

# 2019 Telecommunications Workshop



# Auxiliary

# **Telecommunications**









#### This workshop will:

- Present Risk Management
- Review existing policies and procedures
- Review current communications programs and missions
- Preview new programs, procedures, and missions

This is an optional workshop, but it may be "required" at the local level for all Telecommunications Operators (TCO)





#### **Ground Rules**

- This workshop should be interactive,
   NOT a Lecture A
  - Ask Questions
  - Answer Questions
  - Share Experiences
  - Share Insights
- Participate Participate Participate





# Risk Management

# 2019 Risk Management Discussion





### **Definition of Risk**

A Coast Guard mishap is defined as any unplanned, unexpected or undesirable event that causes injury, occupational illness, death, material loss or damage.





# What is Risk Management

A continuous, systematic process of identifying and controlling risk in all activities according to a set of pre-conceived parameters by applying appropriate management policies and procedures. This process includes detecting hazards, assessing risk, and implementing and monitoring risk controls to support effective, risk-based decision-making.





# Risk Management

Risk Management is more than a form or a process.

It is a mindset and awareness of risk and reward that can be used not only in your Auxiliary life but in everything that we do.





#### Risk Management As A Way Of Life

- We Continually Make Decisions Based on How Much Risk We Are Willing To Accept
  - Personal
  - Auxiliary
- By Increasing Our Understanding Of Risk Management – We Will Increase Our Performance and Safety





#### Risk Management As A Way Of Life

- We Take Steps To Mitigate The Risks
  - Ask for Help
  - Modify Our Plans
    - Change Our Start Time
    - Change Our Route
  - Check Our Equipment





# Risk Management

- Coast Guard (including Auxiliary)
   operations are inherently complex,
   dynamic, potentially dangerous, and, by
   nature, involve the acceptance of some
   level of risk
- Due to these issues the Coast Guard has revamped the Risk Management program, including what we know as TCT





# **Major Changes to RM**

- The Risk Management Instruction;
  - Updates the RM process from 7 steps to the new 5 step process
  - Reintroduces the PEACE and STAAR models
  - Introduces the Risk Assessment Matrix (RAM)
  - Mandates the use of GAR 2.0
  - Standardizes RM training for all communities (surface, air, shore)





# What You Need to Do

# Complete the Introduction to Risk Management training course on AUXLMS, course 100202

This is a one-time training requirement to introduce the principals of RM and the critical human factors skills





#### **CONCEPT OF OPERATIONS**

- CONCEPT OF OPERATIONS CONOPS
  - http://rdept.cgaux.org/documents/Comms/AuxiliaryCommunicationsProgramSOP.pdf was released on 21 March, 2016 for Auxiliary Communications and provides a foundation for the growth and development of current Auxiliary communications capabilities while conveying to the US Coast Guard Auxiliary (CGAUX) and the US Coast Guard (CG), the role, assets, activities, operations and overall policies of the Auxiliary Communication System (ACS)
- Communication officers at all levels, are responsible for maintaining an accurate radio communications resource availability list. (See: ICS Form 217A CG)





# Authorized Operation of Radio Facilities

Only Auxiliary staff or elected officers may activate Auxiliary radio facilities under one or more of the following conditions:

- For a mission ordered or scheduled by the Coast Guard
- When necessary to handle valid distress traffic
- While conducting technical tests to determine a facility's capability (e.g., facility inspection)
- When necessary to contact a Coast Guard unit to determine if Auxiliary help is required





# Authorized Operation of Radio Facilities (con't)

- When conducting net drills
- For assisting in time of disasters or national emergencies
  - When necessary to conduct authorized Auxiliary activities as assigned by appropriate Auxiliary Operational Commanders or Staff officers

Reference: Operations Policy Manual, Annex 4.C.4





# Authorized Operation of Radio Facilities (con't)

# "Qualified Auxiliarists" must have completed AUXCOM prior to August 1, 2008 or be TCO (PQS) qualified

- Auxiliarists may offer their radios to be used as Auxiliary facilities. If accepted, a single facility identification for all radios at the facility (HF and VHF) used in the same service will be assigned by DIRAUX and the information entered in Auxdata
- DIRAUX approves all VHF callsigns which may be assigned by District CM Staff. The DVC-RT issues all HF callsigns





#### **Radio Basics**

- In all radio communications, we are to act as professionals \(\Lambda\)
- At no time shall we make reference to ethnicity, race, gender, sexual orientation or religious affiliation in radio transmissions
- This is a zero tolerance policy and must be strictly adhered to





### Radio Basics (con't)

- It is often not what you say, but how you say it that demonstrates your professionalism
- Brevity and accuracy supports mission success and safety
- Remember, the public and other agencies "hear" you as the voice of the U.S. Coast Guard
- Practice and use proper radio procedures to achieve success, safety, and professionalism
  - No "10" codes, no "Over and Out", etc.





