

# National Traffic System (NTS) Messaging

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Presented to

Columbia Amateur Radio Club

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by

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WB4DLD

# National Traffic System (NTS) Messaging

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# NTS Areas



# What is the National Traffic System (NTS)?

- The “RELAY” in American Radio Relay League (ARRL)
- Started in 1915 as the formal ARRL system to relay messages around the country
- Transmit & Receive Modes: Voice, CW, Packet
- NTS and Amateur Radio Emergency Services (ARES)
- Requirements to join: Any level Ham license & interest
- ARRL Field Organization Appointments: Official Relay Station (ORS) & Section Traffic Manager (STM).

# Advantages of NTS Messaging

- Wireless! Send them from anywhere.
- Use a little HT or a big base station
- Standard Format
- Accountability
- Speed (digipeater vs. email)
- NTS Nets meet daily
- Fun, good practice & helpful



The American Radio Relay League  
**RADIOGRAM**  
 Via Amateur Radio

Number <b>205</b>	Precedence <b>R</b>	HX <b>C</b>	Station of Origin <b>WB4DLD</b>	Check <b>ARL 13</b>	Place of Origin <b>Columbia SC</b>	Time Filed	Date <b>Feb 5</b>
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To:

**Columbia Amateur Radio Club  
 123 First Street  
 Columbia SC 29210 W4RWL**

**803-123-4567**

Telephone Number:

<b>ARL</b>	<b>Sixty</b>	<b>Five</b>	<b>630</b>	<b>PM</b>
<b>Monday</b>	<b>X</b>	<b>My</b>	<b>Cell</b>	<b>803</b>
<b>123</b>	<b>1478</b>	<b>73</b>		

**Jim WB4DLD**

This Radio Message was received at:

Amateur Station \_\_\_\_\_ Date \_\_\_\_\_  
 Name \_\_\_\_\_  
 Street Address \_\_\_\_\_  
 City, State, Zip \_\_\_\_\_

REC'D	From	Date	Time	SENT	To	Date	Time
					<b>K4GLT</b>	<b>Feb 5 2011</b>	<b>0800</b>

A licensed Amateur Radio Operator, whose address is shown above, handled this message free of charge. As such messages are handled solely for the pleasure of operating, a "Ham" Operator can accept no compensation. A return message may be filed with the "Ham" delivering this message to you. Further information on Amateur Radio may be obtained from ARRL Headquarters, 225, Main Street, Newington, CT 06111.

The American Radio Relay League, Inc. is the National Membership Society of licensed radio amateurs and the publisher of QST Magazine. One of its functions is promotion of public service communication among Amateur Operators. To that end, The League has organized the National Traffic System for daily nationwide message handling.

# Radiogram Form Detail

							
The American Radio Relay League RADIOGRAM Via Amateur Radio							
Number	Precedence	HX	Station of Origin	Check	Place of Origin	Time Filed	Date
205	R	C	WB4DLD	ARL 13	Columbia SC		Feb 5

## Number

- Assigned by the message originator
- No standard way of numbering messages
- Consecutive (1, 2, 3..., starting over at the new year or monthly)
- Order by month & number (507 = 7th you originated in May; 11244 = 244th message you originated in November)

## Precedence (E, P, W, or R)

- E = Emergency (life or death urgency in a declared emergency)
- P = Priority (official traffic in a declared emergency)
- W = Health & Welfare (used only in a declared emergency)
- R = Routine (everything else – most frequently used)



# Radiogram Form Detail

The American Radio Relay League  
RADIOGRAM  
Via Amateur Radio

Number	Precedence	HX	Station of Origin	Check	Place of Origin	Time Filed	Date
205	R	C	WB4DLD	ARL 13	Columbia SC		Feb 5

To:

(Optional) HX or Handling Code – A, B, C, D, E, F or G

- A. Collect landline delivery authorized within \_\_\_ miles of addressee or unlimited if blank (A150 = collect call authorized w/in 150 miles; A = collect call authorized regardless of miles)
- B. Cancel message if not delivered within \_\_\_ hours of filing time & service originating station and send message to originator to notify them)
- C. Confirmation of delivery requested by originating station (“TOD YOUR 1014 JULY 4 1330 PST XRAY 73” or if issues “ARL SIXTY SEVEN 1014 PHONE 650 555 1212 INCORRECT NO REPLACEMENT FOUND SENT RADIOGRAM INSTEAD XRAY 73”)
- D. Report your identity & time/date rec’d message plus time/date delivered or sent to another
- E. Delivering station to get reply from addressee and send to originator as a new message
- F. Hold delivery until \_\_\_ (numbered day of month) – great for birthday or anniversary messages,(F14 = deliver on 14<sup>th</sup> of the month; F1 = deliver on the 1<sup>st</sup> of month after date filed)
- G. Delivery by mail or phone, toll call not required, service originating station (often ignored).

# Radiogram Form Detail



The American Radio Relay League  
RADIOGRAM  
Via Amateur Radio

Number	Precedence	HX	Station of Origin	Check	Place of Origin	Time Filed	Date
205	R	C	WB4DLD	ARL 13	Columbia SC		Feb 5

To:

**Station of Origin:** Call sign of station who put the message into NTS format; If WB4DLD prepares message 1207 for a fellow ham, then puts it onto an NTS for relay to Vermont, the originator is WB4DLD. If W4RWL prepares message 23 for his non-ham neighbor then gives it to WB4DLD to relay to any NTS net, the originator is... W4RWL.

**Check:** The word count in body text only (do not count the address or signature); precede with “ARL” if any of the ARL numbered texts are used (i.e., ARL12).

**Place of Origin:** The city & state where the message was written.

**(Optional) Time Filed:** This is not used much... 24-hr format & time zone

**Date:** Month (non-numeric – abbreviated) & day number message was created (i.e., Feb 5).

# Radiogram Form Detail

To:							
<b>Columbia Amateur Radio Club</b> <b>123 First Street</b> <b>Columbia SC 29210 W4RWL</b>							
Telephone Number: <b>803-123-4567</b>							
				<b>This Radio Message was received at:</b> Amateur Station _____ Date _____ Name _____ Street Address _____ City, State, Zip _____			

## To:

Name, call sign (if going to a ham), street address or P.O. Box, city, state (abbreviated) & zip code. Note: Digital and packet NTS messages are routed via zip code.

## Telephone Number:

Be sure to include the area code and double-check the number!!!

## This Radio Message was received at:

Your station identification, date received, and your location. More received-from detail will go in the “REC’D” block after body text and signature.



# Radiogram Form Detail

REC'D	From	Date	Time	SENT	To	Date	Time
					Kelly K4GLT	Feb 5, 2011	0800Z
<p>A licensed Amateur Radio Operator, whose address is shown above, handled this message free of charge. As such messages are handled solely for the pleasure of operating, a "Ham" Operator can accept no compensation. A return message may be filed with the "Ham" delivering this message to you. Further information on Amateur Radio may be obtained from ARRL Headquarters, 225, Main Street, Newington, CT 06111.</p>				<p>The American Radio Relay League, Inc. is the National Membership Society of licensed radio amateurs and the publisher of QST Magazine. One of its functions is promotion of public service communication among Amateur Operators. To that end, The League has organized the National Traffic System for daily nationwide message handling.</p>			

**REC'D:** Call sign from whom you received the message and date & time of receipt. Time may be either your local time (PST/PDT) or Zulu time. Make sure date agrees with time (Zulu is 8 hours ahead of PST/PDT – can cause date to roll forward).

**SENT:** Call sign you sent or passed the message to, or to whom you delivered it, with date & time. Also good to note delivery method for your own reference (i.e., via phone or left on Tom's voicemail). Always leave your call back number if message was left on voicemail!

# ARL Numbered Texts

## Purpose & How Counted

- ARL Numbered Texts replace common phrases in message body text (i.e., Happy Birthday, Greetings by amateur radio, etc.)
- Use of ARL texts reduce total message word count – faster and more consistent transmission of text
- Translated before delivery of message to addressee
- ARL text numbers are always spelled-out in words (i.e., ARL SEVEN or ARL FORTY SIX)
- Message word count (check) is written as “ARL#” (i.e., ARL<sub>4</sub> or ARL<sub>15</sub>) to alert operators that message includes at least one ARL numbered text.

