ECA Newsletter

Volume 24, Issue 2 **March 2023**

Introduction

This has been a record setting winter with record cold and record warm temperatures. On the average, it has not too bad here in the Midwest. The coasts on the other hand have had a pretty dicey winter with heavy storms and rain, heavy snows and all around nasty weather. As you are reading this, it's not over yet. We have had record snowfalls in March so keep your winter go-kits stocked for another month or two.

If you've not made a meeting in a few months, the January meeting was in the new Ambulance District Headquarters. We got a tour of the headquarters and had the opportunity to see how the first responders operate. Wow, what a facility with one of the largest footprints in the county. The tour was very informative and this ambulance district is the largest in Missouri with over 50,000 calls per year. Very impressive.

The Christmas Party was well attended with around 25 folks in attendance. Listen to nets and watch the newsletters for future social gatherings. Hopefully we can have another as spring approaches.

With spring, severe weather season also will begin. Read carefully in this newsletter for the training sessions available from the National Weather Service (Pg. 5). There are two virtual sessions and one in-person session this year so plan around these sessions and take in the information to help with spotting this season.

The next ECA social gathering is slated for mid-February – more details will be available at the meetings and on the nets. Also, we traditionally have a spring foxhunt which is a nice exercise to draw folks out of their winter hibernation. That will occur in the April/May timeframe. Stay tuned since some of these events will depend on when hamfests are, what the weather looks like and other factors. Remember to check in on the nets as shown below – we will make an effort to ensure these things are discussed in the meetings and nets.

If you have read the latest QST magazine, there seems to be renewed interest in CW even among non-hams recently. If you have interest in learning or sharpening your CW skills, we could have some short classes to help out. If interested, drop us an e-mail at william.a.grimsbo@charter.net.

Remember that our nets are according to the following schedule:

Regional Emergency Management Net – every Monday night at 1900 hrs on DEM-VHF-1 repeater.

ARES® Net – 2000 hrs on the 145.490(-) CTCSS 141.3 Hz repeater

ARES Traveler's Assistance Net – As required in the event of a winter storm warning issued by the National Weather Service.

Our meetings are on the second Thursday of the month at 1900 hrs at the County EOC on TR Hughes Blvd near Tom Ginnever behind the County Police building. All are welcome to attend our meetings and all radio amateurs are welcome to check in to our ARES® nets.

EMCOMM and You

If you tune into the 145.490(-) CTCSS 141.3Hz net on Monday nights at 8:00 pm, you will have noticed that some things are being run differently than before. Check-ins are taken by call sign groups. On directed nets like the St. Charles County ARES® net, doubles are often a problem. Much of this is due to people being in a hurry and not allowing the courtesy tone to beep before throwing out their call sign. This happens often on larger group nets. One way to prevent this is to allow the courtesy tone before sending your call sign. This will not prevent doubles but may reduce them. Another method which most of the NCOs are using now is call sign groups. This also does not prevent doubles but significantly reduces the likelihood. Taking check-ins by relatively small groups using call sign prefixes usually results in fewer call signs checking in at a time. An example of this is the NCO taking all call signs "starting with A" or starting with "from K to KB", etc. Remember when checking in to a directed net that hurrying to get your call sign heard is hardly necessary since most if not all NCOs will continue taking check-ins until all that want to check in have checked in. Common courtesy is to wait a bit after the last check-in to put your call out there. If someone else beats you to the PTT key, wait until they are done then try again. There is no need to be the first to get recognized. Try just starting with the first letter of your call sign prefix then release the PTT and see if you are doubling. If so try after that person is finished.

The NCOs should determine if the call sign groups are necessary and employ that method as required. Use of call sign groups is the most common methodology in larger nets on the HF bands. Below is an example of how the NCO could take contacts:

A – AB
AC – AD
AE and up for the As
K-KA
KB-KC
KD-KE
KF and up for the Ks
Ns
W-WA
WB-WC
WD and up for the Ws
Etc.

The groups may be smaller or larger depending on the typical number of check-ins.

