



# NAVIGATING CW TRAFFIC NETS

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# Why participate in CW Nets?

- More efficient than voice methods.
- Spectrum efficient – allows multiple simultaneous traffic exchanges on adjacent frequencies.
- Intuitive operating practices.
- Brevity and word economy.
- Elegant simplicity.

# There is a place for you on CW traffic nets

- Proficiency less than 15 WPM: pair up with a local CW operator for skeds & practice exchanging radiogram messages.
- Proficiency at 15 to 18 WPM: State/section or local CW traffic net. (Likely on 40 or 80 meters NVIS or 2-meter CW).
- Proficiency at 18 to 22 WPM: Liaison to region net.
- Proficiency of 22+ WPM: Liaison to area net.
- Good antenna system and amplifier: IATN assignment, carrying traffic between the Area nets.

# What you will need:

- Comfortable proficiency sending and copying
  - “Head copy” for instructions
  - Good typing or handwriting for copy
- A “good fist.”
- Good key with which you are comfortable.
- HF transceiver and antenna
  - 80 and 40-meters (20-meters for IATN duty)
  - Power needed depends on the net, but 50 W or more usually needed for local/section nets.
- Knowledge of radiogram format, net format and procedures

# If you need to brush up on your code ...

- Take classes from Long Island CW Club or CW Academy (available on-line)
- Practice with:
  - Morse Code Trainer  
<https://morsecode.world/international/trainer/trainer.html>
  - LCWO (Learn CW Online) [lcwo.net](http://lcwo.net)
    - “Word Practice”
    - “Callsign Practice”
  - W1AW code practice on the air or archive
  - Monitor your state/section traffic nets

# Some important points ...

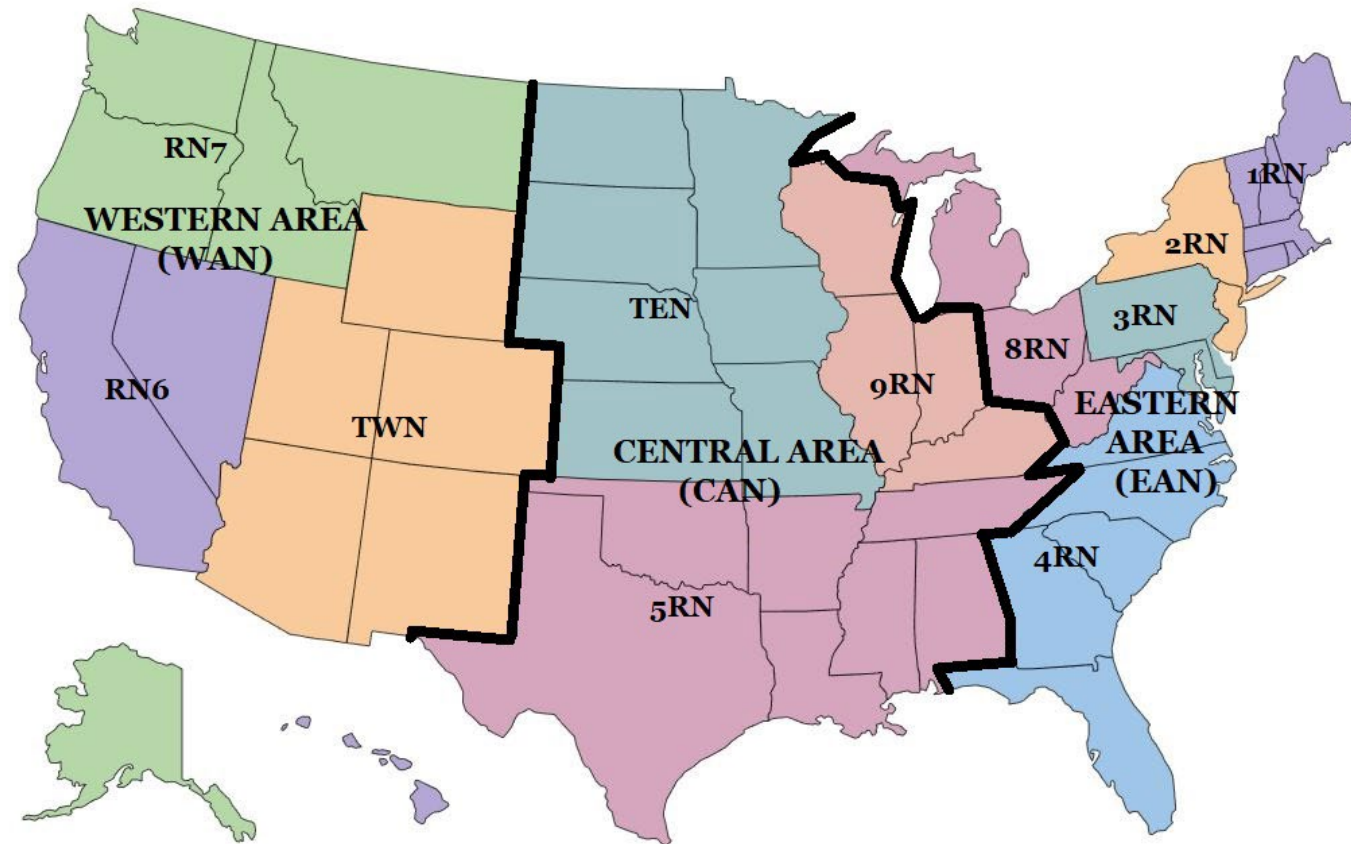
- Automatic decoders (FLDIGI, K3 internal, etc.) **do not** copy hand-sent code very well!!
- You will not be able to rely on such assistance. You must be able to use your own ears/head; CW as a “natural language.”
- If you feel a strong need for digital activities, sign up for the *RRI Digital Traffic Net* or serve as a *Winlink-RRI Gateway* station.

