

TIPPECANOE COUNTY

TCARES



WELCOME

JANUARY 14, 2010

ALL-MEMBER MEETING

Thanks to our host, Subaru of Indiana Automotive (SIA) for the generous use of their facilities, and to Dan, WA9DDI, for helping make it all happen.



- Housekeeping Issues
- Smoking Location
- Restroom Locations
- Comments and Questions Etiquette

Indiana State ARES Nets

- 4th Sunday of the month
 - 8:00 a.m. morning net
 - 6:30 p.m. evening net
- 3910 kHz (+/-) LSB

- Digital net every **Saturday, 10:00 a.m.**
 - 3583 USB
 - Olivia, 500/16 (other modes as announced)

Weekend ARES Net

- 3rd Saturday of the month (**JAN 16**)
- 12:00 noon, WIRES repeater or other frequency as announced
- Discussions, mini on-air training sessions, experimentation



Highly Recommended Training

FEMA/EMI Independent Study Program Courses

IS-100

IS-200

IS-700

IS-800

Required for ACTIVE status TCARES members.

Proposed Classroom Training

Packet Setup & Operation

- Workshop Environment
- Saturday session
- May expand to more than one
- Date(s) to be chosen soon
- Watch your email & web site

Packet – New Version of Outpost

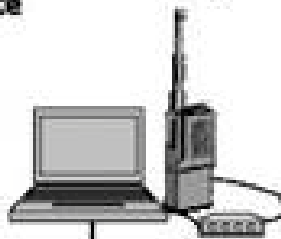
- ◆ Version 2.4 c081 - 3rd release of new version
- ◆ ICS-213 Messaging
- ◆ Allows served agency users to send and receive ICS-213 messages on their own PCs
- ◆ Be ready to network your laptop!

Packet – New Version of Outpost



Red Cross Chapter, Lafayette

Radio Room
Outpost &
Ics213mm
UserID = LOCAL



Local Area Network



P&I Section
Ics213mm
UserID = PNI



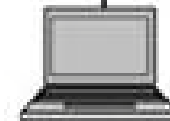
Logistics Section
Ics213mm
UserID = BCOLLINS

Red Cross Shelter, Attica

Radio Room
Outpost &
Ics213mm
UserID = LOCAL



Local Area Network



Ops Section
Ics213mm
UserID = CTYOPS



Logistics Section
Ics213mm
UserID = FRED

New Version of NBEMS

- ◆ Narrow Band Emergency Messaging System (NBEMS) – fldigi, flarq, wrap
- ◆ fldigi - new version 3.12.5
- ◆ Will not work in Windows 98 (only XP and later)
- ◆ Also for Linux, Free-BSD, and Mac OS-X
- ◆ <http://w1hkj.com/>

Indiana House Bill 1060

- ◆ It's REAL – but has only been introduced
- ◆ Prohibits use of any telecommunications device by drivers of vehicles - not just cellphones – unless it can be operated without the use of either hand
- ◆ <http://www.in.gov/legislative/bills/2010/IN/IN1060.1.html>
- ◆ Chair of the committee that introduced the bill agrees that an exemption for amateur radio is needed if the bill is given a vote

Frequencies for emergency radios being filled

- ◆ County warned to review who has access to radios
- ◆ <http://www.jconline.com/article/20100111/NEWS02/1110322/Frequencies-for-emergency-radios-being-filled>



Journal & Courier Story on Radio Frequencies

- ◆ Shows that the public has a difficult time understanding the technical aspects of communications systems
- ◆ Reveals the waste of communications resources
- ◆ Points out the limitations of complicated systems
- ◆ What **is** the capacity of the Tippecanoe County system? <http://www.radioreference.com/apps/db/?sid=313>

Emergency Travel Ordinance

- ◆ Level 1 – Hazardous Transportation Emergency; Travel Prohibited
- ◆ When would it be invoked?
 - ◆ Blizzards, ice storms
 - ◆ Floods
 - ◆ Widespread disasters (tornadoes, earthquakes, etc.)
- ◆ Could it affect ARES operations?
 - ◆ Thanks to Marty, K9ICQ, for bringing this to our attention

Emergency Travel Ordinance

- ◆ Exemptions only for emergency personnel and critical occupations personnel
- ◆ "emergency personnel" includes, but is not limited to, rostered members of law enforcement agencies, fire departments, emergency medical service providers, search and rescue organizations, rescue squads, military organizations, disaster relief organizations, emergency management personnel, and requested mutual aid personnel.

Emergency Travel Ordinance

- ◆ Would ARES members be exempt if called to assist a served agency under a Level 1 Travel Emergency?
- ◆ MAYBE – that’s the best answer for now
- ◆ This topic will be addressed with each served agency and legal counsel consulted for interpretation of this ordinance

Emergency Travel Ordinance

- ◆ REMEMBER: We are NOT first responders. But, we would likely be called to assist a served agency under these circumstances
- ◆ Do NOT assume that as an ARES member you have any special privileges or exemptions from any laws or ordinances – You DO NOT!
- ◆ Until this is addressed with our served agencies, deployments under a Level 1 Travel Advisory will include specific travel information

Haiti Earthquake

- ◆ Tuesday, January 12 at 4:53 PM Haiti time (2153 UTC), a magnitude 7.0 earthquake hit 10 miles (15 kilometers) west of Port-au-Prince, the island nation's capital.
- ◆ Communications in and out of Haiti have been disrupted.

