

# REGION TEN ECOM ON AIR TRAINING TIPS

## PART 2 OF 2

### LESSON

### SUBJECT

TWELVE	ECOM NET ACTIVATION
THIRTEEN	ECOM NET ALERT MESSAGES
FOURTEEN	ECOM NET ALERT MESSAGE FORMAT
FIFTEEN	ECOM IMPLEMENTATION MESSAGE FORMAT
SIXTEEN	ECOM SITUATION REPORTS
SEVENTEEN	ECOM MESSAGE HANDLING TIPS
EIGHTEEN	FILING SHARES AND OTHER MARS MESSAGES
NINETEEN	FILING AMATEUR MESSAGES INTO MARS
TWENTY	NMCM AND NIMS/ICS/NRP INFO
TWENTY ONE	USE OF OTHER DIGITAL MODES
TWENTY TWO	PUTTING IT ALL TOGETHER

**LESSON TWELVE ECOM TRAINING SERIES  
BY NNN0EHG/NNN0ASO TWO**

**FOR THIS LESSON WE WILL BE COVERING ECOM NET ACTIVATION**

**YOU SHOULD HAVE THE FOLLOWING IN FRONT OF YOU**

**NTP8(D),  
PAOG ANNEX C,  
YOUR STATE ECOM PLAN  
PAC AREA TOOL KIT PAGES 12 & 15.**

**Here are some tips on how to call any emergency net as NCS.**

**1. Call the ECOM net and keep a log using this net call up script:**

**0abE 0abE (net call) THIS IS NNN0XXX OVER  
(a = state / b = number of net / ie: 0W1E)  
(Abbreviated call signs are NOT allowed)**

**2. Respond to any emergency calls stations make.**

**3. Designate a message handling station to: (via SCD, SSB or email)**

- A. Send emergency messages**
- B. File an implementation message**
- C. File any EEI messages**
- D. File any SITREP messages**

**4. Remain as NCS until relieved**

**5. File closing reports: NET REPORTS/FINAL SITREP REPORT**

**6. Depending on the type of emergency communications service requested,  
initial attempts for Region/State ECOM nets shall be on local state traffic net  
frequencies.**

**THIS COMPLETES THE MATERIAL FOR LESSON TWELVE OUR NEXT LESSON SUBJECT  
WILL BE ON ECOM NET ALERT MESSAGES**

**LESSON THIRTEEN ECOM TRAINING SERIES  
BY NNN0EHG/NNN0ASO TWO**

**FOR THIS LESSON WE WILL BE COVERING ECOM NET ALERT MESSAGES**

**YOU SHOULD HAVE THE FOLLOWING IN FRONT OF YOU**

**NTP8(D),  
PAOG ANNEX C,  
YOUR STATE ECOM PLAN  
PAC AREA TOOL KIT PAGES 6 & 7**

**ALERT NOTIFICATION**

1. In some cases, i.e. hurricane, ice storm warning, an impending Tsunami, forest fires approaching communities, etc.) It is possible to alert Area, Region & State ECOM members in advance of a pending disaster and the possibility that MARS may be activated. For this purpose an ALERT message may be sent by the State Director, State ECOM Assistant, Region Director or ECOM Assistant to officially place MARS members on an alert status. Members should monitor the designated HF or VHF frequencies to await an official notice of activation (Remember, WE CANNOT SELF ACTIVATE).

2. Conditions and actions to be taken are as follows:

**A. COMCON III**

**Description: An emergency situation is expected within 48 hours.**

**Action: Alert NMC MARS stations to monitor primary frequency.**

**Take precautions, test emergency power, locate any essential items, continue normal routines.**

**B. COMCON II**

**Description: An emergency situation is anticipated within 24 hrs.**

**Action: Take measures to activate on short notice. Curtail routine.**

**C. COMCON I**

**Description: An emergency situation is imminent.**

**Action: Suspend all normal operations, activate emergency networks as necessary.**

**D. COMCON 0**

**Description: An emergency situation exists.**

**Action required: Identical to COMCON I.**

3. The Alert messages will be passed on to the TRAFFIC REPS for distribution on the nets (unless nets have been suspended) and repeated until an "Alert Cancellation" message is received.

