0 USB	7,357.0 USB
X20INT	14,346.0 USB	14,383.5 USB
X17INT	18,117.5 USB	18,272.5 USB
X15INT	21,432.5 USB	20,940.0 USB

Armed Forces Day Test Message Entries

QSL cards are available for individuals that receive the Armed Forces Day test message.

To receive a QSL card copy the printed text of the test message as you received it from the military station, and include it in your QSL report. Transcripts of the received text should be submitted "as received". No attempt should be made to correct possible transmission errors.

Requests for a QSL card must be complete and sent to the appropriate address according to the following instructions:

A. Stations copying Armed Forces Day message transmitted from US Army and US Navy stations and requesting a QSL card, complete the QSL report using the on-line form at www.usarmymars.org.

B. Stations copying Armed Forces Day message transmitted from US Air Force stations and requesting a QSL card, include the following information on a single sheet of paper and mail to the address listed below:

- Transcript of received text
- Time observed
- Frequency observed
- The Call sign of the military station copied
- The full name of the reporting individual
- Amateur Radio call sign,
- Full mailing address (including zip code).

ARMED FORCES DAY CELEBRATION
 CHIEF, AF MARS
 203 W LOSEY ST
 SCOTT AFB, IL 62225



ARES Breakfast

Saturday
 May 13th 2017
 7:30AM

Hy-Vee Market Grille,
 6150 Egan Dr, Savage, MN

NECOS Schedule May 2017

The first Monday or the month the net is held on the WB0RMK repeater, Carver. You will find WB0RMK here: 147.165/765 PL 107.2

May 2017

May 8th N0BHC Bob

May 15th WA0DGW John

May 22th KD0UWZ Chad

May 29th N0BHC Bob

June 2017

Jun 5th WA0DGW John