Haiti Earthquake

- ◆ Emergency frequencies to keep clear:
 - ◆ 7.045 MHz (IARU Region 2 nets)
 - ◆ 3.720 MHz (IARU Region 2 nets)
 - ◆ 14.265 MHz (SATERN nets)
 - ◆ 7.265 MHz (SATERN nets)
 - ◆ 3.977 MHz (SATERN nets)
 - ◆ 14.300 MHz (Intercontinental Assistance and Traffic Net)
 - ◆ EchoLink node 278173

Last Week's Snow

- ◆ Amazing how disruptive 4-5" of snow can be
- ◆ During height of snowfall:
 - ◆ Controller for Indiana's 800 MHz system in the entire northern third of the state went down
 - ◆ Each site still had local trunking capability, but linking between all the sites was down
 - ◆ Demonstrates how fragile such a complex system is

Statewide RACES Exercise

- ◆ This Saturday, 9:00-10:00 a.m.
- ◆ Designed to test communications between county EMAs and the state EOC in Indianapolis
- ◆ For RACES stations ONLY
- ◆ Participation by non-RACES stations is **PROHIBITED**

One-Inch Hail Initiative

- Now in effect nationwide
- Only used by the NWS in the criteria for defining a thunderstorm as severe
- This change does NOT affect how, or what, SKYWARN spotters report to the NWS
 - All reports of hail, no matter the size, should still be relayed to the NWS in Indianapolis
- Severe Thunderstorm definition:
 - Storm that produces hail 1" or larger in diameter; or
 - Winds equal to or in excess of 50 knots (58 mph)

2010 Central Indiana Severe Weather Symposium

- ◆ Saturday, March 13 - 8:00 a.m. – 4:00 p.m.
- ◆ Valle Vista Conference Center, Greenwood, IN
- ◆ \$35 per person / \$25 for students
- ◆ Includes starter breakfast and lunch
- ◆ Registrations still being accepted
- ◆ Space is LIMITED



2010 NWS SKYWARN Spotter Training

- ◆ Thursday, March 4, 7:00 p.m.
- ◆ Ivy Tech auditorium
- ◆ Scheduled TCARES meeting night
 - ◆ Please plan to attend the NWS Spotter Training
 - ◆ March TCARES meeting rescheduled for the following week – Thursday, March 11, 7 PM
- ◆ ACTIVE TCARES members required to attend once every 2 years

SKYWARN Spotter Locations

- ◆ Locations in Tippecanoe County
- ◆ Clear view to NW – W – SW
- ◆ Quick escape route to S or N
- ◆ Looking for suggestions by March 1
- ◆ Will plot designated locations for spotter deployment
- ◆ Not duplicate spotter locations of other agencies

TCARES ID Cards

 <p>TIPPECANOE COUNTY, INDIANA AMATEUR RADIO EMERGENCY SERVICE®</p> <p>This identification card certifies that</p> <p>Sample ID Card</p> <p>is a member in good standing of the Tippecanoe County Amateur Radio Emergency Service (TCARES). The bearer of this card, a licensed Amateur Radio operator, is a trained emergency communicator, volunteering personal time, skill, and equipment to serve in the public interest.</p> <p>Member Classification: RESERVE ID Card Expiration Date: 31-Dec-09</p>  <p>N00NE</p>	<p>TIPPECANOE COUNTY TCARES TCARES Identification Card Number: 79-000 Not valid unless signed by issuing authority.</p> <p>R. Bruce Stewart, N9GKE Emergency Coordinator, Tippecanoe County Indiana ARES</p> <p>TCARES on the web: www.W9TCA.com</p> <p>If found, please return to: Tippecanoe County ARES P.O. Box 4574 Lafayette, IN 47903</p>  <p><small>TCARES Form ID-224A (05/2009)</small></p>
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- ◆ Expired at the end of 2009
- ◆ New ID cards valid thru end of 2010 now being distributed
- ◆ Cards with an expired date may be kept, but NOT used as a form of ID

Member Notifications / Callouts

- ◆ Self-activating
 - ◆ Widespread disasters, major storms, etc.
- ◆ Net on Primary Repeater
- ◆ Phonevite
 - ◆ Calling system to home & cell phones
- ◆ Email
- ◆ Web site (www.W9TCA.com)

Contacting TCARES Leadership

- ◆ Radio:
 - ◆ Primary Repeater (WIRES)
 - ◆ D-STAR Repeater, 444.300+ MHz, W9ARP B
 - ◆ TAC-A (145.500 MHz, 100.0 Hz CTCSS)
 - ◆ TAC-1 (445.500 MHz, 100.0 Hz CTCSS)

Contacting TCARES Leadership

- ◆ Email:
 - ◆ Individual email addresses
 - ◆ EC@W9TCA.com (N9GKE)
 - ◆ AEC@W9TCA.com (to EC and all AECs)
 - ◆ NCS@W9TCA.com (to all designated Net Controls)