4. Alert notifications can be in conjunction with, not replace EEI msgs.

**KEY POINTS TO REMEMBER**

**#1 AN ECOM NET BE ESTABLISHED FOR COMCON III WHEN AN EMERGENCY SITUATION IS EXPECTED TO DEVELOP WITHIN 48 HOURS**

**#2 AN ECOM NET BE ESTABLISHED FOR COMCON II WHEN AN EMERGENCY SITUATION IS EXPECTED TO DEVELOP WITHIN 24 HOURS.**

**#3 AN ECOM NET BE ESTABLISHED FOR COMCON I WHEN AN EMERGENCY SITUATION IS EXPECTED IS IMMINENT.**

**#4 AN ECOM NET BE ESTABLISHED FOR COMCON 0 WHEN AN EMERGENCY SITUATION ALREADY EXISTS.**

**#5 THE COMCON LEVEL CAN ONLY BE CHANGED BY A DIRECTOR OR THEIR DESIGNATED ASSISTANT EVEN IF MARS ASSISTANCE HAS BEEN REQUESTED.**

**THIS COMPLETES THE MATERIAL FOR LESSON THIRTEEN OUR NEXT LESSON SUBJECT WILL BE ON ECOM ALERT MESSAGE FORMAT AND USE**

**LESSON FOURTEEN ECOM TRAINING SERIES  
BY NNN0EHG/NNN0ASO TWO**

**FOR THIS LESSON WE WILL BE COVERING THE ECOM NET ALERT MESSAGE FORMAT**

**YOU SHOULD HAVE THE FOLLOWING IN FRONT OF YOU**

**NTP8(D),  
PAOG ANNEX C,  
YOUR STATE ECOM PLAN  
PAC AREA TOOL KIT PAGES 12 & 15**

**ALERT MESSAGE FORMAT:**

**O Z MO YEAR (DTG)  
FM NNN0XXX XX (STATION INITIATING ACTION)(ST)  
TO NNN0GXX XX (STATE DIRECTOR)(ST)  
NNN0GXX ONE XX (STATE ASST DIR) (ST)  
NNN0GXX TWO XX (STATE ECOM ASSISTANT )(ST)  
INFO NNN0ASE SCA  
NNN0ASE ONE ST (ST)  
NNN0ASE TWO ST (ST)  
NNN0ASX ST (REGION DIRECTOR)(ST)  
NNN0ASX ONE ST (REGION ASST DIR)(ST)  
NNN0ASX TWO ST (REGION ECOM ASSISTANT)(ST)  
BT  
UNCLAS  
SUBJ: ALERT NOTIFICATION  
1. (SITUATION-CITE ALERTING CONDITION I, II, III)  
2. (AREAS AFFECTED)  
3. (ANTICIPATED PERIOD OF TIME)  
BT  
NNNN**

**KEY POINTS TO REMEMBER**

**#1 YOU SEND AN ALERT MESSAGE VIA THE QUICKEST WAY POSSIBLE PLUS EMAIL AND MARS WL2K.**

**#2 THE ALERT COMCON CHANGE MESSAGE READ ON A ON ALL NETS UNTIL IT IS CANCELLED OR CHANGED.**

**THIS COMPLETES THE MATERIAL FOR LESSON FOURTEEN OUR NEXT LESSON SUBJECT WILL BE ON ECOM IMPLEMENTATION MESSAGES FORMAT AND USE**

**LESSON FIFTEEN ECOM TRAINING  
BY NNN0EHG/NNN0ASO TWO**

**FOR THIS LESSON WE WILL BE COVERING THE ECOM IMPLEMENTATION MESSAGE  
FORMAT**

**YOU SHOULD HAVE THE FOLLOWING IN FRONT OF YOU  
NTP8(D),  
PAOG ANNEX C,  
YOUR STATE ECOM PLAN  
PAC AREA TOOL KIT PAGES 16.**

