

Welcome to the 2024 EPA Fall SET. It runs from 10/05 to 10/11.

NOTE TO EC's: This exercise is voluntary. As EC you know your unit's specific needs for training and experience. If you have other plans for the Fall SET then feel free to follow them.

We're trying something new in cooperation with EPA NTS. The exercise activities include checking-in to traffic nets and sending ARRL Radiograms. The NTS team has worked with us to smooth the path for first-time NTS participants.

The exercise instruction includes several sections. Topics include:

OVERVIEW

EXERCISE SCENARIO

EXERCISE ACTIVITIES

SET MESSAGE CONTENTS

PREPARING TO SEND A RADIOGRAM USING NTS

ADDRESSING A RADIOGRAM

DELIVERY CONFIRMATION

EPA TRAFFIC HANDLERS

WINLINK RADIOGRAMS

SENDING A MESSAGE USING NTS NET

EPA ARES FALL 2024 SET SCORESHEET

EPA TRAFFIC HANDLING NETS

EC SUMMARY TO SEC EXAMPLE

ARRL RADIOGRAM – Template and Example

PENNSYLVANIA SLOW NET

OVERVIEW

The EPA Fall 2024 SET is designed to exercise general emcomm skills, check each unit's capability to activate its membership and expose participants to message handling via the ARRL National Traffic System.

- 1) Activate units, report capabilities (10/5)
- 2) Send messages using National Traffic System (NTS) (10/5 to 10/11)

In an infrastructure breakdown, NTS is a ready resource for message handling. Participants will have an opportunity to use NTS to send messages and become familiar with NTS resources.

Note: The NTS portion of the EPA SET can be performed from October 5th to 11th.

The NTS portion of the exercise will use ARRL Radiograms rather than ICS-213 which is much more widely used for emcomm purposes. The emphasis of this exercise is to grow the relationship between EPA ARES and EPA NTS. Radiograms are somewhat simpler to use and a better option for this exercise. We will explore ICS-213 and other ICS and ARC forms in the future.

The exercise will be scored. ECs submit the score sheets to the SEC for completion and consolidation. Results will be reported to EPA ARES SM, DEC's and ECs.

EXERCISE SCENARIO

There are spot internet and telephone interruptions across Pennsylvania creating a potential for disruption of emergency services. ARES units are requested to provide a list of available emcomm support. The ARRL National Traffic System (NTS) is being activated to provide support. Participants are asked to send check-in messages via NTS to county and section leadership.

## EXERCISE ACTIVITIES

### Scoring

SET activity scoring has been used in EPA in the past and is popular in other ARES Sections. Scoring guidelines are included this year. See EPA ARES FALL 2024 SET SCORESHEET for the reporting form. The NTS portion of the SET runs from 10/5 to 10/11. ECs consolidate their scores and send the results to w2afe@arri.net after 10/11. The scores for NTS messages received by the SEC will be added at that time.

An after-action report will include details from participating ARES groups and acknowledge all participants. It will be delivered to EPA ARES leadership.

Unlimited participants per activity – While there is a maximum of 50 points per activity in 2.1 through 2.4, any number of participants are permitted. Only five are counted for points purposes. All participants will be recognized.

Participation is open to all licensed amateur radio operators.

#### 1) Unit Activation and Capabilities Report (Perform on 10/5)

Item	Description	Score
1.1	<u>Activate ARES Unit</u> Perform unit activation. Deliver the exercise scenario. Inform members of the SET activities.	10 points for activating ARES unit.  50 points for having, and following, a written activation procedure.
1.2	<u>Member Check-in and Capabilities</u>  Open a net and check-in members. Deliver the exercise scenario.  Inventory member Emcomm capabilities. a) Base and/or Deploy. b) Hours of emergency power operation possible c) Major capabilities (Examples: HF 100 watts, mobile 50 watts, HT, Winlink, Packet, FLdigi)  Summarize on ICS-213. ECs send a single consolidated ICS-213 to EPA SEC at ARES-EPA via WINLINK.  See EC SUMMARY TO SEC EXAMPLE	50 points for submitting a single / consolidated ICS-213 summarizing unit capability.

