EmComm 6:

Being Professional with Emergency Communications

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Synopsis

- Learn how to change your relaxed amateur communications into efficient professional communications when needed for emergencies. Learn techniques used by dispatchers and public safety personnel to make communication details accurate.

"Professionalizing our service in EmComm"

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Topics

- Who Are We?
- Our Heritage, Change Happens, Today
- Categories of Communications
- ARRL Volunteer Guidance
- Training for Professionalism
- Know your Customer
- Document your Procedures
- Being Professional
- Amateur Radio Equipment
- Emergent Volunteers

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Who are we?

- **What's a "Ham"?**
- "**Ham**: a poor operator. A 'plug.' "
  - That's the definition of the word given in G. M. Dodge's "The Telegraph Instructor" (1899) long before radio. Picked up by Amateur Radio Operators long ago with the definition lost in the fog of time.
- **Over 704,236 nationally and growing**

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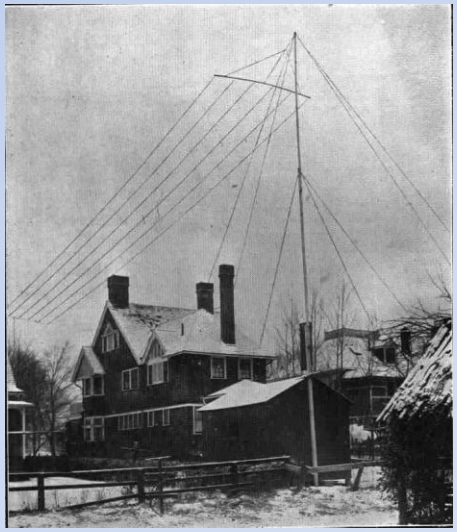
Our Heritage

- Pioneering technology
- Casual conversation
- Create new modes



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Change Happens!

- Technology
  - Tubes ➡ Transistors ➡ *ICs* ➡ MicroChips

- World Events

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Today

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Categories of Communication

- Personal
- Public Service
- Communicating under Emergency Conditions
- Emergency Communications

Personal Communications

- Individual or group
- Casual conversation
- Contesting

Public Service Communications

- Examples include: walk-a-thons, bike-a-thons, parades, festivals and community events.
- Time commitment is typically defined in advance.
- Equipment is minimal as well, often you will only be asked to bring a hand-held radio.
- Responsibilities may include supporting the communications needs of the community agency in such issues as crowd control efforts, first aid stations, parking, etc
-

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Communicating Under Emergency Conditions

- ARRL Field Day
- Portable operations away from mains power
- Loss of commercial power

“AMATEUR RADIO IS THE *HOBBY*…”

“EMERGENCY COMMUNICATIONS IS A *COMMITMENT*…”

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Emergency Communication

- **CFR Title 47** *(Telecommunications),* **Part 97** *(Amateur Radio Service),*
- **§ 97.403 Safety of life and protection of property.**
  - **No provision of these rules prevents the use by an amateur station of *any means of radiocommunication* at its disposal to provide essential communication needs in connection with the *immediate safety of human life* and *immediate protection of property when normal communication systems are not available*.**

"I'll be there if you need me!"

- Many amateurs choose not to get involved with "emergency communications" support due to the additional certification, training and practice required.
- They offer to be there if needed.
- The 'rules of engagement' have changed from years gone by.

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ARRL Volunteer *Guidance*

- http://www.arrl.org/readiness

- **If you're an individual Amateur Radio Emergency Communication volunteer…**
  - **You need to be trained**
  - **You need to be equipped with sustaining skills**
  - **You need to prepare your family for your absence**
  - **You need to find ways to volunteer**

ARRL Volunteer guidance (cont)

"Once you're prepared to go out there and give your time and expertise to an event or disaster, you need to find where you can do that. You would first want to become a member of your local *ARES, CERT, RACES* or other local emergency management organization."

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ARES

Amateur Radio Emergency Service

ARES can be activated before, during and/or after an emergency

The Amateur Radio Emergency Service is a national, voluntary organization of FCC licensed Hams - special radio operators who provide communications in an emergency and are organized through the American Radio Relay League (ARRL).

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RACES

Radio **A**mateur **C**ivil **E**mergency **S**ervice

RACES is only activated during an emergency

- **Authorized by CFR Title 47** *(Telecommunications),* **Part 97** *(Amateur Radio Service),* **Subpart E, 97.407** *(Providing Emergency Communications)*
- **'War Powers Act' vs 'Executive Order'**
- **RACES stations are limited as to who they can communicate with, which messages they may pass, and how long drills may last.**
- **'Fenced' amateur frequencies**

