PUBLIC SERVICE COMMUNICATIONS FOR THE 21ST CENTURY

Amateur Radio public service for your neighborhood, the nation and the World.

IS TRAFFIC HANDLING RELEVANT?

- Basic traffic handling skills apply to all operating activities.
  - Proper use of procedural words and phrases.
  - Proper use of ITU phonetic alphabet.
  - Ability to convey important information accurately and efficiently.
  - Ability to transcribe important data and retain radio logs.
  - Important administrative skills.
- Community outreach – every message handled is a PR opportunity.
- A challenging and fun operating activity.
- An organized emergency preparedness infrastructure in daily operation.

DO TRAFFIC NETS COMPETE WITH THE INTERNET?

- Amateur networks are not designed to compete with commercial telecommunications services.
  - Western Union, Postal Telegraph, CN, CP Telegraphs
  - The Bell System
  - Cellular data networks
  - Internet

Throughout our history, Amateur Radio resources have never offered the capacity or level of service provided by commercial entities.

EMERGENCY COMMUNICATIONS

Commercial telecommunications infrastructure sometimes fails so Amateur Radio fills the gap.

- Earthquakes
- Hurricanes
- Wildfires
- Cyber-attacks
- Civil-unrest

Even when limited commercial infrastructure remains partially operational, trained operators and standardized procedures offer a value-added capability.

RADIO RELAY INTERNATIONAL NETS

- An International, open International messaging infrastructure available to:
  - Local radio clubs
  - Local EmComm units (ARES, RACES, AuxCom, etc.)
  - Individual radio amateurs serving their neighborhood
- RRI Digital Traffic Network (DTN): Automated hybrid mesh network supports high traffic volumes.
- RRI Voice and CW Nets: A universal common denominator interface.
- Local and state/section digital nets also provide convenient "sound-card" digital interface.

NEIGHBORHOOD HAMWATCH

- Assistance to local volunteer organizations active in disaster response.

- Volunteer radio amateurs act as interface (gateway) between community volunteers equipped with FRS, GMRS or CB radios and Amateur Radio networks.

- Access to local emergency management, public safety (emergency situations), and NGOs via the Amateur Radio gateway.

- Access to the national messaging layer via RRI networks.

    A force multiplier: One radio amateur can support emergency communications for multiple individuals providing services in a neighborhood or smaller community, freeing up other radio amateurs for similar or higher priority tasks.

- Neighborhood level interface.

- RRI Registered Radio operators monitor **FRS Channel One** in time of emergency for distress calls, requests for information (shelter locations, social services, etc.).

- In exchange, RRI volunteers collect situational awareness data, which can be shared with local, state and Federal emergency management.
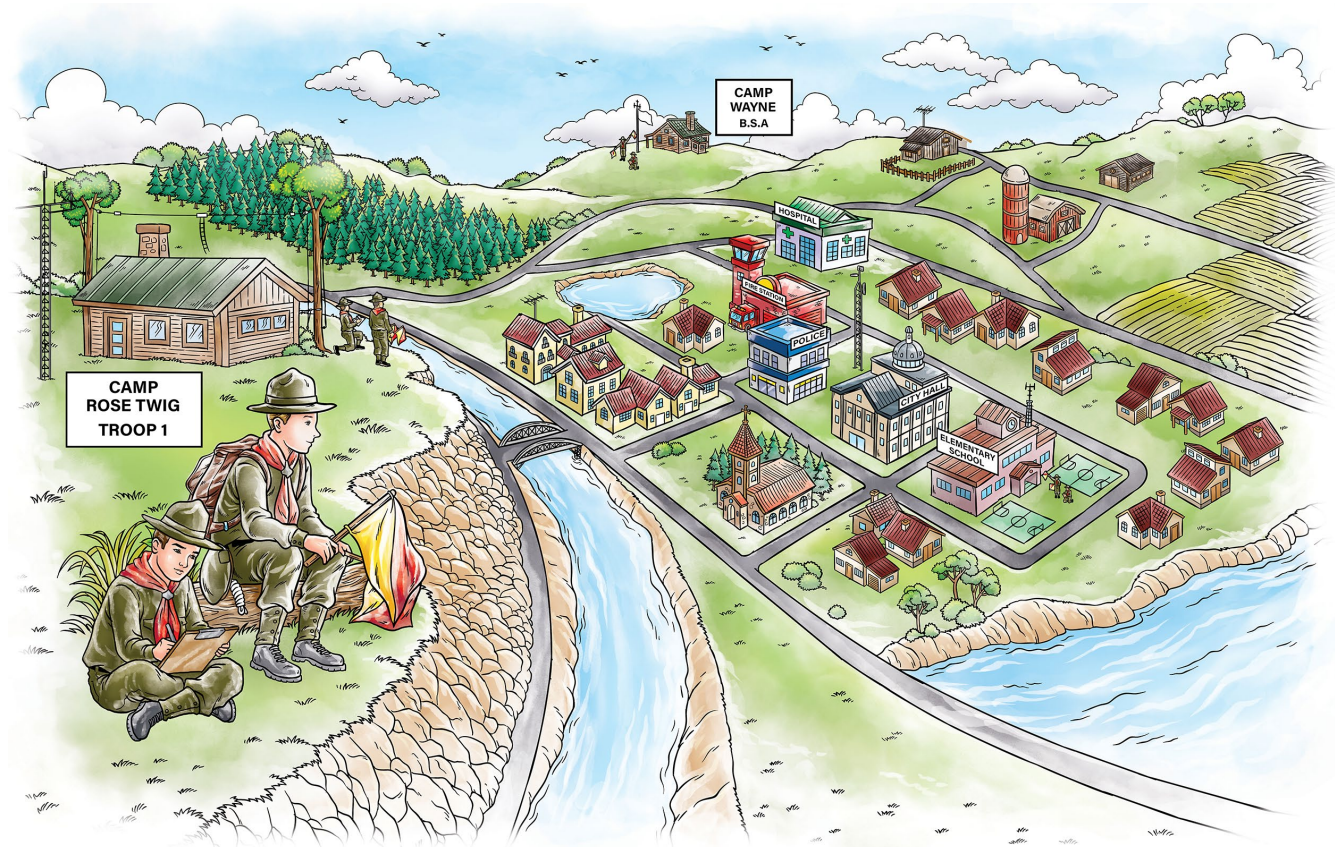

