

## Explanation of Radio Message Database Entries

**HEADER1:** Radio messages for the Navy and Coast Guard consist of two basic parts: the header, which contains information as to where the message is to go and how and from whom, and the textual information. The header itself consists of a preamble, the address and the prefix. HEADER1 consists of the address and the prefix, whereas HEADER2 contains the preamble (see below). The address is the most important part of the header, as it contains directions as to whom the message is addressed both for action and information, and from whom. The basic header starts with Z, which denotes Action for all call signs which follow. Immediately following the last Action is V followed by a single call sign, which designates From. Following the From call sign are various options: Q followed by call signs designates Information addresses and Y followed by call signs means those call signs are to acknowledge receipt of the radio message. Immediately after the Address is the Prefix, which contains information as to priority of the call (N or nite for delivery by the following morning, P or priority sending, R or routine sending, typically within an hour) followed by optional call signs if the priority differs for different action and information addressees. Finally, the Group Count, GR, is followed by the number of words contained in the text. It is often found that call signs have been misread by the radio operator, and the database has corrected their translations.

Commercial radio messages differ somewhat in style, but the information required is still the same. Typically it begins with the origin of the message, followed by CK (or check or number of words in the message) and the number of words. The time and date of the message as filed in the radio office is next, followed by BT or Break Transmission, and the person(s) the message is to go to. Additional information, such as NL (Nite Letter), NITE (night message), DL (day letter) are found immediately before the address. GOVT, COLLECT, and PRESS are often found within the address and signifies who is to be charged (and how) for the radio message.

The best source of information that explains Navy, Coast Guard, and commercial radio messages is the Communications Instructions for the United States Coast Guard, 1930, found in the National Archives, Washington DC (Record Group 287, Entry T47.8 C73/930). Other sources of information include: Recapitulation of Instructions Governing the Use of Naval Communication Facilities at Washington, DC October 23, 1925 (Record Group 287 [unknown entry] and Record Group 181 at San Bruno, California Entry 49, A6-1) and the Coast Guard Filing System (National Archives Washington DC Civil Reference Branch Offices).

**FROM:** The originating person, ship, or office. Often FROM is obtained from the Q portion of HEADER1, and has been translated into a mnemonic acronym or the ship name (see the attached listing of all call signs found and their translations). Occasionally, FROM sends two or three messages at the same time, and a '-1' or '-2' has been appended to distinguish the messages in the database.

The best source of radio call sign translations can be obtained from the National Archives, Washington DC (Record Group 80, SecNav General Correspondence, 1926-1940, Entry A6-3(2)/A10-1(13), 3rd Edition, US Navy Call Book, Part I, 1935 [Galley Proofs]). Another source may be the Berne List, an international listing of all call signs possibly located at the Library of Congress (not examined as yet).

**ACTIONx:** These are the addressees designated for action in the header, followed occasionally by a priority designation in parentheses. ACTIONx listings are obtained from the HEADER1 information if a header was present, or used the Action listing in the radio message. Translations of call signs by the radio operators were not perfect, and the database contains corrected translations. Omissions and ACTIONx which were INFO have not been corrected.

**INFOx:** These are the addressees designated for information in the header, followed by an optional priority designation in parentheses. See ACTIONx for additional information

**PRECEDENCE:** The general priority of message traffic assigned to the radiogram, as indicated in the prefix. This entry is only used for Navy and Coast Guard traffic. Occasionally, a radio message is found without a header but has a designation of Routine, Priority, Nite or Urgent

written somewhere on the message. Entries include R (routine), P (priority), N (nite), U (urgent), or blank (routine).

**CLASSIFIC:** The security classification scheme assigned to the radio message. Most of the radio traffic is unclassified (entry: blank). Other possible entries are C (confidential) and R (restricted). Any confidential or restricted radio messages must be sent in code or cipher.

**STYLE:** Plain text (blank), Code (CO), or Cipher (CI). A Code is used when each word of plain text is substituted for a unique series of letters. Cipher indicates that each letter of the text is translated individually. It is nearly impossible from the plain text translations to determine whether the message was sent in code or cipher. Additionally, any plain text translation of an encrypted telegram must be paraphrased to reduce the ability of others to decrypt the original message. Often one will see subtle changes in the text from radio office to radio office in the translations.

**GROUP:** The number of words contained in the text of the radio message. No attempt was made to count words for radio messages that did not have a GR or CK embedded in the header. Occasionally, the group count differs in the header from version to version due to erroneous reception, and the wrong group count was retained.

**OFFICENO:** The reference number as defined for Navy and Coast Guard radio traffic. This is the first two numbers found in the actual textual message, and indicates the originating office (for Navy) or number suitable for Coast Guard Filing System. Each Navy station had its own office numbering system. For the Chief of Naval Operations, 00 and 10 meant the CNO, 38 indicates Ship Movement and Fuel, 20 is Communications, 16 is Naval Intelligence. In general, the numbers 00 and 01 represent the highest authority at Navy stations. The Coast Guard scheme is straightforward: 60 designates operations, 80 is communications, and 99 designates a coded or ciphered message. For commercial radiograms, office numbers are not part of the message; consequently, the first two letters of the originator (FROM) are adopted for reference purposes.

**DATEL:** The local date that the message was sent or filed in the originating radio office. For Navy and Coast Guard messages, this information is found in the second set of two digits in the first four digit number beginning the text.

**TOFFL:** The local time of filing of the message sent or filed in the originating radio office. For Navy and Coast Guard messages, this is usually the last four digit number at the end of the text. In some cases, no Toffl is available and is obtained from context relative to other messages (usually contains an alphabetic letter - the higher the replacement, the less uncertain the time). In some of these cases, duplicate copies indicate the time of filing and was adopted.