This results in two or three check-ins per call sign group which should reduce doubles on the air. Remember that other people are listening so let's show an attitude of professionalism and order and show some common courtesy on the nets. It sounds better to others that may be listening and it makes the NCO job much easier.

- DE N0PNP

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Technical Articles

INSECTOID - Ugly but Effective

I called this antenna project the Insectoid because it has six (6) legs, not eight like the famous (or infamous) Octopus from MFJ. The Insectoid takes an old antenna switch hexagonal aluminum case and converts it to an antenna platform for three bands worth of Hamstick (or equivalent) dipoles. The challenge was to build this on a platform that is rugged and that will

accommodate the 3/8” x 24 thread used on the Hamsticks. I used six 3/8” x 24 coupling nuts and flat and lock washers (roughly $36 in hardware alone) and a PVC pipe base that sits nicely atop the 1½ inch fiberglass poles that I have many of.

The first step is to figure out how to insulate three of the Hamsticks from the case and to connect the opposite three to the case as the counterpoise.

I had a few black plastic standoffs that I could carefully cut in half with a hack saw. They were drilled out for 3/8 inch center holes and sliced down the side center to form two pieces which made nice insulators – you’re on your own for these since I have no idea where I got them from but they do work. I ran the 3/8” x 24 bolt through and connected the coupling nut on the other side. There is a photo below that might help.

I drilled a hole in the center of the top of a 3/8” x 24 bolt (½ to ¾ inch long). The hole should be deep enough to accommodate an #8-32 by ½ inch screw. Then thread the hole for the said screw. This has to be done on the three 3/8” x 24 bolts that are on the insulated coupling nuts. The #8 x 32 screws are for attaching a wire from the nut to the center conductor of the SO-239 connector.

The drilling was done on my drill press using a 9/64 bit with a #8-32 tap to thread the hole.

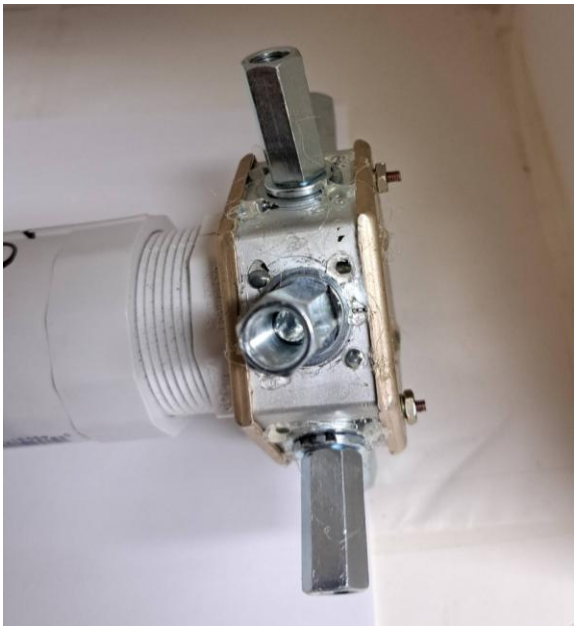
Use liberal amounts of oil while drilling to keep the bit cutting, not wearing out.

Use oil on the tap as well – note the threads in the bolt head hole.

As you can see above, the screw fits nicely in the threaded hole.

Don't use rusted bolts as in the photos. This was done to show you how – I used nice new clean ones for the antenna project.

The un-insulated coupling nuts will bolt directly to the conductive case (see below).



As is the case with all antenna designs, this is a compromise. I wanted to be able to work 80m, 40m and 20m without having to use a fan dipole that requires an acre of land to set up.

The base is made from 1½ inch PVC pipe and an adapter for a screw-on plug (see photo below). I drilled a 5/8 inch hole in the center of the screw-in plug and filed it out square to accommodate the panel-mounted SO-239 connector on the bottom of the hexagonal aluminum case. I would have just used a 1½ inch cap on top of the 1½ inch pipe rather than the adapter and plug but they all had round tops, not flat. I ran some screws through the case and into the plug for strength. I glued the adapter to the one foot length of pipe with PVC cement and screwed the case and plug into the adapter.

