

“Verification” of Message Content

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A survey of the “performance” of the National Traffic System in March 2003 indicated that about 4 out of 5 messages actually get to their destination, and about 20 percent of the delivered messages were 100% accurate. Following is a method to improve that unfavorable performance.

Historical procedures for relaying formal written traffic (radiograms) do not include a procedure to allow the **Sending person to verify that the Receiving person has received the correct information**, other than “taking the person’s word for it”, when the Receiving person sends “QSL” (cw) or “yes, I got it OK” (voice).

A “feedback” procedure has been developed to further insure the Sending person that, yes indeed, the information has been written down by the Receiving person...and is correct. The decision regarding “correctness” is made by the Sender, NOT the Receiver.

This simple process is done routinely with “tactical” messages.

1. The Sending person transmits the information.
2. The Receiving person REPEATS BACK the information, as received.
3. The Sending person says, “Yes, you have it correct”, or “No, change....”
4. Steps 2 and 3 are repeated until the Sending person is satisfied... the message has been “verified

When messages are transmitted by pactor or packet, verification is done by the software, similar to the process used with email on the internet. Verification has historically not been done with written messages sent via voice, cw, or RTTY. Nor has it normally been done at an especially critical part of the message handling procedure: the Delivery to the ultimate receiving person (Addressee).

If the Sending station decides to use “Verification”, the following process should be used. It is highly recommended that all messages sent by (voice or cw) ARES/RACES personnel use the following Verification process. Doing so will improve the odds that the message will be Delivered with 100 percent accuracy.

A “new” Q-signal is defined for Verification “QVV”.

QVV – Please send each Word Group back to me for Verification by me.

QVV? - Will you be Verifying each Word Group?

The process....using CW...

1. Before starting the message, the Sending station sends QVV.
2. The Sending station will send 234 ...if the message number is 234
3. **AFTER** the Word Group is written, the Receiving station will send 234 back to the Sender.
- 4a. If the Sender receives “234”, he will send the next Word Group. If he did NOT receive 234, he will send an "N", followed by re-sending the 234.
- 4b. If the Receiver does NOT receive a valid Word Group, he will send “?”. The Sender will repeat the Word Group.
5. Prosigns are considered to be a Word Group. The process continues until all Word Groups have been sent, received, and “verified”.

The process....using Voice...

1. Before starting the message, the Sending station tells the Receiving station that “Verification” will be used.
2. The Sending station will say “234”, followed by spelling the word ...if the message number is 234
3. **AFTER** the Word Group is written, the Receiving station will pronounce the word, and spell it back to the Sender,
- 4a. If the Sender receives “234”, he will say the next Word Group. If he did NOT receive 234, he will say "repeat", followed by re-saying the 234.
- 4b. If the Receiver does NOT receive a valid Word Group, he will say “repeat”. The Sender will repeat the Word Group.
5. “Line Breaks” are considered to be a Word Group. The process continues until all Word Groups have been sent, received, and “verified”.

“Verification” of Message Content *(background information)*

It is VERY important that all messages relayed by emergency service communications personnel be relayed in a manner which provides the highest possible level of accuracy. “Manual” methods of relaying (voice or morse code) are compromised by the natural processes of human behavior.

IT IS BETTER TO NOT RELAY A MESSAGE...THAN TO RELAY A MESSAGE IN WHICH THE CONTENT HAS BEEN (MISTAKENLY) CHANGED.

Radio Amateur emergency service communications personnel have, in general, a “higher than average” level of confidence in themselves and their ability to quickly and accurately relay messages of behalf of other parties. Only those people with high confidence levels answer “yes”, when leadership asks for volunteers to “relay messages”. This confidence, while good, sometimes hides the truth...those communicators are not as good as they think they are! They make mistakes. They are “human”.

“Verification” is a tool which can be used to help insure that messages are relayed “without error”.

The Verification concept was presented to the leadership of the National Traffic System (NTS...sponsored by the ARRL) in 2003. The concept was rejected by the leadership (NTS Cycle 4 Pacific, Central, and Eastern Area Chairs) in 2005. The reasons given were “it is not needed” and “the use of this concept will increase the time required to relay a message”.

Amateur communicators using the “radiogram” template are encouraged to consider initiating the Verification (QVV) process before sending radiograms. Amateur communicators using other templates (such as ICS forms) are also encouraged to consider using the Verification process.

Amateur communicators functioning with “Emcomm” related messages are strongly urged to use the Verification (QVV) process when sending ALL messages (by voice or cw).

Any group of communicators relaying messages should seriously consider using the “Verification” process, and any other processes which will increase the likely-hood of all messages being delivered containing ALL information EXACTLY as it was originated. 100% accuracy is the goal for EVERY message!