# Let's review the US Region & Area nets ...

**U.S. TRAFFIC AREAS & REGIONS**

AK is part of  
Region 7  
(RN7)

HI is part of  
Region 6  
(RN6)



PR is part of  
Region 4  
(4RN)

# Let's review the radiogram format ...

SVC 424 R HXG WA3QLW RRI14 ELIZABETH CO APRIL 24  
KATE K6HTN  
PASADENA CA 91104  
<BT>  
RRI FORTY SEVEN 1591 KE0ZYV  
APRIL 24 1943 X SAID  
GETTING ON AIR SOON  
BT  
LESLIE WA3QLW  
<AR> N

- SVC means that this is a “service message” reply to, in this case, confirm a delivery
- HXG is a “handling instruction.
- ” RRI (ARL) FORTY SEVEN is a standard text meaning: “REFERENCE YOUR MESSAGE NUMBER \_\_\_\_ TO \_\_\_\_ DELIVERED ON \_\_\_\_ AT \_\_\_\_ UTC.”
- This message is going between two well-known traffic handlers, so address is abbreviated
- Zip code needed, however, in case the messages ends up being relayed via the RRI DTN



# PROSIGNS

- Procedural signs or “prosigns” are codes for expressions used in passing traffic. They are usually SENT WITHOUT A SPACE AS ONE LONG CHARACTER.
  - <AA> (comma or line break) at the end of each line of an address
  - <BT> separates text of the radiogram
  - <AR> (finished) or “End of message”
    - <AR> B means “End of message, more to come”
    - <AR> N means “End of message, no more”

## Vocabulary: common prosigns & abbreviations

<BT> = break

<AA> = line break

<AR> = end of msg

<AR> N = end no more

<AR> B = end more

<AR> 1 = end 1 more

<AS> = stand by

GE = good evening

TU = thank you

# Q-Signals and QN-Signals

- Q-signals are three-letter abbreviations sent with the usual spacing.
  - QSL: “I acknowledge receipt”
  - QRK: “Your readability is \_\_\_ (1 to 5)”
  - QTC: “I have traffic for \_\_\_”
  - Etc.
- QN-Signals were developed by the Michigan QMN Net during the 1930s and remain in widespread use today. These signals are unique to traffic nets.
  - QNI: “Check into net.”
  - QNX: “Excused from net”
  - QNO: “Leaving net (‘outta’ here’)
  - QRU: “What have you for me or ‘no traffic.’”
  - ETC.

## **Common Q-signals used on CW Nets:**

QRU – No traffic for you. QRU? – Do you have any traffic?

QNI – Please check in now

QNU – The net has traffic for you

QTC – Traffic

QNA – Call for specific station to check in

QSK – You may break for fills; I can hear you between my dits

QRV – Ready to copy; QRV? – Are you ready to copy?

QNX – You are excused from the net

QNF – Net is closed

# CW nets are ...

- Highly structured and predictable
- Terse
- Very efficient
- Full of abbreviations
- Friendly in their own “TU” sort of way

We introduce the most common shortcuts as we go through the examples that follow.

# Basic CW Net Procedures



Note: These procedures are an example. Some minor variation is common between nets.

# Radio Relay International "Pink Card"

QN-Signals

Q-Signals

An all-in-one source for the traffic operator

## TRAFFIC OPERATIONS AID

### QN SIGNALS FOR CW NET USE

QNA\* Answer in prearranged order.  
 QNB\* Act as a relay Between \_\_\_ and \_\_\_.  
 QNC All net stations Copy, I have a message to all net stations.  
 QND\* Net is Directed (controlled by a 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 of traffic or QRL.)  
 Can you copy me?  
 Can you copy \_\_\_?  
 QNK\* Transmit messages for \_\_\_ to \_\_\_.  
 QNL Your net frequency is Low.  
 QNM\* You are QRMing the net. Stand by.  
 QNN Net control station is \_\_\_.  
 Unable to handle the net.  
 QNO Station is leaving the net.  
 QNP Unable to copy you.  
 QNQ\* 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 \_\_\_.  
 How do I route messages for \_\_\_?  
 QNW You are excused from the net.\*  
 QNX 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 the Use of QN Signals**

The QN signals listed above are special Q 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 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 in the affirmative unless otherwise indicated.