**Upon Implementation of any portion of the ECOM plan by a MARS member.  
The "Implementation Message" must be sent via the quickest means available  
and as an MARS WL2K message. The FORMAT is:**

**O Z YEAR (DTG)  
FM NNN0(CALL) (ST) (station initiating action)  
TO NNN0ASA VA  
NNN0ASZ GA  
NNN0ASE SCA  
NNN0ASE ONE AZ  
NNN0ASE TWO XX (ST)  
NNN0ASX XX (Region Director)(ST)  
NNN0ASX ONE XX (Region Asst Director) (ST)  
NNN0ASX TWO XX (Region Two) (ST)  
NNN0GXX XX (State Director)(ST)  
NNN0GXX TWP XX (State Two)(ST)  
BT  
UNCLAS  
SUBJ: EMERG COMM IMPLEMENTATION  
1. CIRCUMSTANCES REQUIRING IMPLEMENTATION)  
2. MARS SERVICES REQUESTED, YES/NO.  
(IF YES, NAME, TITLE, AGENCY, PHONE)  
3. ADDITIONAL COMMUNICATION SUPPORT REQUIRED, YES/NO.  
(IF YES, WHEN AND TO WHAT EXTENT)  
A. STATE - ACTION TO BE TAKEN BY STATE DIRECTOR  
B. REGION - ACTION TO BE TAKEN BY DIRECTOR  
C. OUTSIDE REGION - ACTION TO BE TAKEN BY AREA OR CHIEF, NAVMARCORMARS  
BT  
NNNN**

**Note: Although not a requirement, it is a good idea to notify  
adjacent states They may be of assistance in providing relays.**

**KEY POINTS TO REMEMBER**

**#1 THE STATION ACTIVATING THE ECOM PLAN OR NET SENDS THE  
IMPLEMENTATION MESSAGE VIA THE QUICKEST MEANS AVAILABLE PLUS MARS  
WL2K.**

**#2 AN IMPLEMENTATION MESSAGE DOES NOT REPLACE AN EEI OR SITREP  
BECAUSE EACH ARE DIFFERENT MESSAGES WITH DIFFERENT PURPOSES.  
THIS COMPLETES THE MATERIAL FOR LESSON FIFTEEN OUR NEXT LESSON SUBJECT  
WILL BE ON ECOM SITREP REPORTS**

**LESSON SIXTEEN ECOM TRAINING SERIES  
BY NNN0EHG/NNN0ASO TWO**

**FOR THIS LESSON WE WILL BE COVERING ECOM SITUATION REPORTS**

**YOU SHOULD HAVE THE FOLLOWING IN FRONT OF YOU**

**NTP8(D),  
PAOG ANNEX C,  
YOUR STATE ECOM PLAN  
PAC AREA TOOL KIT PAGE 17**

**Situation Reports (SITREPS)**

**During the emergency, Situation Reports (SITREPS) shall be sent by the on-scene MARS station every six hours or more frequently via MARS WL2K.**

**The last SITREP will be the FINAL SITREP. Each paragraph will contain the appropriate information or one of the following terms:**

**NO CHANGE – Indicates same as previously reported.**

**NEGATIVE – Indicates not applicable/being used or nothing to report.**

**NOT AVAILABLE – Indicates information not available at present.**

**The SITREP message format is:**

**P 123456Z MON YEAR (DTG)  
FM NNN0XXX XX (STATION INITIATING ACTION)(ST)  
TO NNN0GXX XX (STATE DIRECTOR)(ST)  
NNN0ASX XX (REGION DIRECTOR)(ST)  
NNN0ASX ONE XX (REGION ASST DIRECTOR)(XX)  
NNN0ASE SCA (AREA DIRIRECTOR)  
NNN0ASE ONE AZ (AREA ASST DIRECTOR)  
INFO NNN0GXX TWO XX (STATE TWO)(ST)  
NNN0ASE TWO ST (ST)  
NNN0ASX TWO ST (REGION TWO)(ST)**

