

National Traffic System Basics

TRANSMITTING A RADIOGRAM

Transmitting the radiogram for the first time applies both to originated radiograms and radiograms that have been received for relay. Let's assume you have found a station to receive your radiogram, either by your own efforts to find one or as a result of having been told by a net control station to transmit it to so-and-so. You call him, he says he is ready to receive (QRV). A voice example would go something like this: "Copy message number fifteen, routine, KY1T ten, Newington, Connecticut, two one five one zulu, April twelve. Mrs. Judy Smith, one nine zero eight Moon Street Northeast, Albuquerque, New Mexico, eight seven one one two, telephone two nine eight six four zero eight. Break. Mother and Dad arrived home safely Sunday afternoon X-ray love. Break. Uncle George. End of message, no more".

On CW, it would go like this: NR 15 R KXIB 10 NEWINGTON CONN 2151Z APR 12 MRS JUDY SMITH AA 1908 MOON ST NORTHEAST AA ALBUQUERQUE NM 87112 AA 298 6408 BT MOTHER AND DAD ARRIVED HOME SAFELY SUNDAY AFTERNOON X LOVE BT UNCLE GEORGE AR N.

Phone operators use the proword "break" for separation of the address and signature from the text. It is incorrect procedure to use the words "going to" preceding the address and "break and the text" preceding the text.

Radiograms should be sent by voice, not read. That is, reading puts emphasis on certain syllables and words, and this means de-emphasis of others. In transmitting a radiogram by voice, no word or syllable should be de-emphasized. Letting your voice fall at the end of a sentence as would be done in reading is poor practice in voice traffic work, as is letting your voice fall for unaccented syllables. You are not a broadcast announcer. Keep in mind that the receiving operator must put down what you transmit, completely and accurately.

Avoid such inanities during transmission as "Mrs., a married lady" or "Moon, opposite from Sun." They only confuse things and give a bad impression of our service. Avoid giving dates as "four, twelve, eighty-eight." Just say "April twelve" and forget the year. (We hope no message will be over a year old! Also, don't say "today's date." Spell all difficult or unusual words (e.g., "Ferrier, I spell F-E-R-R-I-E-R"). If the word is very difficult, unusual, or a group of letters not forming a word, spell it out using ITU phonetics (e.g. "NCOIC, I spell: November, Charlie, Oscar, India, Charlie.") Using phonetics excessively is poor procedure. Usually simply spelling the word is sufficient.

RECEIVING A RADIOGRAM

Some of the problems of receiving have already been touched on above. The principal rule to follow is do not, repeat do not assume you have received a part of a radiogram correctly if you are not absolutely certain. This is what causes most of the "garbles" in our amateur message handling. A single letter lost in a crash of static can completely change the meaning of an entire

CW message, as can loss of an entire word by voice. Most operators are prone to "guess" and usually they guess right. But if you did not actually "copy" the missing part, it is taking a chance. It's best to make sure.

Modern procedure, both on voice and CW, uses "break in." On voice, this usually refers to "VOX" procedure, in which the transmitting operator can pause long enough between words or phrases to let his VOX relay open, enabling the receiving operator to "break" if he misses something. On CW, the meaning of "break-in" is that the receiving operator may miss the last word of this phrase: "... arrive on Sunday." He would simply say "on" and the transmitting operator would repeat "Sunday" and go on with the message. On CW, the receiving operator, after missing "Sunday," presses his key to interrupt the transmission, sends ON and the transmitting operator repeats SUNDAY and goes on with the message. "Break-in" procedure is strongly recommended for all radiogram traffic.

If break-in is not used, it is necessary to get "fills." This makes it necessary for the receiving operator to note the parts missed and get the missing parts filled after the radiogram has been completed. On voice, simply ask for "word after..." or "word before..." or if more than one word might have been missed, "between... and." On CW, the abbreviations WA, WB, or BN are commonly used. When break-in is not used, it is common practice for transmitting stations to repeat (on voice "I repeat," on CW a question mark) difficult words, letters or groups.

Perhaps the second most prevalent cause of "garbling" of messages is poor handwriting. Many people cannot make out their own handwriting a day or more after it is written, and in some cases only an hour or so delay can erase the memory of what a scrawl is supposed to mean. The answer is to copy by typewriter or a personal computer. A little practice is all that is needed to be able to do this as easily as copying by pencil; usually it is faster, and always is more legible. If you must copy by hand, require the transmitting operator to send at a speed at which you can write legibly; don't scrawl illegibly because you don't want to admit you can't copy that fast. Copy five words or groups to a line by hand, ten (5+5) by typewriter, to enable an instant "check of the check." In fact, this is the origin of the word "check" for word count.

RELAYING THE RADIOGRAM

The rule is that received radiograms must be relayed or delivered within 48 hours after receipt. However, this is only a "counting" rule; for practical purposes, the rule is to relay or deliver the message as soon as possible after receipt. This means immediately if you have an outlet; otherwise, as soon as an outlet is available. The public is conditioned to "instant communication" and will be unimpressed with messages, even free ones, which are slower than the mail, and in some cases "slower than walking."

Relaying the message uses the same procedure as transmitting, but here are some principles that are applicable especially to relaying. For one thing, when you are relaying a message, its contents are none of your concern. You take no action and make no changes, nor any comments on its contents, except in making sure you receive it correctly and relay it in the same condition. Neither do you judge its importance, except on the basis of the precedence assigned to it by the

originating station. If you disagree with the precedence assigned, your argument is with the originating station, not necessarily the one sending the message to you.

Relaying stations are authorized to change the form of radiograms they handle, if incorrect when received, but not the content. Even spellings that appear to be obviously incorrect are best relayed exactly as sent; for all you know, the writer may have a purpose in spelling incorrectly. The best rule to follow in relaying is to relay the radiogram exactly as you received it, after making certain that you received it correctly. If the station sending it to you is the originating station, he may change it if desired; otherwise, no changes (except in form) should be made.

COUNTING RADIOGRAMS

All amateurs who handle traffic are invited to report their total message count monthly to their Section Manager.

For counting purposes, traffic is divided into a few categories, as follows:

- Originated: Any radiogram originated by someone other than yourself, filed with your station for initial transmission on the air.
- Received: Every radiogram received by Amateur Radio at your station. This includes all messages received, whether received for relay or received for delivery.
- Sent: Any message transmitted from your station by radio to another station, whether such a message was initially transmitted from your station or was received from another station.
- Delivered: Any message delivered by you to the addressee, provided that the message was received at your station by radio and that the addressee is someone other than yourself. This delivery must be an off-the-air function (by telephone, mail in-person, etc.)

The traffic total is the sum of originated received, sent and delivered points. Note that in some cases the same message can be counted twice; for example, the same message received by radio and then relayed to another station by radio is counted both in the "received" and "sent" categories, while a message received by radio and then delivered is counted both in "received" and "delivered" categories.

When transmitting or receiving messages in book form, count one point for every three messages in the book, plus another point for any over a multiple of three. That is, a book of three messages would count as a single message, but a book of four, five or six would count as two, and a book of seven would count as three, etc. "Booking" of messages is a time-saving device for those who want to use it in the interest of efficiency. It is similarly perfectly proper procedure to separate booked messages into single messages if desired; that is, the transmitting station decides in what form they shall be sent, as long as it is proper. Each message, regardless of its content, deserves to receive separate treatment. Messages handled using unauthorized "short cuts" cannot properly be included in your traffic count.

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