

# **Region 9 Army MARS Training Topic**

## **TRAINING TOPIC – Message Machine**

**OVERVIEW** - Message Machine (MM) is a tool for the MARS Operator who handles digital ACP-126 and ACP-127 messages.

**LESSON INTENT** – The intent of this lesson is to go through a “Basic Set Up Walk Through” and introduction to the Message Machine Operator Instruction Manual.

**REFERENCES – MESSAGE MACHINE - OPERATOR INSTRUCTION MANUAL UPDATED - 4 JUNE 2017**

## **PURPOSE**

- Message Machine (MM) is a tool for the MARS Operator who handles digital ACP-126 and ACP-127 messages.
- It is developed in Qt ([HTTP://www.qt.io](http://www.qt.io)), a cross platform application development tool, and compiled for Windows (32bit), Ubuntu (32 and 64bit), and MAC OS X (Mountain Lion 64bit). While Qt can also create Android and other mobile platform applications, MM is not designed to run on those platforms.
- While all the functions of MM can be performed manually using any methods the operator desires, having the ability to accomplish all the procedures in message handling in one application enhances efficiency.
- The primary use for MM is as a message digest used for message handling. Using MM the operator immediately visualizes message traffic in the pending action queue that is awaiting processing. The operator can take a cursory glance at the list of messages and decide if he needs to perform some action on the messages.
- Once the determination has been made that the operator does need to act on the message, MM can be used to perform those actions. Such actions may be to fix errors in a message and re-process it in the digest, re-transmit the message to another station, or if the message is addressed to the operator themselves to decode the message and/or read it.
- Once the operator has completed his actions on the message, or if the operator has no action to take on the message, the message can be marked as processed and it is no longer visible on the pending action queue.
- MM can also perform SQL like searches on the messages in the database. This makes finding messages painless and fast. The operator can almost instantly know if they have received a message already.
- MM includes a Machine Mode that makes operation of the MARS Messaging Station semi-automated. Remote stations will be able query MM to see if there are any messages for them or for any Relay or Gateway station and ask MM to send them those messages.
- Machine Mode enables automated acknowledgment of received messages which will allow the sender to know the condition of the received message. The sender can then decide if they need to resend the message or lower transmission speeds.
- MM optionally includes routing capabilities. Based on the user defined ruleset messages received and processed will be routed to an outbound stream. To enable the routing feature, an unlock code associated with your call sign needs to be entered in the Routing settings tab.

# How to Set Up – A Aalk Through – Start On Page 9

<C:\MSC\Message Machine\MMInstructions.pdf>

Message Machine - v2.43.00

File About Help

Status: Idle...

Messages Search Sync Log Reports Settings

Last Processed Message:

Pending Action:  Formatting Errors:

Message Summary

SUMIDKEY	RECIPIENT	SENDER	PRECEDENCE	DATE_TIME	MMMESSAGEID	MMUSMTFTYPE	MMUSMTFREF	STR
1	UHWDBCA UHWDBAZ UH...	UHWHBC	ROUTINE	2017-12-18T17:0...	_R_UHWHBC #0029 3521706	GENADMIN/ARMY MARS REGION ...	SUBJ/NEW ENCRYPTION KE...	KENWOC
2	UHWDBNV UHWDBAZ UH...	UHWHBC	ROUTINE	2017-11-10T00:0...	_R_UHWHBC #0032 3140048	GENADMIN/ARMY MARS REGION ...	SUBJ/COMEX 17-4//	KENWOC
3	UHXAAA UHXPPP	UHWHHCP	ROUTINE	2017-11-08T15:1...	_R_UHWHHCP #0228 3121518			KENWOC
4	UHXHREG UHXVREG UHC...	UHWHHC	ROUTINE	2017-11-27T23:2...	_R_UHWHHC #4476 3312328	GENADMIN/HQ ARMY MARS FT ...	SUBJ/ALEX 2 DEC THROUGH 3 DE...	KENWOC
5	UHXHREG UHXVREG UHC...	UHWHHC	ROUTINE	2017-11-27T23:2...	_R_UHWHHC #4476 3312328	GENADMIN/HQ ARMY MARS FT ...	SUBJ/ALEX 2 DEC THROUGH 3 DE...	KENWOC
6	UHXAAA UHXPPP	UHWHHCP	ROUTINE	2017-12-21T18:0...	_R_UHWHHCP #0229 3551807			KENWOC

