Quick and Dirty CW Netiquette

by Alan Wormser, N5LF

CW nets are lots of fun and they often handle the same amount of traffic as a voice net in about 1/3 the time. The traffic nets meet on 80 meters between ~~3625~~ **3525** and ~~3725~~ **3600** kHz. The section nets (statewide -- the best ones for most folks to check into) usually meet at 7 pm and 10 pm **local time** (traffic nets meet at the same local time all year). Training nets may meet 30 minutes to 1 hour before the regular nets. Look at a recent ARRL Net Directory for more information on CW nets in your area. See the [ARRL Public Service Manual](#) for more information. **The Texas CW Net meets on ~~3643~~ kHz at 7 & 10 pm.** **3541 or 7053 summer at 7, 3541 at 10**

Order of events during a net session:	Tips on how to do things on the net:
I. [Opening the CW Net](#) II. [QNA - Check in Liaisons](#) III. [QNI - General Check ins](#) IV. [Handle Traffic & Continue Check-ins](#) V. [QNF - Close the Net](#) VI. [Other Details: Net Calls, Rechecks](#)	• [Passing a Message in CW](#) • [Message Format](#), [Precedence](#) • [Handling Instructions (HX-)](#) • [Numbered (ARL) messages](#) • [Prosigns](#), [Q-signs](#), [QN-signs](#) • [Special Types of Messages](#) • [ARRL's Field Services Dept](#) • [Additional Notes](#)

The description below is from my observation of my favorite net -- your mileage may vary -- there may be regional variations or preferences. I can say, though, that traffic handlers are among the **most patient and best Elmers** you'll meet. I know I've learned a lot since I started doing the CW nets after 20 years of SSB and FM nets. Send slow if you want them to come back at you slow! If they're still too fast, just use QRS ("please slow down") and they will! They want the message to get through, so **they will work with you - don't be intimidated!**

If you are a complete traffic handling newbie, take a glance at the [special notes](#) at the end of this page, and basic information for traffic handling from the [ARRL's Field Services Dept](#). (FSD, or as some call it, the "Free Stuff Department").

I. Opening the Texas CW Net:

ncs (giving the net preamble): TEX TEX DE K5AO TEXAS CW TRAFFIC NET AN ARRL NTS SECTION NET NOW OPEN ALL STATIONS WELCOME QND QNN K5AO/PAT/ARLINGTON QNZ VVV

Explanation: K5AO is the net control station (NCS). He calls the Texas CW Net (symbol: TEX). He announces that TEX is part of the American Radio Relay League's (ARRL) National Traffic System (NTS - a system of message nets across the US & Canada). Then he says, QND ("this is a directed net, follow directions from the NCS"), QNN K5AO/PAT/ARLINGTON ("the NCS is K5AO, Pat, in Arlington, TX"), and QNZ ("please zero-beat on my frequency"). The VVV is optional, and is used to help stations zero-beat.

[Top of this page] [N5LF home page]

II. QNA - Check in the Liaisons:

ncs (asks for liaisons to other nets): TEX DE K5AO QNA RN5 REP K
ke4gk (sends a sine): G
ncs (responds): G
ke4gk (Region 5 Net representative): DE KE4GK/RN5 GE PAT QRU K
ncs: TU BOB [AS] TEX QNA TTN REP K
ac5f: F
ncs: F
ac5f (Texas SSB Traffic Net): DE AC5F/TTN GE PAT QTC K5AO 1 [AR] K
ncs: TU [AS] QNA DFW? K
kd5tuv (Dallas/Ft. Worth 2 Meter FM net): DE KD5TUV/DFW QRU...

Explanation: NCS asks for liaisons to other nets. In this case he is asking for specific nets. Several folks may respond, so to get NCS's attention quickly, each chooses a sine (an identifying letter). Many folks use the 1st letter of their suffix - but any letter will do as long as it is unique. NCS replies by sending back one of the letters he heard (in the example, "G"). Then that fellow tells NCS who he/she is, what net they will take messages to/from and if they have any traffic for the net.