# Radio Basics (Cont.)

- REMEMBER:
- When you key the microphone on your radio "The Whole World is Listening!"
- Always listen before transmitting and be sure you are on the correct channel (frequency)





#### VHF Communications

- 7 CG Auxiliary narrow band VHF frequencies are available for our use on narrow band radios with maximum allowed output power of 50 watts
- VHF repeaters are allowed an output power of 100 watts
- Maximum output power on channels in the Marine band is 25 watts
- No power amplifiers allowed on VHF radios





#### VHF Communications (con't)

- RDF (Radio Direction Finding) stations are authorized
- VHF hand held marine radios MAY be accepted as mobile facilities in special cases
- APRS (Automatic Packet Reporting System) is not authorized
- MMSI (Maritime Mobile Service Identity) numbers are not authorized for Auxiliary aircraft





#### VHF REPEATERS

There are 56 Auxiliary VHF repeaters throughout the United States, most of which share common input/output frequencies, with varied CTCSS tone access. Most are unit owned

- Repeater requests (CG Form 6086) must be reviewed by CG Office of Spectrum Management before construction or implementation
- Maximum output power of 100 watts
- Narrowband only
- 7 possible frequencies





#### **HF Communications**

- HF serves as a platform for other missions:
  - AUXMON (Auxiliary *Monitoring* Mission) A quality control program for Coast Guard broadcasts
  - AUGCOM GMDSS monitoring for digital and SSB voice distress calls (replaces the old SSB voice distress calls) <a href="http://rdept.cgaux.org/documents/Comms/AUGCOM/AUGCOM/20Mission%20Final%20to%20BSX%202016">http://rdept.cgaux.org/documents/Comms/AUGCOM/AUGCOM/20Mission%20Final%20to%20BSX%202016</a> PDF.pdf
  - SHARES A DHS administered radio program that coordinates a voluntary network of government, industry, and disaster response agency HF radio stations used for emergency communications





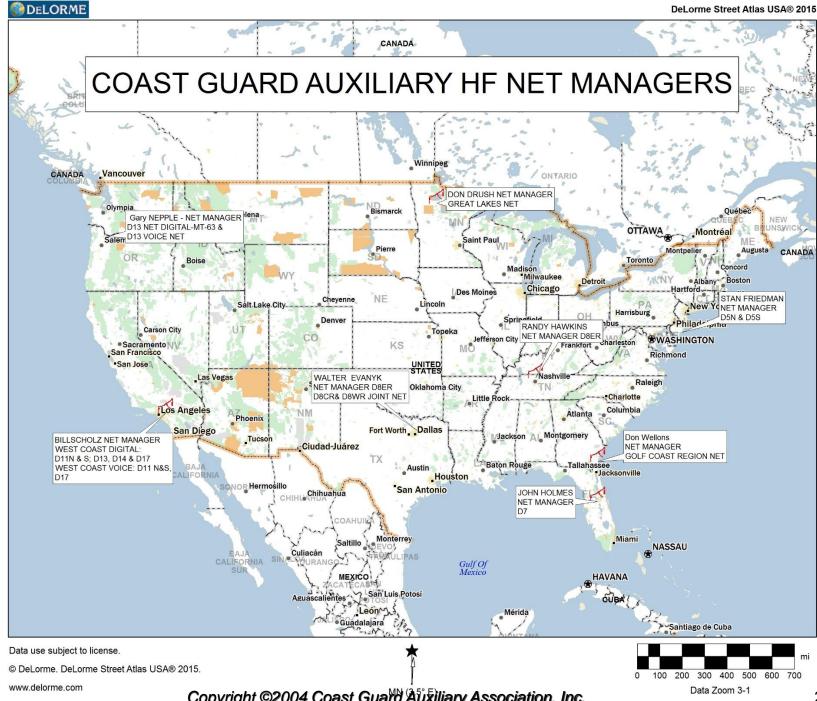
### HF Communications (con't)