## ARL Numbered Texts (Examples)

- ARL FORTY SIX = Greetings on your birthday and best wishes for many more to come.
- ARL FIFTY = Greetings by amateur radio.
- ARL 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.
- ARL SIXTY SEVEN = Your message number \_\_\_\_\_ undeliverable because of \_\_\_\_\_. Please advise.
- ARL SIXTY FIVE = Arriving \_\_\_\_\_ on \_\_\_\_\_ Please arrange to meet me there.

# Checking your Message

Remember these basic rules when checking (counting the words) text.

- Punctuation (X-rays, Queries) count separately as a word.
- Mixed letter number groups (1700Z, for instance) count as one word.
- Initial or number groups count as one word if sent together, two separately.
- The signature does not count as part of the text, but any closing lines such as “Love”, or “73” do.

Here are some examples:

\*Harry J. Brown --3 words

\* J B Thomas-3 words

\* SASE --1 word

\* St. Simons----2 words

\* 3 PM ----2 words

\*WB4DLD----1 word

\* ARRL FORTY SIX----3 words

\*Seventy Three ----2 words

\* 73 ----1 word

\*Telephone numbers count as 3 words. Area code, prefix, number)

\*ZIP codes count as 1 word.

# Book Messages

When sending book traffic always send the “common” parts first such as (heading, text, signature). Then send “uncommon” parts such as (message number, addressee’s name, address, town, zip, phone number). Before sending book traffic, announce beforehand that it is Book Traffic. Each message is counted separately, even though it was sent in book form.

# How to Send a Message

- Please copy my number: 1, Routine, HX Golf, (your call sign), 25, (your location), (time if applicable), December two zero.
- Going to (your addressee) and (amateur call sign if any), figures 1234 Brushy Creek Drive, Bandera TX, zip figures 99877, phone figures 919 555 1234, break for text.”
- \*Now wait for the receiving station to say “go with text”, plus this allows them any fills they might need of the preamble information or any needed fills of information of the addressee.
- When they say, “go with text,” read your message word for word at writing speed, any tough words use phonetics. The number of words should match the (check) in the preamble. ARL Message codes are always phonetically spelled out. One number character per box. Ex. ARL Fifty Six would be 3 words. When done delivering your text to receiving station say, “Break for Signature”.
- \*Wait for receiving station to ask for fills, or say, “go with signature”.
- Give signature of message sender, amateur call sign if applicable and say “end message number one, how copy”.
- The receiving station will acknowledge your message number one and say “thanks for the traffic” ending with their call sign.
- You can reply by saying “thank you for taking it” and end with your call sign so net control knows the message has been passed and you both are finished.

# How to Deliver an NTS Message

- Preferred delivery is via telephone.
- Okay to leave on voicemail or answering machine IF you are comfortable you reached the right person.
- Radiogram postcard if cannot reach by phone.
- Service originating station to inform if cannot deliver or if they requested confirmation.

# Local NTS Nets (local time)

- South Carolina Single Sideband Net (SCSSB Net) 7:00 PM  
3.915 MHz
- Carolina's Net (CN) 7:00 PM & 10:00 PM 3.573 MHz CW
- Carolina's Slow Net (CSN) 8:00 PM 3.571 MHz CW

# Additional Resources

The following Links are on [www.scssb.net](http://www.scssb.net)

[ARRL Website](#)

[SC Section ARRL Website](#)

[SC Section ARRL Field Organization](#)

[US Amateur Bands - Color](#)

[South Carolina Amateur and Ham Radio Clubs](#)

[South Carolina Nets](#)

[Callsign Lookup](#)

[FCC ULS Homepage](#)

[FCC Enforcement Bureau](#)

[Third Party Regulations per Countries](#)

[Telephone Number Lookup](#)

[SC Zip code Lookup](#)

[Telephone Number Prefix Locator](#)

[Using the ARRL Radiogram Forms](#)

[National Traffic System Methods and Practice Guidelines](#)

[Download NTS Traffic Entry Form for Windows - by KA1VGM](#)

[Printable ARRL Radiogram Form](#)

[SC Information Highway - SCiWay](#)

73 bt

Jim WB4DLD

end

no more