**BT**

**UNCLAS**

**SUBJ: SITREP ONE (OR, TWO, THREE, ETC.)**

- 1. (BRIEF SUMMARY OF SITUATION IN DISASTER AREA)**
- 2. (DESIGNATOR OF ECOM NET AND NUMBER OF STATIONS PARTICIPATING)**
- 3. (BRIEF ADVISORY INFO, RECOMMENDATIONS, NEEDS, ETC.)**
- 4. (PROGNOSIS FOR IMMEDIATE FUTURE)**
- 5. (OTHER PERTINENT INFO: PROBLEMS, EQUIPMENT PERFORMANCE ETC.)**

**BT**

**NNNN**

**KEY POINTS TO REMEMBER**

**#1 THE DIFFERENCE BETWEEN EEI UPDATES AND SITREP MESSAGES IS THAT AN EEI UPDATE ADVISES OF THE STATUS OF THE EMERGENCY. A SITREP ADVISES ONLY MARS ACTIVITY DURING THE EMERGENCY. THEY ARE CONSOLIDATED AND**

**FORWARDED TO CHIEF MARS BY THE AREA/REGION DIRECTOR. IN SHORT THEY ARE VERY DIFFERENT**

**THIS COMPLETES THE MATERIAL FOR LESSON SIXTEEN OUR NEXT LESSON SUBJECT WILL BE ON ECOM MESSAGE HANDLING TIPS**

**LESSON SEVENTEEN ECOM DTRAINING SERIES  
BY NNN0EHG/NNN0ASO TWO**

**FOR THIS LESSON WE WILL BE STUDYING ECOM MESSAGE HANDLING TIPS**

**YOU SHOULD HAVE THE FOLLOWING IN FRONT OF YOU**

**NTP8(D),  
PAOG ANNEX C,  
YOUR STATE ECOM PLAN,**

**1. All Ecom messages are to be sent via MARS WL2K as well as being forwarded to the PA1E NCS directly or via relay as soon as possible for use on the PA1E net and in the MT63 BEACON alerts.**

**2. All ECOM messages are sent via MARS WL2K.**

**3 For an AFLOAT message:**

**A. Go to navymars.org web site, select: SEND A MARSGRAM / ON BOARD A SHIP AND FILL OUT THE FORM**

**-- OR --**

**B. Via MARS WL2K**

**C. Send: 1R USS ABRAHAM LINCOLN (SHIPS NAME)**

**D. Send: RR NOASE  
DE .... (ETC)**

**5 Message Precedence and Time held Reference**

**IMMEDIATE SY 1O 30 MIN - 3 HRS (1 OSCAR)  
PRIORITY SX 1P 18 - 24 HRS  
ROUTINE ST 1R 24 - 48 HRS**

**6 Sending an ECOM message via a TRAFFIC NET**

**Check in with: I LIST ONE (PRECEDENCE) MULTI AND OUTBOUND**

**Indicating you have a message for multiple addee's in your Region and for members outside your Region.**

**KEY POINTS TO REMEMBER**

**#1 THE NET TRAFFIC REP HANDLES ALL OUTGOING TRAFFIC ON A NET UNLESS ANOTHER STATION IS ASSIGNED THE DUTY BY THE NCS.**

**THIS COMPLETES THE MATERIAL FOR LESSON SEVENTEEN OUR NEXT LESSON SUBJECT WILL BE ON ECOM MESSAGE HANDLING TIPS**

**LESSON EIGHTEEN ECOM TRAINING SERIES  
BY NNN0EHG/NNN0ASO TWO**

**FOR THIS LESSON WE WILL BE STUDYING FILING SHARES AND OTHER MARS  
MESSAGES**

**YOU SHOULD HAVE THE FOLLOWING IN FRONT OF YOU**

**NTP8(D),  
PAOG ANNEX C,  
YOUR STATE ECOM PLAN,  
PAC AREA TOOL KIT, PAGE 17 & 26**

**1. To file a SHARES message on a MARS nets.**

**A. Accept the SHARES message as sent to you.  
(SAMPLE SHARES MESSAGE AS RECEIVED)**

**R 131628Z MAR 2004  
FM JOE BANK FAA TOWN VA 757-887-4494  
TO JOHN DOE FBI SHAWNEE KS 800-800-8354  
INFO JANE DOE FBI OKLAHOMA CITY OK 800-800-7900  
BT  
MESSAGE TEXT  
ETC.**