- Maximum power output 1000 watts on HF radios
- Usable for Auxiliary HF radio Nets
- 41 frequencies 2-23 MHz are available
- Radios must be able to transmit outside of Amateur bands
- Accommodates digital modes
- Supports CG contingencies and SHARES

#### Reference:

http://rdept.cgaux.org/documents/BeQualified/Becoming QualifiedAuxiliaryHighFrequencyProgram.pdf







# **CG Station Radio Watchstanding**

- Auxiliary Watchstanders at a CG station must complete the same training as active duty CG watchstanders and stand a "board examination"
- They must have received, or applied for, DO security clearance prior to being certified as a CG Watchstander
- Watchstanders serve at the Station CO's discretion
- AUXCOM or TCO/PQS are helpful and <u>might</u> be required at the discretion of the station OIC





### **Auxiliary Station Watchstander**

- Watchstanders at an Auxiliary Communications Unit (ACU) must be certified as TCO or completed AUXCOM prior to August 1, 2008
- Other requirements might be required, on a District to District basis
- A radio watch requires that the station is actively manned and the operator is ready for intervention





# **SHARES (Shared Resources)**

- Administered by DHS
- This program provides the Federal emergency response community with a single interagency emergency message handling and frequency spectrum management system
- SHARES promotes interoperability between <u>HF</u>
  radio systems used by Federal departments and
  agencies and monitors applicable regulatory,
  procedural, and technical issues





### SHARES (con't)

- Only use the Auxiliary furnished application,
   Form 1, available only from DVC-RT
- Do not use SHARES furnished application
- Use Auxiliary HF call sign when logging into a SHARES net
- The DVC-RT acts as a facilitator of the application process
- See: <a href="http://www.dhs.gov/shares">http://www.dhs.gov/shares</a>





## **AUXMON**

- AUXMON stations monitor CG broadcasts to mariners on stations located on the East Coast, Gulf Coast and Pacific Coast
- The Coast Guard broadcasts are by voice, digital, and FAX all on HF marine frequencies
- Members monitor and report any problems to the CG Communications Command (CommCom)





# **AUXMON (Con't)**

- HF radio equipment and special software is required to participate in the AUXMON program
- Additional AUXMON members are needed
- For application, please see:

http://rdept.cgaux.org/documents/Comms/AUXMON Applicationrs.pdf







#### **CHANGE AGENTS**

- Technology voice to digital communications
- Wide band VHF shifts to narrowband NTIA compliant, except for Marine channels
- GMDSS replaces traditional SSB MF/HF distress messaging
- August 1, 2013 Coast Guard halted monitoring of 2182
   MHz SSB for distress calls and 2670 KHz VOBRA
- Rescue 21 implemented for Sea Area 1, VHF
- COMMCOM Email of July 2015
   <a href="http://wow.uscgaux.info/Uploads-wowll/R-DEPT/COMMCOM-MEMO-SMLL\_SIZE.pdf">http://wow.uscgaux.info/Uploads-wowll/R-DEPT/COMMCOM-MEMO-SMLL\_SIZE.pdf</a>
- Auxiliary TC Concept of Operations released in 2016





# **AUXILIARY COMMUNICATIONS**SYSTEM - 2016 & Beyond

VHF Communications

MF/HF Communications

Station Watch Standing

**AUXMON** 

**SHARES** 

**AUGCOM** 





#### **AUGCOM MISSION**

- Specifics of AUGCOM mission released Mar. 31, 2016
   See
  - //rdept.cgaux.org/documents/Comms/AuxiliaryCommunicationsProgramSOP.pdf
- Directly supports the CG COMMCOM, Sectors and other CG Commands
- Aids response to GMDSS HF maritime services for sea area A-2
- Participants are a select group of qualified Auxiliary HF facilities and designated as AUGCOMSTA

http://rdept.cgaux.org/documents/Comms/AUGCOM/AUGCOM%20Re cruiting%20Statement%20rev926.pdf





#### WHAT IS A FACILITY?

- The Coast Guard counts assets; vessels, aircraft, and radios
- DIRAUX assigns each asset a facility identification number; i.e. OPFAC # for a vessel, or Facility ID for a radio i.e. NF81AA
- The identification number is for record keeping only. You must insert this facility identification number in the box in Section III of the Mission Hour, Form 7030, where it calls for a facility registration number





