# Region 9 Army MARS Training Topics for "phone bridge" use

**TRAINING TOPIC  –**  Off-Line Encryption

**LESSON INTENT –**  Review the step by step process of changing "Plaintext to Ciphertext" and "Ciphertext" to Plaintext" message using Station Manager

**EXPECTED TIME TO DELIVER –** 45 Min.

## Steps in performing Offline encryption in Station Manager

1. Create an ACP message as though you were going to send it by radio.
2. Select "Codress"
3. Select "Gen Text to Encrypt"
4. You will See the message "The CODRESS message text to off-line encode has been copied to the system clipboard" click OK.
5. Select Open tab and and select "off-line encryption"
6. Click on Accept
7. In the new window select the appropriate Part File  "Part 1File  ZYG - Part 2 File ZYG"
8. Click on "Process Keys"
6. Select the appropriate Key Index "April = 4"
7. Select the "Plaintext" Window and right click and select "Past"
8. You will see the complete message from you copy of the message in step 1.
9. Delete all of the lower part of the message up to and including the BT.
10. Scroll up tho the header and delete all from the top of the message to DTG
11. Select the "Encrypt Plain Text into "Ciphertext" box.
12. You will see the "Ciphertext" in the lower box & the group count will be in the program status window.
13. Select and copy the "Ciphertext" and past it into the body of you message you first created.
14. Again make sure the first 8 char group and the last 8 char group are the same.
15. Copy the group count in the Program status window to FL 10 "Group Count" Box
16. Next select "Send Now to PT" and your are on your way to sending a "Coderess Message".

Note: Make sure that security Warning was changed to ZNR UUUUU

# Steps in performing Offline Decryption in Station Manager

1.  In the Action selection  above the receive window pull down the menus and select "Copy RX to clipboard"
2.  In the Open selection above the receive window pull down the "Off-line Encryption"
3.  in the Off-Line "Encryption" window select "Accept"
4.  In the new window select the appropriate Part File  "Part 1File  ZYG - Part 2 File ZYG"
5.  Select "Process Keys"
6.  Select the appropriate Key Index "" April = 4"
7.  Select the "Ciphertext" Window and right click and select "Past"
8.  You will see the complete message from you copy of the message in step 1.
9.  Delete all of the lower part of the message up to and including the BT.
10. Scroll up and find and page breaks and delete the to bring the "Ciphertext"  on the bottom up to bottom of the    "Ciphertxt" on top.
11. Scroll up tho the header and delete all from the top of the message to BT.
12. Make sure that the first 8 char block is the same as the last 8 char block.
13. Select the "Decrypt Ciphertext into Plaintext" box.  If all is correct you will see "Plaintext" in the upper box.

Note: if your RX text has missing char or bad chars you can replace the whole block with 8 X'es (XXXXXXX) and this will allow you to recover the message.