**B. Add 'DE' line, ZYJ and state routing indicators and enter into the MARS WL2K**

**C. SAMPLE MESSAGE AS FORMATTED FOR ENTRY INTO MARS WL2K**

**DE NNN0ASA 124  
R 131628Z MAR 2004 ZYJ  
FM JOE BANK FAA TOWN VA 757-887-4494  
TO NOGBD/JOHN DOE FBI SHAWNEE KS 800-800-8354 (NOGBD = ST Routing Ind)  
INFO NOGBD/JANE DOE FBI OKLAHOMA CITY OK 800-800-7900  
BT  
MESSAGE TEXT  
ETC.**

**Note: 'ZYJ' is a special 'Z' signal meaning, 'THIS IS A SHARES MESSAGE'**

**2. Army/Air Force MARS to NMC MARS forward as received except for:**

- A. Delete "GROUP COUNT"**
- B. Add "UNCLAS"**

**3. For NMC MARS to Army/Air Force MARS, forward as received, they will alter  
it as needed for their system.**

## **KEY POINTS TO REMEMBER**

**#1 WHEN WE SEND A NMCM MESSAGE TO AN ARMY MARS STATION WE DO NOT CHANGE ANYTHING. THEY WILL MAKE ANY ALTERATIONS NECESSARY SO IT WILL FLOW SMOOTHLY THRU THEIR MESSAGE SYSTEM.**

**THIS COMPLETES THE MATERIAL FOR LESSON EIGHTEEN OUR NEXT LESSON SUBJECT WILL BE ON FILING AMATEUR MESSAGES INTO**

**LESSON NINETEEN ECOM TRAINING SERIES  
BY NNN0EHG/NNN0ASO TWO**

**FOR THIS LESSON WE WILL BE COVERING FILING AMATEUR MESSAGES INTO MARS**

**YOU SHOULD HAVE THE FOLLOWING IN FRONT OF YOU**

**NTP8(D),  
PAOG ANNEX C,  
YOUR STATE ECOM PLAN,  
PAC AREA TOOL KIT, PAGE 17**

**AMATEUR RADIO TO MARS TRAFFIC REFILE**

**A. Sample message as received:**

**NR56 ROUTINE W4SSN CK7 NORFOLK VA 2100Z MAR 15  
WELDON RYE RMCS USN  
OPERATIONS DIV NAVCOMMSTA SAN FRANCISCO  
STOCKTON CA 95283 286 262 0670 BT  
YOUR MESSAGE RECEIVED X SEE YOU SUNDAY BT HAROLD**

**B. Sample message as formatted for MARS MARS WL2K:**

**DE NNN0(YR CALL)(SERIAL #)  
R 152100Z MAR 1997  
FM NNN0(YR CALL) (ST)  
TO RMCS WELDON RYE USN  
OPERATIONS DIV NAVCOMMSTA SFRAN  
STOCKTON CA 95283  
286-262-0670  
BT  
UNCLAS  
1. 56 R W4SSN 7 NORFOLK VA 2100Z MAR 15  
2. YOUR MESSAGE RECEIVED X SEE YOU SUNDAY  
3. HARLOLD SENDS  
BT  
NNNN  
(CR)**

**C. To reformat a Amateur Radio from a MARS message back to Amateur Radio do the following:**

**Put para 1, in as the "TOP HEADER LINE", put the "TO" lines in as the "TO ADDRESS"**

**Put para 2, in as the message TEXT, add BT followed by para 3.  
Send the message via whatever Amateur Radio channels available.**

