

NATIONAL TRAFFIC SYSTEM

NTS Guide

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INTRODUCTION TO NTS

- ◉ There are 2 Organizations that are part of the National Traffic System, the ARRL and Radio Relay International (RRI).
- ◉ From the ARRL website (arrl.org)
 - During disasters or other emergencies, radiograms are used to communicate information critical to saving lives or property, or to inquire about the health or welfare of a disaster victim.
- ◉ Why is the ARRL called a "Relay League?"
- ◉ The very first Amateur stations were called "Relay Stations," because their first recognized function was to relay message traffic. Back in 1915, when the first issue of QST was printed, they were using low-frequency spark-gap transmitters to send messages in Morse code.

- Today, we send traffic using Morse code, voice, and digital modes, with an established message format, in a nationwide network called the National Traffic System (NTS). The NTS is a traffic system established by the ARRL. Many traffic nets are affiliated with NTS, while others are independent. Many independent nets are seamlessly integrated with the NTS, through liaison stations, so that virtually all traffic nets are points of entry and exit for messages, and also provide message relay services to efficiently move traffic from origin to destination.

The ARRL is revitalizing their commitment to the NTS and incorporating its use into the Amateur Radio Emergency Services plan.

As amateur radio operators, emergency communications support is our highest calling and being able to accurately and efficiently handle written traffic is of utmost importance.

FEMA and Department of Homeland Security have exercised message traffic via the NTS and believe this is a viable and important system.

- From the RRI website (radio-relay.org)

The Modern Approach to Traffic Handling and Emcomm

We love traffic handling and we love emcomm. We're Radio Relay International. We're the leading traffic handling outfit for operators in the U.S.A. and Canada with affiliates worldwide including in the UK, EU, Oceania and beyond. Decades of experience. Proven leadership. Quiet professionals doing our job. RRI is traffic handling the way it should be done with proven methods, new technology and a new sense of purpose.

- There are two general types of traffic nets: routine and emergency. The routine nets operate on daily schedules, and handle traffic that is routine (non-emergency), providing a system for maintaining traffic net structure and operator proficiency. They are usually operated in a directed, controlled manner by a Net Control Station (NCS), and are semi-formal. The emergency nets are operated as needed, usually by ARES and/or RACES stations, to meet the communications needs of disaster and emergency response teams. Emergency nets are strictly formal, and only stations participating in the emergency are allowed to check in.

- It is an enjoyable and valuable public service to acquire and maintain traffic handling proficiency. Traffic handlers and traffic nets are prepared to handle both routine and emergency traffic, whenever the need arises.

NOW A LITTLE ABOUT THE TRAFFIC SYSTEM

Next I will cover how traffic flows through the traffic system.