EXERCISE ACTIVITIES - continued

2) NTS Activities (Perform 10/5 to 10/11)

Item	Description	Score
2.1	<p><u>Check-in to a traffic net (radio)</u></p> <p>Check in to one of the EPA traffic nets. This can be done any time from 10/5 to 10/11. Report to your EC that you checked in.</p> <p>You <u>do NOT</u> need to send or receive any traffic, just check-in.</p> <p>See EPA TRAFFIC HANDLING NETS below.</p> <p><b>ECS – Send list of 2.1 participants to SEC. Include name and call.</b></p>	<p>10 points per successful participant.</p> <p>Max 50 points</p>
2.2	<p><u>Radiogram to EC (telephone)</u></p> <p>Connect with an EPA traffic handler by telephone and send an NTS ARRL radiogram to your EC. Select from the EPA Traffic Handlers List below.</p> <p>Message is: <u>YourCall YourName YourCounty EPA SET</u>. See SET MESSAGE CONTENTS for details.</p> <p><b>ECS – Send list of 2.2 participants to SEC. Include name and call.</b></p> <p>See EPA TRAFFIC HANDLERS for a list of traffic handlers who have agreed to take messages by telephone for this exercise.</p>	<p>10 points per successful participant.</p> <p>Max 50 points</p>
2.3	<p><u>Radiogram to SEC (radio)</u></p> <p>Connect with a traffic net by radio.</p> <p>See SENDING A MESSAGE USING NTS for how to join an NTS net and send a message.</p> <p>Address the ARRL Radiogram to EPA SEC Jay King, W2AFE Chester County, Phoenixville, W2AFE@arrl.net, 408-835-9202</p> <p>Message is: <u>YourCall YourName YourCounty EPA SET</u>. See SET MESSAGE CONTENTS for details.</p>	<p>10 points per successful participant.</p> <p>Max 50 points</p>
2.4	<p><u>Radiogram to KC3QVF (winlink)</u></p> <p>Use the WINLINK ARRL Radiogram form to send a Radiogram to KC3QVF.</p> <p>Chris Beggy, KC3QVF, Philadelphia PA, <a href="mailto:KC3QVF@arrl.net">KC3QVF@arrl.net</a>, 215-740-3900 has agreed to be the target recipient for these exercise messages.</p> <p>Message is: <u>YourCall YourName YourCounty EPA SET</u>. See SET MESSAGE CONTENTS for details. Winlink Telnet is acceptable for this exercise.</p>	<p>10 points per successful participant.</p> <p>Max 50 points</p>

The NTS activities can be performed from 10/5 to 10/11. This is to allow sufficient time for participants to check in to traffic nets and send their messages. In an actual Grey Sky the nets would have more frequent operations and possibly be running full-time.

Participants may engage in any or all of the NTS activities.

**ECs – Include participant details (name and call) for 2.1 and 2.2 in SEC submission. This is to enable reporting all exercise participants.**

## SET MESSAGE CONTENTS

Exercise messages should be kept short and include only the information vital to the SET. The suggested message format is YourCall YourName YourCounty EPA SET. For example: K3ABC JOHN SMITH BUCKS EPA SET

## PREPARING TO SEND A RADIOGRAM USING NTS

Before checking in to a traffic net or contacting a traffic handler, write down the message and delivery details. This includes 1) The destination contact information (name, call, phone, email, etc), 2) any “Handling Instruction” (likely HXC – confirm delivery) and 3) the message contents.

You are not required to use the Radiogram template, but it may help. See ARRL RADIOGRAM for a blank template and an example.

For the purposes of this exercise, you are NOT acting as a traffic handler, you are a customer of the process. The traffic handlers are accustomed to working with people who are new to the process. They will format and route your messages.