**Do NOT mess with any Amateur Radio handling instructions, change any precedence information or add any punctuation.**

## **KEY POINTS TO REMEMBER**

**# 1 FOLLOWING THE NNNN, THE (CR) INDICATES CARRIAGE RETURN OR ENTER ON YOUR KEYBOARD.**

**# 2 WE CAN SEND AMATEUR RADIO MESSAGES TO A CANADIAN OR SOUTH AMERICAN ADDRESS BUT ONLY THRU AMATEUR RADIO CIRCUITS.**

**# 3 WE DO NOT NEED TO KNOW WHAT ALL THE HEADER LINE STUFF IS IN AN ARRL MESSAGE. SEND IT AS RECEIVED.**

**THIS COMPLETES THE MATERIAL FOR LESSON NINETEEN OUR NEXT LESSON SUBJECT WILL BE ON NMCM AND NIMS/ICS/NRP INFO**

**LESSON TWENTY ECOM TRAINING SERIES  
BY NNN0EHG/NNN0ASO TWO**

**FOR THIS LESSON WE WILL BE COVERING NMCM AND NIMS/ICS/NRP INFO**

**YOU SHOULD HAVE THE FOLLOWING IN FRONT OF YOU  
PAC AREA TOOL KIT, PAGE 25**

**MARS AND THE INCIDENT COMMAND SYSTEM (ICS) NIMS/NRP**

- 1. All 3 MARS services have decided to make a change in the requirements for holding a DOD ID Card with Field Certification.**
- 2. Completion of FEMA on-line courses IS-100, IS-200, IS-700 and IS-800, plus being identified as deployable to support one or more disaster support agencies. The 3 MARS Chiefs will notify supported agencies the holders have met above requirements and are allowed into Disaster Areas to provide communication support. For the new card, complete the above courses and return your course certificates and current DOD card to the State Director.**

**FEMA offers the free online courses at:**

**<http://training.fema.gov/EMIWeb/IS/crslist.asp>**

- 3. All DHS, ARES and emergency support agency units will operate under the INCIDENT COMMAND SYSTEM (ICS). They have set designations for structure where their management Commands and Approves the Incident Action Plan and Resources: (briefly)**

**OPERATIONS: uses the resources**

**PLANNING: tracks these resources**

**LOGISTICS: obtains more resources**

**FINANCE: pays for these resources**

**We fit into the LOGISTICS SECTION where the Incident Communications Manager is responsible to receive and transmit messages. Our position is to relay traffic between their message center and our MARS WL2K system. Each situation is going to be different. Plan ahead with your 'CUSTOMER' agency to fit into their plan.**

- 4. Be careful that we do not commit to support that we won't be able to fulfill. Each member needs to evaluate their responsibilities and establish clear understandings of what can be expected by their superiors for each part of their "Emergency Service Commitments".**
- 5. Response happens on Field Local, Regional and National Levels**
- 6. Here is a list of acronyms you will need to know:**

**NIMS – NATIONAL INCIDENT MANAGEMENT SYSTEM**

**NRP – NATIONAL RESPONSE PLAN**

**DHS – DEPT OF HOMELAND SECURITY**

**ICS – INCIDENT COMMAND SYSTEM**

**ICP – INCIDENT COMMAND POST**

**EOC – EMERGENCY OPERATIONS CENTER**

**IAC – INCIDENT ADVISORY COUNCIL  
JFO – JOINT FIELD OFFICE  
JOC – JOINT OPERATIONS CENTER  
FCO – FEDERAL COORDINATING OFFICER  
ESF – EMERGENCY SUPPORT FUNCTION  
NOC – NATIONAL OPERATIONS CENTER**

**KEY POINTS TO REMEMBER**

**# 1 IF YOUR ARE NOT GOING TO COMMIT TO FIELD OPERATIONS YOU DO STILL NEED TO COMPLETE THE NIMS COURSE WORK BECAUSE WE ALL WILL NEED TO KNOW HOW AND WHY THE SYSTEM WORKS AND HOW NMCM FITS INTO IT.**