There were several holes in the case from the SO-239 connectors from the antenna switch so I plugged them with hot-melt glue. The PVC fittings and pipe ran around $24. All together, I have about $60 into the project. With all of the time spent, it would add up to well over the cost of just buying one of the Octopus hubs from MFJ. If I don't include the man-hours, I just saved about $60. Moral is – you're probably better off just buying one unless you want to enjoy the annoying frustration of building one of your own or unless you need an article for a newsletter.

It works great. I was able to tune up an 80m dipole, a 40m dipole and a 10m dipole. One thing to note about the Hamstick antennas is that the 75, 40 and 20m versions are VERY shortened – meaning they are essentially a resonant, relatively high Q circuit so they have relatively narrow 2:1 bandwidth. Don't expect to get 2:1 VSWR that covers entire bands. Likely you will be able to cover a segment of the bands so choose wisely.

This design is as effective as it is UGLY and I will be using it with my QRP station at field locations. It will handle 100 watts but I built it mainly for my QRP go-kit. OBTW, the nice lettering was done on my wife's Brother Scan & Cut machine.

- 73 DE N0PNP

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Dipole Caddy

With the introduction of the Insectoid to my collection of Ham junk, I needed a way to easily carry all of those dipoles around. They are Hamsticks or equivalent so they are not too long but they are clumsy to carry. Also, the plastic bags they come in were starting to look a bit ratty (i.e., they had holes in them large enough to lose a Hamstick through. I humbly asked (begged) my dearly beloved wife to sew me some bags for the dipoles that are about 58 inches long and 3 inches wide. That's large enough to comfortably handle two of the longest Hamsticks I have and she made me one short one for the 6m dipole. Now they were in nice bags with snap tops, all labeled for what band they are (she really likes me).

Now I had all my nicely bagged and labeled dipoles but they were falling all over the place with nothing to hold them together. Also, I needed a way to carry as many of them around as possible. I had the idea that a piece of PVC pipe might be a good thing to hold them all together. I thought, if I put a handle on the pipe, all the better for carrying them around.

Hence, the "Dipole Caddy" was created. I tried for about ten minutes to find a

synonym for "carry" that started with a "D" but couldn't find one that fit well so "Dipole Caddy" is where it landed. It works great to carry all of the Hamsticks around or to stow them away for the winter. My beloved wife was nice enough to make me some press-on vinyl lettering on her handy Brother Scan-and-Cut machine and now it is permanent. If interested in the plans for this little project, I will have to type some up since this was an "ON-THE-FLY" sort of project. I used a 3 inch diameter 20 inch length of PVC pipe I had laying around and some ¾ inch PVC pipe with a couple of end caps to make the handle. Pretty simple. Until next time – 73, DE N0PNP.

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ECA OFFICERS (2021-2022):

Following is the officers as of the July 2022 meeting:

- Bill Moss, KE0RXS as President
- Mark Hall, AE0ME as Vice President
- Jeff Young, KB3HF as Secretary/Treasurer
- Ken Humbertson, W0KAH as Director
- Wayne Garrison, KB0BZR as Director
- Wayne Ault, WD6EZQ as Past President Director

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Just a Note:

The St. Louis area office of the National Weather Service (NWS) will be offering virtual storm spotting classes from 7:00 pm to 8:30 pm on the evenings of January 19th (Register at https://register.gotowebinar.com/register/5068334516104000601) and March 29th (Register at https://register.gotowebinar.com/register/5075185573056760159). There will be an in-person class on February 13th at the St. Peters Police Department at 1020 Grand Teton Drive in St. Peters from 6:30 pm to 8:30 pm in their Training Room.