**DATEZ:** The GMT (Greenwich Mean Time, now Universal Coordinated Time, also known in Navy lingo as Zulu Time) date of the message origination.

**TOFFZ:** The GMT time of the message filing. The translation of Datel and Toffl to GMT time requires knowing the local time zone of the originating office. East coast US was always +5 (i.e. add five hours to local time to get GMT time), West coast as +8, Hawaii +10.5, American Samoa +11, Lae New Guinea and Sydney Australia -10, Nauru Island was -11.5, and various ship's time zones were obtained from the bridge logs. Interestingly, Paris and London were both -1. At no time was daylight savings time used anywhere in the United States during 1937.

**TEXT:** The actual text of the radio message. For commercial traffic, all header information is included in the text. All messages are transcribed verbatim without punctuation added. In some cases for commercial traffic, '=', ':', and ';' are added to indicate line breaks, as they are used for this purpose in other versions. Spelling and other errors are indicated by '[SIC]'. Misspellings without this designation are likely due to transcription errors. Several readings of each text message was compared to the original telegram to minimize these errors.

**REFERBACKx and REFERFORWx:** These are concatenations of OFFICENO, DATEL, and TOFFL, and are often used by Navy and Coast Guard messages when referring to previous messages. This form has been adopted for the database. Whereas in real time reference forwards are impossible, it is possible in hindsight to link various messages in a chain that refer back to one another; REFERFORW simply indicates the message that refers back to the current message. Up to five references were included, but in some cases there are actually more than five. After each 8 digit REFERBACK(FORW) entry is the specific designator (DZTZF1) in parentheses in GMT time to the specific message referred to. If no entry in parentheses is evident, it means that that specific message was not found. A few of these messages, however, are found in notations on the messages and are included in COMMEMO2 (see below).

**DZTZF1:** A concatenation of year, month, day, time, and FROM all in GMT time. DZTZF1 is a unique identifier of the particular message and is the heart of the database. The database is indexed and sorted by this parameter.

**SOURCE:** The source location of the radio message as found in various archives and personal collections. See attached for the complete listing. The most important source(s) is N14 and COM14, the records of the 14th Naval District based in Honolulu. Much of N14 and COM14 are duplicates, but some in each are unique. Sources ONI, RG80, CNO and SECNAV are largely duplications. THOMPSON has many errors, none serious, in time of filing and text, which is to be expected as it is a secondary source.

**COPYNO:** The numerical copy version number of each message, starting with number zero. See below for more information regarding duplicate copies.

**RECORDNO:** The record number of the database, as determined by original entry. This is used to help locate an individual entry, and is relatively unimportant to understanding the database.

**HEADER2:** The preamble to the header (see above). This entry typically contains the Station Serial Number and the Radio Station that actually delivered the radio message (e.g. PM 36 signifies the 36th message that NPM delivered to that station on that day). Most SSN's are reset daily, except from major Naval radio station to Naval radio station, which are reset every six months. Also included in HEADER2 is the local date as indicated when the message was received.

**WEATHER, PCLOSS, POSITION:** (Not printed). These are logical entries to indicate whether the text contains information on weather, post-loss radio potentially attributable to Earhart, or position information of ships and planes at specific times from the original source.

**TOFRECEPTL (Z):** The time of receipt of the radio message at the receiving radio station in Local or GMT time, with 2 digit year, month, day and time. This information can only be obtained from the radio message itself, and is indicated as the last time (for reasons of re-transmission along relay stations), usually below the text. Printed if available

**TOFDELIVL (Z):** The time of delivery of the radio message by the composer to the radio station, or the time of actual delivery to the air in local and GMT time. The difference is readily obtainable by comparing the time to TOFF. Printed if available.

**TOFREADL (Z):** The time that the radio message was actually read, in local and GMT time at the receiving station. This is an unsatisfactory parameter to judge when messages were actually read, as the date/time stamps of many offices were in error (e.g. 14th Naval District is typically off by two days). Printed if available.

**COMMENT1:** A very brief comment added by the database enterer when entering the relevant information.

**COMMEMO2:** A catch-all entry for more lengthy comments on the radio message, as well as any ancillary notations made upon the radio message.

**DUPLICATE COPIES:** Nearly half of the more than 3000 radio messages contained in the database are duplicates of the 1672 unique messages. Those messages that do have duplicates were sorted by COPYNO in the following subjective manner: primary source messages were given lower numerical COPYNO, and those with headers were rated more important. An attempt was made to find the least misspelled version for COPYNO 0. Secondary sources (e.g. reports, retranscriptions, etc.) were delegated to the highest level COPYNO. Each duplicate version was tested for having the identical header as COPYNO=0: if it was identical, it was not printed; if not, HEADER1 was printed. In cases where no HEADER1 was available for COPYNO>0 but HEADER1 did exist for COPYNO=0, then the header1 indicator is printed. A similar situation arise for TEXT. No REFERBACK (FORW), TIMEL (Z), DATEL (Z), OFFICENO, GR, PRECEDENCE, CLASSIFIC, STYLE are printed at any time for COPYNO>0. Except for the latter four parameters, computerized tests ensured that these entries are the same for each copy. Specific differences, when important, are called out in COMMENT1 or COMMEMO2 for each copy. TOFRECEPTL (Z), TOFDELIVL (Z), and TOFREADL (Z) are printed if available. RECORDNO, COPYNO, and SOURCE are included in each duplicate to indicate where to find the message in the archives and in the database.