**#2 ICS IN EFFECT WHEN JUST ONE POLICE OFFICER MAKES A TRAFFIC STOP. IN FACT IT IS USED BY ALL PUBLIC SERVICE AGENCIES BECAUSE IT CAN BE EASILY EXPANDED FROM A ONE PERSON INCIDENT TO ONE THAT INCOPRORATES MANY AGENCIES.**

**#3 WHEN THERE ARE MULTIPLE AGENCIES INVOLVED IN AN INCIDENT THEY SET UP AND OPERATE AS A JOINT FIELD OFFICE.**

**THIS COMPLETES THE MATERIAL FOR LESSON TWENTY OUR NEXT LESSON SUBJECT WILL BE ON OTHER DIGITAL MODES**

**LESSON TWENTY ONE ECOM TRAINING SERIES  
BY NNN0EHG/NNN0ASO TWO**

**FOR THIS LESSON WE WILL BE COVERING USE OF OTHER DIGITAL MODES**

**YOU SHOULD HAVE THE FOLLOWING IN FRONT OF YOU**

**NTP8(D),**

**NMCM DIGITAL TRAINING PROCEDURES**

**(found on the National NMCM web page – TRAINING – DIGITAL MODES TRAINING)**

**It is not the purpose of Ecom training to get into depth of the How's and Why's of Digital operations but here are some basic info reference ideas and links. Several of our 'Partner' agencies use AMTOR and RTTY for message sending so we should be ready and capable to work those modes. The important part is that we need to be capable "All Mode Operators" so we can be of MAXIMUM support to those in need.**

**Most of the common TEXT LINES used in all digital modes were discussed in LESSON SEVEN. You can go there for a quick review.**

**For easy to use instructions of digital Sound Card communications refer to National Home web page for: Training, Digital Modes, Digital Modes II**

**SOUND CARD basic Offset = For all digital HF modes use -1.5 KHZ offset from the assigned/matrix frequency**

**For assistance with TNC (Terminal Node Command) Digital modes (RTTY/Amtor ARQ (Automatic Repeat Query/mode A) and Pactor ARQ) contact your State/Region Six.**

**Basic offset shift you use for digital modes (from frequency matrix)**

**PK-232 TNC = For all digital AFSK HF modes use -2.21KHZ offset from the assigned/matrix frequency (- .71 from window freq)**

**KANTRONIC TNC = For all digital HF modes set SHIFT = modem, MARK = 1400, SPACE = 1600, and use -1.5KHZ offset**

**Note: If working on LSB (ie: Army MARS) digital frequency, reverse the offsets.**

**One good choice of several FREEWARE TNC programs is XP Ware for Windows. It has good documents that explain how to set up and operate plus is easy to use for both Kantronic & AEA tnc's. Found at <http://glaswerks.com/xpware/>**

**KEY POINTS TO REMEMBER**

**#1 THE SAME TEXT LINES, Q & Z CODES ARE USED FOR ALL DIGITAL MODES.**

**THIS COMPLETES THE MATERIAL FOR LESSON TWENTY ONE OUR NEXT LESSON SUBJECT WILL BE ON PUTTING IT ALL TOGETHER**

**LESSON TWENTY TWO ECOM TRAINING SERIES  
BY NNN0EHG/NNN0ASO TWO**

**FOR THIS LESSON WE WILL BE COVERING PUTTING IT ALL TOGETHER.**

**YOU SHOULD HAVE THE FOLLOWING IN FRONT OF YOU**

**NTP8(D),  
PAOG,  
STATE OP GUIDE,  
PAC AREA TOOL KIT**

**During the course of these Twenty One Lessons, we have covered all the aspects of Emergency Communications needed to be a skilled, competent, confident operator. We have covered:**

**Personal preparations for emergencies.  
The contents of your area tool kit.  
Items to include in a portable radio station.  
What to do when “it” happens.  
Our ART/SAT/Support teams and how you fit in.  
Some basic digital operations, Q & Z signals, sample text lines.  
The parts of an EEI message, how to format and send one.  
How and where to call and manage an ECOM net.  
What the “Alert Message” is plus how and who sends it.  
Filing an “Implementation Message”.  
Sending SITREPS.  
Tips on message handling.  
How to file messages from SHARES, other MARS services and ARRL.  
Where we fit into the Incident Command System (ICS).  
FEMA courses available to members.  
Getting digital active.**

