ACP-127 Message Procedures - Expanded Training and Guidance

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This paper will discuss common procedures used when preparing and sending messages in accordance with the guidance of ACP-127, the basic and as supplemented. Advanced topics of ACP-127 procedures is beyond the scope of this paper. The intent of this paper is to give you some basic skills and essential knowledge in ACP-127 message procedures.

Likewise, in-depth discussion about USMTF messages or the various USMTF message formats is also outside the focus of this paper. So, without exploring all facets of the USMTF formatted message body, we will simply use the GENADMIN USMTF formatted message in the course of understanding ACP-127 procedures. Regardless which USMTF message format you're sending, the ACP-127 message procedures is the tool to move that message through radio networks. Here is the example USMTF message that I'll use throughout the discussion on ACP-127 procedures.

```
UNCLAS FOUO
EXER/MARS COMEX//
MSGID/GENADMIN/ARMY MARS STATION AEM1WF/1//
SUBJ/ACP 127 PROCEDURES TRAINING//
GENTEXT/REMARKS/(U/FOUO) THIS IS AN EXAMPLE USMTF
MESSAGE TEXT.//
```

****for our example USMTF message, we will leave the "REF", "POC", and "AKNLDG" sets blank.*

For this discussion you'll need the following documents available: ACP-127G, U.S. Supp-1(K) to ACP-127G, JAFPUB 02-2014 (JAF02-14 MC 1-1), AM 2-203, and AM 2-310. Some of the examples and guidance shown in AM 2-203 and AM 2-310 have been superseded as a result of U.S. Supp-1(K) to ACP-127G. Changes to those publications haven't caught up with the changes in ACP-127 procedures. So, keep this in mind when looking at those publications. Conflicts are to be resolved in favor of U.S. Supp-1(K) to ACP-127G and the basic ACP-127G.

Definitions:

> Routing Indicator (RI) – A group of letters to indicate the geographic location of a station, a fixed headquarters of a command, activity, or unit at a geographic location, and the location of a relay or tributary station to facilitate the routing of messages. Similar to a ZIP Code.
>
> ACP-127 – A procedure to send teletype messages using Routing Indicators to indicate the origination and destination. U.S. Supp-1 (K) to ACP-127 is specific, additional guidance for the use of ACP-127 in the United States.
>
> USMTF – A standardized message format, utilized by the Department of Defense.

Beginning in section 1-1 of AM 2-203 (page 1) you'll find some general information about the format lines used in ACP-127 procedure. Additional examples are also contained in AM 2-310. Again, note that with the emergence of U.S. Supp-1(K) to ACP-127G, some of the information contained in AM 2-203 and AM 2-310 has been superseded (updates to these publications are pending at the time this document was prepared). The documents referenced provide essential instructions and examples that should be consulted when preparing messages using ACP-127 procedures. Among others, the general references regarding this are:

- ACP-127G, Chapter 2 (page 2-1), preparations of messages for transmission.

- ACP-127G (page B-1), schematic diagram of message format.
- U.S. Supp-1(K) to ACP-127G, supplemental guidance throughout the publication.
- AM 2-203, beginning at section 1-1 (page 1).
- AM 2-310, various guidance and examples throughout the publication.

I'll discuss each Format line of the ACP-127 procedures for clarification. Other than as provided by ACP-127, and as supplemented, don't deviate or ad-lib content on any format line---no creative writing, please. The procedures must adhere to specific rules and guidance regarding the content, especially when relayed through automated systems that are designed to read and process the formatted lines.

To keep the discussion from revealing actual FOUO information, I'll use fictitious Routing Indicators in my examples.

PART ONE: THE PLAINDRESS MESSAGE.

FORMAT LINE 1:

Format Line 1 is the transmission identification. It signals the start of the transmission, identifies the transmitting station, and the serial number of the transmission. The first character of Format Line 1 is the letter "V". It is a used to ensure the first character of intelligence is not lost or garbled.

The next four characters are "ZCZC", the Start-of-Message Indicator (SOM). These characters tell automated switching systems that this is the beginning of the message, or initiates software features that save the message to a file.

Following the SOM is the channel indicator. The channel indicator is three letters which identify a specific channel between the two stations. In MARS, channel indicators are listed in the Routing Indicator tables beginning on page 19 of AM 2-203. MARS stations that don't have a specific Routing Indicator listed in this table will use their abbreviated callsign as the channel indicator. For example, for call sign AEM1AB the abbreviated call sign is 1AB. So, "1AB" is also used as the channel indicator on Format Line 1.[1]

The serial number follows the channel indicator. This is a three digit serial number which serves to sequentially number each transmission from the sending station.