QRA What is the name of your station?  
 QRG What is 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.)  
 Are you ready?  
 QRV 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 break-in?  
 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 \_\_\_?

### OPERATIONAL, PROWORDS, PROSIGNS

/VOICE	CW
/ES, AFFIRMATIVE	C
/NO, NEGATIVE	N
/ROGER	R

ROGER/R means all received and understood. t does not mean yes/affirmative.)

/OVER K

/CLEAR CL

/CLEAR <SK>

/SEVENTY THREE 73

Best regards - note meaning is plural.)

ARL (in Check) ARL (in CK)

ARL (in Text) ARL (in TXT)

ARL + space precede Check figures if ARL Numbered Radiograms in text - voiced as letters "A R L", ARL on CW. ARL + space precede the Numbered Radiograms in the text as 1 group.)

NUMBER NR

begins message record copy until END)

BOOK OF # or BUK # BOOK OF # or BUK #

begins record copy of [# as spelled word] booked messages until END BOOK)

use a slight pause) <AA>

<AA> marks end of address lines like a CR/LF

OP NOTE OP NOTE

[Introduces operator delivery or service note - generally not delivered to addressee.)

BREAK <BT> or =

[Marks start and end of text and separates parts of booked messages. A listening pause follows a break at the start of the text and before NR when sending books. No listening pause before SIG.)

END + <AR> +

[MORE, ONE MORE, + [B, B1 (or 1), N or NM]

NO MORE]

(ends record copy of single messages + number of messages to follow)

END BOOK <AR> END BOOK <AR>

+ [MORE, ONE MORE, + [B, B1 (or 1), N or NO MORE] NM]

(ends record copy of messages sent booked + number of messages to follow)

I SAY AGAIN ?

(FOR CLARITY) (FOR CLARITY)

(Send "I SAY AGAIN, or "?" on CW, repeat previous group(s) for emphasis/clarity.

I SAY AGAIN ?

(FOR ERROR) (FOR ERROR)

(Send "I SAY AGAIN, or "?" on CW, repeat last group sent correctly, and then continue.)

I SPELL (none)

(Voice only ONE group then "I spell", and then spell the group with phonetics or letter spelling, then continue. Last and other proper names should be spelled phonetically.)

**FILL REQUESTS - VOICE**

"[IN (part)] WORD AFTER (group(s))"

"[IN (part)] WORD BEFORE (group(s))"

"[IN (part)] ALL AFTER (group(s))"

"[IN (part)] ALL BEFORE (group(s))"

"[IN (part)] BETWEEN (group) AND (group)"

"part name"

"confirm (group(s))"

**FILL REQUESTS - CW**

"[IN (part)] WA (group(s))"

"[IN (part)] WB (group(s))"

"[IN (part)] AA (group(s))"

"[IN (part)] AB (group(s))"

"[IN (part)] BN (group) ES (group)"

"part name"

"CFM (group(s))"

(Respond only with group(s) requested or CONFIRM on voice, CFM on CW, as warranted. The "[IN (part)]" is used optionally to avoid ambiguity in defining the fill location.)

**GENERAL NOTES:** The objective in handling formal written Radiogram traffic is to pass an exact copy of the original message to the addressee in an efficient and timely fashion. Radio-email, added to the tool kit, allows real-time messaging everywhere, error corrected, with no intermediate relaying manpower needed.

**DTN BATCH FILE FORMAT:** text files for posting Radiograms with the DTN via Radio-email or direct.

ST 21201@NTSMD < WA1QAA

P BALTIMORE 410 555

78 P WA1QAA 15 ELLICOTT CITY MD 1800 SEP 20

BACI EOC

BALTIMORE MD 21201

410 555 1212

BT

TWELVE SUPPORT TEAMS IN ROUTE

TO YOUR EOC X DO

YOU HAVE EMERGENCY POWER QUERY

BT

MIKE WA1QAA MDC SEC

/EX

(blank line if last message, or ST line of next message - no blank line allowed)

**RADIO-EMAIL TYPES**

TYPE 1: Radio-email carrying active Radiograms. Subject line begun NTS for plain text, NTSD for Batch Files + service class, [destination], quantity and the request for confirmation of receipt: "pse HXC this email".

TYPE 2: Regular Radio-email with multiple network and/or internet addressees, binary attachments, email body text.

TYPE 3: Radio-email sent to a single network client for delivery to a Radiogram type address entered with a PBL as the first lines of the body text, with an email-formatted body text message (a modern form of Radiogram).

TYPE 4: Radio-email sent to a single client directly, peer-to-peer, for re-filing (or forwarding) onto the network or internet by a station with access.