Radiograms are limited to 25 words and no punctuation.

The following destinations are used for this exercise

- 1) Participant’s EC (get contact info from the EC or QRZ page)
- 2) The EPA SEC Jay King, W2AFE, Phoenixville PA, Chester co, w2afe@arrl.net, 408-835-9202
- 3) Chris Beggy, KC3QVF, Philadelphia PA, KC3QVF@arrl.net, 215-740-3900

## ADDRESSING A RADIOGRAM

NTS needs a minimum of the recipient’s full name and either email or phone number. Providing the recipient’s call, and postal address helps assure efficient message routing and successful delivery.

The address information provided, determines how message are delivered.

- If an email address is provided, then the message will likely be delivered by email.
- If a phone number is provided and email is not, or email bounces, then the message will be delivered by telephone.
- If the receiving station is on the air (this happens mostly during traffic nets) then the message may be delivered by radio.
- If none of the above work, then efforts are made to deliver the message to the physical address.

The NTS team will make several delivery attempts using any, and all, available delivery information.

## DELIVERY CONFIRMATION

To receive delivery confirmation, use the HXC handling instruction. It’s in the Radiogram template, upper left, after message number and precedence.

## EPA TRAFFIC HANDLERS

These EPA traffic handlers have agreed to accept Fall 2024 SET traffic via telephone. This is a unique situation. Normally one would place traffic by radio but the emphasis this year is to build working relationships between EPA ARES and EPA NTS.

Contact any of the NTS staff listed below to place traffic by telephone call.

EPA Traffic Handlers			
Name	Call	Phone	County
Tom Inman	KC8T	(570) 323-7633	Lackawanna
Bob Montgomery	W3ZR	(570) 478-0024	Sullivan
Roger Burkhart	N3GE	(540) 664-1722	Lancaster
Alex Mark	K3EAM	(570) 313-3458	Luzerne
Bob Brown	N3RPB	(570) 772-9036	Lycoming
Thomas E. Davis	NW3X	(570) 687-6137	Lackawanna
Bill Carlton	N3HBY	(570) 560-6278	Monroe
David Kirby	N3SRO	570-954-0087	Luzerne

## WINLINK RADIOGRAMS

ARRL Radiograms can be sent using winlink. It is one of the built in templates. In winlink do:

New Message / Select Template / Standard Templates / RADIOGRAM and RRI Forms / Radiogram.txt.

### Fill in the Radiogram

- Fill in the header with your station and location.
- Address to Chris Beggy, KC3QVF, Philadelphia PA, [KC3QVF@arrl.net](mailto:KC3QVF@arrl.net), 215-740-3900
- Message: *YourCall YourName YourCounty* EPA SET  
(ex: K3ABC JOHN SMITH BUCKS EPA SET)

At bottom of form, select Liaison Station: Region 3

If you are not currently a winlink user, the software can be installed from <https://winlink.org/WinlinkExpress>  
The software requires registration to use. Telnet (no radio) is okay for this exercise.

## SENDING A MESSAGE USING NTS NET

Tom Inman KC8T, EPA Traffic Manager has provided a presentation and video that includes an example of NTS net operations.

[https://youtu.be/poGONWcEb\\_o](https://youtu.be/poGONWcEb_o)

Here are simplified instructions for checking into an NTS net and sending a message. NTS welcomes new participants and will guide you through the check-in and sending your message.

You are not expected to fully format and manage the message. You are a ham using the NTS system to send a message. You need to provide the message destination address and contents. The NTS traffic handler will fill in all the procedural and routing details. Ask for delivery confirmation if you want it.

