

## Procedure Signs

Procedure signs are used as shorthand between radio operators for radio messages. A basic radio message consists of the Header (Call, Preamble, Address, Prefix), and the Text. These procedure signs were standard at least between the Navy and US Coast Guard, and probably all other US government communication activities. Procedure signs that are used between radio operators that are not specific to any radio message are called Z-Signs or Z-Codes. Some procedure signs are designated overscored (written with a line over the codes), and are considered one symbol, so that there are no spaces between the actual letters. The following procedure signs were abstracted from the Communications Instructions for the US Coast Guard, 1930, printed by the US Government Printing Office, Washington, DC, 1931. A copy can be found in the National Archives, Record Group 287, T47.8 C73/930.

AA

The "unknown ship" sign is written AA (overscored). It is used as an answer when the call sign of a station calling is not clearly received.

AA

The "all after" sign is written AA. It is used after the sign C, INT (overscored), IMI (overscored) and J.

AAA

The "blank" sign is written AAA (overscored). It is used in the heading or text of a message to indicate the position of missing portions. When the missing portions of an incomplete message can not be obtained at once, the message should be passed on immediately, using the "blank" sign to indicate the missing portions. This does not relieve a station of responsibility for obtaining and passing on the complete version as soon as practicable.

AB

The "all before" sign is written AB. It is used after the signs C, INT (overscored), IMI (overscored), and J.

AR

The procedure sign AR (overscored) is used at the end of a transmission when the end is not otherwise indicated, and means "Am closing off transmission to receive your answer or receipt"

AS

It is used after a call or during a transmission to mean "Wait, but stand by for further communication.". It is also an order when made by a senior; a request, when made by a junior. A junior having been told AS (overscored) must wait for K before proceeding, but if in the meantime he has been given a priority dispatch, or if it appears that he has been overlooked, he may call up the senior station and ask permission to transmit.

B

(a)It is used after a call to mean "Did you receive last message?"; (b)after a call and followed by identification data to mean "did you receive message indicated?"; (c)when transmitting long messages, the text will usually be divided into portions of 100 words or plain language or 50 groups of code. "B" followed by numerals indicating the total number of groups sent thus far, is used at the end of each portion to mean "Has message been received thus far?"; (d)After completion of a message to mean "there is more to follow---receipt for last message is requested"; (e)After a transmission, such as the receipt for a message, to mean "There is more to follow".

HM

The "break" sign is used to separate the heading and text of dispatches.

## C

It is used (a) after a call, by itself, to mean "You are correct"; (b) after a call or address and followed by identification data to mean "following is correct version of message or groups or portions indicated"; (c) After a call or address and followed by identification data, when a request for verification and repetition has been previously made, to mean "Following is verification and repetition of message or groups or portions indicated". C shall be used in this manner only with the authority of the originator. (d) After a call, made four times in succession, to mean "Following is correct version of message transmitted without time of origin."

## EEEEEEEE

The ""erase" sign, a succession of eight or more E's, is used when (a) an error is made in transmission to mean "I will start over commencing with a repetition of the last work correctly made.", (b) in radio to signify that a scheduled transmission was not commenced on time; (c) The procedure sign IMI (overscored) must not be used to correct an error in transmission.

## F

The "do not answer" is used in radio (a) in the preamble to mean "Stations indicated in the call are not to answer this call or receipt for this message", (b) in the prefix to mean "stations indicated in the address are not to receipt for this message".

## G

The "repeat-back" sign is used (a) after a call to mean "repeat back last transmission I made"; (b) after a call and followed by identification data, to mean "repeat back message or portion indicated"; (c) in the preamble, to mean "All stations indicated in the call are to repeat back this message; (d), in the preamble, after call sign(s) to mean "station(s) whose call sign(s) precede G repeat back this message. This is only used when all stations called are not to repeat back; (e) in the prefix, to mean "every station handling this message is to repeat it back to the station from which received before retransmitting". The use of G in the prefix should be restricted to messages where the phraseology is such that the slightest mistake in reception would be of grave consequence; (f) when used in the prefix on the authority of the originator only. When placed in the prefix, an acknowledgement shall invariably be required; (g) when messages are repeated back they are made through only once, even though the original message was made through twice.

