KV5R's

TRAFFIC HANDLER

Training, Procedures, Resources, and Forms for the Traffic Handler

Compiled by KV5R

Contents

FOR THE BEGINNER

The beginner should collect certain information and understand the basics of the traffic system and traffic handling. This document contains everything you should need to get started in traffic handling. The first section contains a basic course. The next section contains forms, and the last section contains references like HX-codes and ARL-codes. See Contents.

Introduction to Radiogram Traffic

Lesson 1. In the Beginning

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.

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.

Lesson 2. Preparation

To prepare to handle traffic, we need to obtain some information and forms, do a bit of study, and get organized.

Note: The forms mentioned are included in this book.

First, locate and print a net schedule for the nets in your area. For the South-central US, use my online net schedule, or locate or create a custom schedule for your area. Keep your schedule handy and begin listening to the nets. You'll learn a lot just by listening!

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, I have 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 and reference information. These include:

- ARRL Message Forms, (print several copies),
- FSD-3 – the list of ARL Numbers and Precedences used in messages, and
    - FSD-218 – Instructions for Radiograms, which contains details of the radiogram format, including precedences, handling instruction (HX) codes, Q-signals, and prosigns.

Lesson 3: 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 for a little while 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), and don't worry if the net is a little high or low on your dial. No two radios are calibrated exactly alike.

When Net Control calls for check-ins, with or without traffic, listen carefully for a little break, then give your call sign only, slowly and clearly, using **standard ITU phonetics**. Then, wait to be recognized by Net Control.

When recognized, speak clearly and **e-nun-ci-ate** your words. Give your call sign, name, location, and if you have traffic to list, give the destination location – as in "I have one for Dallas, Texas" or if not, say "No Traffic." A brief greeting or comment is usually acceptable. 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.

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. Emergency radiograms should be archived indefinitely, for liability purposes. Also, radiograms of possible historic value should be archived indefinitely.

Lesson 4: The ARRL Radiogram Form, Sections and Preamble

The Radiogram Form is divided into four sections:

1. The Preamble Section,
2. The Address Section (the recipient's contact information),
3. The Text Section, and
4. The Signature.

The **preamble** section contains eight fields:

Number	Precedence	HX	Station of Origin	Check	Place of Origin	Time Filed	Date

Number: This is the Originator's reference number. It can be anything the Originator likes. Some people use a 4 number date code, such as 1216. Others use a sequential number, indicating the number of messages they've handled this year. At the end of the message relay, the receiver will confirm the message using this number. The number stays with the message from origination to delivery.

Precedence: Routine, **W**elfare, **P**riority, or **Emergency**. For details, refer to **FSD-3** (in this document). We'll cover these in a later lesson.

HX (Handling Instructions): The codes HXA through HXG determine how the message is to be handled. The last letter should be spoken phonetically, such as, “Hotel X-ray Golf.” For meanings of the HX codes, refer to **FSD-218** (in this document). We'll cover these in a later lesson. HX codes are optional, and not used if not needed.

Station of Origin: This the call sign of the first Amateur station who put the message into ARRL radiogram format. It may or may not be the actual originator of the message text.

Check: This is the count of the number of words and groups in the text of the message. The check provides a way to confirm that the message was copied exactly as written. If the text of the message contains an ARL code, the letters “ARL” will precede the check number. Note that ARL followed by the check number has no relation to the actual ARL number used in the text of the message. The check count includes closing salutations, but does not include the signature.

Place of Origin: Not necessarily the same as the Station of Origin, this is the location (the City and State) of the person indicated in the signature, i.e., the author of the message text.

Time Filed: This is the time that the Station of Origin created the radiogram. The use of the time field is optional, and many senders omit this for routine messages.

Date Filed: This is the date that the Station of Origin created the radiogram. The date should not be omitted, since traffic handling depend on it.

A plain reading of the preamble is similar to the following example:

“Number one-two-one-five, Routine, Hotel X-ray Golf, Kilo Victor Five Romeo, ARL two-three, Athens Texas, zero-nine-hundred Zulu, December One Five.” – with each part paced slow enough to write.