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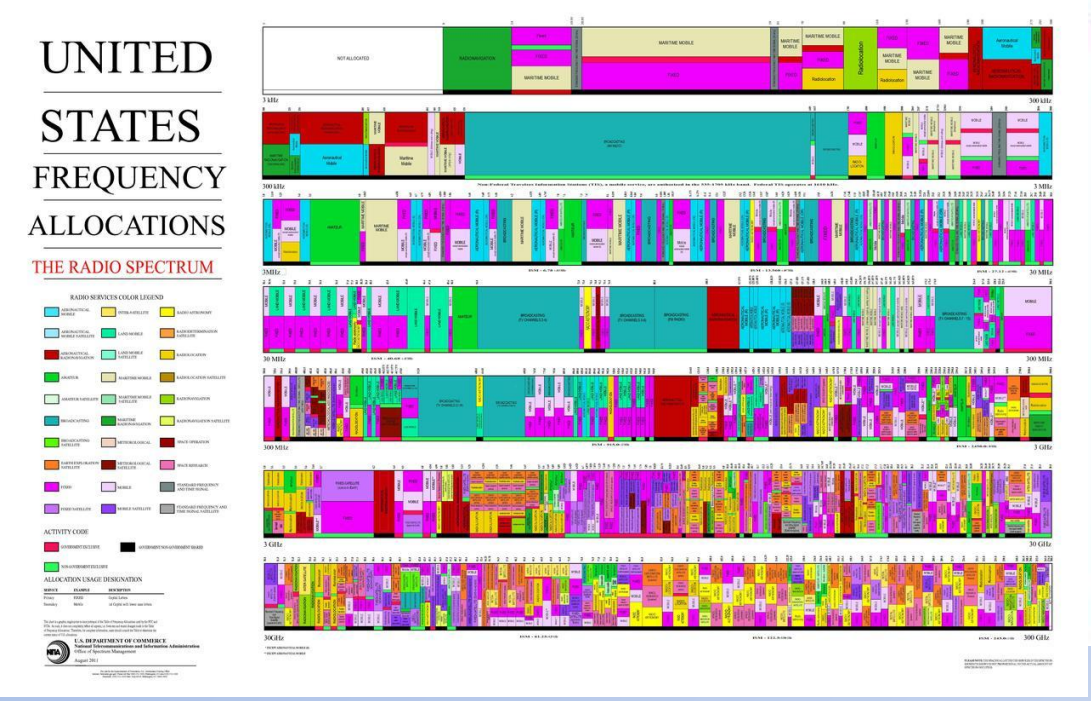

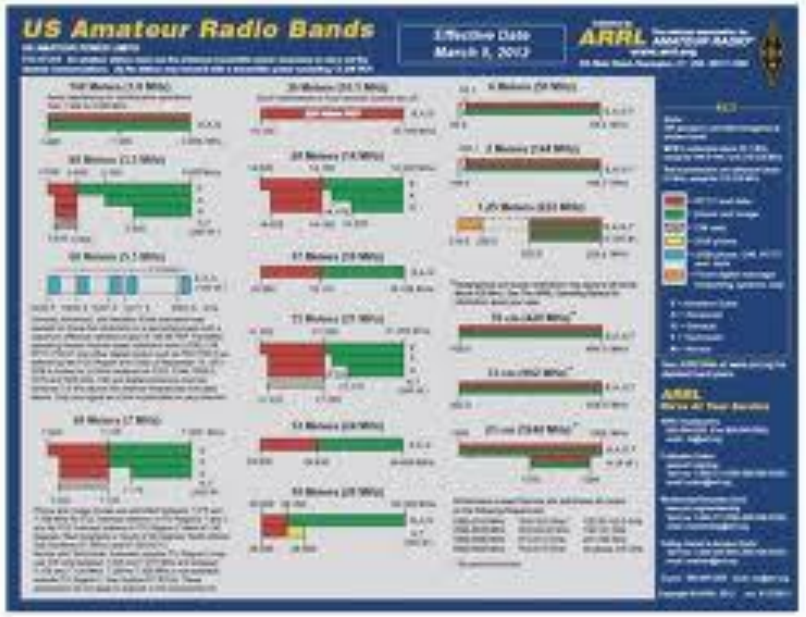

RACES Frequencies

H.F.	H.F.	V.H.F.	U.H.F
1800-1825 kHz 1975-2000 kHz 3.50-3.55 MHz 3.93-3.98 MHz 3.984-4.000 MHz 7.079-7.125 MHz 7.245-7.255 MHz 10.10-10.15 MHz 14.047-14.053 MHz	14.22-14.23 MHz 14.331-14.350 MHz 21.047-21.053MHz 21.228-21.267 MHz 28.55-28.75 MHz 29.237-29.273 MHz 29.45-29.65 MHz	50.35-50.75 MHz 52-54 MHz 144.50-145.71 MHz 146-148 MHz	222-225 MHz 420-450 MHz 1240-1300 MHz 2390-2450 MHz

ACS

Auxiliary Communications Service

ACS can be activated before, during and/or after an emergency

- Amateur Radio Groups otherwise organized to support emergency communications in their area.
- In alignment with the DHS/OEC AUXCOM principle of multiple services under one name
- Sometimes specialized such as SAR, etc.

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We Are Not Alone!

- Amateur Radio Operators support these organizations and more!
  - MARS (Navy-Marine Corps, Army, USAF)
  - SHARES (SHAred RESources) HF Radio Program
  - USCGA (US Coast Guard Auxiliary)
  - USAF CAP (Civil Air Patrol)
  - SAR (Search and Rescue)
  - SATERN (Salvation Army Team Emerg. Radio Network)
  - Faith-Based Organizations (Adventist, LDS, etc.)