## GR

The "group sign" is used (a) as the last item in the prefix and followed by numerals to mean "The message contains the number of groups indicated"; (b) after a call and INT (overscored) to mean "What is number of groups?"; (c) after a call and INT (overscored) and followed by numerals, to mean "Is not the number of groups as indicated?". When the number of groups received does not correspond with the number after the GR sign, the receiving station will immediately challenge the transmitting station in this manner. If, after rechecking the message, the transmitting station finds that the receiving station is correct, the transmitting station will make C; otherwise, without further delay, the transmitting station will verify the number of groups by repeating the first letter or numeral of each word or group in succession. Subject to this challenge, the count of the transmitting station is final; (d) after a call (with or without identification data) and followed by numerals, to mean "Number of groups is as indicated"; (e) As the last item in the prefix, and followed by X, to mean "the number of groups will be sent later"; (f) GR is obligatory in dispatches. It is never to be used in messages consisting of procedure signs and radio operators' signals only.

## HM

The "silence" sign is transmitted five times, and is to be used only by the direct authority of the Coast Guard division commander in the vicinity affected by the silence sign. It is used (a) in radio after a call to mean "stations addressed cease all radio transmission"; (b) in radio after a call and followed by identification data, to mean "stations addressed cease all radio transmission on the frequency or frequencies indicated".

## II

The "space sign s used (a) between component parts of the heading; (b) between the groups of the text in code dispatches; (c) to separate procedure signs and radio operating signals from call signs in the heading of messages except preceding and following V (from); (d) the space sign may be used between procedure signs, radio operators' signals, or between a message and a procedure sign or radio operator's signal immediately following, if necessary for clarity. It is never used before AR (overscored). (e) in radio, to separate messages sent in strings after a single call up; (f) in radio, the space sign may be used between the heading and text, if the text consists of procedure sign(s) only, and if this use of the space sign add to clarity; (g) in radio, between the time groups of the dispatch and the TFC time of first call).

## IM

The "Signal" sign is used between the heading and text of all signals, and mean that the text following is from a signal book or signal vocabulary.

## IMI

The "repeat" sign is used: (a) after a call to mean "repeat last message"; (b) After a call followed by identification data to mean "repeat message or portion indicated". If it is necessary to obtain repetition of a portion of the heading a request for repetition of the entire heading must be made (except when INT (overscored) GR is used); (c) Between the first and second transmission of a message being sent twice to mean (I am going to repeat this message"; (d) in the body of a plain-language message to mean "I am going to repeat difficult portion just transmitted"; (e) when indicating portions of a code message reference should be made to the numeral(s) of the group(s) rather than the groups themselves. In plain-language dispatches, reference may be made either to the group number(s), or to the words themselves, using more than one word if necessary for definite identification; (f) before receipting for a message, the receiving station may be doubtful of a portion, in which case the sign IMI (overscored) or INT (overscored) may be employed. These signs do not require the originator to verify the coding or wording. When making repetitions the message or portion of message is to be made through only once even though the original message was made through twice; (g) after receipting for a message, IMI (overscored) and INT (overscored) shall not be employed. After receipting for a message, a repetition may ordinarily be obtained only by the addressee authorizing the use of "J" (verify and repeat).

