

National Traffic System (NTS) Messaging Basics

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National Traffic System (NTS) Messaging Basics

CONTENTS

- What is the National Traffic System?
- Advantages of NTS Messaging
- The ARRL Radiogram Form
- ARL Abbreviated Texts
- Sample Message
- Local NTS Contacts & Nets
- How to Deliver an NTS Message
- Record Keeping & Reporting (PSHR)
- Additional Resources



1. 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).



2. Advantages of NTS Messaging

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





The American Radio Relay League
RADIOGRAM
 Via Amateur Radio

Number 704	Precedence R	HX C	Station of Origin KG6ILA	Check 14	Place of Origin MTN VIEW CA	Time Filed	Date JUL 2
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To:

**SUPER STUDENT KG6AAA
 1234 SECOND ST
 ANYTOWN CA 94000**

This Radio Message was received at:

Amateur Station _____ Date _____
 Name _____
 Street Address _____
 City, State, Zip _____

Telephone Number: **650-123-4567**

**THIS IS THE ARRL RADIOGRAM
 FORM XRAY DETAIL TO FOLLOW
 XRAY HAVE FUN 73**

PINK FOSTER KG6ILA

REC'D	From	Date	Time	SENT	To	Date	Time
					Austin AK2US	7/2/03	2112 PDT


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.



3.1 ARRL Radiogram Form


- ▶ **Preamble:** Message number, precedence, HX (optional handling code), station of origin, check (text word count), place of origin, time filed (optional), and date.
- ▶ **Addressee:** Name, call sign (if a ham), full street address, city, 2-letter state abbreviation, zip code (very important) & telephone (be sure to include area code).
- ▶ **This Radio Message was received at:** Station identification and location.
- ▶ **Text:** 25 words maximum, 5 per line; Use the word "xray" for a period (.) and "query" for a question mark (?). Last word is salutation (i.e., "73", "Love", etc.)
- ▶ **Signature:** (Write-in above REC'D block) Name & call sign of person who wrote the message – include full phone number if not a Ham or if new to NTS.

 The American Radio Relay League RADIOGRAM Via Amateur Radio							
Number	Precedence	HX	Station of Origin	Check	Place of Origin	Time Filed	Date
704	R	C	K66ILA	14	MTN VIEW CA		JUL 2
To:						This Radio Message was received at:	
SUPER STUDENT K66AAA 1234 SECOND ST ANYTOWN CA 94000						Amateur Station _____ Date _____ Name _____ Street Address _____ City, State, Zip _____	
Telephone Number: 650-123-4567							
<u>THIS</u>	<u>IS</u>	<u>THE</u>	<u>ARRL</u>	<u>RADIOGRAM</u>			
<u>FORM</u>	<u>XRAY</u>	<u>DETAIL</u>	<u>TO</u>	<u>FOLLOW</u>			
<u>XRAY</u>	<u>HAVE</u>	<u>FUN</u>	<u>73</u>				
PINK FOSTER K66ILA							
REC'D	From	Date	Time	SENT	To	Date	Time
					Austin AK2US	7/2/03	2112 PDT
<small>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.</small>				<small>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.</small>			

- ▶ **REC'D & SENT:** Record the names and call sign of the person you rec'd the message from and/or sent/forwarded the message to, along with the date & time (PST/PDT or Z).



3.2 Radiogram Form Detail (1 of 6)



The American Radio Relay League
RADIOGRAM
Via Amateur Radio

Number	Precedence	HX	Station of Origin	Check	Place of Origin	Time Filed	Date
704	R	C	KG6ILA	14	MTN VIEW CA		JUL 2

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)



3.2 Radiogram Form Detail (2 of 6)



The American Radio Relay League
RADIOGRAM
Via Amateur Radio

Number	Precedence	HX	Station of Origin	Check	Place of Origin	Time Filed	Date
704	R	C	KG6ILA	14	MTN VIEW CA		JUL 2


To:

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

- 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)
- Cancel message if not delivered within ___ hours of filing time & service originating station (B72 = cancel if not delivered within 72 hrs and send message to originator to notify them)
- Confirmation of delivery requested by originating station ("TOD YOUR 1014 JULY 4 1330 PST XRAY 73" or if issues "ARRL SIXTY SEVEN 1014 PHONE 650 555 1212 INCORRECT NO REPLACEMENT FOUND SENT RADIOGRAM INSTEAD XRAY 73")
- Report your identity & time/date rec'd message plus time/date delivered or sent to another
- Delivering station to get reply from addressee and send to originator as a new message
- Hold delivery until ___ (numbered day of month) – great for birthday or anniversary messages (F14 = deliver on 14th of the month; F1 = deliver on the 1st of month after date filed)
- Delivery by mail or toll call not required, service originating station (often ignored).



3.2 Radiogram Form Detail (3 of 6)



The American Radio Relay League
RADIOGRAM
Via Amateur Radio

Number	Precedence	HX	Station of Origin	Check	Place of Origin	Time Filed	Date
704	R	C	KG6ILA	14	MTN VIEW CA		JUL 21

To:

- Station of Origin:** Call sign of station who put the message into NTS format; If KG6ILA prepares message 1207 for a fellow ham, then puts it onto an NTS packet BBS for relay to Vermont, the originator is... KG6ILA. If WB6W prepares message 23 for his non-ham neighbor then gives it to KG6ILA to relay to any NTS net, the originator is... WB6W.
- 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., ARL7).
- 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., Sep 21).



3.2 Radiogram Form Detail (4 of 6)

To:							
SUPER STUDENT KG6AAA 1234 SECOND ST ANYTOWN CA 94000	This Radio Message was received at: Amateur Station _____ Date _____ Name _____ Street Address _____ City, State, Zip _____						
Telephone Number: 650-123-4567							

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.



3.2 Radiogram Form Detail (5 of 6)

<u>THIS</u>	<u>IS</u>	<u>THE</u>	<u>ARRL</u>	<u>RADIOGRAM</u>	
<u>FORM</u>	<u>XRAY</u>	<u>DETAIL</u>	<u>TO</u>	<u>FOLLOW</u>	
<u>XRAY</u>	<u>HAVE</u>	<u>FUN</u>	<u>73</u>		
PINK FOSTER KG6ILA					
From	Date	Time	To	Date	Time

Text: 25 words maximum, 5 per line; Use "xray" for a period (.) and "query" for a question mark (?).

Signature: There is no "Signature" field, just write-in below text; Name & call sign of author – include phone number if not a ham or if not known on an NTS net.



3.2 Radiogram Form Detail (6 of 6)

REC'D	From	Date	Time	SENT	To	Date	Time
					Austin AK2US	7/2/03	2112 PDT
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.			

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!



4. 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., ARL4 or ARL15) to alert operators that message includes at least one ARL numbered text.



4. 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.



5. Sample Message

**Now, let's check your
message receiving skills!**



5. Sample Message

THE AMERICAN RADIO RELAY LEAGUE RADIOGRAM VIA AMATEUR RADIO							
Number	Precedence	HX	Station of Origin	Check	Place of Origin	Time Filed	Date
305	R		KE5AUI	19	Perry, OK		Mar 05
TO NCRG Members Perry, OK 73077						This Radio Message Was Received At Amateur Station _____ Phone _____ Name _____ Street Address _____ City and State _____	
Telephone Number _____							
Reminder	of	Green	Country	Hamfest			
In	Claremore	Oklahoma	On	March			
16 th	And	17 th	Xray	See			
Everyone	There	Xray	73				
Ricky Harbour, KE5AUI							
REC'D	From	Date	Time	SENT	To	Date	Time
This message was handled free of charge by a licensed Amateur Radio Operator whose address is shown in the box at right above. As such messages are handled solely for the pleasure of operating. No compensation can be accepted by a "Ham" operator. A return message may be filed with the "Ham" delivering this message to you. Further information on Amateur Radio may be obtained from A.R.R.L. Headquarters 225 Main Street, Newington, CT 06111				The American Radio Relay League, Inc., is the national membership society of licensed radio amateurs and the publishers of QST Magazine. One of its functions is promotion of the public service communications among amateur operators to that end. The League has organized the National Traffic System for daily nationwide message handling.			