The sender should speak slowly and clearly, using standard phonetics where it seems necessary, and pacing the words a little below writing speed. To learn to pace your message relay properly, write the words as you say them, on scratch paper, or spell them to yourself at writing speed. This will help keep you from out-pacing the writing speed of the receiver, and eliminate a lot of fills.

Lesson 5: The ARRL Radiogram Form, Address Section

TO: 1. 2. 3. 4. Phone: 5. Op Note:	6. Received at: Station Call:_____ Name:_____ Date:_____Time:_____

The Address Section contains the recipient's contact information, including:

1. Full Name and Amateur Call Sign (if going to an Amateur licensee),
2. Street or Box address,
3. City, State, and Zip Code, and
    4. Phone Number.
    5. An optional "Op. Note" may be placed below the phone number.
    6. Using the "Received at" section is optional.

The recipient's contact information must be spoken in a careful and consistent manner if it is to be received exactly as written.

Certain words ("**Introducers**") are used to "introduce" the data fields, so the receiver knows what to expect.

Introduce one or more initials with the word "initial" or "initials," followed by the letter or letters phonetically. One initial is frequently in the name.

Groups of initials are often called "letter groups," such as "MR," "MRS," "RT," "APT," and etc.

Introduce a call sign with the words "amateur call," followed by the call sign phonetically.

Introduce number groups with the word "figures." Groups of figures are voiced individually, as in "Figures 1-2-1-5" -- not "twelve fifteen." Omitting the word "figures" indicates that the number parts are spelled out as separate words.

Introduce groups of mixed letters and numbers with the words "mixed group."

There is no punctuation in the address section. Punctuation symbols, if actually in the name or address, are to be spelled out as words. Note that the US Postal Service does **not** require **any** punctuation in addresses.

Other words are called "operational words," and include words and phrases that precede the clarification of data, such as "I spell," "I repeat," and "correction."

In the **Name** line,

- Names are voiced phonetically, unless very common and unique.
- Call signs are voiced phonetically using ITU phonetics **only**.
    - Middle initials are introduced with the word "initial" and voiced phonetically, such as "initial Whiskey."
- Titles such as MRS are voiced like, "initials Mike Romeo Sierra."

For example, the name Mr John Q Public, W5XYZ, is voiced as, "Initials Mike Romeo, John - I spell JOHN, initial Quebec, Public - I spell Papa Uniform Bravo Lima India Charlie, amateur call Whiskey Five X-ray Yankee Zulu.

In the **address** line,

- Street or box numbers are voiced as figures.
    - Unusual street names are voiced phonetically.
- Directions, such as EAST, are spelled out, not abbreviated.
- Common abbreviations, such as ST for street, are voiced like "initials Sierra Tango."

In the **City, State, Zip** line,

- Unusual city names are voiced phonetically.
- State names are pronounced in full, but the use of the two-letter abbreviation is assumed.
    - Postal Codes are introduced as “Zip Figures” followed by numbers spoken individually. Zip plus 4 codes are sent as three groups: five numbers, the word DASH (spelled out), and four numbers.

For example, the address 123 South Louis St, St. Louis, MO, 98765-1234, would be voiced without confusion as, “figures 123, direction South, Louis - I spell L-O-U-I-S (and make it phonetic in marginal conditions), initials Sierra Tango, (then a pause), Saint Louis - I spell, initials Sierra Tango, next word L-O-U-I-S, Missouri initials Mike Oscar, (another pause), zip figures 98765, DASH, figures 1234.”

In the **phone** line,

- Introduce a phone number with the words “phone figures.”
    - Do not place dashes or any other punctuation in phone figures -- simply pause between groups. For Example, “phone figures 817 555 1212.”

After the phone figures, and perhaps an optional operator's note, the sender says, “Break,” signaling the receiver to ask for fills or move on to the text section. Fills for both the preamble and the address sections are covered at this point.

There are, of course, many possible variations. The goal is to reproduce the address section exactly. For detailed instructions, refer to the NTS Methods and Practices Guidelines manual. Listening to others pass traffic, and copying along with them, is another good way to become familiar with the procedures for sending and receiving spoken traffic.

Lesson 6: The ARRL Radiogram Form, Text and Signature

Signature:			Op Note:		
Rec’d from	Date	Time	Sent to	Date	Time

The text section of the radiogram contains the actual text of the message, as recorded by the Station of Origin, and signed by the originator of the message text.