- 1) Write out your message and destination contact details. Have this in front of you before accessing the net. It will be easier to read it than to compose it on the fly.
- 2) Join the net at the appointed time.
- 3) Net control will begin by calling for emergency or time valued traffic. Please stand by during this call.
- 4) Net control will then call for stations with traffic, and with traffic only. Transmit and say, "this is," and then pause to ensure you are not doubling. If you are not, then continue with "yourcall with traffic." Net control will ask you to list your traffic. Respond with the number of messages and their destinations. For example, "I have one for Hershey." Net control will ask you to stand by, and will continue.
- 5) Net control will also call for stations from Eastern Area, Third Region, and the Digital Traffic Network.
- 6) Net control will then process all traffic. Net control may take the messages on the net frequency or, if there is a lot of traffic my direct participants to move to a new frequency to deposit the message and then return to the main net frequency.
- 7) Stay on frequency until released by net control.

## CW NET

See PENNSYLVANIA SLOW NET for details on how to participate in the Pennsylvania CW traffic net. The net normally operates at 13 wpm but Net Control and other operators will accommodate any speed that is good for you.

EPA ARES FALL 2024 SET SCORESHEET

Send to EPA SEC Jay King, W2AFE, w2afe@arrl.net with sections 1.1 through 2.2 completed. SEC will complete 2.3 and 2.4.

**ECs, include the calls and names of 2.1 and 2.2 participants.**

Item	Description	Score	Score
1.1	<u>Activate ARES Unit</u>	10 points for activation.  50 points for having and following a formal activation procedure.	_____  _____
1.2	<u>Member Check-in and Readiness</u>	50 points for submitting a single / consolidated ICS-213 summarizing unit capabilities.	_____
2.1	<u>Check-in to a traffic net (radio).</u>  (ECs, your members will need to report to you their check-ins)	10 points per successful participant.  Max 50 points	____ (# participants)  ____ ( X 10)  ____ Total
2.2	<u>Radiogram to EC (telephone)</u>	10 points per successful participant.  Max 50 points	____ (# participants)  ____ ( X 10)  ____ Total
2.3	<u>Radiogram to SEC (radio)</u>	10 points per successful participant.  Max 50 points	____ (# participants)  ____ ( X 10)  ____ Total
2.4	<u>Radiogram to KC3QCF (WINLINK)</u>	10 points per successful participant.  Max 50 points	____ (# participants)  ____ ( X 10)  ____ Total
	<u>TOTAL</u>	Add up individual scores	____ Grand Total

Note: The NTS activities have until 10/11 complete. ECs complete 2.1 and 2.2. You'll need to wait until 10/11 to receive all the Radiograms. Then forward the form to SEC at email w2afe@arrl.net.

SEC completes sections 2.3 and 2.4. All results will be reported.

## EPA TRAFFIC HANDLING NETS

EPA has several active NTS nets. Newcomers are always welcome. Schedule and frequency information follows.

If you don't have an HF station, you can listen to these nets using SDR at <http://www.websdr.org/>

The Milford PA station is ideally located for the EPA traffic nets. It is at <http://websdr.k3fef.com:8901>

The Ohio traffic net is well known and a good example to listen to, they meet on 3.972.5 at 1030, 1645 and 1845.

### EPA Nets

**Eastern PA Emergency Phone and Traffic Net** 3918 kHz 5:00 PM Eastern time, Daily

**Western PA Emergency Phone and Traffic Net** 3918 kHz 5:30 PM Eastern time, Daily

**Pennsylvania Traffic Net (CW)** 3585 kHz 7:00 PM Eastern Time, Daily

**Luzerne County ARES Traffic and Training Net** 146.61 Mhz with a tone of 82.5 Hertz and a negative offset of 0.6 Mhz every Monday at 8:00PM Local Time. The last LCARES Net of the month will be on the N3FCK UHF Linked

**Lackawanna County ARES Traffic & Training Net**

Wednesday evening, 8:00 PM 1st & 2nd Wed: 146.715, -0.6 MHz, tone 136.5

4th Wed. 146.94, -0.6 MHz, tone 127.3

5th Wednesday: N3FCK UHF Link system, 442.55, 443.60, 444.50, and 441.15; all +5.0 MHz, tone 100

**The RF Hill ARC Southeastern Pennsylvania Practice and Traffic Net**, (abbreviated as SEPPTN), are on Sundays and Wednesdays at 8:00 PM Local Time on the W3AI repeater at 145.310 MHz (-600) with a PL Tone of 131.8.