# Radio Relay International "Pink Card"

- Covers:
- Radiogram format
- Handling instructions
- ITU Phonetic Alphabet
- Message precedence.
- Example message transmissions

1. MESSAGE EXAMPLE
2. 1 R HXG W1NJM 8 NEWINGTON CT 1830 JUL 1
a b c d e f g h
3. DONALD SMITH 164 EAST SIXTH AVE NORTH RIVER CITY MD 21201 410 555 1234 OP NOTE DELIVER WEEKDAY BT
4. HAPPY BIRTHDAY X SEE YOU SOON X LOVE BT
5. DIANA OP NOTE SERVICE TO STATION OF ORIGIN

1. **CHARACTERS** Use only capital letters, figures, slant bars (/).
2. **PREAMBLE** (Tracking information stays with message to delivery)
- Number (begin with 1 each month or year - no leading zeros) SVC may be entered ahead of the number for Service messages.
  - Precedence (R, W, P, EMERGENCY). TEST + space may be used before Prec. in exercise traffic, as in: TEST P.
  - Handling Instructions (optional - see table for formatting)
  - Station of Origin (first amateur handler's call sign)
  - Check (number of words/groups in text only. ARL + space precede figures if ARL Numbered Radiograms in the text, as in: "ARL 8". Corrections are appended with "/").
  - Place of Origin (signer's location, not necessarily location of station of origin)
  - Time Filed (optional with originating station - if not UTC, add time zone letters and adjust Date as necessary.)
  - Date (MON, 3 letters, DT, no leading zeros - must agree with Time Filed) Time Filed, Date and Time are assumed UTC by default.
3. **ADDRESS** (complete with zip code, telephone #, email address, etc., may include an OP NOTE).
4. **TEXT** (typical limit, 25 groups, but may be expanded for emergencies) X as punctuation counts as a word - <BT> does not. A group is a series of characters with no spaces between them.
5. **SIGNATURE:** (person for whom message originated - may include a full address and OP NOTE).

## RADIOGRAM HANDLING INSTRUCTIONS ("HX-CODES")

<b>HXA</b> ___	(Followed by number.) Collect landline delivery authorized by addressee within ___ miles, (if no number in blank, authorization is unlimited). This means that the originating station has obtained authorization from the addressee, through the party originating the message, to call collect when delivering the message.
<b>HXB</b> ___	(Followed by number.) Cancel message if not delivered within ___ hours of filing time; service message back to originating station. NOTE: filing time must be included in preamble.
<b>HXC</b> ___	Report date and time of delivery of the message back to the originating station by service message.
<b>HXD</b> ___	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 and time and method of delivery (this information is sent by service message to the originating station).
<b>HXE</b> ___	Delivering station get reply from addressee, originate message back. This reply is sent to the person from whom the original message was received, at the "place of origin", using a full address obtained from the addressee. If an address is not available, a reply can often be successfully routed back to the station of origin since a record is kept of originator's info.
<b>HXF</b> ___	(Followed by a number.) Hold delivery until ___ (date). This blank contains the number of the day on which the message should be delivered (even if it is in the following month).
<b>HXG</b> ___	Delivery by mail or landline toll call not required. If toll call or other expense involved, cancel message and send service message back to originating station.

Compliance with these instructions is mandatory. **MORE THAN ONE HX\_CODE MAY BE USED.** If more than one code is used, they may be combined provided no numbers are to be inserted; otherwise the HX should be repeated, thus: **HXCE, HXAC, or HXA50 HXC**  
**Ed. note:** The numbers following eligible HX\_codes are expected. In this example the HXA in the first case has the range number intentionally omitted, thus the "C" may be appended. In the second case, where the optional 50 mile range is included, the figures force the separation of the full "HXC."

## MESSAGE SENT ON VOICE

"NUMBER ONE ROUTINE HOTEL X-RAY GOLF WHISKEY ONE NOVEMBER JULIET MIKE EIGHT NEWINGTON CONNECTICUT ONE EIGHT TREE ZERO JULY ONE  
 DONALD SMITH I spell SIERRA MIKE INDIA TANGO HOTEL  
 figures ONE SIX FOUR EAST SIXTH I spell S I X T H initials ALFA VICTOR ECHO  
 NORTH RIVER CITY MARYLAND figures TWO ONE TWO ZERO ONE  
 figures FOUR ONE ZERO FIVE FIVE FIVE ONE TWO TREE FOUR  
 OP NOTE DELIVER WEEKDAY  
 BREAK // (mandatory listening pause)  
 "HAPPY BIRTHDAY initial X-RAY SEE YOU SOON initial X-RAY LOVE  
 BREAK  
 DIANA I spell DELTA INDIA ALFA NOVEMBER ALFA  
 OP NOTE SERVICE TO STATION OF ORIGIN  
 END NO MORE"

(NOTE: It is critically important to voice the message at a speed suitable for the receiving operator to copy accurately. Use no extraneous words. Do not voice the names of message parts.)