Note: There are only two “break” prowords in the message. The first “break” is located between the address and text sections, and is paused for fills before continuing. The second “break” is between the text and the signature, but request for fills, or “Roger” of the entire message, is after the signature and the closing proword “End.” If the sending station is using fast VOX and listening between groups, the receiver may request fills at any time, as needed.

Radiograms are limited to 25 words, and contain five rows of five blanks, in a 5-by-5 table. This facilitates the easy counting of words by each station that handles the traffic, to ensure that no errors creep in to the message. Each word, figure group, or mixed group, containing no spaces, is called a “group,” occupies one blank in the text section, and counts as one for the check.

The most common “check count” errors occur because groups were not separated properly, either by the sending or the receiving station. Beware of separating (or combining) groups like “call sign” (callsign), “ARL FIFTY SIX” (ARL56), “June 25 2005” (June25,2005), “in to” (into), etc.

Words in the text may be plain words, numeric figure, letter groups, and mixed groups, and salutations such as “73” or “Sincerely.” Each group of letters, figures, mixed figures, initial X-ray, and spelled punctuation count at one “word” for the check count.

Proper names, and unusual place names, should be spelled phonetically. Non-word groups are introduced as figures, mixed group, letter group, and initials.

There are only three punctuation symbols allowed: The slash (within figure and mixed groups), the “X” (initial X-ray) sentence separator, and the “R” (initial Romeo), which is used in numeric and mixed groups in place of the decimal. All other punctuation symbols are spelled out as words, and count as one word for the check. These include the words QUERY, EXCLAMATION, DASH, ATSIGN, POUNDSIGN, AMPERSAND, and so forth, and are always spelled out in full.

The ARRL Numbered Radiograms, also called ARL codes, are standard messages used to shorten the length of the text. Some ARL codes contain one or more blanks. The information that applies to the blanks is placed after the ARL number in the text of the message. When the text is read to the recipient, the ARL code is read in plain text, with the blanks filled in appropriately. Also, messages that are mailed or emailed to the recipient should be re-written to include the actual text indicated by the ARL code, per FSD-3. ARL numbers are always spelled out as one or more words.

For example, the text “ARL FIFTY ONE OLD BOMBERS FLY IN BREAKFAST X 73” (a 10 word message) makes little sense until delivered in the context of the ARL code, which is: “Greetings by Amateur Radio. This message is sent as a free public service by ham radio operators at the Old Bombers fly-in breakfast. Best Wishes, from (and then the signature).”

Using the proper pauses between groups, and longer pauses between lines, helps the receiver to reproduce the groups properly. Proper grouping is confirmed by the check number. Never “Roger” a message until you have counted and confirmed the check count!

After sending the text, the sender will say, “break” and then send the signature. Fills will be after the text and signature.

The ARRL radiogram form does not contain a special field for the signature, but it is placed just below the block of blanks in the text section. The signature is exactly as the originator of the text stated when the message was created. It is usually just the name, and call sign (if any) of the person originating the text of the message. Titles may be placed after the signature name. It does not include salutations such as 73, or Love, or Sincerely, which are counted in the body of the text.

An optional operator's note, or OP NOTE, may be placed after the signature. The op note is used to help relay or deliver the message, and is not read to the recipient.

Finally, the sender ends with “End, no more” or, “End, one more,” etc. The receiving station either asks for fills, or says something like, “I Roger number 123” and signs clear, or awaits the next message. If the message was relayed off-frequency, the sender or receiver returns to the net, rechecks, and informs Net Control that the message has been passed.

The receiver that accepts a message for delivery to the addressee accepts responsibility for the final disposition of the message, and is obligated to perform one of three possible actions: (1) deliver the message, or (2) relay the message, or (3) send a service message to the Station of Origin explaining why the message could not be delivered.

The most important thing for the sender to remember is to speak clearly, and pace the message groups no faster than the receiver can write. The most important thing for the receiver to remember is that it is okay to request whatever fills, clarifications, and instructions as may be needed. The goal of both is to reproduce the entire contents of the message form without error.

This is the end of the basic course.

OPERATING AIDS

ARRL Message Precedences

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 to stricken populace in emergency areas. On CW, RTTY, AMTOR and packet this designation will always be spelled out. When in doubt, do not use this designation.