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Are There Training Standards Established?

- None that are universally recognized
- FEMA has not identified a resource 'Type'
- Most are academic only
- Some have on-equipment proficiency

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Training

- **ARRL**
  - **EC-001:** ***Amateur Radio Emergency Communication***
  - **EC-016:** ***Public Service and Emergency Management for Radio Amateurs***
    - **Completion of EC-001 is required**
    - **12 On-line lessons (921 screens!) – *free!***
    - **13 FEMA EMI/ISP courses required (IS-001, 100.a, 120.a, 130, 139, 200, 240, 241, 244, 250, 288, 700.a and 800.b) and IS-300 is highly desirable – *all free!***
    - **Need your Section manager (SM) recommendation to take final exam – *not free!***

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Where else can I go for training?

- **DHS/OEC**
  - Classroom academic and proficiency
  - http://www.dhs.gov/communications-unit-leader-training
- **FEMA**
  - Online and classroom academic
  - http://training.fema.gov

Training (cont)

- **DHS/OEC**
  - **COML** (Comm Unit Leader)
    - Heads the Communications Unit and is responsible for integrating communications and ensuring that operations are supported by communications. The COML must understand ICS and local response systems to support the efforts of Incident personnel.
    - 3 Day/24 hours

NOTE: Upon successful completion of the COML course, students have 3 years to complete a *Position Task Book (PTB)*.

Training (cont)

- **DHS/OEC** (cont)
  - **COMT** (Comm Unit Technician)
    - The Communications Technician (COMT) course is a five (5) day, 40 hour class designed for responders who will provide communications technical assistance during emergency events. Participants will learn how to plan, implement, and demobilize communications systems supporting the communications unit in a safe and effective manner to meet the needs of the incident.
    - 5 Day/40 hours

NOTE: Upon successful completion of the COMT course, students have 3 years to complete a *Position Task Book (PTB)*.

Training (cont)

- **DHS/OEC** (cont)
  - **AUXCOM** (Auxiliary Emergency Communicator)
    - Teach auxiliary emergency communicators their role in an EOC and field environments, who they will report to, and what they can expect as far as a mission under NIMS/ICS.
    - 2 Day/20 hours
    - AEC Manager position

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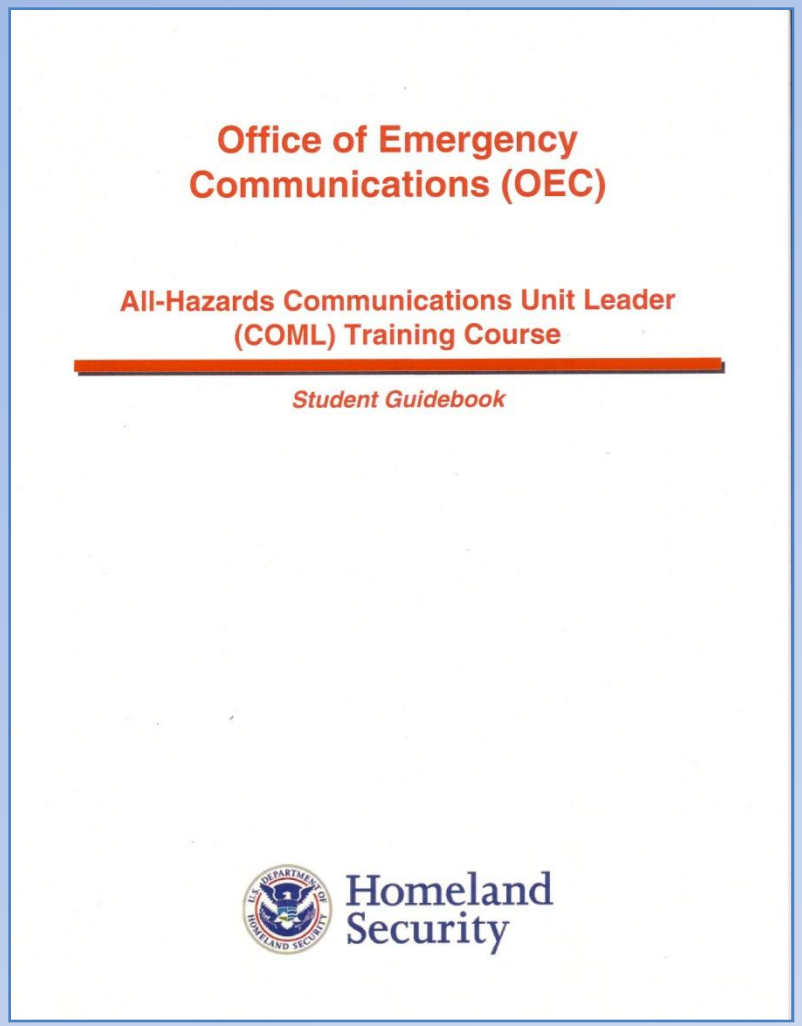
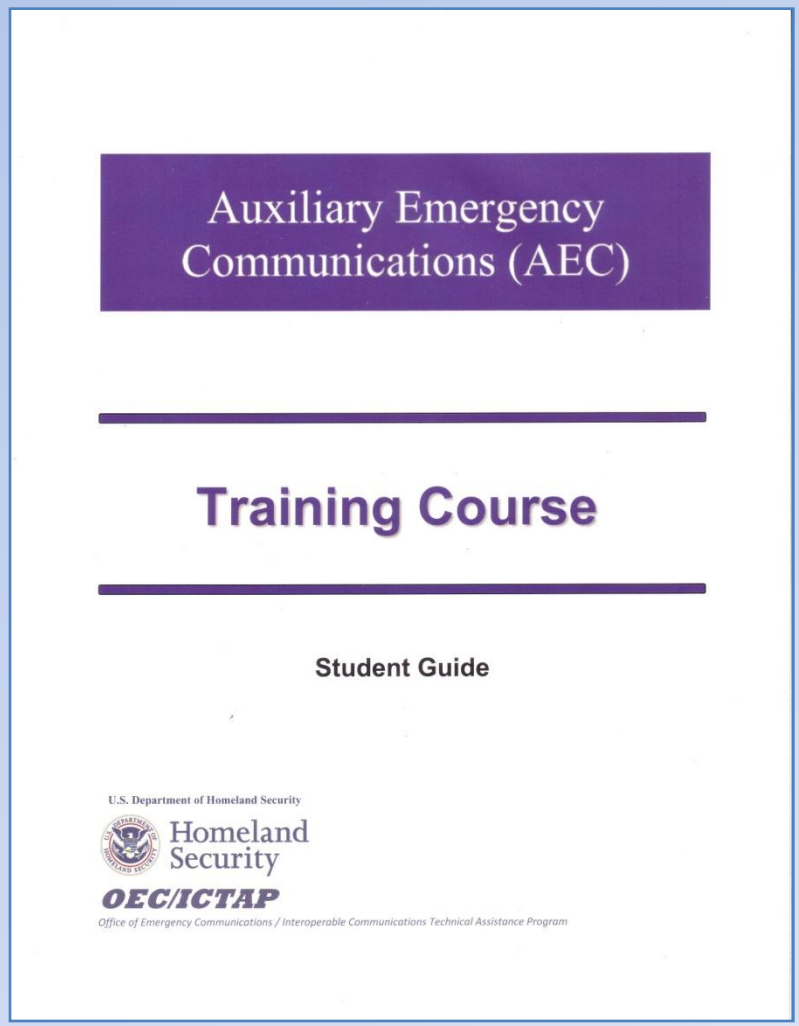
DHS/OEC Class Examples