- Editor

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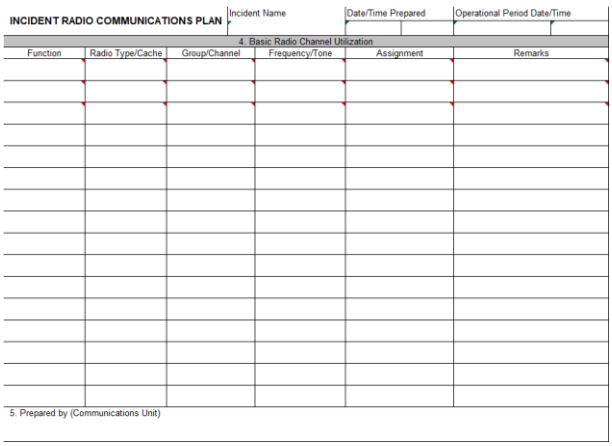
Skills Training

Correct Use of the ICS-205 Form

Planning an exercise or planning a response to an emergency for Emcomm communicators requires the use of the ICS-205 form.



INCIDENT RADIO COMMUNICATIONS PLAN | Incident Name | Date/Time Prepared | Operational Period Date/Time

4. Basic Radio Channel Utilization

Function	Radio Type/Cache	Group/Channel	Frequency/Tone	Assignment	Remarks

5. Prepared by (Communications Unit)

A full-sized copy is attached to the end of this newsletter.

The ICS-205 form has columns for the description of the use of the radio frequencies, the radio type, talk groups or channel numbers, the radio frequencies and sub audible CTCSS tones required for those channels/groups/frequencies, the assignment of communications assets and any necessary remarks that may be required to clarify intents and uses for the communications assets. The header of the form requires the incident name, date prepared and the operational period that the specific plan is for.

Each bit of information on the form is important to keep order and function in the response.

For an ARES® exercise, the NIMS system is employed so there will be a staging area with logistics personnel, an Incident Command area, and there will be a Safety Officer. There may also be other response assets such as quick response teams or maintenance teams out of the Logistics branch. There will be a communications asset assigned to each area. Safety may want the ability to go direct to the Incident Commander and may require a special simplex frequency for that purpose. Logistics at staging and Command will likely be on the same frequency – be it a repeater or simplex channel.

If cache radios are being used, each function under the NIMS structure should have an asset assigned with the appropriate channel/frequency listed in the ICS-205.

The instructions for the form are as follows:

Purpose. The Incident Radio Communications Plan (ICS 205) provides information on all radio frequency or trunked radio system talkgroup assignments for each operational period. The plan is a summary of information obtained about available radio frequencies or talkgroups and the assignments of those resources by the Communications Unit Leader for use by incident responders. Information from the Incident Radio Communications Plan on frequency or talkgroup assignments is normally placed on the Assignment List (ICS 204).

Preparation. The ICS 205 is prepared by the Communications Unit Leader and given to the Planning Section Chief for inclusion in the Incident Action Plan.

Distribution. The ICS 205 is duplicated and attached to the Incident Objectives (ICS 202) and given to all recipients as part of the Incident Action Plan (IAP). All completed original forms must be given to the Documentation Unit. Information from the ICS 205 is placed on Assignment Lists.

Notes:

- The ICS 205 is used to provide, in one location, information on all radio frequency assignments down to the Division/Group level for each operational period.
- The ICS 205 serves as part of the Incident Action Plan (IAP).

Block	Block Title	Instructions
1	**Incident Name**	Enter the name assigned to the incident.
2	**Date/Time Prepared**	Enter the date prepared (MM/DD/YYYY and the time prepared (24 hour format)
3	**Operational Period**	Start date (month/day/year) and time (using the 24-hour clock) and end date and time for the operational period to which the form applies.
4	**Group/ Channel**	Zone **Group /Channel** N**umber** Use at the Communications Unit Leader's discretion. Channel Number (Ch #) may equate to the channel number for incident radios that are programmed or cloned for a specific Communications Plan, or it may be used just as a reference line number on the ICS 205 document. **Frequency** (N or W) Enter the