If you take a peek at the NCS's (K5AO) logbook right now, you'll see that so far he has 3 check ins and 1 message that's going to him (K5AO). Next he'll take a few general check ins, then start to pair folks up, excuse others, and route the traffic, ask for more check ins, etc. Luckily this NCS is pretty good at multitasking -- but sometimes it would help to have three hands!

[Top of this page] [N5LF home page]

III. QNI - General Check ins:

ncs: TEX TEX DE K5AO QNI K
n5ab: A

ncs: A

n5ab: DE N5AB GE PAT QRU K ("This is N5AB. Good evening Pat, I have nothing for you")

ncs: GE BILL PSE [AS] ("Good evening Bill. Please wait.")

w5yz: Y

ncs: Y

w5yz: DE W5YZ [BT] GE PAT QTC DALLAS 1 [AR] K ("Good evening Pat, I have 1 for Dallas")

ncs: GE JACK ES TU PSE [AS] TEX DE K5AO QNI K

Explanation: Net Control Station (NCS) is K5AO. He calls CQ for the Texas CW Net (TEX) and asks for check-in's (QNI). N5AB gets NCS's attention by sending a letter (called a "sine") -- the 1st letter of the suffix. Listen to the net, as some prefer calls, full suffix, etc...

NCS sends back the sine, and the station (N5AB) proceeds to check in, saying "good evening" (GE) to NCS and listing no traffic (QRU). NCS replies, "Good evening, Bill. Please standby." If Bill never checked in before, or the NCS doesn't know him, he might ask:

> N5AB DE K5AO PSE UR NAME ES QTH?

Next, NCS continues to ask for check-ins, and W5YZ sends his sine. NCS responds and W5YZ checks in with traffic (QTC) listed as 1 for Dallas. NCS says good evening to W5YZ, says thank you (TU), and asks him to standby.

So, now the NCS's log shows 5 stations, 1 message going to Dallas, and 1 message going to NCS (K5AO).

[Top of this page] [N5LF home page]

IV. Handle Traffic and Continue Check ins:

ncs: W5YZ?

w5yz: HR

ncs: TUV? (The net control will often use just your suffix to get your attention.)

ka5tuv: R (R="roger", or he could say C="Yes" pun: Spanish "Sí")

ncs: W5YZ ES KA5TUV DWN 3 D 3 DALLAS 1 THEN BOTH QNX K

w5yz: GG

ka5tuv: GG

ncs: TEX DE K5AO QNI K **...**

Explanation: The NCS tells W5YZ and KA5TUV to go down 3 kHz and pass the Dallas message, then both are excused from the net. Each station replies, "GG" ("going," or "I'm going to that frequency") to let NCS know that they understood the instructions.

While the other two are off handling the Dallas traffic, NCS may take AC5F's message (remember that AC5F had one for K5AO/NCS, see the QNA dialogue above). He'll also take further check ins and excuse stations that are no longer needed.

[Top of this page] [N5LF home page]

V. QNF - Close the Net:

ncs: LAST CALL TEX DE K5AO QNI K

        (nothing heard)

ncs: TEX DE K5AO QRU QNX QNF 73 [SK]

In other words, "Texas CW Net, I have no more for you (QRU), you are all excused from the net (QNX), and the net frequency is free (QNF)." (Now a number of stations usually send NCS their 73, GE, GL, TU ES CUL,).

[Top of this page] [N5LF home page]

VI. Other Details:

* NET CALLS

NCS may ask another station to give a net call, especially if conditions are bad:

ncs(calling n5ab): AB?
n5ab: HR
ncs: PSE NET CALL K
n5ab: TEX TEX DE N5AB N5AB QNI K

N5AB will do this 2 or 3 times, then report back to NCS with either the new check ins, or "NIL" if nothing was heard.

* RECHECKS

If you are sent off frequency and return to the net frequency, wait for a gap, then send either your sine or the suffix of your call. NCS will respond when he can and then you can tell him if you need further help.

If you return to the net and NCS knows that you have other traffic still, he may pair you up with someone else or say something like:

ncs: N5LF DE K5AO TU PSE NW UP 4 QSP HOUSTON 3 AF5C AFTER K6GCA K

("Thanks, please now go up 4 kHz and relay your 3 Houston messages to AF5C after he

finishes with K6GCA")

n5lf: GG. ("OK, I'm going there.")