**We remind you that this information is of NO value if you do not keep it fresh and up-to-date. ECOM is an ever changing issue and all your input has real meaning.**

**Now, putting it all together is what NNN0DOG has done in the following story. Listen to it, apply these concepts to your situation, but also look for where there are missing parts of the ECOM Plan.**

**It was a dark and stormy night !  
THE STORY OF A DISASTER  
By NNN0ASO TWO**

**IT WAS A DARK AND STORMY NIGHT for Duke/NNN0DOG who had enjoyed a picnic in his backyard after just that afternoon notifying his State Director, Ecom assistant and ART Captain that he had acquired a new portable generator for his station. His local Red Cross office called to ask if he was available to assist with shelter communications if predicted high winds developed.**

**He said he probably could but needed authorization from his superiors. He then called his ART Captain informing him of the request. This was the fastest way available for him to notify his chain of command. He also wrote and emailed an EEI listing the facts and an Implementation message waiting an hour for the evening traffic net so the Traffic Rep could post them in the Mars Data System.**

When word of this reached the State Ecom assistant, who upon pre-done instructions of the State Director sent out a COMCON alert message per the State Ecom Plan and following the local MOU with the Red Cross, instructed Duke's ART Captain to activate his ART Team via their phone tree. Each member grabbed their 72 hr kit and radio station suitcase then headed out for the Shelter, keeping in touch with each other on the MARS 2 meter repeater frequency. Upon arriving they checked in with the Shelter manager, established their station, checked into the State Ecom net and began operations.

Meanwhile the State Ecom Assistant called one of the other ART Captains asking him to open a State ecom net on their daily traffic net frequency and notified the NCS of the PA1E net so they could forward stations checking in there to the State net.

While Duke was working at the ART station later that evening winds did reach hurricane levels causing much damage in the region so he issued several SITREP updates. With the outlook being for continued operations the State Ecom assistant recruited shift change operators for the ART station to relieve the current crew as well as adding some improved equipment to facilitate extended operations.

Three days later when events resolved somewhat, regular communications came back on line, the ART station was closed and they checked out with the Shelter Manager. After COMCON conditions were canceled, the State Ecom net was closed, a final SITREP was composed by the State Director and sent to the Region Director. Duke's ART Captain monitored the return of all staff on their trip home, after action notes were compiled for future improvements and the DARK AND STORMY NIGHT came to a tired but satisfying end.

## **KEY POINTS TO REMEMBER**

**#1 DID YOU NOTICE THAT IN THE STORY THEY SENT NO EEI UPDATES. REMEMBER THEM FROM LESSON SIXTEEN ? THEY DEAL WITH THE STATUS OF THE EMERGENCY. ALL THAT WAS SENT WERE SITREPS DEALING WITH THE MARS MEMBERS ACTIVITY DURING THE EMERGENCY.**

**FOR FURTHER ECOM TRAINING TAKE A LOOK AT "Essentials for ECOM Training and Staff Correspondence Course" FOUND On the National NMC MARS home web page Training Table of Contents Official Correspondence Courses**

**THIS COMPLETES THE ECOM TRAINING SERIES. HOWEVER YOU DO NEED TO TAKE THE OPEN BOOK FINAL TEST IN LESSON TWENTY THREE FOUND ON THE PACIFIC AREA WEB PAGE (ECOM – ECOM TRAINING – FINAL TEST) AND SEND IT TO NNN0ASE TWO TO RECEIVE CREDIT FOR YOUR TRAINING AND A CERTIFICATE FOR YOUR WORK.**

**THIS COMPLETES THE MATERIAL FOR THE ECOM TRAINING SERIES. IF YOU HAVE ANY QUESTIONS PLEASE CONTACT YOUR STATE FOUR OR TWO. GOOD LUCK ON YOUR FINAL TEST**