Check in daily, once a week, or even once a month. The nets will appreciate your participation.

For more information, contact Tom Inman (KC8T), Eastern PA Traffic Manager [KC8Tom@comcast.net](mailto:KC8Tom@comcast.net)

The National Traffic System (NTS) needs volunteers to help move radiogram traffic around the state. Please consider volunteering a few minutes a week to this worthy task. Traffic handling improves your skill level while giving back to the amateur community. Please tune in and check in



## EC SUMMARY TO SEC EXAMPLE

ECs prepare this summary on ICS-213 and send, by winlink, to ARES-EPA. Use any Winlink mode, RF preferred, telnet is permitted.


Include check-in message mode metrics in the EC summary. I.e. #responses via vhf simplex, vhf repeater, Winlink VHF, HF, telnet, hf phone, hf cw, etc.

General Message (ICS 213)			
<input checked="" type="checkbox"/> THIS IS AN EXERCISE		<a href="#">Load ICS213 INITIAL Data</a>	<a href="#">Form Instructions</a>
1. Incident Name: <input type="text" value="ARRL EPA ARES FALL 2024 SET"/>			
2. To (Name/Position): <input type="text" value="JAY KING EPA SEC"/>			
3. From (Name/Position): <input type="text" value="your name county EC"/>			
4. Subject: <input type="text" value="county EMCOMM CAPABILITIES"/>		5. Date: <input type="text" value="10/05/2024"/>	6. Time: <input type="text" value="2330"/>
7. Message:			
<pre>TOTAL CHECK-INS 4 VHF REPEATER 1 VHF SIMPLEX 1 HF 40M PHONE 1 WINLINK FM VARA  DEPLOYABLE EMCOMM CAPABILITIES 6 VHF HT, 5 WATTS, 2-4 HRS 2 VHF MOBILE, 50 WATTS, 8 HRS 1 HF MOBILE, 80/40M, PHONE, NVIS, 8 HRS 2 VHF MOBILE WINLINK VARA, 50 WATTS, 8 HRS  BASE EMCOMM CAPABILITIES 3 VHF/UHF, 40 WATTS, 8 HRS 4 HF PHONE, 80-10M, 100 WATTS, 16 HRS</pre>			
8. Approved by: <input type="text" value="name call"/>		8b. Position / Title: <input type="text" value="county EC"/>	
Optional Location Coordinates			
Latitude <input type="text" value="40.145833"/>	Longitude <input type="text" value="-75.541667"/>	MGRS <input type="text" value="Ex:11SNR0184195204"/>	Grid <input type="text" value="FN20FD"/>
<small>LAT/LON and MGRS default to the center of the grid square listed in Express Settings, unless a GPS is used or Lat/LON or MGRS are entered manually. For Winlink mapping and CSV export you must enter a latitude and longitude.</small>			

Note: The Deploy and Base capabilities numbers likely will not add up to the number of check-ins.


ARRL RADIOGRAM – Template and Example

NR	PREC	HX__	STN ORIG	CK	PLACE OF ORIG	TIME FILED	MON DY
(2) TO					THIS RADIO MESSAGE WAS RECEIVED AT:(9) AMATEUR STATION _____ TEL _____ NAME _____ STREET ADDRESS _____ CITY,STATE,ZIP _____		
TEL							
OP NOTE (2.4)							
TXT							
_____					_____		
_____					_____		
_____					_____		
_____					_____		
_____					_____		
SIG (4)					OP NOTE (4.2)		
RCVD FROM		NET	DATE/TIME		SENT TO	NET	DATE/TIME
(5)					(6)		
(7) ORIG - FROM - DATE/TIME				(8) DLVD - TO - DATE/TIME			
Name				Name			
Addr				Addr			
City				City			
TEL				TEL			