## INT

The "interrogatory" sign is used: (a) after a call and followed by identification data and the doubtful portion of a message, to mean "did I correctly receive the portion of the message which I am now repeating back?" INT (overscored) will not be used for checking the reception of the greater portion of a message. In such cases a repetition should be requested. If it is necessary to obtain repetition of a portion of the heading, a request for repetition of the entire heading must be made, except as used in (b) and (c); (b) after a call and followed by GR, to mean "what is the number of groups?"; (c) after a call and followed by GR and numerals to mean "Is not the number of groups as indicated?"; (d) After a call and followed by Y, to mean "Do you acknowledge last message?"; (e) After a call or address and followed by Y and identification data, to mean "Do you acknowledge message indicated?"; (f) after a call or address and followed by radio operators' signal(s) to give an interrogatory sense to the radio operators' signal(s); (g) after a call and followed by K, to mean "May I transmit?"; (h) after receipting for a message, IMI (overscored) and INT (overscored) shall not be employed. After receipting for a message, repetition may be obtained ordinarily by the addressee authorizing the use of J (verify and repeat).

## IX

The "executive to follow" sign is used in the prefix of a message which requires the instant of execution to be indicated. Such a message is said to be sent by the executive method.

## 5-SECOND DASH

The "executive" sign, a 5-second dash preceded by IX (overscored) is used: (a) after a call to mean "Execute all outstanding messages prefixed IX (overscored); (b) after a call and identification data to mean "execute the message(s) or portion indicated"; (c) a message must be identified, if (1) it is one of several outstanding messages which have been preceded by IX (overscored) and is to be executed by itself; (2) there is any possibility of doubt as to which message is to be executed; (3) a considerable time has elapsed between the transmission and the execution of the message; (d) the instant of execution is the termination of the 5-second dash; (e) the executive sign can not be annulled after it has once been made.

## J

It is used (a) after a call or address, followed by identification data, to mean "Obtain a verification from the originator and then repeat message or portion indicated"; (b) the use of "J" requires the originator to verify the phraseology, and also the coding (if coded, of the message or portion indicated; (c) the sign "J" is to be used only at the direction of competent authority.

## K

It is used (a) after a call to mean "transmit"; (b) after a call and procedure sign(s) to mean "transmit"; (c) after a call and INT (overscored) to mean "May I transmit?"; (d) in radio, followed by a numeral (1 to 5), to mean "transmit, your signals are of readability indicated".

## L

It is used in the preamble to mean "stations called relay following message to the addressee for which you are responsibly"; (b) in the preamble after a call sign(s) to mean "stations indicated by the call sign(s) preceding L relay the following message to the addressee for which you are responsible"; (c) in radio, by a ship station to effect delivery through a relay ship to ships for which the relay ship is known to be responsible under the existing group radio organization; (d) in radio, to effect delivery of general messages; (e) in radio, by a shore station, when delivering group traffic direct to senior officer(s) present afloat, if specific arrangements for such delivery have been made; (f) in radio, by senior officer(s) present afloat to effect delivery to shore addressees or ships in port, if specific arrangements for such delivery have been made with shore station receiving such; (g) in radio, by a shore station to deliver messages through a shore relay station to shore addressees or to ships in port, when the relay station is known to be responsible for delivery under the existing shore radio organization; (h) during special operations and at certain other times the communication organization is altered due to changes in the administrative organization. During the period preceding and after such changes and until the communication organization is well settled, the use of L must be avoided and T, with specific instructions, used instead.

## M

It is used (a) in the preamble followed by a call sign, to mean "relay this message via the station indicated by the call sign following M"; (b) in the preamble after a call sign and followed by a call sign(s) to mean "station indicated by the call sign preceding M relay this message via the station(s) indicated by the call sign(s) following M".

## N

It is used (a) after a call to mean "not received"; (b) after a call and followed by identification data, to mean "message indicated was not received"; (c) in the address, to modify collective call sign(s) previously employed in the address. When so employed it exempts the station(s) indicated by the call sign(s) which follow it; (d) the use of N (less) in calls is to be avoided except under unusual circumstances. When exemptions in a call are necessary, N may be employed in a manner similar to its use in an address.

## NITE

The "deferred" sign is used (a) in the prefix to mean "transmission of this message may be deferred but must be completed and message delivered to addressee(s) prior to the beginning of office hours the following morning (on board ship (0700, ashore 0900); (b) all messages shall be prefixed NITE, unless otherwise indicated by the originator.