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ICS COMU (unit) Positions

- **COML** – Plans and manages the technical and operational aspects of the
- communications function during an incident or event
- **COMT** – Installs and troubleshoots communications equipment
- **INCM** – Manages an Incident Communications Center (ICC), when having the COML do so would present span-of-control issues
- **RADO** – Staffs the ICC, using radios to receive information and relay messages
- **THSP** – Catch-all term for outside specialists providing expertise to the COML including amateur radio, computer network technicians, and satellite communications (SATCOM)
- **MsgR** – Physically relays messages to areas not yet served with any communications system

Training (cont)

- **FEMA on-line** (http://training.fema.gov)
  - EMI/ISP (over 150 courses!)
  - IS-100, 200, 700 & 800 is the federal disaster worker minimum
  - Other jurisdictions determine requirements

IS-144 Telecommunicator Emergency Response Task Force (TERT)

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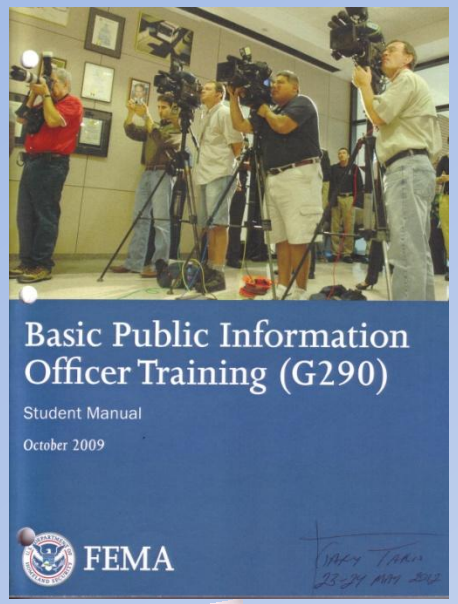
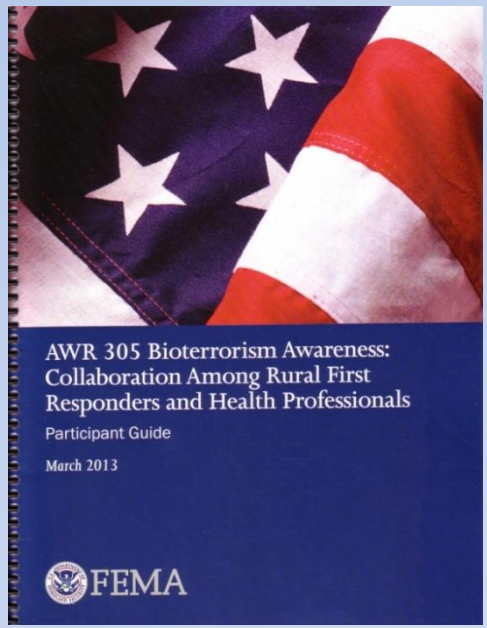
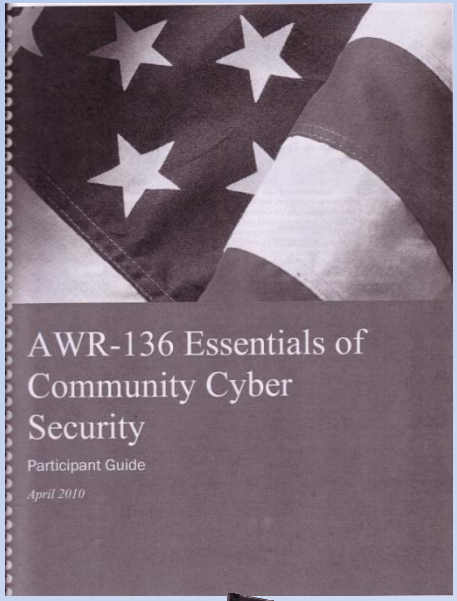
Training (cont)