U.S. Supp-1 (K) to ACP-127G does not use security warning signals on Format Line 1. Instead, the message is handled in accordance with the operating signal in Format Line 4 or the classification shown in the text. The security warning is a mandatory entry on Format Line 4.[2] Therefore, you don't enter a security warning on Format Line 1.

Here is an example of Format Line 1:

```
VZCZC1AB001
```

FORMAT LINE 2:

Format Line 2 consists of the message Precedence and Routing Indicator(s) of the message destination. If the message is dual precedence, only the higher precedence is shown in this line. Sections 1.2, 1.3, and 1.4 of AM 2-203 explain the routing process in great detail. The Routing Indicators used on this line are listed in AM 2-203, beginning on page 19. One or more Routing Indicators are permitted on this line as required but generally should not exceed two lines which equates to 16 seven-character Routing Indicators. Routing Indicators appearing in Format Line 2 must contain a minimum of four valid characters and a maximum of seven valid characters.[3] The Routing Indicator to typically use on Format Line 2 is that of the Minor Relay or Tributary Station servicing the area, region or State the addressee is located. What you're trying to do is tell the relaying stations where to route the message.

Here is an example of Format Line 2:

```
RR UHXPBC UHXPYZ
```

FORMAT LINE 3:

Format Line 3 contains the Prosign "DE" and the Routing Indicator for the originating station. If you are the originator, then this is the Routing Indicator for your State (or, if there is a specific RI assigned

to the facility that you're supporting or Billet then that RI will be used instead). You can find the Routing Indicator for your location in AM 2-203, beginning on page 19. Let's say you've determined that your Routing Indicator is "UHXPAE". Then, enter "UHXPAE" in the Format Line 3 field.

Also part of Format Line 3 is the message serial number, followed by the Julian Date and time the message is released. The date and time are concatenated together. For example, Julian date 033 and time 1800Z should be entered on Format Line 3 as "0331800". The time zone indicator "Z" is to be omitted from this line. Format Line 3 is used to uniquely identify the message by all stations through relay.

Here is an example of Format Line 3:

```
DE UHXPAE #0001 0331830
```

FORMAT LINE 4:

The use of a security warning with either the operating signal "ZNR" or "ZNY" is a mandatory entry on Format Line 4.[4] The meanings for these two are:

- ZNR - This message may be forwarded without change by radio or non-approved circuit.
- ZNY - Do not forward this message unencrypted by radio or non-approved circuit.

Following the operating signal is the associated classification. Two are used in MARS: "UUUUU" is used for unclassified; "EEEEE" is used to identify that the message is unclassified but must be encrypted for transmission only to protect its contents.

It is at this point you are deciding whether the PLAINDRESS message you are preparing must be protected before transmission over radio or not. If the information does not need to be protected then select "ZNR UUUUU". If, however, you need to protect the contents of the message then select "ZNY EEEEE" instead. If the message contains FOUO or PII information you must select "ZNY EEEEE".

Another optional entry on Format Line 4 is transmission instructions or related operating signals. I won't include these in my example for simplification. Rather, I'll leave this topic for advanced discussions.

Here is an example of Format Line 4:

```
ZNY EEEEE
```

NOTE: If the message you are preparing contains the operating signal ZNY, then the message and all procedure lines must be coded and sent as a CODRESS message. This is discussed later in this training.

FORMAT LINE 5:

This format line contains the message priority, the Date-Time-Group (DTG), and optional operating signals.

The first entry on this line is the priority of the message. MARS uses "R" (Routine), "P" (Priority), and "O" (Immediate). In some cases dual priorities must be entered. An example entry for dual precedence is "PR". Refer to ACP-127G, Section VII, page 1-17, beginning at para 150 for additional guidance on precedence.

The next entry on Format Line 5 is the DTG. The format for the DTG is six digits representing the date (two digits) and time (four digits), ending with the time zone "Z", followed by the first three characters of the month, ending with the four digit year that the message is released.[5] If the date is the 3rd of the February 2014 and the time is 1821Z, the DTG would be: 031821Z FEB 2014.

Optional operating signals may be entered on this line as well, following the DTG. For our example PLAINDRESS message, we'll omit this.