## NR

The "number" sign is used: (a) in the preamble, as the first item and followed by numerals, to mean "station serial number is as indicated"; (b) in radio, following a call and R (or N), and followed by numeral(s) to mean "message(s) numbered as indicated received (or not received)."

## P

The "priority" sign is used, and used only, to indicate that the message contains orders, request, or information concerning distress or other extremely urgent matters: (a) in the prefix, to mean "following is priority to all addressees"; (b) in the prefix, followed by call sign(s) to mean "following is priority to station(s) indicated; (c) by itself, after a call to mean "have priority message to transmit concerning distress".

## Q

The "information" sign is used in the address and followed by call sign(s) to mean "following is for information to the station(s) indicated."

## R

It is used (a) by itself after a call to mean "last message or transmission has been received"; (b) after a call, and followed by identification data, to mean "message or transmission indicated has been received"; (c) R shall not be made until the correct group count has been established; (d) in radio, after a call and following a numeral from the "readability" table (1 to 5) to mean "the readability of your signals is as indicated".

## S

It is used (a) in radio, after a call and followed by a numeral from the "signal strength" table (1 to 5) to mean "the strength of your signals is as indicated"; (b) the need for using S to indicate signal strength should be infrequent. This signal is intended primarily for test purposes.

## T

It is used (a) in the preamble, to mean "station called transmit the following to all addressees"; (b) in the preamble, followed by call sign(s), to mean "station called transmit the following only to station(s) indicated by call signs(s) following T; (c) in the preamble, after a call sign and followed by call sign(s) to mean "station indicated by the call sign preceding T transmit the following to station(s) indicated by call sign(s) following T".

## UO

The "negative silence" sign is transmitted five times. It is to be used only by the direct authority of the Coast Guard division commander in the vicinity affected by the "silence sign: (a) in radio, after a call, to mean "stations addressed may resume all radio transmission"; (b) in radio, after a call and followed by identification data, to mean "stations addressed may resume radio transmission on the frequency or the frequencies indicated".

## V

It is used (a) in a call and followed by a call sign, to mean "from station indicated"; (b) in an address and followed by a call sign, to mean "from originator indicated"; (c) space signs are not used preceding and following V.

## VA

It is used after a call or message, to mean "I have nothing more to transmit".

## W

It is used (a) in radio after a call, to mean "am being interfered with by other stations"; (b) in radio, after a call and followed by call sign(s), to mean "am being interfered with by station(s) indicated".

## WA

The "word after" sign is used (a) after the signs C, IMI (overscored), INT (overscored), and J to mean "word after"; (b) in referring to plain-language dispatches only, when single word(s) are required; (c) the word(s) used for reference and the desired word following are repeated.

## X

It is used (a) in radio, after a call, to mean "am being interfered with by static or local noise"; (b) when preceded by GR in the prefix, to mean "the number of groups will be sent later".

## Y

The "acknowledge" sign is used: (a) in the prefix, to mean "The following message is to be acknowledged by all addressees" (Action and information); (b) in the prefix, followed by call sign(s) to mean "the following message is to be acknowledged by the addressee(s) indicated"; (c) after a call by itself to mean "Your last message in abbreviated form without time or origin group is hereby acknowledged"; (d) after a call or address and followed by identification data to mean "your message sent in abbreviated form with time of origin group indicated is hereby acknowledged"; (e) after a call or address and following INT (overscored) to mean "do you acknowledge my last message sent in abbreviated form without time of origin group?"; (f) after a call or address, INT (overscored) Y followed by identification data means "do you acknowledge message indicated?"; (g) it is not to be placed in the prefix without the authority of the originator; (h) it shall invariably be used when "G" is placed in the prefix.

## Z

It is used (a) in the address of messages and followed by call signs to mean "the message following is addressed for action to the addressee(s) indicated"; (b) the sign Z in itself is not an order to retransmit the message. However, local delivery by telephone, messenger, land wire, or visual means is mandatory.