CHAPTER TEN

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RADIOTELEGRAPH PROCEDURE

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CHAPTER TEN

RADIOTELEGRAPH PROCEDURE

10000. GENERAL

10001. SPEED OF TRANSMISSION

.1 When deemed advisable, the net control station should prescribe the speed of transmission on a radiotelegraph net, or the qualifications of the operators to be employed during specific periods.

10002. SPEED KEYS

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- .1 When authorized by the net control station, speed keys may be employed on manually-operated radiotelegraph nets if traffic conditions warrant and operator capabilities permit.
- .2 In the interest of morale and pride of accomplishment, radiomen should be encouraged to qualify for speed-key certificates within their commands.
- .3 The following commanders shall be the sole issuing agency of certificates.

<u>Navy</u> - Fleet commanders; naval force commanders; type commanders; commandants of naval districts and river commands.

<u>Marine Corps</u> - Commandant of the Marine Corps; Commanding General, Department of Pacific; Commanding Generals, FMF commands.

- (a) The above commanders, at their discretion, may set up boards within their commands to conduct examinations for speed-key certificates.
- (b) Certificate cards shall include the name and service number of the operator, date of issue and title of issuing officer. They shall be serially numbered.
- (c) A notation of the operator's qualification shall be made in his service record.
- (d) Records shall be maintained of certificate cards issued and revoked.
- •4 No radio operator should be permitted to use a speed-key until he has met the following qualifications:
 - (a) Send clearly the headings of messages, with hand and speed-key, at 15 words per minute, for a period of one minute. One error, properly corrected, may be allowed each transmission-one error with hand key; one error with speed-key.
 - (b) Send distinctly with hand key 20 groups of five-letter code in 70 seconds. One error, properly corrected, may be allowed provided the total time of text does not exceed 70 seconds.
 - (c) Send distinctly with speed-key 25 groups of 5-letter code in 75 seconds. Two errors, properly corrected may be allowed provided the total time of text does not exceed 75 seconds.
 - (d) Send distinctly with speed-key 60 words of plain language in 2 minutes (each set of consecutive 5 letters being counted as a word.) Two errors, properly corrected, may be allowed provided the total time of text does not exceed 2 minutes.
 - (e) The speed-key used to complete the above requirements should be adjusted to make not more than 12 dots per second.

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10011. SCHEDULED TRANSMISSIONS

- •1 General principles for conducting broadcast and intercept method transmissions are set forth in Subsection 6200.
- .2 It is necessary that all stations conducting scheduled transmissions commence their transmissions on time. Each station prior to commencing a schedule normally shall make a preliminary test.
- 10012. TEST CALLS
 - .1 Test calls consist of a series of V's followed by the prosign DE, the broadcast station's call sign and, when employed, letter designation (sent three times) for five minutes before each scheduled time.

EXAMPLE:

VVV VVV DE NSS NSS NSS WWW (For five minutes preceding the schedule) $% \mathcal{T}_{\mathcal{T}}^{(1)}$

- 10013. COMMENCING BROADCAST SCHEDULES
 - .1 Broadcasts shall be made on specified frequencies and at specified times. Any changes in either frequency or time shall be transmitted once at the beginning and once at the end of the regular broadcast during a period of forty-eight hours preceding the change.
 - .2 Not Specifically Addressed Traffic. After running the call tape for approximately five minutes, the broadcast shall be commenced at precisely the prescribed time by the general call CQ transmitted three times, the prosign DE transmitted once, and the call sign of the transmitting station transmitted three times. The prosign BT shall be used to separate the call from the first item of the broadcast.

EXAMPLE:

CQ CQ CQ DE NSS NSS NSS \overline{BT}

.3 <u>Specifically Addressed Traffic</u>. After running the call tape for approximately five minutes, precisely at the prescribed time, the transmission begins:

NERK NERK NERK DE NSS NSS NSS W NR156 W NR156 -P P - 191845Z 191845Z -FM FM NUYO NUYO -TO TO NWLV NWLV -GR17 GR17 <u>BT</u> (TEXT) <u>BT</u> <u>AR</u>

W NR157 W NR157 -0 0 - 191915Z 191915Z -GR75 GR75 BT TEXT BT AR

NERK NERK NERK DE NSS NSS QRU AR

NOTE: When plain language designations are used in the address component, the prosigns will be sent twice and the plain language designations only once. 10013.3 (Continued)

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- (a) When a message must carry double transmission identification data, it will appear as W NR162/S154 to indicate Washington primary fleet broadcast message serial number 162; submarine serial number 154.
- 10014. COMMENCING INTERCEPT SCHEDULES
 - .1 The intercept method is defined in Article 6203.
 - .2 Precisely at the scheduled time, and assuming that neither station has a message to transmit, NBA begins the schedule, using BRAVO transmission identification numbers:

NPL DE NBA B NR228 B NR228 K

NPL, using KILO transmission identification numbers, transmits:

NBA DE NPL - NPL DE NBA B NR228 B NR228 - NBA DE NPL K NR287 K NR287 K

NBA transmits:

NPL DE NBA C - NBA DE NPL K NR237 K NR 287 K

NPL indicates that the schedule is completed:

NBA DE NPL C AR

.3 Precisely at the time for the next schedule, and assuming that NBA has two messages arranged for transmission in order and NPL has one message awaiting transmission, NBA begins:

NPL transmits:

NBA DE NPL -NPL DE NBA B NR229 B NR229 -P P - $\cancel{0}31\cancel{0}56Z$ $\cancel{0}31\cancel{0}56Z$ -FM FM NTSY NTSY TO TO NTFJ NTFJ GR15 GR15 \overrightarrow{BT} (TEXT) \overrightarrow{BT} \overrightarrow{AR} B NR23 $\cancel{0}$ B NR23 $\cancel{0}$ M M - $\cancel{0}31115Z$ -FM FM NCFX NCFX -TO TO NAYS NAYS GR25 GR25 \overrightarrow{BT} (TEXT) \overrightarrow{BT} \overrightarrow{AR} (Continued on next page)

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10014.3 (Continued)

NBA DE NPL K NR288 K NR288 -M M - Ø31118Z Ø31118Z -FM FM NWFD NWFD -TO TO NUYO NUYO GR18 GR18 BT (TEXT) BT K

NBA transmits:

NPL DE NBA C -NBA DE NPL K NR288 K NR288 M M - Ø31118Z Ø31118Z -FM FM NWFD NWFD -TO TO NUYO NUYO GR18 GR18 BT (TEXT) BT K

NPL transmits:

NBA DE NPL C AR

10020. AIR-GROUND COMMUNICATIONS

- 10021. TERMINATING AIR-GROUND TRANSMISSIONS
 - .1 When one ground station is communicating with several aircraft on a common frequency, it is often impossible for one aircraft to determine when communication between other aircraft and the ground station has terminated. Because of these difficulties, the following rules, when prescribed, will apply to air-ground communications:
 - (a) Every sequence of transmissions between a ground station and aircraft must conclude with a final transmission, ending in the prosign \overline{AR} by the ground station even when the last transmission made by the aircraft ended with the prosign \overline{AR} . Thus, if the aircraft transmits R \overline{AR} , the ground station will reply R \overline{AR} .
 - (b) In air-ground communication, a ground station, from time to time, may indicate to all stations on this frequency that no transmissions are in progress, and that it is free to communicate with any station by transmitting the prosign DE and its call sign followed by the prosign \overline{AR} .

10030. SPECIALIZED FUNCTIONAL PROCEDURE

10031. EXPLANATION

- .1 Specialized procedures may be prescribed for use on functional CW nets. These procedures use to the maximum extent abbreviated CW equivalents of the voice brevity code (ACP 165), shortened calls and "round-robin" series of transmissions from stations in the net.
- 10032. PICKET REPORTING NET
 - .1 The Picket Reporting Net is the CW or RATT equivalent of a voice air defense net for exchanging raid and ECM information.
 - .2 The net will be guarded by all pickets in the inner and intermediate picket lines of the sector and controlled by the sector AD ship. The force AD ship, the other sector AD ships, and the guided missile ships will listen and thus be able to maintain their air summary plots. Once the net is established by the sector AD ship, each picket will

10032.2 (Continued)

transmit all raid information on hand, ending the message with \overline{AR} . The next station will take his turn on the net; if he has nothing to send, he will identify himself and transmit an \overline{AR} . When a complete round of reports indicates that all ships have nothing to report, the sector AD ship may transmit SR (meaning "stop reports"). The circuit will remain manned and ready, and when any ship sends a report, the sequence reporting starts again. Each ship should wait 5-10 seconds after receiving AR before it starts its transmission. The major portion of traffic on the picket reporting net will be raid and ECM information. However, to coordinate raid information between adjacent pickets and to clarify raid reports, brief messages may be sent by units during their turn in the cycle. The answer will come back in sequence. In order to achieve rapidity of communications, a brevity code will be used to the maximum extent possible.

.3 All raid reports sent via the picket reporting net will be in the following form:

From_____ Raid designation_____ Grid posit_____

Course, speed, size, altitude_____

Time

If, for example, a ship occupying picket station Bravo wished to report a bogey which she had designated "Bravo thirteen", and which was located at Golf position NKDL4119, on course 215, speed 490 knots, composed of few aircraft at an altitude of 36,000 feet, at 1442 local time, the report would be drafted as follows:

PB B13 NKDL4119 C215S49FBA36 T42 AR

- .4 If it is desired to report a number of bogies, which will normally be the case, the individual bogey reports will be separated by "Slant" and AR transmitted at the end of the report.
- .5 Friendly posit reports and ECM reports will be sent via this net.

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