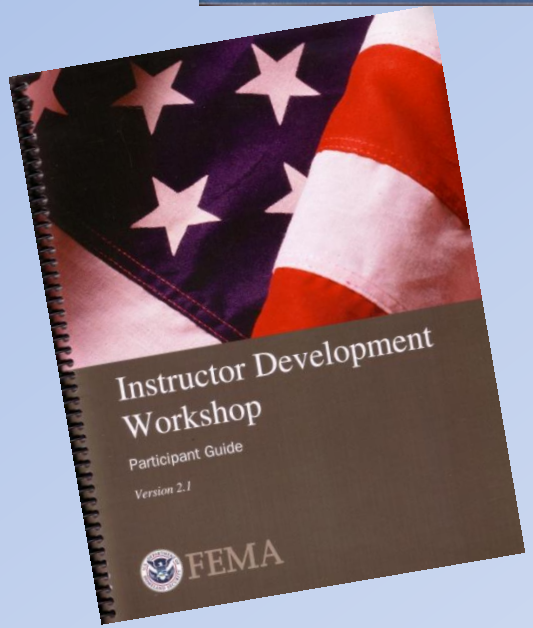
- **<u>FEMA classroom</u>**
  - IS-300 Intermediate ICS
  - IS-400 Advanced ICS
  - Many others

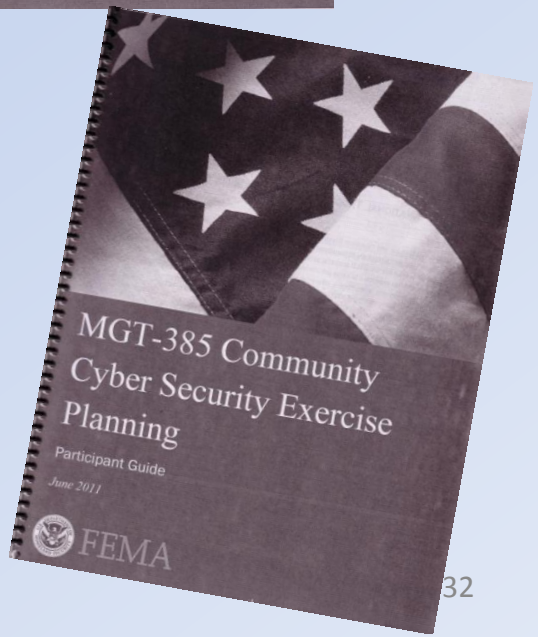
Other FEMA Class Examples











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Where else can I go for training?

- **ACES**
  - Classroom academic and proficiency
  - http://www.oregonaces.org/

- **Oregon ARES**
  - Section Training Plan - Annex A, Training
  - Baseline/example plan for OR ARES Units
  - Has Position Task Books (PTBs)

Training (cont)

- **Washington ARES**
  - Section Level Training Recommendations

- **Emcomm-Standards-and-Training**
  - Yahoo! Group
  - Many examples from around the country
- **Radio Jump Kits** (Hardware)
- **Personal Go Kits** (Personal support)

Training (cont)

- **Your Supported Organization(s)**
  - **First Responders**
    - **EOC**
    - **Police/Fire/EMS**
  - **COAD**
    - **Red Cross**
    - **Salvation Army**
  - **Hospitals**
    - **Registered and trained volunteer**

Training (cont)

- **Your Organization**
  - **Technical Training**
    - **Setting up, operating and fixing equipment**
    - **System engineering and troubleshooting**
  - **Procedural Training**
    - **Voice operations**
    - **Data operations**
    - **Other (SSTV, ATV, HSMM-MESH, etc)**

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Training (cont)

- **<u>Your Organization</u>** (cont)
  - **Other**
    - **First Aid**
    - **CPR**
  - **Personal Readiness**
    - **Sustainment (water, food, etc.)**
    - **Medication, eyeglasses, etc.**
  - **Family Readiness**
    - **Are they ready for you to be gone?**