Show My Messages  
 Show Processed  
 Enable Button

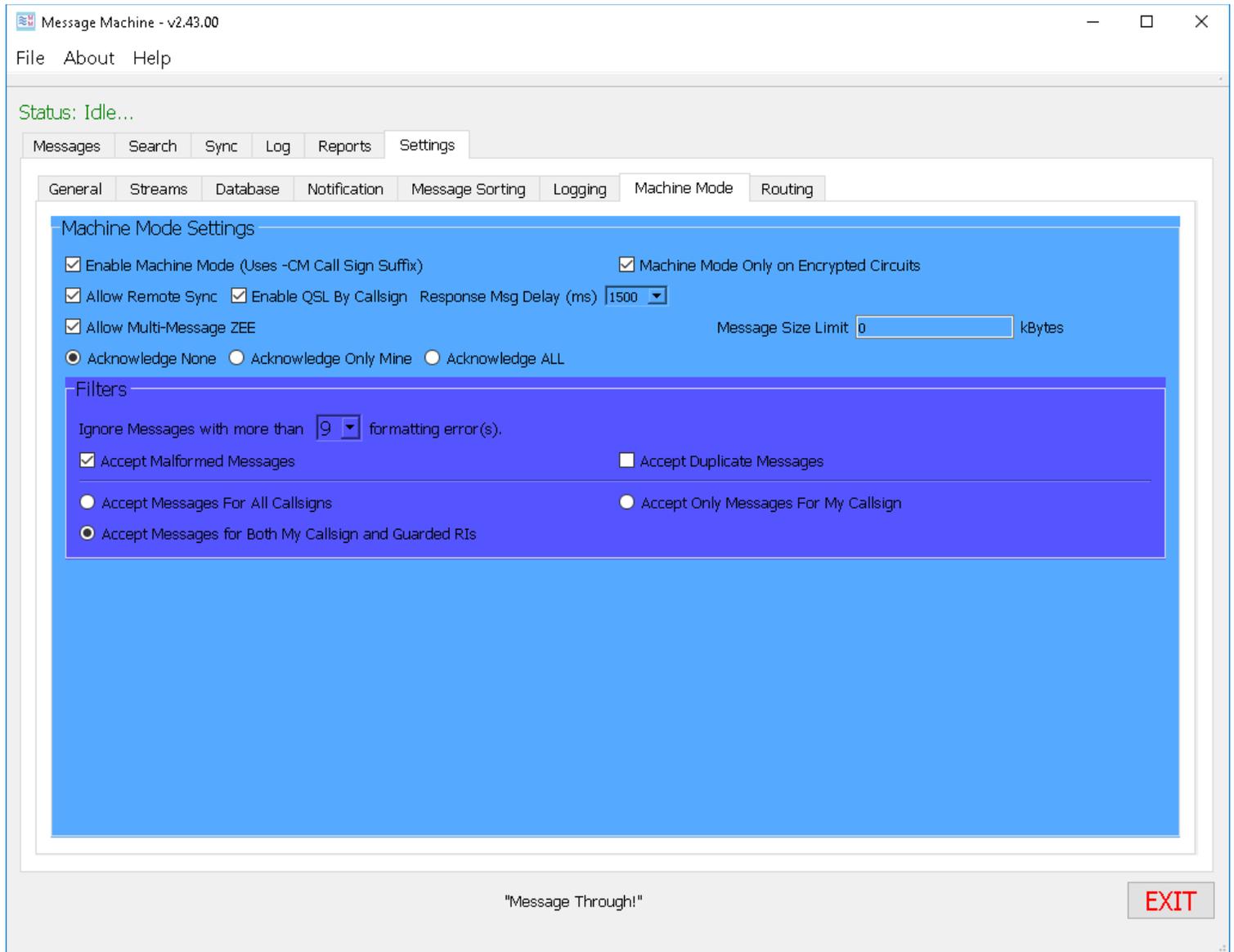
Formatting Errors

IDKEY	MMMESSAGEID	MMRAW	MMERRORLIST	MMBBSSENT
1	10	ZNY EEE %o_»Ék#Q"BA#Y...	ERROR - Non-Text characters found in message body! ERROR - Could not parse recipient(s)ERROR - Missing Format Line 1 (...	0
2	9	_R_FM 290251Z DEC 2017 NRAR...	ERROR - BT found after message text: 40 ERROR - Found extra BTWarning - Missing Format Line 2 (RR/PP)	0
3	8	_R_FM 290251Z DEC 2017 NRAR...	ERROR - BT found after message text: 40 ERROR - Found extra BTWarning - Missing Format Line 2 (RR/PP)	0
4	7	_R_FM 290251Z DEC 2017 NRAR...	ERROR - BT found after message text: 40 ERROR - Found extra BTWarning - Missing Format Line 2 (RR/PP)	0

Enable Button

"Message Through!"

## MACHINE MODE TAB



- **Note: there are some selections in this box that the user will have to configure carefully as to the particular event this tool is being used for.**
- Check the box "Enable Machine Mode"
- Check the box "Machine Mode only on Encrypted circuits"
- Check the box "Enable Remote Sync"
- Check the box "Enable QSL By Call Sign" leave default Response Delay.
- Check the box "Enable Multi-Message ZEE" Set Message File Limit to 0 (Enter Message Size Limit, 0 is no limit).
- **This is one of those areas listed in the note above.**
  - **Acknowledge none** – Should be default if just receiving messages only
  - **Acknowledge Only Mine** – When you are working in an event such as training or as a QRU Station. **This will keep you from ACKNOWLEDGING other traffic not intended for you QRU station such as bulletins, General Broadcast Messages, or Net Rosters etc.**
  - **Acknowledge ALL** – Be careful about this one as it can cause lots of unwanted message traffic.

### Filters Area

- Ignore Messages With more Than – use the default

- You choice – Accept Malformed Messages
- May want to accept to check duplicated message if running ALE as it scans many frequencies and one may be not be malformed.
- Accept messages for all call signs – Another personal choice based on your operating choice.
- Accept call signs for my call sign – Another personal choice based on your operating choice.
- Accept messages for both My call sign and Guarded Ri's – **This should be your default box checked.**

**EXPECTED TIME TO DELIVER – 55 Min.**