## SENDING MESSAGES BOOKED

Unique text groups are each marked by "BLANK" to affirm Check, and the actual groups are sent later with the unique parts after a "BREAK" or <BT> on CW. Copy begins with "BOOK OF [quantity] and ends with "END BOOK", or <AR> END BOOK <AR> on CW. Common parts are sent first. Book parts are separated by "BREAK" or <BT> on CW, each unique message part beginning with "NUMBER" or NR on CW. Booked messages may be sent to multiple stations, polled ready to copy,

## TRAFFIC OPERATIONS AID

PHONETIC ALPHABET		SIERRA	
A	ALFA	S	SIERRA
B	BRAVO	T	TANGO
C	CHARLIE	U	UNIFORM
D	DELTA	V	VICTOR
E	ECHO	W	WHISKEY
F	FOXTROT	X	X-RAY
G	GOLF	Y	YANKEE
H	HOTEL	Z	ZULU
I	INDIA	1	ONE
J	JULIET	2	TWO
K	KILO	3	THREE (TREE)
L	LIMA	4	FOUR
M	MIKE	5	FIVE (FIFE)
N	NOVEMBER	6	SIX
O	OSCAR	7	SEVEN
P	PAPA (PA-PA)	8	EIGHT
Q	QUEBEC (KAY-BEK)	9	NINE (NINER)
R	ROMEO	0	ZERO

## RADIOGRAM PRECEDENCES

These precedences are not meant to prohibit handling lower level traffic until all higher levels are passed. Handle higher precedence traffic before lower as outlets are available.

**EMERGENCY:** (Spelled out on form.)\* - 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. If in doubt, do not use it.

**PRIORITY (P):** 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 (W):** 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 (R):** 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.

\* **EMERGENCY:** Emergency is always spelled out in the preamble. Means other than Amateur Radio should be included in the delivery options. EMERGENCY messages have immediate urgency. They should take priority over any other activity and should be passed by the best means available with the cooperation of all stations.

## FORMATTING

<b>DASH</b>	substitute for hyphen in text and zip codes
<b>DOT</b>	substitute for period in email addresses and URLs
<b>R</b>	substitute for decimal point in figure groups
<b>X</b>	substitute for period in text - except after last group

All other punctuation is entered as a spelled-out word.

## EMAIL ADDRESS, URL

JOHN DOT SMITH ATSIGN DOMAIN DOT NET  
 HTTP COLON SLASH SLASH WWW DOT WORK DOT COM

## INTRODUCERS - VOICING, USE ONLY ONE PER GROUP

**Initial(s):** "initial BRAVO", "initials JULIET ROMEO"

**Figure(s):** "figure FOUR", "figures ONE NINER"

**Mixed Group:** "mixed group BRAVO SLASH SIX"

**Mixed Group Figure(s):** "mixed group figures TWO TWO ZULU"

**Amateur Call:** "amateur call WHISKEY ONE NOVEMBER JULIET MIKE"

**Telephone Figures:** to introduce telephone figures if no zip code  
 NOTE: Introduced groups are voiced one character at a time, letters phonetically. Introducers are not voiced for Preamble groups.

## MESSAGE SENT ON CW

NR 1 R HXG W1NJM 8 NEWINGTON CT 1830 JUL 1  
 DONALD SMITH <AA>  
 164 EAST SIXTH AVE <AA>  
 NORTH RIVER CITY MD 21201 <AA>  
 410 555 1234 <AA>  
 OP NOTE DELIVER WEEKDAY  
 BT // (mandatory listening pause)  
 HAPPY BIRTHDAY X SEE YOU  
 SOON X LOVE  
 BT  
 DIANA <AA>  
 OP NOTE SERVICE TO STATION OF ORIGIN



# Net Control Station “calls the net” ...

NCS asks if the frequency is in use (QRL?):

**NCS: QRL?** (at 15 WPM)

**NCS: QRL?**



NCS gives net call:

**NCS: SCN SCN DE K6HTN**

SCN = SCN/CW = Southern California Net



Next, the NCS transmits the net preamble and net call:

**SOUTHERN CALIFORNIA SLOW SPEED TRAFFIC NET NOW OPEN <BT>  
NEW OR SLOW STATIONS PSE CHECK IN NOW K**



Notes:

- A. In a directed net, one doesn't transmit unless directed by the NCS. This is to minimize "collisions."
- B. Note use of the "break" prosign (<BT>) and the "over" prosign (K).
- C. Slow speed training nets minimizes specialized Q-signals and QN-signals.

A station accepts the invitation.

**K6MQA: M**

**NCS: M**

**MQA: K6MQA STUART FILLMORE QRU K**

**NCS: K6MQA GE STUART TU <AS>**



Pause (<AS> = stand by) while NCS writes this info down. GE stands for Good Evening. NCS then asks for more new or slow stations.

**NCS: NEW OR SLOW STNS QNI K**

There are no more slow stations. NCS speeds up to 18 WPM ...