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Common Subjects To Know

- How to use your equipment
- Learn to use other people's equipment
- Proper Procedures (voice & data)
- The ICS system
- Participant Management & Accountability
- Incident Response and Planning
- Interoperability
- Intrastate and Interstate Radio Networks
- Personal and Family Readiness

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Know Your 'Customer'

- EOC, ECC, ACC, etc.
- Fire/EMS
- Medical
- Law Enforcement
- Other Local Government (Water, Power, etc.)
- COAD (Community Organizations Active in Disasters)
- VOAD (Volunteer Organizations Active in Disasters)
- Other

Know Your 'Customer' needs

- Defines types of services needed
  - Voice, data, other
- Collaborates on content and format for information to be passed
  - Format can be ICS-series forms, ARRL RadioGram or other mutually agreed to local customized form
- Participate with your supported agencies in training whenever possible!

We will be watched!

You never get a Second chance at a First impression…

so do it right the first time!

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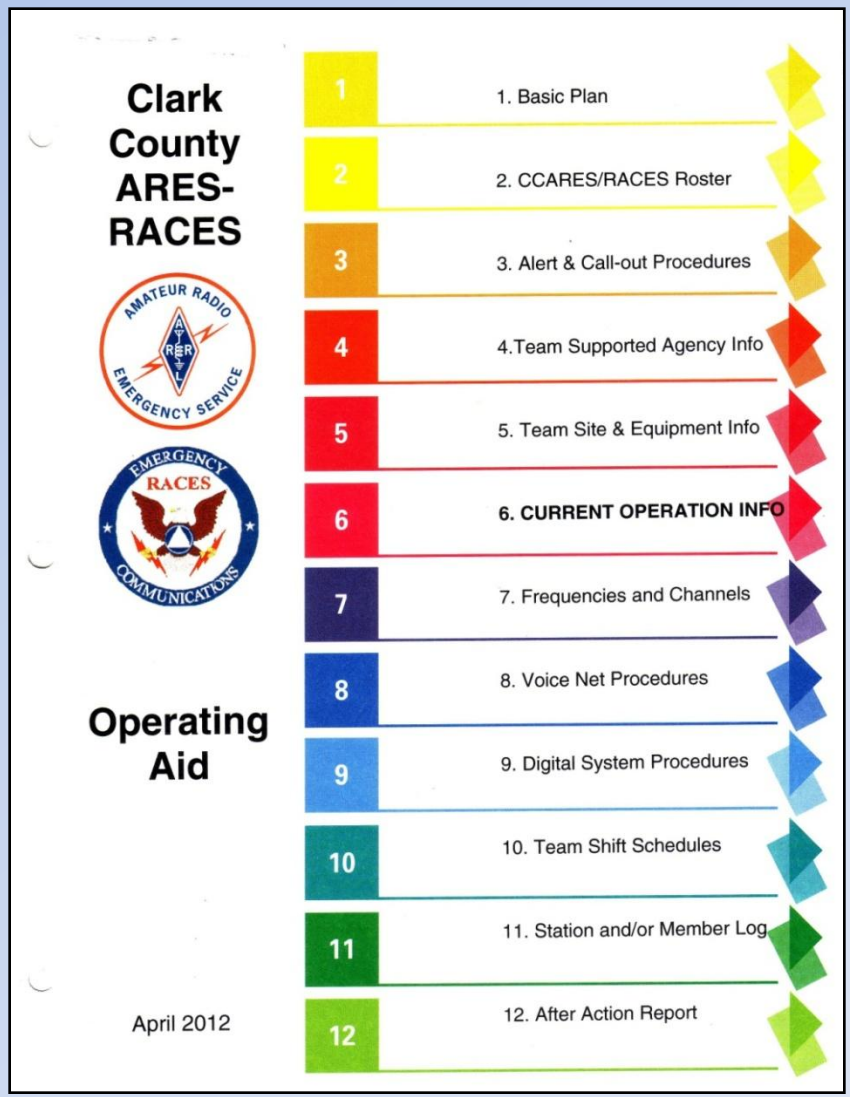
Document your procedures



Then follow them!