		Receive Frequency (RX Freq) as the mobile or portable subscriber would be programmed using xxx.xxxx out to four decimal places, followed by an "N" designating narrowband or a "W" designating wideband emissions. The name of the specific trunked radio system with which the talkgroup is associated may be entered across all fields on the ICS 205 normally used for conventional channel programming information. RX Tone/NAC Enter the Receive Continuous Tone Coded Squelch System (CTCSS) subaudible tone (RX Tone) or Network Access Code (RX NAC) for the receive frequency as the mobile or portable subscriber would be programmed. **Assignment** Enter the Net function each channel, talkgroup or frequency will be used for (Command, Tactical, Ground-to-Air, Air-to-Air, Support, Dispatch). . Enter the nomenclature or commonly used name for the channel, talk group or frequency such as the National Interoperability Channels which follow DHS frequency Field Operations Guide (FOG). **Assignment** Enter the name of the ICS Branch/Division/Group/Section to which this channel/ talkgroup/frequency will be assigned.
5	**Remarks**	Enter any special instructions (e.g., using cross-band repeaters, securevoice, encoders, private line (PL) tones, etc.) or other emergency communications needs). If needed, also include any special instructions for handling an incident within an incident.
6	**Prepared By**	Name - Signature - Date/Time Enter the name and signature of the person preparing the form, typically the Communications Unit Leader

There are numerous variations on the ICS-205 form for different services but St. Charles County ARES will use the form shown above (ICS 205) unless otherwise directed by Regional Emergency Management or other Agency Having Jurisdiction (AHJ). Fillable variations of this form are available on-line at various locations.

- N0PNP – 73

NWS Spotter Procedures

Traveler's Assistance Net Logging Sheet

The Traveler's Net has been functioning well but the logging system could use some changes to simply operations and logging.

The next time we activate the net, you will see changes to the logging sheets. The Net Sign Up Sheet remains the same. It is the first tab at the bottom of the workbook.

The Net Log Sheet is the second tab at the bottom of the workbook. This is where you will see a simplified log. All of the traveler help information has been removed and replaced by just Op Call Sign, Operator Name, and Comments Columns. Here's where you continue to log the top of the hour and half hour net script announcements along with any other information such as accident reports from the MoDOT Traveler's Map and weather report updates. The Net Scripts have also been added the right of the logging area along with a link to the complete instructions for operating the net

The Traveler Assistance (Help) Information section has been moved to a third sheet called "Help Log" (third tab at bottom with red line below). Here is where you will log actual requests for assistance. The sheet has the same information as was included in the net log sheet. Be sure to gather all of the information requested by the sheet from the individual(s) who needs assistance before calling 911 for help.

- Jeff (KB3HF)

Editor's Note: There are hyperlinks to the ***MoDoT Traveler Map***, ***NWS STL Radar map*** and the ***W0ECA Traveler's Assistance Net Operating Guidelines Version 2.5***. Hold your cursor over the first block of the link and a drop-down will appear with the hyperlink in it. Click on the hyperlink in the drop-down to open the new window with the website for these links.

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Items for Sale

We have a few items for sale including the following:

- Three element beam antenna kits for DF'ing - $10. Four available
- TDoA DF'ing kits (Time Direction of Arrival) - $12. Two available
- **Sinclair Labs Duplexer Model Q-202GR. Set up for 145.490 TX and 144.890 RX. Four cavity Q-circuit (pass/reject) rack mount unit. Looking to get $200 for the unit. Spec sheet is available online.** I'd really like to get this one out of my basement.
- Various meters and test equipment including frequency counters, capacitance and inductance meter, see below:
  - 50 MHz B&K Model 1801 Freq Meter for $25
  - Heathkit 2240 LC Bridge for $20
  - Heathkit IT-121 FET/Transistor Tester for $10 with the manual
  - RF Applications Model D-144 VHF Deviation Monitor with manual for $20
  - Antennas, power supplies, etc. for various prices depending on the unit
  - Small stereo amplifiers (10 to 15 Watts) for around $20
  - Two -10dB *TX RX Systems Inc.* Taps for station output monitoring with N

connectors for IN/OUT and a BNC for the tap - $25 ea.
- VHF Amplifiers, etc.