[Top of this page] [N5LF home page]

VII. Passing a Message in CW:

For this example, N5LF has a message for Dallas. He checks in at the appropriate time to list the traffic:

ncs (k5ao): TEX QNI K
n5lf: L
ncs: L
n5lf: DE N5LF QTC DALLAS 1 [AR]
ncs: TU ALAN ES PSE [AS]

Then NCS takes a few more check ins. One of the stations (KC5ABC) is in a suburb of Dallas, so NCS pairs him with N5LF and sends them off frequency to handle the traffic:

ncs: LF
n5lf: R ("roger")
ncs: ABC
kc5abc: C ("yes")
ncs: N5LF ES KC5ABC DWN 3 DWN 3 DALLAS 1 K
n5lf: GG ("going")
kc5abc: GG ("going")

Receiving stations call first.
Since KC5ABC is receiving the message, he will call N5LF first (after making sure he has a clear frequency):

kc5abc: QRL? (nothing heard, so he proceeds) N5LF N5LF DE KC5ABC K
n5lf: KC5ABC DE N5LF QRV?
kc5abc: QRV (he could also say R, C, or CFM)

n5lf: QSK

N5LF starts by telling KC5ABC that he has break-in keying capability, so it's OK for KC5ABC to interrupt immediately if he needs a filler. Since KC5ABC is a beginner at this, he'll ask for fillers at the end. N5LF continues:

n5lf: HR NR 123 R HXG N5LF 12 AUSTIN TX AUG 5
PETE LOWRY K5QD [AA] (prosign [AA] is a "line return" in CW)
2345 SAGE HEN DR [AA] (...and [AA] is used only in addresses)
DALLAS TX 75219 [AA]
214 555 1212

[BT] (now he listens a second, then goes on)
HOPE YOU HAD A GOOD
VACATION CALL WHEN YOU GET
A CHANCE
[BT] (now he listens a second then goes on)
JACK PATTY AND THE KIDS [AR] N

kc5abc: WA GOOD (asking for the word after "good" in the text)
n5lf: HAD A GOOD VACATION (it is typical to back up a word or two for doing fillers)
kc5abc: R NW AA GET ("Roger, now all after GET")
n5lf: GET A CHANCE
kc5abc: R NW IN SIG BN JACK ES THE ("Roger, now in the signature between JACK and THE")
n5lf: JACK PATTY AND THE
kc5abc: QSL ("I acknowledge" or "I've got the whole message")
n5lf: TU ("Thank you" - CW ops are very mannerly)

Success! KC5ABC is a beginner, and had lots of noise at his end, but N5LF stuck with him and the message got through. Pete will be happy to hear from Jack and Patty.

Note that after the [BT], N5LF listened for a second. If both stations are using break-in keying (QSK), then KC5ABC can interrupt N5LF the minute he misses something. KC5ABC would just send a series of dits to get N5LF's attention:

n5lf: PETE LOWRY K5QD [AA] 2345 SAGE
kc5abc: dit dit dit dit dit dit dit
n5lf: ? (sends a question mark once or twice)
kc5abc: AA LOWRY
n5lf: LOWRY K5QD [AA] ...

*Try **that** in SSB or FM! Immediate feedback - that's what can make CW faster than voice for traffic handling.*

[Top of this page] [N5LF home page]

VIII. Handling Special Types of Messages

* Book Traffic (when the same message goes to several addresses)

Here come 3 messages, all with the same text and signature.
The sender first gives the common parts of the message:

BOOK OF 3 R HXG N5LF ARL 5 AUSTIN TX SEP 5
[BT]
ARL FIFTY ALL WELL HERE

[BT]
JACK SPRATT MANAGER AUSTIN RED CROSS

(Now they send the parts that are different for each message. End each with "[AR] B" if there is another message, or "[AR] N" is that is the last message of the book.)