#### WHAT IS A FACILITY ?(con't)

- DIRAUX approves VHF radio callsigns, which may be assigned by DIRAUX or the District CM Staff
  - E.g. <u>"Auxiliary Boston Radio"</u>, where Boston signifies the location. DIRAUX does not issue Auxiliary HF callsigns
- HF facility owners must forward a copy of their DIRAUX accepted Offer for Use Form 7004 to DVC-RT and BC-RTI for issuance of their <u>HF callsign</u>





#### FIXED LAND FACILITIES

- Fixed land facilities are permanently located in an Auxiliary Communications Unit (ACU) either owned by the Auxiliary or in the residence, or similar building, owned by the radio facility owner
- The location is FIXED and DIRAUX must authorize relocation of the radio facility via Form 7004





## MOBILE RADIO FACILITIES

- Mobile radio facilities are usually mounted in vehicles and can be used while the vehicle is in motion
- Handheld radios are considered to be mobile
- Movement at the direction of the CG requires orders via the AOM process
- They are not to be confused with TRANSPORTABLE radio facilities





#### WHAT IS A TRANSPORTABLE FACILITY?

A station which is transferred to various fixed locations but is <u>not intended to be used while in</u> motion

#### Examples:

- Go-kit
- Trailer
- Boxed radio with accessories





## **TRANSPORTABLE (Cont.)**

- A transportable station is normally configured to permit it to be easily transported and set up for operation in various temporary locations
- A transportable station should be ready for emergency deployment at all times, but is not used on a regular basis and is not used at a permanent location
- Movement at the direction of the CG requires orders via the AOM process





## TRANSPORTABLE FACILITY



An example of a transportable radio facility is shown on the tailgate of the truck





## Mishap Reporting

- ALL mishaps must be reported to the Order Issuing Authority (OIA)
  - With or without injuries
  - Even if there is no damage
- Mishap does not equal punishment
  - Accidents happen
  - Not reporting a mishap DOES lead to punitive action

Note: A Coast Guard mishap is defined as any unplanned, unexpected or undesirable event that causes injury, occupational illness, death, material loss or damage.





## Why Mishap Reporting

- Why should I report every mistake I make even if there is only a minor injury, or negligible damage?
  - Remember Mishap reporting is NOT for assigning blame or punishment
  - It is for education and an overall goal of process improvement
  - Analysis of all mishaps can lead the Auxiliary and Active duty to review training, policies, procedures to make improvements in the safety of all missions in the future
  - Stop the small mistakes and the big mistakes are less likely to happen





#### **AOM Considerations**

- When a Mobile Radio Facility is directed to move, AOM orders are required
- When a Transportable Radio Facility is directed to move, AOM orders are required
- In those situations where an operator (TCO), under orders, travels from home to arrive at a Fixed Land ACU, they are not eligible for AOM travel reimbursement. Depending on their ACU duty hours, relative to meal time, they may request reimbursement for meals through the AOM process





# WHAT IS NOT A TRANSPORTABLE FACILITY?

- A mobile facility where the intention is to be able to move the radio from the vehicle to another site – NO!
- A fixed facility where the intention is to be able to move the radio to another site – NO!
- WHY NOT! This encourages double counting of available radio assets. If I remove the radio from my vehicle then I have reduced the availability of mobiles by one - Ask a COML!





### **PROWORDS - Reminders**

- Remember, ROGER, WILCO, OVER and OUT?
- They are all prowords, but are <u>never</u> used together at the same time
- ROGER means I heard you and understand what you said





## PROWORDS (Cont.)

- All transmissions end with either OVER or OUT or WAIT or WAIT-OUT
- OVER means you are expecting a reply from the other station
- OUT means your exchange is over and no other transmissions will follow





## PROWORDS (Cont.)

- WAIT means everyone should stand by and you will be back in a few seconds
- WAIT-OUT means for everyone to stop transmitting and wait for you to return after a short period of time
- WILCO means you understand and will comply
- Roger, good copy- <u>WRONG!</u> Why?
- What should you say????





#### **MARINE CHANNEL 16**

- Channel <u>16</u> is the international emergency/distress and calling channel
- Always monitor channel 16 unless there is a specific reason to monitor another channel (regatta, SAR case, guard channel, etc.)
- Encourage all boaters to monitor channel
   16 when underway





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#### **Bravo Zulu!**



Thank you for your participation!

We seek your feedback on the content of this presentation.

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