**NCS: SCN QND QNZ QNN K6HTN QTC RN6 1**

- QND = “This is a directed net”
- QNZ = “Zero beat NCS”
- QNN = “Net control is \_\_\_\_\_”
- QNA = “Calling fro station representing \_\_\_\_\_”



Net control is calling for the RN6 rep to check in.

**QNA RN6 K**

**KI6BHB: KI6BHB TU QTC WEST LA 1 RN6 1  
THRU K**



KI6BHB checks in as the RN6 rep (thank you very much), with 1 msg for West Los Angeles & 1 being carried through to RN6.

**NCS: R KI6BHB TU DAVE <AS>**

RN6 is the only net that SCN sends a liaison to, so NCS calls for general check-ins.

**NCS: SCN DE K6HTN QNI QTC ? K**

And he gets Rick N6IET, who is in West Los Angeles. No traffic.

**N6IET: I**

**NCS: I**

**N6IET: N6IET TU QRU K**

**NCS: N6IET TU RICK QNU <AS>**

NCS calls for more check-ins.

**NCS: SCN DE K6HTN QNI QTC ? K**

NCS doesn't hear anyone; she assumes all traffic has been listed. She excuses K6MQA, who is not passing any traffic tonight.

**NCS: K6MQA TU STUART QRU QNX 73 DE K6HTN**

**K6MQA: TU KATE 73 DE K6MQA dit dit**

**NCS: dit dit**

“dit dit” means “bye bye,” more or less.



NCS asks Rick to call Dave on the net & get the West LA traffic:

**NCS: N6IET CALL KI6BHB HR QTC 1**

**IET: KI6BHB DE N6IET QRV**

Rick is ready to copy.

**BHB: TU QSK**

Dave declares that he can hear Rick breaking in if he needs a repeat.

**HR NR 123 ...**

Here is number 123 ...



HR NR 123 R VE3GNA 25 TAMWORTH ON APR 14

JOHN SMITH <AA>

400 N MAIN ST NR 32 <AA>

SANTA MONICA CA <AA>

310 583 1212

<BT>

HOPE YOU ARE ENJOYING YOUR

STAY AT HOME TIME X

PET ALL THE DOGS FOR

ME 73

BT

GLENN VE3GNA

<AR> N



Rick needs “a fill” ... WA means “send again word after ..”

**IET: WA ALL THE**

**BHB: ALL THE DOGS**

Rick is now confident he has everything correct.

**IET: QSL TU**

**BHB: TU N6IET DE KI6BHB K**



NCS now excuses Rick ...

**NCS: N6IET TU QRU QNX 73 DE K6HTN dit dit**

**IET: TU 73 DE N6IET dit dit**

**NCS: KI6BHB DE K6HTN QRV**

**BHB: TU QSK**

**HR NR 236 R KI6BHB 27 CHINO HILLS CA APR 14**

**K6HTN**

**<BT>**

**RN6/1 APR 14Z KI6BHB NCS**

**W2 N6AWH W1 WV6UZX NCN**

**N6IET SCN 6 IN 9**

**X RN6/2 KI6BHB NCS W2**

**WB6UZX NCN N6IET SCN ZILCH**

**IN 3**

**<BT>**

**DAVE**

**<AR> N**

**NCS: QSL TU DAVE QRU QNX 73 K6HTN dit dit**

**BHB: TU 73 DE KI6BHB dit dit**

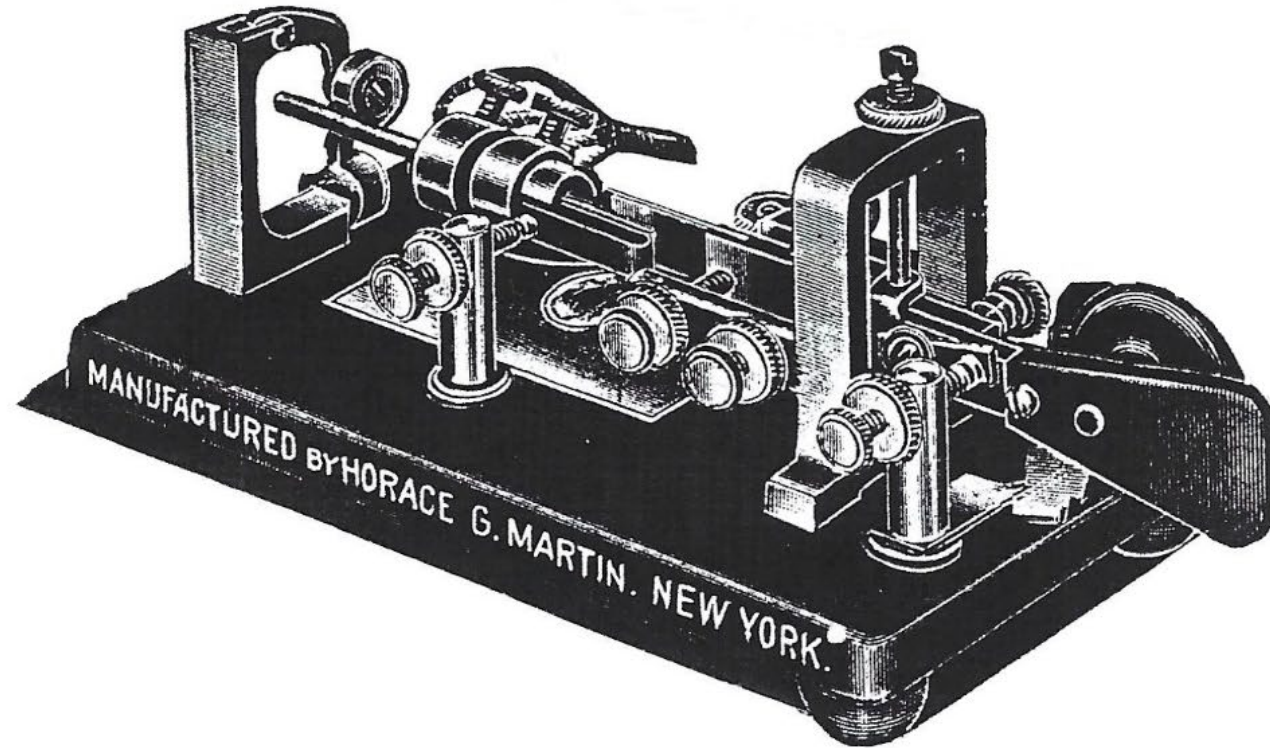
Last check for more check ins ...