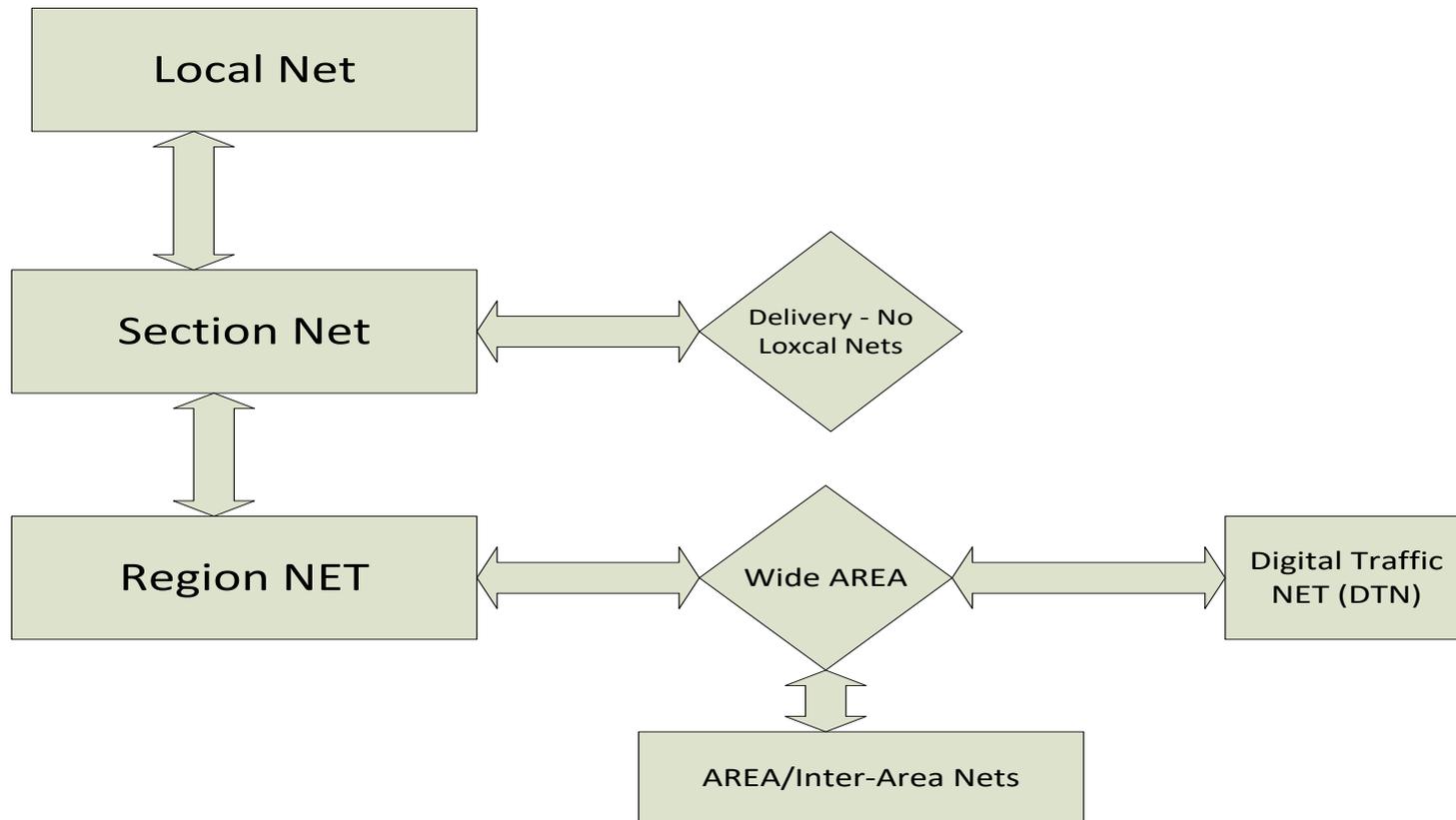
Then I will give you some tips about how to get involved in NTS nets and traffic handling.

I recommend if you are interested in traffic to find an “Elmer” to help you along or find a traffic handlers class to learn the in-depth workings of traffic handling.



HOW TRAFFIC FLOWS

How Traffic Flows in the NTS



HOW TO GET INVOLVED!

- ⦿ First, locate and print a net schedule for the nets in your area. For Northwest Oregon and Southwest Washington you can use the Northwest Oregon Traffic and Training Net (NTTN) which is at 6:05 pm (1805) local time daily on the WORC repeater System (worc.info for a list of repeaters).
- ⦿ There is a listing of nets on the NTTN website (nttnweb.us) to help you get started. I also have a partial list here.