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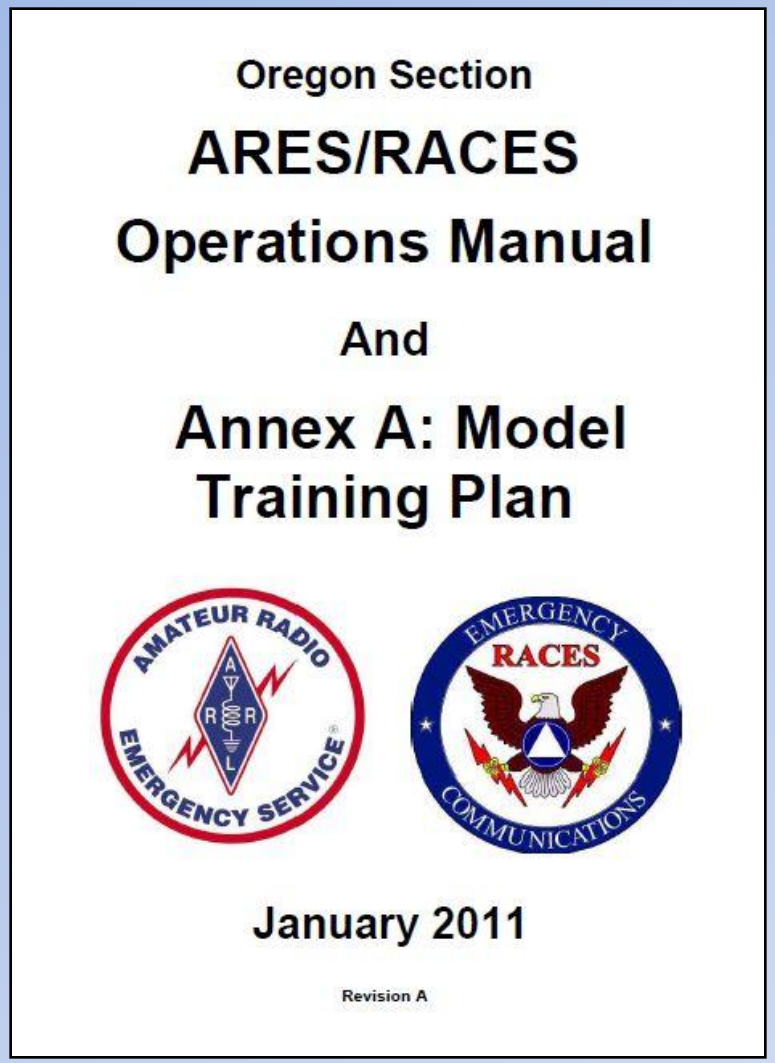
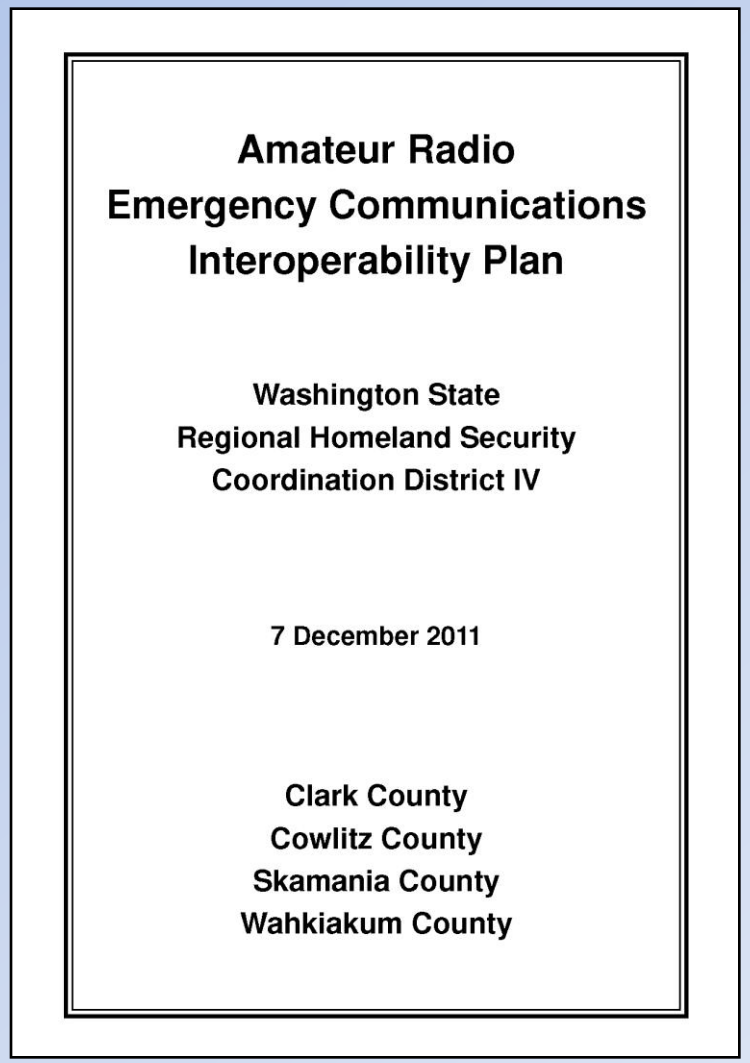
Document your Procedures (cont)