National SOSˢᴹ
Radio Network

www.NationalSOS.com

BOY SCOUT RADIO WATCH

- Program developed by Joe Ames (W3JY) an active BSA scout leader.

- Similar in structure to Neighborhood Hamwatch Program.

- Scouts are introduced to the purposeful use of two-way radio.

- Interface from FRS, GMRS or CB radio to RRI Networks and local EmComm.

RRI PHILOSOPHY

- *Universality* – Open architecture
  - **Access** by multiple modes/methods including common denominators.
  - **Procedures** built on standard message formats and operating methods.
  - **Professional** standards ensure effective community service and reliability.
  - **Nonpolitical** management methods isolate RRI from egotism and hidden agendas.
- *Infrastructure* – Nets in North America, Europe, Asia and Oceania
- *Community* – Regular cooperation builds community and relationships that can be leveraged in time of emergency.

MESSAGE TYPE – RADIOGRAM

- Radio-telegrams or "radiograms" are universal.

- Network management data provides temporal information and service data, aids in accuracy and facilitates record-keeping.

- Compatible with email, NIMS (ICS-213) and text messaging.

- Unlike email, multiple delivery options ensure immediate feedback for important messages.

- Efficacy of radiogram proven in major Federal exercise in 2016.

Radiogram ICS-213 Message

Number	Precedence	HX	Station of Origin	Check	Place of Origin	Time of Origin	Date of Origin
3	P		K8QMN	33	`KALAMAZOO MI	2230Z	OCT 2

To (Name): **FEMA NRCC**

Position (Title & Agency):

C/O W3JY

City, State, Zip:

PAOLI PA 19301

Telephone and optional e-mail:

610-555-2221

From (Name): **WILLIAMS**	Position (Title & Agency): **EMERGENCY MANAGER**
Subject:	Agency Local Time (conversion from UTC):

SITREP 1/ KALAMAZOO COUNTY MI   2/ WIDESPREAD POWER OUTAGE 3/ ENTIRE COUNTY WITHOUT POWER INTERNET AND CELLULAR OUTAGES IN PROGRESS 4/ WESTERN MICHIGAN UNIVERSITY CLOSED 5/ HOSPITALS ON EMERGENCY POWER 6/ VERIFIED SOURCE

Please be brief – Use only the period for punctuation – Assume message may be delivered in all capitals

Message Routing (Received from call sign / DTG):	Message Routing (Transmitted to call sign / DTG): **WB8WKQ 022240Z OCT 2018**

info@radio-relay.org – www.radio-relay.org – Follow us on Twitter@RadioRelayIntl

RRI Form 1703 ICS
2017-5-1

INTEROPERABILITY

- Messages must be able to flow between various networks and services. A few examples:
  - Digital traffic network to VHF/UHF voice circuits.
  - Message flow between traffic system and public safety voice or data
  - Delivery via telephone or messenger
- All capitals, minimal punctuation and brevity all facilitate interoperability
- Network management data enhances accountability and facilitates replies and service message process. This data associates message originator and his location with a specific net and ham radio station.

ROUTINE MESSAGES

- A radiogram is a unique PR opportunity – explain and promote the Amateur Radio Service.

- Relaying radiograms is a fun and exciting operating challenge.

- Traffic nets build camaraderie and friendships.

- Today's many communications options, including e-mail delivery and voicemail make delivery easy.

- One learns effective communications methods while having fun.

GETTING STARTED IN THE WORLD OF NETS

- Monitor a local or state/section net for several sessions.

- Check-in and let net control know you're new to traffic handling.

- Study the *Radio Relay International Public Service Communications Manual* (TR-001) available at:

    http://radio-relay.org/wp-content/uploads/2017/11/RRI-Training-Manual-TR-001-2017-Draft-for-Distribution.pdf

- Visit the Radio Relay International Web Page at: www.radio-relay.org

REGISTER WITH RADIO RELAY INTERNATIONAL

- Registered Radio Operators receive:
  - Notices of new issues of the "QNI Newsletter" (www.qni-newsletter.net)
  - Notices of emergency operations during major disasters.
  - Bulletins with news pertaining to RRI activities including national-level disaster exercises.

  RRI is a 501(c)(3) nonprofit public benefit corporation. We do not charge dues, but we do accept donations.

RRI TRAINING CLASSES

- RRI offers several different training classes and presentations for radio clubs, community organizations and EmComm groups.

- *Introduction to Disaster Communications* class runs about four hours:

  - Introduction to basic disaster telecommunications theory and planning.

  - An overview of Amateur Radio EmComm programs.

  - Radiogram and ICS213 message formats.

  - Radiotelephone (voice) procedures

  - Radiotelegraph (CW) procedures

  - Introduction to the Digital Traffic Network (DTN) and Digital Traffic Station (DTS) functions.

Requests for training may be directed to: info@radio-relay.org

QUESTIONS?

Thank you for your interest. The presenter welcomes your questions and inquiries after the program.

73 to All!