OREGON NETS

| Net Name | Frequency | Day | Time (Local) | Notes |
|---|-----------------|--------|---|---|
| Beaver State Net (traffic) | 3920 Khz | Daily | 17:30 | k6ugs.com/BSN.htm |
| Daytime Oregon Section Net (traffic) | 3920 Khz | Daily | 10:15 | |
| Oregon Section Net (traffic) | 3569 Khz | Daily | 18:30 | CW |
| Oregon Section Net (traffic) | 3569 Khz | Daily | 22:00 | CW |
| Daytime Region 7 Net (traffic) | 3925 Khz | Daily | 09:30 | |
| Daytime Region 7 Net (traffic) | 7238/3925 Khz | Daily | 15:15 | |
| West Coast Slow Speed Net (WCN)(traffic) | 3540 Khz | Daily | 1900 - Summer 1800 - Winer 1600 Early | CW www.west-coast-net.info |
| Noon-time Net (traffic - public svc wide area) | 7293.5/3970 Khz | Daily | 1130 | |
| Northwest Oregon Traffic and Training Net (traffic) | 145.27 Mhz | Daily | 18:05 | nttnweb.us |
| Oregon Digital Net (ODN) | 3579.5 Khz | Friday | 20:00 | Starts with PSK-31 |

- ◉ Keep your schedule handy and begin listening to the nets. **You'll learn a lot just by listening!**

Recommend listening to a couple of nets to see how they check in and how the net progresses.

- ◉ Next, study the Traffic System and Net Procedures. The ARRL Operating Manual, Chapter 7, covers this in detail. Also, the official book for NTS and ARES is called the Public Service Communications Manual, or PSCM, and is available online at ARRL. The official NTS Methods and Practices Guidelines (NTS-MPG), also available online, covers traffic nets and traffic handling in detail.

- The ARRL version of the MPG prints to over 450 pages - however, KV5R has created a "reformatted" version that prints to less than 190 pages. Look online for the "KV5R Reformat of the NTS-MPG" if you wish to study a detailed course on traffic handling.

- ◉ Next, obtain and print some message forms available at nttnweb.us (and a few for hand out here), and reference information. These include:
 - ◉ ARRL Message Forms, (print several copies),
 - ◉ FSD-3 - the list of ARL Numbers and Precedence's used in messages, and
 - ◉ FSD-218 - Instructions for Radiograms, which contains details of the radiogram format, including precedence's, handling instruction (HX) codes, Q-signals, and prosigns.
- ◉ We have some of these available here.

CHECKING IN, AND BASIC NET PROCEDURES

- The next step is to begin regularly checking in to traffic nets. The following applies only to routine nets - not emergency nets. Do not check in to an emergency net unless you have, or can handle, traffic that is relevant to the declared emergency.
- Please note that these are general guidelines, not cast in stone. Every net is a little different. Listen to each net a few times before checking in.

- The Net Control Station establishes the exact frequency for the Net. Zero-beat Net Control (that is, tune until Net Control is perfectly clear mainly an hf thing), and don't worry if the net is a little high or low on your dial. No two radios are calibrated exactly alike (for HF Nets).
- When Net Control calls for check-ins, with or without traffic, listen carefully for a little break, then give your call sign and the phrase “with traffic” if you have traffic or just your callsign if you do not have traffic, slowly and clearly, using standard ITU phonetics. Then, wait to be recognized by Net Control.

- ◉ Example:

With Traffic

Kilo Uniform Zero Lima with traffic

Without Traffic

Kilo Uniform Zero Lima

- ◉ When recognized, speak clearly and e-nun-ci-ate your words. List the traffic you hold, give the destination location - as in "I have one for Dallas, Texas". End the check-in with your call sign.

- Remember that Net Control is in charge of the net. If you have anything to say later in the net, wait until the Net Control calls for more check-ins, and say, "Recheck." When Net Control recognizes your recheck, present your information or question, but keep it brief and pertinent. Ending the exchange with your call sign signals Net Control that your recheck is complete.
- Listen to the net to learn how and when other types of break-ins are used, such as "relay, " "contact," "comment," and "info."

- When possible, monitor the net until it ends, in case someone checks in with traffic for your area. Some nets ask that you call Net Control and ask to be excused if you have to leave early. Just recheck, give your call sign, and say, "Please check me out." Do not leave the net if you have traffic listed, without informing Net Control.

