

## Message handling

Amateur Radio has proven to be a robust, flexible and reliable form of Emergency Communication. The capacity is limited, however. ***Accuracy is always more important than speed.*** The principle of message handling is to do everything necessary to allow the *Receiving Station* to produce an **exact copy** of the message sent by the *Transmitting Station*.

Most of the messages handled for our clients will be in written form. Even when sending or receiving a brief tactical message, it is best to write it down. This provides a record of station activity, and makes it less likely that an important element will be left out, or misunderstood. A message is always sent exactly as filed. It is not appropriate for us to interpret, correct or change a message in any way. We do not have to understand the message, only convey it.

Messages will be handled (in Pacific County) using the National Traffic System (NTS) format, also referred to as "ARRL" format, for the American Radio Relay League, which sponsors NTS. The message format consists of three "Blocks"; the **Header, Body and Signature**. Messages presented in other formats will be "massaged" into NTS format. Even when copying a message on plain paper, this basic format should be used.

### 1. The Header Contains:

**A. Message Number** for reference purposes. This number is locally generated by the originating station operator. Along with the originating station's callsign, and possibly the date, this becomes a unique message identifier.

**B. Precedence** indicating the importance of the message. The Precedence is abbreviated with a single initial, except for EMERGENCY, where the entire word is spelled out:

**EMERGENCY:** Any message having life and death urgency to any person or group of persons, which is transmitted by Amateur Radio in the absence of regular commercial facilities. This includes official messages of welfare agencies during emergencies requesting supplies, materials or instructions vital to relief to stricken populace in emergency areas. If in doubt, do not use this precedence.

**(P) Priority:** This classification is for important messages having a specific time limit, official messages not covered in the emergency category, press dispatches and emergency-related traffic not of the utmost urgency.

**(W) Welfare:** This classification refers to either an inquiry as to the health and welfare of an individual in the disaster area or an advisory from the disaster area *that indicates all is well*. Welfare traffic is handled only after all emergency and priority traffic is cleared. The Red Cross equivalent to an incoming Welfare message is DWI (Disaster Welfare Inquiry).

**(R) Routine:** Most traffic in normal times will bear this designation. In disaster situations, traffic labeled Routine should be handled last, or not at all when circuits are busy with higher-precedence traffic.

**C. Handling Instructions;** completely optional and not often used in intra-County traffic. Generally not applicable to disaster-related traffic. Any special handling instructions should be spelled out in the body of the message. (see page 5 for a listing)

**D. Station of Origin,** where message first entered the Amateur radio system, so it is possible to check back if a question arises. Also part of the unique message identification. This entry does not change as a message is passed along.

**E. Check:** the number of words in the body of the message.

**F. Place of Origin,** where the *message originator* is located, not necessarily where the station of origin is located.

**G. Filing Time,** ordinarily optional, but very important with emergency messages, the time the message was “handed” to the operator.

**H. Date of origin.**

**I. Address** to which the message is to be delivered. This should be as specific as possible, and include a phone number. In some cases, an email address is appropriate.

**2. The Body Contains:** The message itself. There may be 25 or 50 blank lines on a standard message form, arranged five-across. One word goes on each line. The number of words in this section is the “Check” or the “Count”. Request that messages be kept as brief as possible.

**3 The Signature** contains the Name and Title of the originator. If the message precedence is EMERGENCY, the message should be signed or initialed by the sender.

**Sending a message by voice,** begins with contacting the receiving station and indicating that you have traffic. This should include the number and precedence of the traffic you hold for them, such as, “I have one Priority and two Routine”. The receiving station indicates they are ready.

Read the message slowly and clearly, at a speed that the receiving station will be comfortable writing down. The speed should be somewhere between 15 and 20 words per minute, or 3-4 seconds per word.

There are certain words and phrases that are used in a specific way while passing written traffic by voice:

**PLEASE COPY:** Indicates you will be reading the message Header immediately following, sort of like saying “Ready! Set!...”

**FIGURES:** Indicates that a numerical sequence will follow.

**INITIAL(S):** Indicates one or more initials or an abbreviation will follow.

**I SPELL:** Said after a word that will then be spelled out using the standard phonetic alphabet. Say the word, “I SPELL”, the word in phonetics, and then say the word again and continue with the message. Proper names and any unusual word or spelling should be handled this way.