Here is an example of Format Line 5:

```
R 031821Z FEB 2014
```

FORMAT LINE 6:

Only the Prosign "FM" and the Plain Language Address (PLA) of the message originator is to be entered on Format Line 6. You should normally be using a PLA that is listed in AM 2-203. The PLA for individual MARS members begins with "ARMY MARS STATION", followed by the member's non-billet callsign.

Here is an example of Format Line 6:

```
FM ARMY MARS STATION AEM1AB
```

FORMAT LINE 7 & 8:

Format Line 7 is the "TO" addressee and Format Line 8 is the "INFO" addressee. The instructions and entries for Format Line 7 and 8 are essentially identical. The format to use for either line is to enter the Prosign "TO" or "INFO" (as appropriate), the Routing Indicator for the addressee, followed by the PLA for the addressee, separated by the Prosign "/" (SLANT).

The addressee's Routing Indicator should normally be the one that is for the State or Country in which the addressee is located. The operating signal "ZEN" may be used in place of the Routing Indicator where the message will be delivered to that addressee by other means.

There are other PLA's, Address Indicating Groups (AIG's) or collective addresses sometimes used that haven't been included in AM 2-203 yet (e.g. collective address "ALL ARMY MARS", "ALL ARMY MARS REGION ONE", etc.). Further, you may be required to use other Routing Indicators and PLA's that are identified in OPORD's or other exercise or operation messages for addressees not contained in AM 2-203. One thing to be careful about is that you must enter the PLA's exactly as written in AM 2-203 or other documents and messages.

Here are examples of Format Lines 7 or 8:

```
TO UHXPDNC/ARMY MARS STATION AAR4XY
TO UHXX/ALL ARMY MARS
INFO ZEN/ARMY MARS STATION AAR4PR
```

FORMAT LINE 9:

This line is only used when exempting one or more addressee(s) from a collective address or AIG that is used on Format Line 7. For example, if the collective address used on Format Line 7 is "ALL

ARMY MARS REGION FOUR" but you want to exempt "ARMY MARS STATION AAR4BT" from that collective address then you'd enter the exempted PLA on Format Line 9. The first entry on this line is the Prosign "XMT". The rest of Format Line 9 is formatted the same way Format Line 7 is.

Here is an example of Format Line 9:

```
XMT UHXPDFL/ARMY MARS STATION AAR4BT
```

FORMAT LINE 10:

Normally, Format Line 10 is omitted. It is primarily used to count the number of code groups in Format Line 12. Our example here is for the creation of a PLAINDRESS message. So, we will omit this line for our example.

FORMAT LINE 11:

This is the Prosign "BT" which separates the header from the body of the message. Enter "BT" for Format Line 11.

FORMAT LINE 12:

Format Line 12 is the body of your message. The first line of Format Line 12 is the classification and any special instructions.[6] Your USMTF message or other format type message goes on Format Line 12. It's important to keep in mind that the length of any one line is not to exceed 69 characters.[7] If your message is long, you'll also have to separate or paginate sections of your message.[8]

This is an example of Format Line 12:

```
UNCLAS FOUO
EXER/MARS COMEX//
MSGID/GENADMIN/ARMY MARS STATION AEM1WF/1//
SUBJ/ACP 127 PROCEDURES TRAINING//
GENTEXT/REMARKS/(U/FOUO) THIS IS AN EXAMPLE USMTF
MESSAGE TEXT.//
```

FORMAT LINE 13:

This is the Prosign "BT" which separates the body of the message from the end. Enter "BT" for Format Line 13.

FORMAT LINE 14:

Not normally used and is omitted for our example.

FORMAT LINE 15:

This is the End-of-Message (EOM) validation number prior to the End-of-Message Functions.[9] The entry on this line consists of the four digital station serial number, taken from Format Line 3, preceded by the number sign (#).

Here is an example of Format Line 15:

```
#0001
```

FORMAT LINE 16:

This is the End-of-Message function. This format line indicates the end of transmission and signals the receiving station the transmission of the message is concluded. When sending messages, this is always “NNNN”.

Here is an example of Format Line 16:

```
NNNN
```

Finally, you'll need to observe message alignment. Alignment includes spaces, line feeds, and carriage returns entered at specific locations throughout the message. Instructions for message alignment are explained in ACP-127(G), para 138 and U.S. Supp-1(K) to ACP-127G, para 140.