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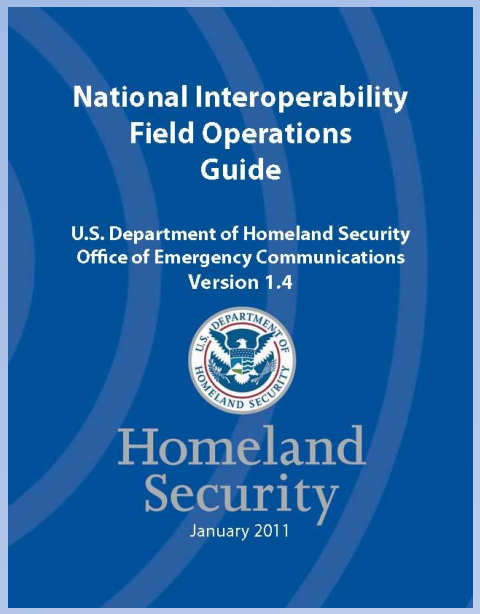
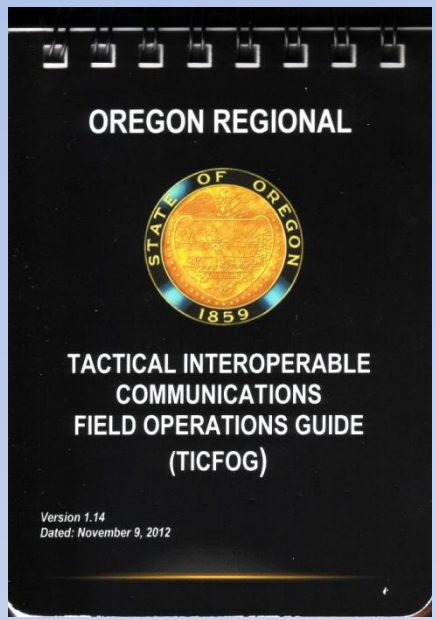
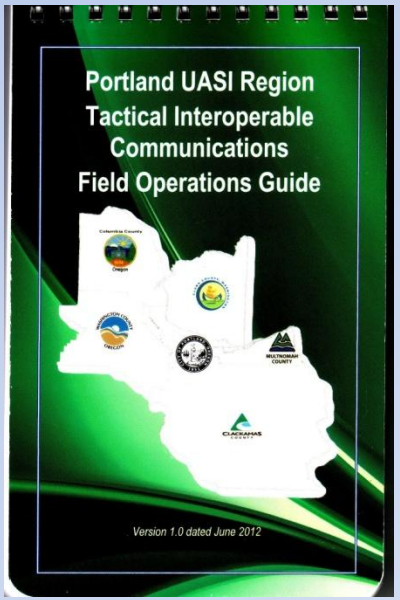
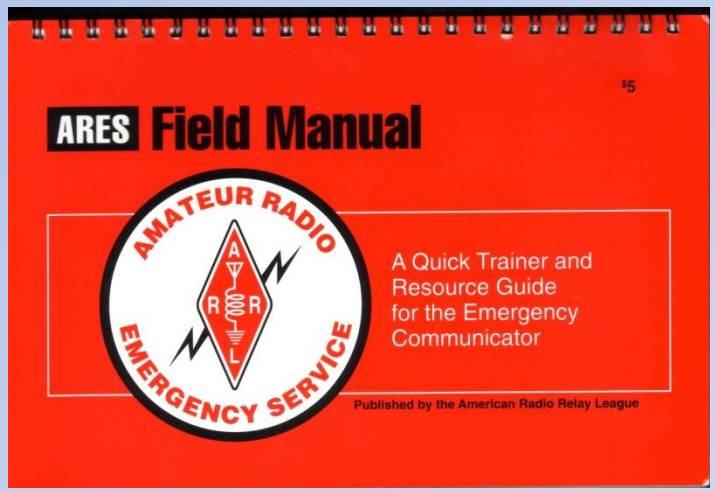
Know Other Reference Materials



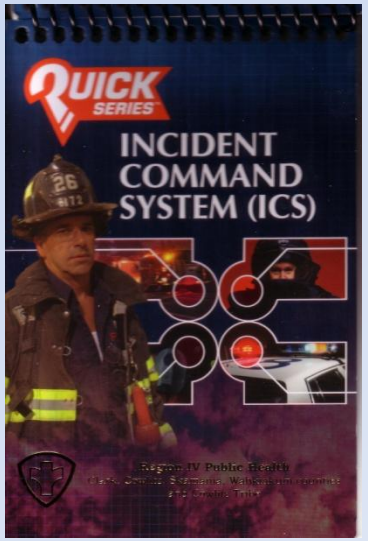






Your County

CEMP



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Being Professional

- **Attitude**
  - "Can do"…. or find someone that can!
- **Behavior**
  - Appropriate
- **Clothing**
  - Appropriate
- **Flexibility**
  - We are volunteers there to serve

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Being Professional (cont)

- Use established processes and procedures
  - Supported organization's process wins!
- Don't "MSU" (make stuff up!)
- Speak clearly and distinctly
  - Avoid the use of 'slang'
- Use plain language (avoid acronyms)
  - NIMS principle!

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General R/T Tips

- Know the expected process; don't MSU!
- Listen before talking; don't 'double'
- Know your words before you start talking on mic
- Speak distinctly
- Be brief
- Don't try to multi-task; stay on task

- … audience additions?

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Amateur Radio Equipment

- Three sources
  - Agency owned
    - Fixed, mobile or portable equipment
  - Member donated
  - Individual amateur radio operator owned
- "Agency owned" can be from
  - Agency funded
  - Grant funded (FEMA, UASI, etc.)

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Emergent Volunteers

- Have a plan to register and involve non-member hams when they volunteer
- Ensure you have educated the volunteers on appropriate practices before they touch the microphone
- Background checks may be needed

Many professions require a minimum of periodic refresher and proficiency training.

Shouldn't we?

Questions?

- or -

Comments?

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