If you hear a traffic listing destined for your local calling area, recheck and offer to take the traffic. Net Control will pair you up with the person holding the traffic, and may or may not move you to another frequency to receive the traffic. Use a radiogram form to copy the traffic, following the sender exactly, and requesting clarification (or, "fills") as needed, until all information is confirmed. If passed off-frequency, return to the net and recheck, informing Net Control that the traffic has been passed.

Messages you receive for your calling area are usually delivered by telephone, or may be mailed, or even emailed to the recipient, if that information is available. When delivering the message to the recipient, say only the message text and signature, not the preamble information. Then ask the recipient if he or she would like to send a message back, and if so, write the message on another message form, fill in the preamble, and then list it on the net. Pass the traffic following Net Control's instructions. You do not need to deliver traffic during the net you have a day or two. Leaving messages on voicemail is acceptable, remember to leave your contact information so the recipient can contact you.

If not passed by direct voice contact (via answering machine, mail, or email), send a service message back to the sender, informing the method of delivery. If the message could not be passed, try another net. Routine radiograms that cannot be passed in two days may be cancelled, with a message back to the sender stating that the traffic could not be passed - but see HX codes "B" and "F" for specific time limits that may apply. Completed radiograms should be archived for a while (I recommend 1 year). Emergency radiograms should be archived indefinitely, for liability purposes. Also, radiograms of possible historic value should be archived indefinitely.

THIS IS THE END OF THE BASIC INFORMATION

For questions you can email the Oregon STM
staff or your Section Traffic Manager

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HANDOUT PACKET

- ◉ We have a handout packet that includes some operating aids for you.
- ◉ ARRL FSD-3 ARRL Numbered Radiograms and Precedence
- ◉ ARRL FSD-218 Message format and Handling instructions.
- ◉ ITU Phonetic Alphabet. *Bottom is designed to be folded laminated and carried in your radio kit.*

FSD-3

Relief Emergency · Routine Messages Recommended Precedences

The letters ARL are inserted in the preamble in the check and in the text before spelled out numbers, which represent texts from this list. Note that some ARL texts include insertion of numerals and text. Example: NR 1 R W1AW ARL 5 NEWINGTON CONN. DEC 25 DONALD R. SMITH AAA 164 EAST SIXTH AVE AAA NORTH RIVER CITY MO AAA PHONE 73-3968 BT ARL FIFTY ARL SIXTY ONE BT DIANA AR. For additional information about traffic handling, consult *The ARRL Operating Manual*, published by ARRL, or the *NTS Methods and Practices Guidelines*.

Group One—For Possible “Relief Emergency” Use

| | |
|-----------|--|
| ONE | Everyone safe here. Please don't worry. |
| TWO | Coming home as soon as possible. |
| THREE | Am in ____ hospital. Receiving excellent care and recovering fine. |
| FOUR | Only slight property damage here. Do not be concerned about disaster reports. |
| FIVE | Am moving to new location. Send no further mail or communication. Will inform you of new address when relocated. |
| SIX | Will contact you as soon as possible. |
| SEVEN | Please reply by Amateur Radio through the amateur delivering this message. This is a free public service. |
| EIGHT | Need additional ____ mobile or portable equipment for immediate emergency use. |
| NINE | Additional ____ radio operators needed to assist with emergency at this location. |
| TEN | Please contact _____. Advise to standby and provide further emergency information, instructions or assistance. |
| ELEVEN | Establish Amateur Radio emergency communications with ____ on ____ MHz. |
| TWELVE | Anxious to hear from you. No word in some time. Please contact me as soon as possible. |
| THIRTEEN | Medical emergency situation exists here. |
| FOURTEEN | Situation here becoming critical. Losses and damage from ____ increasing. |
| FIFTEEN | Please advise your condition and what help is needed. |
| SIXTEEN | Property damage very severe in this area. |
| SEVENTEEN | REACT communications services also available. Establish REACT communication with ____ on channel _____. |
| EIGHTEEN | Please contact me as soon as possible at _____. |