PRIORITY--Use abbreviation P on CW, RTTY, AMTOR and packet. This classification is for important messages having a specific time limit, official messages not covered in the emergency category, press dispatches and emergency-related traffic not of the utmost urgency.

WELFARE--This classification, abbreviated as W on CW, RTTY, AMTOR and packet, 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, AMTOR and packet) should be handled last, or not at all when circuits are busy with higher-precedence traffic.

Handling Instructions (HX Codes)

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 addressee, 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. Most “Routine” messages are HXG.

ARRL Numbered Radiograms (ARL Codes)

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. Will inform you of new address when relocated.
SIX	Will contact you ASAP.
SEVEN	Please reply by Amateur Radio through the amateur delivering this message. This is a free 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 _____(name, address, phone).
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.
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 _____. (usually a holiday)
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.

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				

International Q Signals

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
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 ..... ?

ARRL "QN" CW Traffic Net Signals

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 _____
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 _____
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.

Abbreviations, Prosigns, Prowords

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).....
RB	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.)		

Countries Accepting Third Party Traffic:

V2	Antigua/Barbuda	**LU**	Argentina	**VK**	Australia
V3	Belize	**CP**	Bolivia	**T9**	Bosnia-Herzegovina
PY	Brazil	**VE**	Canada	**CE**	Chile
HK	Colombia	**D6**	Comoros	**TI**	Costa Rica
CO	Cuba	**HI**	Dominican Republic	**J7**	Dominica
HC	Ecuador	**YS**	El Salvador	**V6**	Federated States of Micronesia
C5	Gambia	**9G**	Ghana	**J3**	Grenada
TG	Guatemala	**8R**	Guyana	**HH**	Haiti
HR	Honduras	**4X**	Israel	**6Y**	Jamaica
JY	Jordan	**EL**	Liberia	**V7**	Marshall Islands
XE	Mexico	**YN**	Nicaragua	**HP**	Panama
ZP	Paraguay	**OA**	Peru	**DU**	Philippines
VR6	Pitcairn Island*	**V4**	St. Christopher/Nevis	**J6**	St. Lucia
J8	St. Vincent	**9L**	Sierra Leone	**3DA**	Swaziland
9Y	Trinidad/Tobago	**GB**	United Kingdom **	**CX**	Uruguay
YV	Venezuela	**4U1ITU -- ITU, Geneva**		**4U1VIC -- VIC, Vienna**	

* Since 1970, there has been an informal agreement between the United Kingdom and the US, permitting Pitcairn and US amateurs to exchange messages concerning medical emergencies, urgent need for equipment or supplies, and private or personal matters of island residents.

** Limited to special-event stations with callsign prefix GB (GB3 excluded).

Note: US licensed amateurs may operate in the following US territories under their FCC license: The Northern Marianas Islands, Guam, Johnston Island, Midway Island, Kure Island, American Samoa, Wake Island, Wilkes Island, Peale Island, The Commonwealth of Puerto Rico and the US Virgin Islands.

Temporary Third Party Traffic Agreements:

(Note: During major disaster situations, administrations of countries may request temporary third party traffic agreements to facilitate the passage of emergency and health and welfare messages. W1AW bulletins carry announcements of temporary agreements.)

Traffic Net Schedule (South-Central US)