**BREAK FOR TEXT:** Indicates that you have finished the Header, including the Address and are breaking the transmission for the receiving station to either ask for repeats or fills on the Header, or tell you to continue with the Body of the message. “Go with text”, is the normal response.

**BREAK FOR SIGNATURE:** Indicates that you are finished with the Body of the message. The receiving station counts the words, compares the count to the “Check”, and if all is well, tells you to continue. Otherwise, the word count may need to be verified. This is best done by reading each line of five words, and breaking for confirmation.

**END OF MESSAGE:** Indicates that you have finished the Signature. The receiving station should supply a “Time of Receipt” at this point (see below). Wait for the receiving station to tell you to go on before starting the next message.

**REPEAT...** Indicates the need to repeat a word or words. Use any of the following: REPEAT ALL AFTER, REPEAT ALL BETWEEN, REPEAT WORD AFTER, REPEAT WORD BEFORE... or any other phrase that describes what you need.

**Time of Receipt:** When a message has been properly received, the receiving station gives the transmitting station a Time of Receipt (TOR), which is recorded on the message form and in the log. Messages may be listed in the log and/or filed in chronological order by the TOR. The time given by the Receiving Station may not agree with your watch. Accept and log the time as given, ensuring that the same time is recorded at both stations.

**Time of Delivery:** When a message arrives at its ultimate destination and has been physically delivered to the Addressee, this time is the Time of Delivery (TOD). A message will only have one TOD and only the final Operator will record it on the message form. This can be a valuable bit of information and should be recorded. Occasionally, a message originator will want the TOD reported back to ensure the message was delivered and when.

**Sending a message by Packet Radio**, or other digital format is in many ways easier and faster. The message is typed into a computer text file (off-line) and then sent to the receiving station over the Amateur packet radio network. These messages may in some cases be ultimately delivered by Internet email, manually or automatically. Not all radio

stations will be equipped with Packet Radio. The operation of Packet Radio is somewhat complicated by the fact that it requires a computer. Computer operation using various forms of emergency power can be quite problematic.

Formatting may be difficult or not preserved in some digital modes. In this case, each part of the Header is labeled:

**MSG NUMBER:**  
**PRECEDENCE:**  
**HANDLING:**  
**STATION OF ORIGIN:**  
**PLACE OF ORIGIN:**  
**TIME FILED:**  
**DATE:**  
**TO:**  
**POSITION:**  
**LOCATION:**  
**FROM:**  
**POSITION:**  
**LOCATION:**  
**MESSAGE TEXT:**  
**END OF MESSAGE TEXT**  
**RECEIVED TIME:**  
**DATE:**  
**BY OPERATOR:**

These additional words introduced into the communication are not part of the message itself, but merely labels clarifying the graphical blocks on the standard message form. These labels are not counted as part of the "check". If the message were read aloud, it should be indistinguishable from the same message read from a standard NTS message form.

**Logs:** Each station engaged in emergency communications should keep a log. This is important for a number of reasons. A log can be kept on a blank sheet of paper if a printed form is not available. At the top of each page should be entered the name of the station, the date, and the operator's name and callsign. If the operator or date changes, draw a line across the log sheet and enter the new data. Each entry should have a time, the call of the station heard or worked, and a brief notation of the nature of the transmission.

When handling traffic, the message number, call of the station received from or transmitted to, and the Time of Receipt should be listed. Any communication with any other station should be noted in the log, even if only time and call. In some emergencies, the Amateur Radio Logs have turned out to be the only written chronological record of events.

Net Control Station should keep a detailed log listing every station that checks in, and the time they did so. When they leave, that time should also be recorded. For any message

traffic handled through the net, some record should be kept, at least the two station calls, the message number and TOR. If the stations move off the Net to handle traffic, that should also be recorded with the calls and time, and if known, the frequency to which they are moving.

**Handling Instructions:**

**HXA** (followed by number) Collect landline delivery authorized by addressee within \_\_\_\_ miles. (If no number, authorized unlimited)

**HXB** (followed by number) Cancel message if not delivered within \_\_\_\_ hours of filing time; service originating station.

**HXC** Report date and time of delivery (TOD) to originating station.

**HXD** Report to originating station the identity of station from which received, plus date and time. Report identity of station to which relayed, plus date and time, or if delivered report date, time and method of delivery.

**HXE** Delivering station get reply from addressee, originate message back.

**HXF** (followed by number) Hold delivery until (date).

**HXG** Delivery by mail or landline toll call not required. If toll or other expense involved, cancel and service originating station.