- NINETEEN Request health and welfare report on _____. (State name, address and telephone number.)
- TWENTY Temporarily stranded. Will need some assistance. Please contact me at _____.
- TWENTY ONE Search and Rescue assistance is needed by local authorities here. Advise availability.
- TWENTY TWO Need accurate information on the extent and type of conditions now existing at your location. Please furnish this information and reply without delay.
- TWENTY THREE Report at once the accessibility and best way to reach your location.
- TWENTY FOUR Evacuation of residents from this area urgently needed. Advise plans for help.
- TWENTY FIVE Furnish as soon as possible the weather conditions at your location.
- TWENTY SIX Help and care for evacuation of sick and injured from this location needed at once.
- Emergency/priority messages originating from official sources must carry the signature of the originating official.

Group Two—Routine Messages

- FORTY SIX Greetings on your birthday and best wishes for many more to come.
- FORTY SEVEN Reference your message number _____ to _____ delivered on _____ at _____ UTC.
- FIFTY Greetings by Amateur Radio.
- FIFTY ONE Greetings by Amateur Radio. This message is sent as a free public service by ham radio operators at _____. Am having a wonderful time.
- FIFTY TWO Really enjoyed being with you. Looking forward to getting together again.
- FIFTY THREE Received your _____. It's appreciated; many thanks.
- FIFTY FOUR Many thanks for your good wishes.
- FIFTY FIVE Good news is always welcome. Very delighted to hear about yours.
- FIFTY SIX Congratulations on your _____, a most worthy and deserved achievement.
- FIFTY SEVEN Wish we could be together.
- FIFTY EIGHT Have a wonderful time. Let us know when you return.
- FIFTY NINE Congratulations on the new arrival. Hope mother and child are well.
- *SIXTY Wishing you the best of everything on _____.
- SIXTY ONE Wishing you a very Merry Christmas and a Happy New Year.
- *SIXTY TWO Greetings and best wishes to you for a pleasant _____ holiday season.
- SIXTY THREE Victory or defeat, our best wishes are with you. Hope you win.

- SIXTY FOUR Arrived safely at _____.
- SIXTY FIVE Arriving _____ on _____. Please arrange to meet me there.
- SIXTY SIX DX QSLs are on hand for you at the _____ QSL Bureau. Send _____ self addressed envelopes.
- SIXTY SEVEN Your message number _____ undeliverable because of _____. Please advise.
- SIXTY EIGHT Sorry to hear you are ill. Best wishes for a speedy recovery.
- SIXTY NINE Welcome to the _____. We are glad to have you with us and hope you will enjoy the fun and fellowship of the organization.

* Can be used for all holidays.

ARRL Recommended Precedences

Please observe the following ARRL provisions for PRECEDENCES in connection with written message traffic. These provisions are designed to increase the efficiency of our service both in normal times and in emergency.

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 of stricken populace in emergency areas. During normal times, it will be *very* rare. On CW/RTTY, this designation will *always* be spelled out. When in doubt, do not use it.

PRIORITY--Use abbreviation P on CW/RTTY. This classification is for a) important messages having a specific time limit b) official messages not covered in the emergency category c) press dispatches and emergency-related traffic not of the *utmost* urgency d) notice of death or injury in a disaster area, personal or official.

WELFARE--This classification, abbreviated as W on CW/RTTY, 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).

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

Note--the precedence always follows the message number. For example, a message number may be 207R on CW and "Two Zero Seven Routine" on phone.