At this point you are finished preparing the PLAINDRESS message. For our example, we've created a PLAINDRESS message that contains FOUO or PII information. Thus, you see the security warning "ZNY EEEEE" on Format Line 4. This means that before this message is to be transmitted over radio, it must be encapsulated into a CODRESS message. I'll discuss the preparation of CODRESS message later in this paper.

If, however, the message didn't contain any FOUO or PII information then we would have used the security warning and classification "ZNR UUUUU" on Format Line 4. If the security warning Operating Signal of "ZNR" had been use, the message would be ready now for transmission.

Here is what the PLAINDRESS message containing FOUO or PII information will look like:

```
VZCZC1AB001
RR UHXPBC UHXPYZ
DE UHXPAE #0001 0331830
ZNY EEEEE
R 031821Z FEB 2014
FM ARMY MARS STATION AEM1AB
TO UHXPDNC/ARMY MARS STATION AAR4XY
INFO ZEN/ARMY MARS STATION AAR4PR
BT
UNCLAS FOUO
EXER/MARS COMEX//
MSGID/GENADMIN/ARMY MARS STATION AEM1WF/1//
SUBJ/ACP 127 PROCEDURES TRAINING//
GENTEXT/REMARKS/(U/FOUO) THIS IS AN EXAMPLE USMTF
MESSAGE TEXT.//
BT
#0001
```

NNNN

---

[1]AM 2-203, para 1.4.3.

[2]U.S. Supp-1(K) to ACP-127G, para 203.

[3]U.S. Supp-1(K) to ACP-127G.

[4]U.S. Supp-1, para 203a.

[5]ACP-127G, para 113 and U.S. Supp 1, para 113.

[6]ACP-127G, page B-4 and U.S. Supp-1(K) to ACP-127G, para 211 & Annex B.

[7]ACP-127G, para 138, page1-11.

[8]ACP-127G, para 208 and U.S. Supp-1(K) to ACP-127G, para 210.

[9]U.S. Supp-1 to ACP-127G, para 114 & 205.

PART TWO: THE CODRESS MESSAGE.

FORMAT LINE 1, 2, AND 3:

Format Lines 1, 2, and 3 are prepared exactly the same way as is for a PLAINDRESS message. Refer to Part One (above) for an explanation.

Here is an example of these formatted lines:

```
VZCZC1AB001
RR UHXPBC UHXPYZ
DE UHXPAE #0002 0331845
```

FORMAT LINE 4:

For a CODRESS message, Format Line 4 will always contain the security warning "ZNR", followed by the classification sequence "UUUUU" (there are a few exceptions but we won't discuss that here). The security warning "ZNR" is used for CODRESS messages because the code groups that are entered in Format Line 12 are unclassified, non-FOUO, and don't require protection. If transmission instructions are needed on Format Line 4, you are only permitted to use address groups, call signs or Routing Indicators. The use of Plain Language designators are prohibited for CODRESS messages on Format Line 4.[10]

Here is an example of Format Line 4:

```
ZNR UUUUU
```

FORMAT LINE 5:

Format Lines 5 is prepared exactly the same way as is for a PLAINDRESS message. Refer to Part One (above) for an explanation. An optional operating signal is normally also included at the end of this line to flag receiving stations which offline encryption key set is needed to decrypt the message. For a list of and a detailed explanation of applicable operating signals, contact your MARS leadership (Training Officer, State Director, Region Director, etc.).

Here is an example of Format Line 5:

```
R 031840Z FEB 2014 ZYG
```

FORMAT LINES 6, 7, 8 and 9:

Format Lines 6, 7, 8, and 9 are not included in a CODRESS message header.[11] Besides protecting FOUO or PII information contained in the body of the message, the purpose of the CODRESS message is to hide the address components, the originator and all addressees.[12] A CODRESS message contains all the components as shown in the schematic diagram except the address.

FORMAT LINE 10:

Format Line 10 in a CODRESS message will consist of the Prosign "GR", followed by the countable encrypted groups contained in Format Line 12.[13]

Here is an example of Format Line 10:

```
GR 131
```

FORMAT LINE 11:

Format Line 11 will be prepared exactly the same way as is for a PLAINDRESS message. Refer to Part One (above) for an explanation.

FORMAT LINE 12:

In a CODRESS message, Format Line 12 will contain the code groups that you created from your PLAINDRESS message using the offline TRANSEC tool. The first step is to encrypt your PLAINDRESS message using the offline TRANSEC tool. Next, copy and paste the code groups into Format Line 12 of your CODRESS message (NOTE: training on the offline TRANSEC tool is covered separately). Don't forget to enter the group count number into Format Line 10.

