

Knox County Radio Operator Communication Skills Task Book

Name/Call: _____ Date: _____

Unless otherwise noted, maintenance of certification is by regular participation in quarterly exercises and applicable special event support.

Task Description	Date Completed	Verified By
<p>1. Emcomm Overview (All Operators) Understand the role of the radio operator in an EOC, shelter or other location.</p> <ul style="list-style-type: none"> • Demonstrated familiarity with Amateur Radio Service emergency communications procedures and protocols. • Understand the difference between ARES and RACES per FCC rules. • Proper use of phonetics (ITU/ICAO) and prowords. • Working familiarity with directed net operations and the net control function. • Ability to keep accurate records and logs using applicable forms such as the ICS-214. • Ability to properly format an ICS-213 form (send and reply). <p>Suggested study materials: ARRL ARES Field Resources Manual, Maine ARS Emcomm Training, ARRL EC-001 mentored course.</p>		
<p>2. EOC Communications Equipment Familiarization Know the locations and uses of the equipment in the EOC Radio Room. Demonstrate a basic level of operational skills.</p> <ul style="list-style-type: none"> • Use of the D710 (VHF) and (as applicable) FT-100D with tuner, SSB voice mode. • Use of the swap drive and printer. • Open, create & edit documents with Flmsg. • Working knowledge of simplex paths to other stations in the event of repeater failure. 		
<p>3. Communications Trailer Deployment Safe set up of the Knox County Communications Trailer.</p> <ul style="list-style-type: none"> • Understand the trailer's electrical and heating systems and communications equipment. • Proper positioning of the trailer for functionality and safety. • Proper blocking and leveling of the trailer. • Set up and use of the generator(s) and procedures for shut down. • Antenna deployment and cabling. • Stowing of equipment after use and securing the trailer. <p>Certification: Training will be conducted in small group sessions, arranged by the EMA Director.</p>		

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<p>4. Standard Town Equipment Operation Understand the set up procedures for each assigned town station. This includes the radio, computer, power supply and SignalLink interface.</p> <ul style="list-style-type: none"> • Set up of the equipment the station. • Basic use of the TM-D710 per the “quick start” guide. • Knowledge of simplex paths to other stations in the event of repeater failure. • Maintain computer software by performing updates. • Return equipment to “as found” settings and stow. 		
<p>5. Pen Bay Medical Center Station Operation Set up and use of the PBMC radio station. Same as #4 with:</p> <ul style="list-style-type: none"> • Understand hospital-specific procedures and privacy (HIPAA) regulations as applicable. 		
<p>6. Portable Tower Set Up Proper set up and use of the T50-HD (e.g. Kennebec) portable tower, observing all safety precautions.</p> <ul style="list-style-type: none"> • Select safe location for the trailer • Stabilize and level the trailer • Understand wind restrictions and proper guying of the tower. • Proper practice to attach ropes, antennas, etc. to the top of the tower and cable routing. • Tilt and raise tower procedures • Lower and stow <p>Certification: Training will be conducted in small group sessions, arranged by the EMA Director.</p>		
<p>7. SARTrack APRS Demonstrate competence with SARTrack for general tracking and search & rescue (SAR).</p> <ul style="list-style-type: none"> • Configure SARTrack with packet TNC or internet. • Be able to pull up various map types. • Understand how map tiles are saved and can be recalled when operating without an internet connection. • Know how to acquire information about the various objects that appear on the screen and understand the functionality of digipeaters and Igates. • Be able to report positions in terms of latitude/longitude and UTM coordinate systems. • Use of portable trackers (power on/off, verify beaconing, proper positioning). • Set up SARTrack as a temporary fill-in digipeater. <p>Note: If the operator has an APRS passcode, initial training may be accomplished at home with just a PC and internet connection.</p>		

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<p>8. Data Communications with NBEMS Proper use of fldigi, flmsg and flamp per the Maine Digital Communications Guide.</p> <ul style="list-style-type: none"> • Basic file handling skills. • Install, configure and maintain the NBEMS software and set up the soundcard interface to the radio. • Know the correct procedures for VHF and, as applicable, HF use. • Be able to compose & send ICS and radiogram forms and spreadsheets using Flmsg. • Know the proper use of Flamp including preparing files for transmission, setting block sizes and repeats, requesting block fills, sending fills, saving and displaying received files. • Know under what conditions file compression would be desirable. • Regular participation in NBEMS nets and exercises to gain and maintain proficiency. <p>Note: This requires on-air training. Training nets will be scheduled for operator certification.</p>		
<p>9. Data Communications with Winlink Express Proper use of Winlink Express for sending/receiving messages via the Winlink radio-email system and for transferring messages via bulletin board systems. Primary modes include UHF packet and HF Winmor and Pactor. Supplemental mode is telnet.</p> <ul style="list-style-type: none"> • Basic file handling skills. • Install, configure and maintain the Winlink Express software and set up the soundcard and/or TNC interfaces to the radios. • Use of call signs, tactical calls and SSIDs. • Use and limitations of the channel selection feature (HF). • Be able to connect to one or more RMS gateways using available modes. • Maintain a valid personal Winlink address. • Understand the proper use of relays through packet nodes where required. • Be able to send a message with a Flmsg file attached. <p>Note: A web page with exercises is available. All elements with the exception of on-air practice may be completed with just a Windows PC and an internet connection.</p> <p>Certification: Participate in the weekly Winlink message exercise program and complete 8 exercises over the course of 3 months. Maintenance of certification requires continued participation in the weekly message exercise. Any complete lapse in the weekly exercise participation over any subsequent 3 month period will require recertification.</p>		

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<p>10. Procedures for Passing Formal Traffic Understand the proper composition and voicing of radiograms and other formal messages using standardized formatting, phonetics and prowords as defined by the RRI Traffic Operations Manual.</p> <ul style="list-style-type: none"> • Knowledge of basic formal message procedures. • Practice voicing and the reception of formal traffic during practice sessions on the Pre-Chimes Traffic Net. • Understand the importance of signatures and the legal issues associated with handling 3rd party Health and Welfare traffic. <p>Certification: After initial training, complete 2 message cycles (compose, send, receive reply) per month over the course of 3 months. Messages must be through traffic, passed to a NTS or RRI affiliated net.</p> <p>Maintenance of certification: Complete at least 1 message cycle per month on an ongoing basis.</p> <p>Note: An operator can also be designated as a liaison. This requires that the operator be active in one or more traffic nets, handle traffic on a regular basis and have a recognized appointment such as ARRL Official Relay Station (ORS), Digital Relay Station (DRS), RRI Digital Traffic Station (DTS), etc.</p>		