Every formal radiogram message originated and handled should contain the following component parts in the order given

I. Preamble

- a. Number (begin with 1 each month or year)
- b. Precedence (R, W, P or EMERGENCY)
- c. Handling Instructions (optional, see text)
- d. Station of Origin (first amateur handler)
- e. Check (number of words/groups in text only)
- f. Place of Origin (not necessarily location of station of origin.)
- g. Time Filed (optional with originating station)
- h. Date (must agree with date of time filed)

II. Address

(as complete as possible, include zip code and telephone number)

III. Text

(limit to 25 words or less, if possible)

IV. Signature

CW: The prosign \overline{AA} separates the parts of the address. \overline{BT} separates the address from the text and the text from the signature. \overline{AR} marks end of message; this is followed by B if there is another message to follow, by N if this is the only or last message. It is customary to copy the preamble, parts of the address, text and signature on separate lines.

RTTY: Same as CW procedure above, except (1) use extra space between parts of address, instead of \overline{AA} ; (2) omit cw procedure sign \overline{BT} to separate text from address and signature, using line spaces instead; (3) add a CFM line under the signature, consisting of all names, numerals and unusual works in the message in the order transmitted.

PACKET/AMTOR BBS: Same format as shown in the cw message example above, except that the \overline{AA} and \overline{AR} prosigns may be omitted. Most amtor and packet BBS software in use today allows formal message traffic to be sent with the "ST" command. Always avoid the use of spectrum-wasting multiple line feeds and indentations.

PHONE: Use *prowords* instead of prosigns, but it is not necessary to name each part of the message as you send it. For example, the above message would be sent on phone as follows: "Number one routine HX Golf W1AW eight Newington Connecticut one eight three zero zulu july one Donald Smith Figures one six four East Sixth Avenue North River City Missouri zero zero seven eight nine Telephone seven three three four nine six eight Break Happy birthday X-ray see you soon X-ray love Break Diana End of Message Over. "End of Message" is followed by "More" if there is another message to follow, "No More" if it is the only or last message. Speak clearly using VOX (or pause frequently on push-to-talk) so that the receiving station can get fills. Spell phonetically all difficult or unusual words--do not spell out common words. Do not use cw abbreviations or Q-signals in phone traffic handling.

Precedences

The precedence will follow the message number. For example, on cw 207R or 207 EMERGENCY. On phone, "Two Zero Seven, Routine (or Emergency)."

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 of stricken populace in emergency areas. During normal times, it will be *very rare*. On cw, RTTY and other digital modes this designation will always be spelled out. When in doubt, *do not* use it.

PRIORITY--Important messages having a specific time limit. Official messages not covered in the Emergency category. Press dispatches and other emergency-related traffic not of the utmost urgency. Notifications of death or injury in a disaster area, personal or official. Use the abbreviation P on cw.

WELFARE--A message that is either a) an inquiry as to the health and welfare of an individual in the disaster area b) an advisory or reply from the disaster area that indicates all is well should carry this precedence, which is abbreviated W on cw. These messages are handled *after* Emergency and Priority traffic but before Routine.

ROUTINE--Most traffic normal times will bear this designation. In disaster situations, traffic labeled Routine (R on cw) should be handled *last*, or not at all when circuits are busy with Emergency, Priority or Welfare traffic.

Handling Instructions (Optional)

HXA--(Followed by number) Collect landline delivery authorized by addressee within....miles. (If no number, authorization is 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 addresses, 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 message and service originating station.

For further information on traffic handling, consult the Public Service Communications Manual or the ARRL Operating Manual, both published by ARRL.

ARRL QN Signals For CW Net Use

QNA* Answer in prearranged order.

QNB* Act as relay Between _____ and _____

QNC All net stations Copy. I have a message for all net stations.

QND* Net is Directed (controlled by net control station).

QNE* Entire net stand by.

QNF Net is Free (not controlled).

QNG Take over as net control station.

QNH Your net frequency is High.

QNI Net stations report In.*.

I am reporting into the net. (Follow with a list or traffic or QRU).

QNJ Can you copy me?

Can you copy _____?

QNK* Transmit message for _____ to _____

QNL Your net frequency is Low.