Updated May 26, 2007

Time	Frequency	Days	Name	Who
08:30 AM to 09:30 AM	7285 kHz	Mon-Sat	Daytime Texas Traffic Net	NTS Sam Clark, WA5DTY
10:00 AM to 12:00 PM	7290 kHz	Mon-Sat	7290 Traffic Net 7290trafficnet.org	Independent Jo Ann Keith, KA5AZK
10:30 AM	7280 kHz	Mon-Sat	Fifth Region Cycle 1	NTS
01:00 PM to 02:00 PM	7290 kHz	Mon-Fri	7290 Traffic Net 7290trafficnet.org	Independent Jo Ann Keith, KA5AZK
01:30 PM	7280 kHz	Sunday	Fifth Region Cycle 1	NTS
02:15 PM	14345 kHz	Daily	Central Area Net Cycle 2	NTS
03:30 PM	7280 kHz	Daily	Fifth Region Cycle 2	NTS
05:20 PM	7120.6 kHz	Daily	Oklahoma Slow Speed Training Net	NTS Pat, WB5NKD
06:30 PM to 07:30 PM	3873 kHz	Daily	Texas Traffic Net texastrafficnet.org	NTS Lou, WA5LOU
06:30 PM	146.88 MHz PL 110.9	Daily	Dallas Metro Traffic Net dfwtrafficnet.com	NTS Local Herman May, KE5HYW
06:30 PM	3552 kHz	Daily	Oklahoma Net (CW)	Independent Daniel Reynolds, AA0NI
07:00 PM CST 08:00 PM CDT	3935 kHz	Daily	Central Gulf Coast Hurricane Net	
07:00 PM	3552 kHz W 7052 kHz S	Daily	Texas CW Net http://k6jt.home.att.net/	NTS Section Steve Phillips, K6JT
07:30 PM	3567 kHz W 7045 kHz S	Daily	Fifth Region Cycle 4 (CW)	NTS Region Jim Leist, KB5W
07:45 PM	3552 kHz	Daily	Texas Slow CW Net Texas Slow net	Independent Scott McMullen, W5ESE
08:30 PM	3552 kHz W 7052 kHz S	Daily	Central Area Net Cycle 4 (CW)	NTS Area Jack Bryant, W5TFB
09:30 PM to 10:30 PM	3935 kHz	Daily	Southwest Traffic Net kv5r.com/swtn	Independent George Fenn, W5VBD
09:30 PM	3567 kHz	Daily	Fifth Region Cycle 4 (CW)	NTS Region Jim Leist, KB5W
10:00 PM	3552 kHz	Daily	Texas CW Net (TEX) k6jt.home.att.net/	NTS Section Steve Phillips, K6JT
10:30 PM	146.72 MHz PL 110.9	Daily	Dallas Metro Traffic Net dfwtrafficnet.com	NTS Local Herman May, KE5HYW
ARES, RACES, and Emergency Nets				
07:30 PM	3873 kHz	Monday	Texas ARES Net	ARES
07:30 PM	3873 kHz	Tuesday	Section Managers' Net	West Gulf Division
01:30 PM	7248 kHz	1,3,5 Sn	District 32 RACES	RACES
As Req.	7285 kHz 3873 kHz	Day Night	Emergency & Tactical Traffic Net	
As Req.	7290 kHz 3935 kHz	Day Night	Health and Welfare Traffic Net	

FORMS

There is one page for each of the forms. After printing the manual, print extra copies of the forms as follows:

1. Put (click) the I-beam cursor within the page you want to print.
2. Click File, Print
3. In the Print dialog, choose **Current Page** and specify the number of copies you want.
4. Move to another form page and repeat from step 1.

The forms may also be filled in on the computer.

1. Go to the top of the radiogram table.
2. With the arrow cursor along the left side, drag-select down to the bottom of both tables.
3. Press Ctrl-Insert to Copy.
4. Press Right-Arrow to move the cursor to the end of the document.
5. Press Control-Enter to make a hard page break.
6. Press Shift-Insert to copy the two radiogram tables to the new page.
7. Move to the new end of the document and repeat 5 and 6 as many times as you like.
8. Save.
9. You can now fill in that many radiograms on the computer.
10. Be sure to make more copies before you fill the last page, or better, leave the first page of radiograms blank as your template.
11. To clear out old radiograms, simply select them (Select Table) and choose “Table, Delete, Table” from the Table menu.

Photocopy beforehand or print several extra copies of this page.

ARRL RADIOGRAM VIA AMATEUR RADIO

Number	Precedence	HX	Station of Origin	Check	Place of Origin	Time Filed	Date

TO:

Phone:

Received at:

Station Call:_____

Name:_____

Date:_____Time:_____

Signature:

Rec'd from	Date	Time	Sent to	Date	Time

ARRL RADIOGRAM VIA AMATEUR RADIO

Number	Precedence	HX	Station of Origin	Check	Place of Origin	Time Filed	Date

TO:

Phone:

Received at:

Station Call:_____

Name:_____

Date:_____Time:_____

Signature:

Rec'd from	Date	Time	Sent to	Date	Time