I also have a 102 pin SMD PIC development kit if anyone is interested for **$50**. This kit is brand new and is the EasyPIC V7 for the 102 pin SMD PICs. That's less than half the price if ordered directly from Mikroelektronika. Software tools and library examples are free online and compilers for PIC Basic and C are available online.

If you have interest in any of these things, send an e-mail to william.a.grimsbo@charter.net and I will get back to you. If you have any items you would like to advertise for sale send in an e-mail and we will try to get them in the next newsletter. Please keep these things to radio or emergency-related items in keeping with the intent of the newsletter. Thanks.

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Upcoming Events – 2023

Severe Weather Awareness Week – 7-11 March
Severe Weather Drill Net – 8 March*
Spring Foxhunt Exercise – 8 April*
Spring Work/Training Day – 13 May*
Field Day 2023 – 24, 25 June
Simulated Emergency Test – 7 October*
Backyard Hamfest and Barbeque – 22 July *

*Tentative dates – stay attuned to meetings and nets

Hamfests:

01/28/2023 - Winterfest, ARRL Midwest Division Convention
Location: Collinsville, IL
Type: ARRL Convention
Sponsor: St Louis and Suburban Radio Club
Website: http://winterfest.slsrc.org

03/11/2023 - Lewis and Clark Radio Club Hamfest
Location: Godfrey, IL
Type: ARRL Hamfest
Sponsor: Lewis and Clark Radio Club
Website: https://k9ham.org/hamfest/

NCOs NEEDED!!!

ECA/ARES® Needs Net Control Operators for the Monday Evening nets. We need at least one full time NCO (one net a month) and one floater for when other NCOs are not available or when there is a month with five Mondays). This is good experience in the event of the "real thing" and provides an opportunity to check a box in your skills books. Let us know if you are interested by email to: william.a.grimsbo@charter.net.

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NEW ARES Activities

Washington County and St. Francois County have new ARES teams starting up. The new Emergency Coordinators are excited about the works and are working together to develop their teams across county lines. Kudos to the new Emergency Coordinators (ECs) and we wish them success in developing their teams and training regimes. Beginnings are a tough time and there are many discouragements but starting with a good attitude helps and these guys have the right attitude to make it work.

End-Fed, Half-Wave Antennas

Just for grins, I decided to play with the idea of building a couple of EFHW antennas for my QRP station. I can transmit CW and SSB voice on all bands at up to 10 watts on the low bands and around 5 watts on the higher bands. My thoughts were (if you call them thoughts) to have a couple of different types of antennas to use at a field site for my rigs (I say rig(s) because there are three in the single station I have in a case for semi-portable QRP operation). I have the Insectoid (earlier article in this newsletter) and a EFHW for 40m and for 20m. The one for 40m is a kit from QRP Guys. The other is a homebuilt version of the same antenna in a small plastic hobby box. EFHW antennas are interesting antennas that shouldn't work but do. The feedpoint has high impedance (around 2000 - 4000 ohms) so a 49:1 transformer is required to get the impedance down to approximately 50 ohms for our standard transceivers. Mine use small torroid cores and are only good up to about 25 watts of transmit power. I have some larger cores and some higher voltage capacitors on order to make a couple that will handle 100 watts. I'll publish another article when I get them and put a beast together. Until then, this is just a teaser. If you want to read up on the QRP Guys EFHW, there is an article in QEX July/August 2022 entitled "Tuned Transformer" by Gerald Julien Lemay (VA2GJ) where he discusses the use of the 49:1 transformer and the tuning capacitor on the primary winding of the transformer. It is an interesting article if you're into the math. – N0PNP

Winterfest Report

Winterfest was well attended in Collinsville Il. On 28 January. There were some tables that were pretty empty but there were some of the larger name vendors there Including Amateur Accessories Inc., and others. The ARRL Forum attendance was on the light side. Also some folks from the ARRL were out with COVID and other health issues. If you were in the market for some decent used equipment, that would have been the place to look. Several folks from ECA were in attendance. Winterfest serves as a reminder that hamfest season is only a couple of months away so save up for the next rig.