QNM* You are QRMing the net. Stand by.

QNN Net control station is _____

What station has net control?

QNO Station is leaving the net.

- QNP** Unable to copy you. Unable to copy _____
- QNO*** Move frequency to _____ and wait for _____ to finish handling traffic. Then send him traffic for _____
- QNR** Answer _____ and Receive traffic.
- QNS*** Following Stations are in the net. *(Follow with list.)
Request list of stations in the net.
- QNT** I request permission to leave the net for _____ minutes.
- QNU*** The net has traffic for you. Stand by.
- QNV*** Establish contact with _____ on this frequency. If successful, move to _____ and send him traffic for _____
- QNW** How do I route messages for _____?
- QNX** You are excused from the net.* Request to be excused from the net.
- QNY*** Shift to another frequency (or to _____ kHz) to clear traffic with _____
- QNZ** Zero beat your signal with mine.

* For use only by the Net Control Station.

Notes on Use of QN Signals

The QN signals listed above are special ARRL signals for use in amateur cw nets only. They are not for use in casual amateur conversation. Other meanings that may be used in other services do not apply. Do not use QN signals on phone nets. Say it with words. QN signals need not be followed by a question mark, even though the meaning may be interrogatory.

International Q Signals

A Q signal followed by a ? asks a question. A Q signal without the ? answers the question affirmatively, unless otherwise indicated.

- QRA** What is the name of your station?
- QRG** What's my exact frequency?
- QRH** Does my frequency vary?
- QRI** How is my tone? (1-3)
- QRK** What is my signal intelligibility? (1-5)
- QRL** Are you busy?
- QRM** Is my transmission being interfered with?
- QRN** Are you troubled by static?
- QRO** Shall I increase transmitter power?
- QRP** Shall I decrease transmitter power?
- QRQ** Shall I send faster?
- QRS** Shall I send slower?
- QRT** Shall I stop sending?
- QRU** Have you anything for me? (Answer in negative)
- QRV** Are you ready?
- QRW** Shall I tell _____ you're calling him?
- QRX** When will you call again?
- QRZ** Who is calling me?
- QSA** What is my signal strength? (1-5)
- QSB** Are my signals fading?
- QSD** Is my keying defective?
- QSG** Shall I send _____ messages at a time?
- QSK** Can you work breakin?
- QSL** Can you acknowledge receipt?
- QSM** Shall I repeat the last message sent?

| | |
|------------|--|
| QSO | Can you communicate with _____ direct? |
| QSP | Will you relay to _____? |
| QSV | Shall I send a series of V's? |
| QSW | Will you transmit on _____? |
| QSX | Will you listen for _____ on _____? |
| QSY | Shall I change frequency? |
| QSZ | Shall I send each word/group more than once? (Answer, send twice or _____) |
| QTA | Shall I cancel number _____? |
| QTB | Do you agree with my word count? (Answer negative) |
| QTC | How many messages have you to send? |
| QTH | What is your location? |
| QTR | What is your time? |
| QTV | Shall I stand guard for you _____? |
| QTX | Will you keep your station open for further communication with me? |
| QUA | Have you news of _____? |