**NCS: SCN DE K6HTN QNI QTC ? K**

Hearing nothing ...

**NCS: SCN QNF 73 DE K6HTN**

**<SK>**



INTERMEDIATE LEVEL – Region Net

# Intermediate Level -- Region nets

- Meets twice per evening
- ... around 7 pm (after Local/Section/State nets, but before the Area net) and around 9:30 pm (after Area net)
- About 20 to 24 WPM
- QNI usually only Section or Local net liaisons
- Handles traffic bound for Local/Section/State nets, or the Area net
- Experience with traffic nets assumed

**NCS: QRL? QRL?**

Nothing heard ...

**NCS: RN6 RN6 DE K6HTN SIXTH REGION NET FIRST SESSION <BT>**

**NCS: QND QNZ QNN K6HTN ALSO 6R SCN QTC WAN 1**

(Directed net, break-in, NCS is K6HTN, also SCN rep, listing 1 msg for Central Area net)

**RN6: QNA 6T**

**N6AWH: N6AWH 6T QTC SCN 1**

**RN6: N6AWH TU DEE <AS>**

**NCS: RN6 QNA NCN**

(Northern California Net)

**WB6UZX: WB6UZX NCN QRU K**

**NCS: WB6UZX TU STEVE <AS>**

**NCS: RN6 DE K6HTN QNI QTC? K**

(hears nothing)

**NCS: RN6 QNI QTC? K**

All expected liaisons (3) are present; 2 msgs have been listed: 1 for SCN and 1 for WAN. Steve does not send or receive any, so can be excused.