Contacting TCARES Leadership

- ◆ Phone (via Google Voice):
 - ◆ **(765) 589-xxxx** (Not for public dissemination)
 - ◆ Will simultaneously ring the personal phones of the EC and some AECs
 - ◆ If no answer, leave a message
 - ◆ FOR OFFICIAL USE ONLY (FOUO)
 - ◆ Not for personal calls
 - ◆ To notify of events that ARES may get involved in
 - ◆ As a means of quickly contacting TCARES officials
 - ◆ Don't be afraid to use it – just don't abuse it

APRS Digipeater (K9IN)

- ◆ Thanks to Doug, W9NWN, for getting it on the air
- ◆ On a 100' tower at Cumberland Elementary School
- ◆ AHAAT is 164' with a calculated effective radius of ~28 miles
- ◆ APRS gateway service still being provided by N9GKE and WR9A

W.I.R.E.S. Repeater

- ◆ New call sign – same, reliable repeater
- ◆ Same owner (W.I.R.E.S.) for over 25 years
- ◆ New repeater trustee – W9TN
 - ◆ Pedro, WB9RVN, retired as trustee due to health reasons, requiring a new call sign for the repeater
- ◆ WI9RES vanity club call chosen
- ◆ Improved weather radio integration
- ◆ Future enhancements coming soon

Simulated Repeater Failure Exercise

- ◆ Understanding of TCARES SOPs is key to a smooth recovery
- ◆ If the repeater does not transmit, the net will operate simplex on the output of the repeater
- ◆ The NCS may change to one that has better simplex coverage
- ◆ The net may be moved, one station at a time, to an alternate repeater

Simulated Repeater Failure Exercise

- ◆ If the repeater is still transmitting but unusable, simplex operation on the output would be impossible
 - ◆ The net moves to the backup repeater immediately upon that type of failure
- ◆ Too much reliance on repeaters for local communication
- ◆ Nice resource when available
- ◆ Must plan for repeaters NOT being available

Simulated Repeater Failure Exercise

- ◆ Most stations did very well switching to simplex on the repeater output frequency
- ◆ Familiarization with our equipment is vital
 - ◆ Our ability to be frequency-agile is what makes amateur radio a unique EmComm resource
- ◆ Having designated simplex frequencies pre-programmed into the memory channels of our radios will serve us well when needed

Simulated Repeater Failure Exercise

- ♦ Antenna height – the higher the better
- ♦ Simple $\frac{1}{4}$ wave ground plane at 40' is better than a high-gain antenna at 30'
- ♦ 10' of additional antenna height is equal to doubling your output power (at 10'-60' heights)
- ♦ increasing antenna height allows you to receive stations farther away
- ♦ $\text{range} = \text{SquareRoot}(2 \times \text{AHAAT} \times \text{SquareRoot}((\text{power}/10) \times (\text{gain}/2)))$

TCARES FM Tactical Channels

- ◆ 145.500 TAC-A (frequency changed)
- ◆ 146.595 TAC-B
- ◆ 147.585 TAC-C
- ◆ 146.415 TAC-D (added)

- ◆ 445.500 TAC-1 (frequency changed)
- ◆ 446.200 TAC-2
- ◆ 446.975 TAC-3
- ◆ 445.000 TAC-4 (frequency changed)

Transmit CTCSS of 100.0 Hz on each frequency, optional on receive

TCARES D-STAR Tactical Channels

- ◆ 145.670 DV TAC-A
- ◆ 147.480 DV TAC-B
- ◆ 144.900 DV TAC-C (added)

- ◆ 441.000 DV TAC-1
- ◆ 445.670 DV TAC-2
- ◆ 434.000 DV TAC-3

Updates to TCARES SOPs

- ◆ **NET 1-1 (Net Management)**
 - ◆ Minor changes
- ◆ **NET 1-2 (Net Operations)**
 - ◆ Minor changes
- ◆ **NET 1-3 (Net Frequencies)**
 - ◆ Added and updated some tactical simplex frequencies
- ◆ **NET 1-4 (Net Formats)**
 - ◆ Minor wording changes to most of the net scripts
 - ◆ Removal of a script for Net Condition 4 (not needed)
- ◆ **OP PLAN 100 (National Weather Service Support Plan)**
 - ◆ Update to section on Pre-Warning Activation
 - ◆ No net normally needed for a Net Condition 4

Updates to TCARES SOPs

- ◆ **ADM 1-1 (Administration – Organization Structure)**
 - ◆ Added AEC for Planning (W9TN)
 - ◆ Updated Local Organization section to show served agencies
 - ◆ **ACTIVE membership classification requirement changes:**
 - ◆ Attend at least 3 TCARES meeting during the previous 12 months
 - ◆ Participate in at least 3 TCARES nets every 3 months
 - ◆ With 12 months of achieving ACTIVE status, successfully complete IS-100/IS-200/IS-700/IS-800
- ◆ **Added AEC biography information to the W9TCA.com web site**
- ◆ **More web site additions coming soon**