Abbreviations, Prosigns, Prowords

| | |
|-------------|---|
| CW | PHONE (meaning or purpose) |
| AA | (Separation between parts of address or signature.). |
| AA | All after (use to get fills). |
| AB | All before (used to get fills). |
| ADEE | Addressee (name of person to whom message addressed). |
| ADR | Address (second part of message). |
| AR | End of message (end of record copy). |
| ARL | (Used with "check," indicates use of ARRL numbered message in text). |
| AS | Stand by; wait. |
| B | More (another message to follow). |
| BK | Break; break me; break-in (interrupt transmission on cw. Quick check on phone). |
| BT | Separation (break) between address and text; between text and signature. |
| C | Correct; yes. |
| CFM | Confirm. (Check me on this). |
| CK | Check. |
| DE | From; this is (preceding identification). |
| HH | (Error in sending. Transmission continues with last word correctly sent.) |
| HX | (Handling instructions. Optional part of preamble.) Initial(s). Single letter(s) to follow. |
| IMI | Repeat; I say again. (Difficult or unusual words or groups.) |
| K | Go ahead; over; reply expected. (Invitation to transmit .) |
| N | Negative, incorrect; no more. (No more messages to follow.) |
| NR | Number. (Message follows.) |
| PBL | Preamble (first part of message) |
| N/A | Read back. (Repeat as received.) |
| R | Roger; point. (Received; decimal point.) |
| SIG | Signed; signature (last part of message.) |
| SK | Out; clear (end of communications, no reply expected.) |
| TU | Thank you. |
| WA | Word after (used to get fills.) |
| WB | Word before (used to get fills.) |
| N/A | Speak slower. |
| N/A | Speak faster. |

ITU PHONETIC ALPHABET

| | | | |
|---|---------|---|----------|
| A | ALFA | B | BRAVO |
| C | CHARLIE | D | DELTA |
| E | ECHO | F | FOXTROT |
| G | GOLF | H | HOTEL |
| I | INDIA | J | JULIETT |
| K | KILO | L | LIMA |
| M | MIKE | N | NOVEMBER |
| O | OSCAR | P | PAPA |
| Q | QUEBEC | R | ROMEO |
| S | SIERRA | T | TANGO |
| U | UNIFORM | V | VICTOR |
| W | WHISKEY | X | X-RAY |
| Y | YANKEE | Z | ZULU |

| Numeral | Spoken As |
|---------|----------------|
| 0 | <u>Z</u> ER O |
| 1 | WUN |
| 2 | TOO |
| 3 | TREE |
| 4 | <u>F</u> OW ER |
| 5 | FIFE |
| 6 | SIX |
| 7 | <u>S</u> EV EN |
| 8 | AIT |
| 9 | NINER |

| | | | |
|---|---------|---|----------|
| A | ALFA | B | BRAVO |
| C | CHARLIE | D | DELTA |
| E | ECHO | F | FOXTROT |
| G | GOLF | H | HOTEL |
| I | INDIA | J | JULIETT |
| K | KILO | L | LIMA |
| M | MIKE | N | NOVEMBER |
| O | OSCAR | P | PAPA |
| Q | QUEBEC | R | ROMEO |
| S | SIERRA | T | TANGO |
| U | UNIFORM | V | VICTOR |
| W | WHISKEY | X | X-RAY |
| Y | YANKEE | Z | ZULU |

Oregon Net List

| Net Name | Frequency | Day | Time (Local) | Notes |
|---|-----------------|--------|---|---|
| Beaver State Net (traffic) | 3920 KHz | Daily | 17:30 | k6ugs.com/BSN.htm |
| Daytime Oregon Section Net (traffic) | 3920 KHz | Daily | 10:15 | |
| Oregon Section Net (traffic) | 3569 KHz | Daily | 18:30 | CW |
| Oregon Section Net (traffic) | 3569 KHz | Daily | 22:00 | CW |
| Daytime Region 7 Net (traffic) | 3925 KHz | Daily | 09:30 | |
| Daytime Region 7 Net (traffic) | 7238/3925 KHz | Daily | 15:15 | |
| West Coast Slow Speed Net (WCN)(traffic) | 3540 KHz | Daily | 1900 - Summer 1800 - Winer 1600 Early | CW www.west-coast-net.info |
| Noon-time Net (traffic - public svc wide area) | 7293.5/3970 KHz | Daily | 1130 | |
| Northwest Oregon Traffic and Training Net (traffic) | 145.27 Mhz | Daily | 18:05 | nttnweb.us |
| Oregon Digital Net (ODN) | 3579.5 KHz | Friday | 20:00 | Starts with PSK-31 |