**NCS: WB6UZX TU QRU 73 DE K6HTN**

**UZX: TU 73 DE WB6UZX dit dit**



**NCS: N6AWH DE K6HTN QRV**

**AWH:**

**HR NR 248 R HXG KL7RF ARL 19 FRESNO OH APR 22**

**K6HTN**

**<BT>**

**ARL FORTY SEVEN 1566 KE8OHJ**

**APR 22 X ERIC SAYS**

**THANK YOU FOR THE RADIOGRAM**

**WELCOME MESSAGE X 73**

**<BT>**

**RANDY KL7RF**

**<AR>**

**NCS: QSL QRV ?**

**AWH: QRV**

**NCS:**

**HR NR 428 R WB4RJW ARL 15 EDGEWATER FL APR 23**

**DJ RIGG N6AWH <AA>**

**ATWATER CA 95301**

**<BT>**

**ARL FORTY SEVEN 1557 KO4CZZ**

**APR 23 1624Z STATION SAYS**

**THANK YOU VERY MUCH 73**

**<BT>**

**DIANNE WB4RJW**

**<AR>**

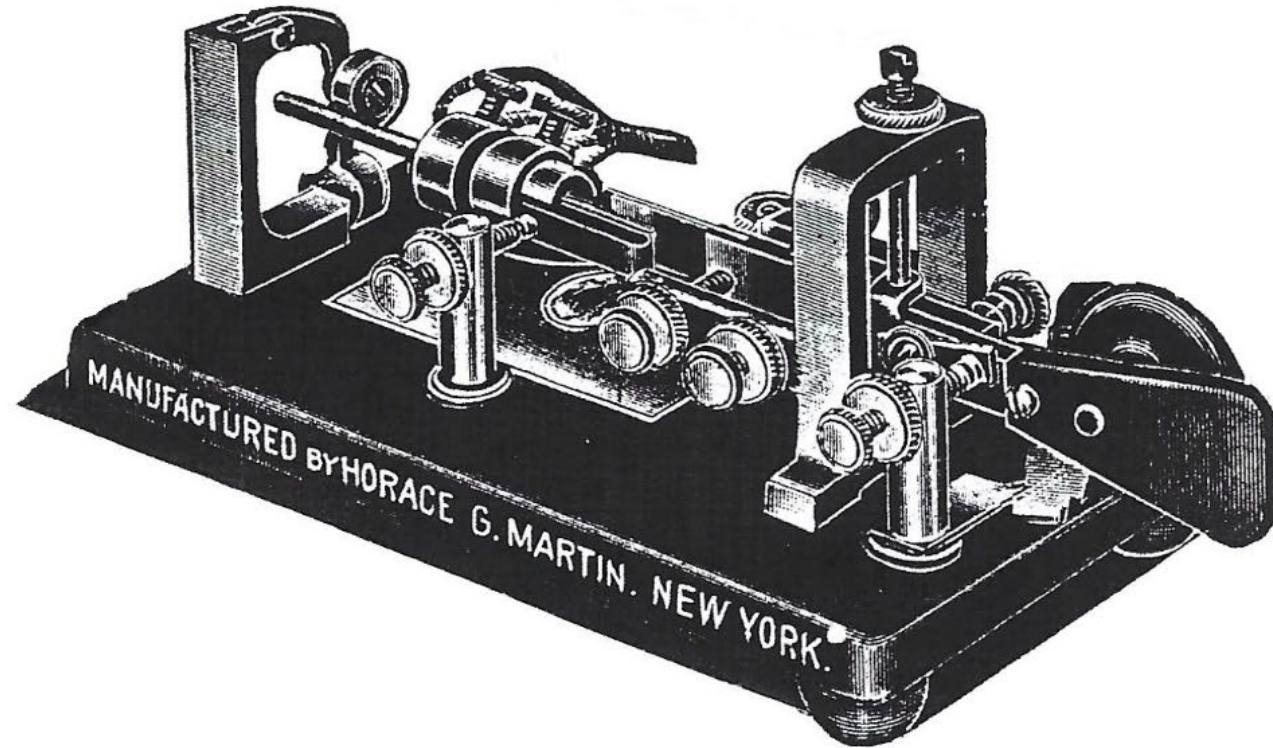
**AWH: QSL**

**NCS: TU DEE QRU QNX 73 dit dit**

**AWH: N6AWH dit dit**

Net is over.

**NCS: RN6 QNF 73 GN DE K6HTN dit dit**



ADVANCED LEVEL – Sample of Area net

# Expert Level -- Area nets

- Around 8:30 pm (after first session of Region nets)
- About 20 to 24 WPM
- QNI only Region net reps (e.g. 6R and 6T)
- Handles traffic between Region nets in its Area  
PLUS longhaul traffic (between Areas) to IATN ops
- Normally requires at least 100 W signal

FOLLOWING IS A TRANSCRIPT TO CHALLENGE  
THE STUDENT!!

**AD0A: WAN WAN**  
**WESTERN AREA NET DE AD0A JV IN AZ**  
**ALSO H TR TT QTC RN6 1**

**AD0A: STN G** (IATN stn from CAN to WAN)

**W7EKB: EKB**

**AD0A: EKB**

**W7EKB: G RN6 2** (has 2 for RN6)

**AD0A: 6R**

**K6HTN: K6HTN 6R QRU**

**W7EKB: K6HTN W7EKB UP 3 RN6 2** (up 3 kHz, pass 2)

**K6HTN: G** (going)

**W7EKB: G** (going)

**AD0A: STN J**

**K0TER: K0TER I J QRU**

**AD0A: K0TER TU <AS>**

**AD0A: 7T**

**W7IZ: W7IZ 7T 7R QRU**

**AD0A: W7IZ TU <AS>**

**AD0A: 6T**

**N6AWH: N6AWH 6T EAN 6**

**AD0A: TU N6AWH K0TER DN 3 EAN 6 (down 3 kHz)**

**THEN BOTH QNX 73 (then both excused)**

**K6HTN: HTN** (HTN returned)

**W7EKB: EKB** (EKB returned)

**AD0A: HTN EKB** (acknowledged)

**AD0A: W7EKB TU QRU QNX 73**

**W7EKB: TU 73 DE W7EKB**

**AD0A: W7IZ**

**W7IZ: dit**

**AD0A: W7IZ TU QRU QNX 73**

**W7IZ: TU 73 DE W7IZ dit dit**



**AD0A: HTN QRV ?**

**K6HTN: QRV**

**NR 14 R HXG KE1ML 20 etc.**

**K6HTN: QSL TU**

**AD0A: TU KATE K6HTN QRU QNX**

**K6HTN: TU 73 K6HTN dit dit**

.. at which point I left the net because I was excused, but  
you get the idea ... TERSE!



More information: [www.radiorelay.org](http://www.radiorelay.org)

73 - 30