6. Local NTS Nets

<u>Net Name</u>	<u>Freq.</u>	<u>Days</u>	<u>Local Time</u>	<u>Note</u>
Ok. Bapt. Disaster Relief	7275	Sn	2:00P	E
Ok. Digital Net	3610	W	8:00P	T
Ok. Phone Emerg. Net	3900	Sn	8:00A	ET
Ok. Section Net(CW)	3692.5	Dy	6:30P	T
Ok. Traffic & Wx. Net	3900	M,T	5:00P	TW
Ok. Training Net(CW)	3695,7120(summer)	Dy	5:30P	T
*Sooner Traffic Net	3845	M,T	5:30P	T

(* Nets affiliated with the NTS/E=Emergency, T=Traffic Handling, W=Weather)



7. 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.



8. Record Keeping & Reporting (PSHR)

- ▶ Use a log sheet to keep track of your messages
- ▶ Use a PSHR log sheet to tally monthly points for Public Service Honor Roll
- ▶ Report message count (originated, sent, received & delivered) to STM monthly
- ▶ Report PSHR totals to STM and SM
STM = Arlyn Seidel, KK5GY- kk5gy@arrl.net
SM = John Thomason, WB5SYT- wb5syt@arrl.org



Oklahoma Section Traffic Report

Oklahoma Section Traffic Manager Report
 From Arlyn L. Seidel KK5GY
 4450 E. Gate Rd.
 Newkirk, Ok. 74647

To: Steve Ewald W1VX
 American Radio League Traffic Editor
 225 Main Street Newington Ct. 06111-1419

CC: John Thomason WB5SYT
 Oklahoma Section Manager
 1517 Oak Drive
 Edmond, Ok. 73034

TRAFFIC HANDLING REPORT: JUNE 2006

1. PUBLIC SERVICE HONOR ROLL REPORT (PSHR)

NAME	CALL					TOTAL
Elfers O. C.	WA5OUV	NO REPORT				
Seidel Arlyn	KK5GY	1/40	2/40	3/30		110
Sitton Sam	W5CU	1/31	2/30	3/5	5/5	71

NETS

NETS	SESSION	STATIONS	TRAFFIC	NET MANAGER
ARTS	30	200	759	WB5NKD
		By 14 CW Traffic Handlers		
AMERICAN AIR LINE	4	43	0	KF5RD
BLACKWELL	4	33	0	N5VEA
BROKENARROW	3	49	0	HD5NJR
CLEVELAND CO ARES	4	135	0	WG5T
CW TRAINING NET	4	33	0	K5EHK
DURANT	NO REPORT			K5BQG
EDMOND	5	180	78	KM5GZ
ENID ARC	4	91	0	KC5OKG
KAY COUNTYARC	4	52	0	KD5FX
MAYES COUNTY	5	102	8	AC5JV
McCurrian Co ARES	No report			WB7VYC
NE OK SIMPLEX	4	140	2	KC5TER
NOBLE COUNTY	4	47	1	KD5DMD
NORA	4	95	3	W5GFI
OK. ARES	4	39	4	W5JPI
OK DIGI	4	10	1	W5JPI
OK PONE EMERG	4	97	9	W5JPI
	L/W WEST TEXAS EMERGENCY NET			
OK SALVATION GROUP	20	77	3	N5FM
OK TRAINING NET	31	125	57	WB5NKD



9. Additional Resources

- ▶ [ARRL Net Directory](#) – Excellent NTS reference with net listings by state (\$5 from ARRL). Online version is accessible free at the ARRL web site (www.arrl.org).
- ▶ [Public Service Communication Manual](#) – Detailed reference on NTS message handling (\$1 from ARRL), also available on ARRL web site.
- ▶ [“National Traffic System \(NTS\) Messaging Basics”](#) (this presentation) Latest version available online at: <http://www.qsl.net/kg6ila> or by writing kg6ila@arrl.net



THANK YOU FOR ATTENDING

Noble County Repeater Group

www.noblecountyarcs.org