**ARRL** — the national association for Amateur Radio™

# RADIOGRAM



NUMBER	PRECEDENCE	HX	STATION OF ORIGIN	CHECK	PLACE OF ORIGIN	TIME FILED	DATE		
1	R	E	N6BKO	19	Kalispell, MT		Feb 19		
TO				THIS RADIO MESSAGE WAS RECEIVED AT					
Dick Walton, W7XT				AMATEUR STATION _____ PHONE _____					
Missoula, MT				NAME _____ E-MAIL _____					
HARC Wednesday VHF Net				STREET _____					
PHONE NUMBER				CITY, STATE, ZIP _____					
E-MAIL									
HELLO	X	THANK	YOU	FOR					
HELPING	US	WITH	THIS	TRAFFIC					
DEMO	X	HOPE	EVERYTHING	IS					
GOING	OK	IN	MISSOULA						
				ED N6BKO					
FROM			DATE	TIME	TO			DATE	TIME
REC'D			SENT						
<small>This message was handled at no charge by a licensed Amateur Radio operator, whose address is shown in the box at right above. 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 ARRL Headquarters, 225 Main Street, Newington, CT 06111 or <a href="http://www.arrl.org">www.arrl.org</a>.</small>					<small>The ARRL is the national association for Amateur Radio and the publisher of QST magazine. One of its functions is promotion of public service communication among Amateur Radio operators. To that end, the ARRL has organized the National Traffic System for daily nationwide message handling.</small>				
					1320 2/11				

PENNSYLVANIA SLOW NET

PA NTS hosts a training/slow speed CW traffic net. 13 WPM is standard, but operators will go to whatever speed is comfortable for you.

**Pennsylvania Traffic Net (CW) 3585 kHz 7:00 PM Eastern Time, Daily**

**PTN Slow Net Procedure  
(by N3GE – 08/24/2024)  
(kc3xxx is your call)**

**PREAMBLE:**

KA PTN PTN PTN DE (NCSCALL) PTN PTN PTN DE (NCSCALL)  
PTN THE PA TRAFFIC TRAINING NET ALL WELCOME  
QND QNZ QNN (NCSCALL/NCSNAME)  
QNA 3RN REP K QNI K x x  
DE kc3xxx RST \_\_\_ QRU K (no traffic) kc3xxx RST \_\_\_AS  
DE kc3xxx RST \_\_\_ QTC (3RN //or// pa city) 1 AR kc3xxx RST \_\_\_AS

**TRAFFIC: (kc3xxx receiving)**

QNC NET TFC (pa city) QSP? xx  
kc3xxx (sending station) QNK (pa city) HR K  
(sending station ) DE kc3xxx QRV AR  
DE (sending station) QSK (send message)  
kc3xxx AS (review msg) QSL (accept msg)  
DE (sending station) NET TU PTN K

**TRAFFIC: (kc3xxx sending)**

QNC NET TFC (pa city) 1 QSP? (receiving station)  
(receiving station) kc3xxx QNK (pa city) HR K  
kc3xxx DE (receiving station) QRV AR  
DE kc3xxx QSK (send message)  
(receiving station) AS (review msg) QSL (accept msg)  
DE kc3xxx NET  
TU PTN QNI K PTN DE (NCSCALL) QNI K

**MOVE UP/DOWN:**

(receiving station) (sending station) DN/UP 3 (pa city) K  
(receiving station) G (sending station) G

**CHECKOUT:**

kc3xxx R  
TNX FER QNI NW QNX 73 GE K  
73 GE DE kc3xxx SK

**NET FINISH:**

LAST CALL PTN DE (NCSCALL) QNI K  
PTN QNF DE (NCSCALL) SK