This area is for your material. If you have done something interesting in Amateur Radio or you have a DIY project, sketch up an article and some photos and we'll publish it in the ECA Newsletter. It can be Amateur Radio related, public safety related or just something useful to other folks. If you need help putting an article together, send an e-mail to william.a.grimsbo@charter.net.

Net Control Roster

Week	NCO	Callsign
1	Paul Orf	AD0YL
2	Ken Humbertson	W0KAH
3	Jeff Young	KB3HF
4	Bill Grimsbo	N0PNP
5 (Floater)	Wayne Ault	WD6EZQ

The scheduled Net Control Operator is responsible for finding a replacement if he/she is unavailable for their scheduled net or paging. Any EMA volunteer interested in becoming a Net Control Operator on either the EMA Training Net or the ARES® Net should contact Bill Grimsbo (N0PNP) at william.a.grimsbo@charter.net.

Some things to remember:

NCOs - If someone does not open the net by 5 min after the designated time, one of the other NCOs are requested to open the net, take check-ins and handle any traffic as appropriate.

NCOs - If you are unavailable to run the net, please make arrangements – in advance – to have one of the other NCOs run the net in your place.

Membership - The net is a very important method of keeping involved with what is happening with the Association and ARES® - Please consider it part of your weekly calendar (i.e., check in and let us know you are still out there).

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Calendars

March 2023

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	1	2	3	4
5	6 EM Net at 1900 ARES Net at 2000	7	8	9 ECA Meeting 1900 hrs at EOC	10	11
12	13 EM Net at 1900 ARES Net at 2000	14	15	16	17 	18
19	20 EM Net at 1900 ARES Net at 2000	21	22	23	24	25
26	27 EM Net at 1900 ARES Net at 2000	28	29	30	31	1

Notes:

1 All meeting locations are subject to change depending on room availability. Tune into nets for latest information.
2 DEM Net is on DEM-VHF-1
3 ARES Net is on 145.490(-) MHz. CTCSS: 141.3Hz
4 There will be normal nets on the 31st

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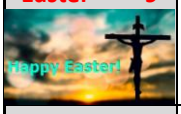
April 2023

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30						1
2	3 EM Net at 1900 ARES Net at 2000	4	5	6	7	8
Easter 9 	10 EM Net at 1900 ARES Net at 2000	11	12	13 ECA Meeting 1900 hrs	14	15
16	17 EM Net at 1900 ARES Net at 2000	18	19	20	21	22
23	24 EM Net at 1900 ARES Net at 2000	25	26	27	28	29

Notes:

1 All meeting locations are subject to change depending on availability. Tune into nets for latest information.
2 DEM Net is on DEM-VHF-1
3 ARES Net is on 145.490(-) MHz. CTCSS: 141.3Hz
4 Have a Safe and Happy Thanksgiving

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May 2023

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	1 EM Net at 1900 ARES Net at 2000	2	3	4	5	6
7	8 EM Net at 1900 ARES Net at 2000	9	10	11 ECA Meeting 1900 hrs	12	13
14 Mother's Day	15 EM Net at 1900 ARES Net at 2000	16	17	18	19	20
21	22 EM Net at 1900 ARES Net at 2000	23	24	25	26	27
28	Memorial Day 29 EM Net at 1900 ARES Net at 2000	30	31			

Notes:

1 All meeting locations are subject to change depending on availability. Tune into nets for latest information.
2 DEM Net is on DEM-VHF-1
3 ARES Net is on 145.490(-) MHz. CTCSS: 141.3Hz
4 Merry Christmas and Happy New Year to all

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ICS-205 Form

INCIDENT RADIO COMMUNICATIONS PLAN

Incident Name	Date/Time Prepared	Operational Period Date/Time

4. Basic Radio Channel Utilization

Function	Radio Type/Cache	Group/Channel	Frequency/Tone	Assignment	Remarks

5. Prepared by (Communications Unit)