NR 234 PAUL SMITH [AA]
12345 CHERRY TREE LN
HOUSTON TX 79034 [AA]
443 555 1212 [AR] B

NR 235 PEGGY JONES [AA]
145 TREELINE DR [AA]
GULF CITY LA 76574 [AA]
504 234 1234 [AR] B

NR 236 HEAVENS T MERGATROID[AA]
234 MAIN ST APT 45C [AA]
HOUSTON TX 77483 [AA]
713 555 1215 [AR] N

* Station Activity Report (SAR):

HR NR 12 R HXG N5ABC 14 GUMPVILLE TX AUG 4
WD5GKH STX STM
[BT]
SAR JUL ORIG 1 RCVD 2 SENT 3 DLVD 0 TOTAL 6 X 73
[BT]
JAKE N5ABC

Explanation: An SAR is a message sent to the Section Traffic Manager (STM) for your ARRL section, giving the number of messages Originated, Received, Sent, and Delivered (in that order).

* Public Service Honor Roll Report (PSHR) appended to an SAR:

HR NR 21 R HXG W4RGD 15 ARK CITY KS AUG 2
WD0GKH KS STM
[BT]
SAR 1/2/3/0 TOTAL 6 PSHR (notice the shorthand for "orig/rcvd/sent/dlvd")
1/15 2/16 3/20 4/10 5/5
6/0 TOTAL 66
[BT]
CHUCK W4RGD

Explanation: A PSHR is a message to the Section Traffic manager (STM) indicating your traffic and emergency net activities for the month. Although it can stand alone, if

you are an active traffic handler it can be appended to the SAR message too.

> 1.) Participating in a public service net (1 pt/session, max 40)
> 2.) Handling formal messages (radiograms) (1/message, max 40)
> 3.) Serving ARRL-sponsored volunteer position: (10 pts/position, max 30)
> 4.) Participation in short-term public events including off-the-air meetings (5 pts/hr,no limit)
> 5.) Participation in unplanned emergency response (5 pts/hr, no limit)
> 6.) Providing and maintaining (10 pts each item):
> a) an automated digital system that handles radiograms
> b) a Web page or e-mail list server oriented toward Amateur Radio public service

* Transcontinental Corps (TCC) Reports:

HR NR 21 R HXG W4RGD 15 ARK CITY KS AUG 1
JAKE WILDER W1ED
MASSOULA PA
[BT]
TCC CHARLIE SENT THREE K5YZ (sometimes TCC is left out)
7053 KHZ 0211 JUL 30Z
[BT]
CHUCK W4RGD

Explanation: TCC is a group of higher-level NTS traffic handlers who make schedules to pass traffic from coast to coast across the US. The messages above reads (in English), "Transcontinental Corps report, Schedule C with K5YZ" (they meet in pairs on a series of scheduled QSO's). The rest is apparent in the text.

[Top of this page] [N5LF home page]

IX. Additonal Notes:

Note that in the net dialogues below, the following conventions are used: Prosigns are shown in [square brackets]. The sending station's callsign is shown in lower case. All text sent in CW is shown in upper case.

NCS = Net Control Station. The station in charge of the net.

Sine = 1) A single letter sent to get NCS's attention, or 2) the suffix of your call, used by NCS to get your attention.

Traffic = Formal messages to be relayed by radio for delivery by phone, packet or E-Mail

Basic Information for Traffic Handling:
Q-Signals, Message Format, ARL (Standard numbered messages)

Useful CW abbreviations:

WA, WB, BN = word after, word before, between
AA, AB = all after, all before
ES = and
R, C, HR = "Roger", yes (Si), here or hear
NR = number
PRBL = preamble
ADR = address
TXT =text
SIG =signature
HLO = hello
AGN = again (as in, "please send it again")
PSE = please
NW = now
GG = going (indicating to NCS that you are moving off
frequency)
GA = good afternoon, go ahead
GE, GL, GM = good evening, good luck, good morning

Useful CW Traffic prosigns:

[AS] = "please wait" or "standby"
[AA] = new line (used in address of formal messages)
[BT] = "break" on voice (separates address from text and text from
signature)
[AR] = end of message
[AR] N = end of message, and no more messages
[AR] B = end of message, get ready for another
[SK] = end of transmission (when leaving the net, for example)

[Top of this page] [N5LF home page]