For longer messages, Format Line 12 may also contain section and paging information. For longer messages, paging lines must be inserted between the lines of code groups. All messages exceeding a total of 20 lines of heading and text, beginning with Format Line 5, will be divided into pages for transmission.[14] You are only permitted five pages per message; the first page with the header doesn't count (which means you may see a page count of six). If a message is longer than that you'll have to divide the code groups into SECTIONS, transmitted as separate messages. Our example message will have only two pages.

Here is an example of a paging line:

```
PAGE 2 UHXPAE 0002 UNCLAS
```

FORMAT LINES 13, 14, 15, and 16:

Format Line 13, 14, 15, and 16 will be prepared exactly the same way as is for a PLAINDRESS message. Refer to Part One (above) for an explanation.

When you're done with the instructions above, here is an example of what your CODRESS message will look like:

```
VZCZC1AB001
RR UHXPBC UHXPYZ
DE UHXPAE #0002 0331845
ZNR UUUUU
R 031840Z FEB 2014 ZYG
GR 131
BT
IGL8XKOC 7OR6A9P2 LE944GLC 9VEC23A1 6KGZ22VA PA6RIQ22 9QIWNTP9
FWDRGSH1 SST1WFRF T9MTY5K1 3DS8ZTR4 D1ODAI6H VNG118Q1 K54ESDIF
83BXQMP2 F2LN2UH3 VSD5E5B8 ZZWL14E2 YBXV4VQF R811EY68 MHRMYGC9
```

B4MJ7CO3 41CCWCP8 WTB4KXIC WCAA9THG V74HJPWA 8EMSRE43 LSLX1K9H
VXLRY43G 2DSGY4FG CXZARDI9 YK9BSWC7 YQL1MDZF P3S1UEQD LX6WSVXB
DL81Q6OB 15GYXMQ2 A87WUOWE WBFNEOY1 8YOWW18C FOV5Q1T2 DIGT9RD8
P18678Q2 I3JP7ZZG 6BUJOTR6 8ZWCZHX7 H7IR4VP5 LR3G6DW2 QDNDDPI3
UD6BLCZD H74I98H8 638A9UE3 HTQJEPF4 H34Q9Z8A BHSYVO8E CR9LS339
VLNUHE48 732QH543 7GI8AZ17 1JATZW3D C45R8L5H BM2N65VD D9GERT3G
SAYU59F5 UPT5MW5B 53HI3Z55 E69F6XNH X66T7YJ8 I9ZWW5R5 LBFMMKLH
VRCB6R5B 8LA2Q314 E7YWSU8D CP1K2TC4 R6LLY5AA CVG3LO92 CDL9C4J6
1W193KF5 RHFQUKA6 8KJ1PPW6 E15XFMEG KSMRIBS8 UOC17BHE 6V4KTR3G
RI6IGLFC 7L31Z1Z6 7GQ5H5G7 X7YRDYFE HYR8WCM8 W4UCPUL7 Q4HNCLD3
QVITUC12 OFNQJUY1 1OX8RCH3 Q3RYWPV6 SLY5REO7 QCIJ2FJH VAMYVQE6
49P4SVVA 5Z1NQGP1 WMDFKRN4 Q76JVLNG FKYIR59C 4V54CCG5 IKKKVI8C
LWDL54W1 CGH9WDX2 GI3P6C4D 9GITFEOB SHJ54RG4 84MVTA83 3AQGHNQ4
3ER7DNUE P33SRJ84 NI4L7IZH P1EU8131 1FQF6O89 YYJRJRC5 T5MM16D7

PAGE 2 UHXPAE 0002 UNCLAS

TTFBYYAB 5W6RT8DC W5HICPAG BTCFQF2H ACPHWKTA I6DQAY9B RDWPAHN3
12GIRPC4 BSLA4TDA JIHTXKH2 VA2LNZQ5 IGL8XKOC
BT
#0002

NNNN

****for our example CODRESS message, the code groups don't actually decrypt; they are dummy code groups used for illustration purposes only.*

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[10] ACP-127G, para 133.

[11] ACP-125G, para 205b(2)).

[12] ACP-125G, para 146.

[13] ACP-127G, page B-4 and para 208g.

[14] ACP-127G, para 208 and U.S. Supp-1(K) to ACP-127G, para 210.