

WACOM is Washington Amateur Communication, INC.  
Located in Washington County Pennsylvania

<https://wa3com.com>

#### Club Officers

President: Joe Caldwell, N3XE; joe@n3xe.com

VP: Patrick Degnan, KB3TFN; pdegan@gmail.com

Secretary: George Brecosky; KC3TBI; gbrecosky@gmail.com

Treasurer: Kay Briggs, KC3HBO; glock4kay@gmail.com

#### Board of Directors

Director: Tom Wright, N3WS; [tom.n3ws@protonmail.com](mailto:tom.n3ws@protonmail.com) or [n3ws@winlink.org](mailto:n3ws@winlink.org)

Director: Dennis Presky, K3PSP; dpresky@mra1.com

Director: Bill Stiffy, NY9H; ny9h@arrl.net

Quartermaster: Patrick Degnan, KB3TFN; pdegan@gmail.com

Purpose of this document: To define policy and procedures for establishing communications

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### Emergency Net Operations:

- Anyone can bring up a net when needed
- NCS (Net Control Station) has control of the repeater system.
  - Emergency nets take precedence over weekly scheduled nets
- Operators should gain experience in net control operations by acting as NCS for weekly nets
- A Backup NCS or two should be assigned
- Operators checking in should inform the net before leaving
- Operators should **not** self-deploy and should defer to NCS before taking any action.

### ARES Net:

Amateur Radio Emergency Service

Tom Wright N3WS – ARES Emergency Coordinator for Washington County

[tom.n3ws@protonmail.com](mailto:tom.n3ws@protonmail.com) or [n3ws@winlink.org](mailto:n3ws@winlink.org)

- An ARES net may be activated for:
  - Emergency events when additional communication capabilities are needed
  - Community events where additional communications are needed
    - Marathons, 5K, walks, hamfest, etc

### SKYWARN Net:

A SKYWARN Net will be activated on the K3PSP repeater system during significant weather events. A SKYWARN net can be activated for Warning class events. SKYWARN Net will take precedence over other normally scheduled nets.

- National Weather Service (NWS) Definitions
  - Advisory: Be Aware
    - The weather event will be an inconvenience. However, if caution is not exercised, it could become life-threatening (mostly during the winter months)
  - Watches: Be Prepared
    - Conditions are favorable for the weather event in or near the watch area
  - Warning: Take Action
    - The weather event is imminent or occurring in the warned area

## SKYWARN

NWS Amateur Radio Frequency	147.09 MHz	Backup	146.88 MHz
Report Severe Weather (Toll Free)	1-800-242-0510 – Do Not Distribute, Official Skywarn Use Only		
Report Severe Weather (Backup)	412-262-1988 / 877-633-6772 (General Public)		
Email	<a href="mailto:PBZ-Skywarn@noaa.gov">PBZ-Skywarn@noaa.gov</a>		

## PACE Communication Plan.

*PACE is an acronym for Primary, Alternate, Contingency, and Emergency*

### Primary communications:

K3PSP Repeater System (5 Repeaters Linked)

- 146.790 Mhz (Central, - Shift, No Tone, Washington)
- 147.285 Mhz (East, + Shift, 131.8 Hz Tone, Scenery Hill)
- 145.250 Mhz (West, - Shift, 131.8 Hz Tone, West Alexander)
- 147.390 Mhz (North, + Shift, 131.8 Hz Tone, Smith Twp)
- 147.315 Mhz (South, + Shift, 131.8 Hz Tone, Waynesburg)
- EchoLink Node: WA3COM-R

### Alternate Communications:

County specific backup simplex and interoperability frequencies:

- 146.55 "TAC-5" Allegheny, Clarion, Clearfield, Greene, Huntingdon, Mercer, Potter, Somerset, Warren
- 146.58 "TAC-8" Beaver, Blair, Clinton, Franklin, Jefferson, McKean, Venango, Westmoreland
- 147.54 "TAC-4" Armstrong, Cambria, Cameron, Erie, Washington, Forest, Fulton, Lawrence, Mifflin
- 147.57 "TAC-7" Bedford, Butler, Centre, Crawford, Elk, Fayette, Indiana

Additionally, three extra frequencies were selected for use as extra or alternate frequencies in each district as follows:

- 145.51 "ALT-1" Northeast District (N2)
- 145.53 "ALT-3" Southwest District (S1)
- 145.59 "ALT-9" Northwest District (N1) and Southeast District (S2)

### Contingency Communications:

- 3.983 Mhz LSB

This frequency is used for several groups including:

- Wester PA ARES Net
- Western PA ARRL Health and Wellness Net
- Wester PA Phone Traffic net

### Emergency Communications:

146.52 Mhz FM – National Simplex Calling Frequency

## Digital Communication VIA NBEMS

Narrow Band Emergency Message Software: <http://www.w1hkj.com/>

- FLDIGI – Software Modem
- FLMSG – Forms manager
  - Contains forms for ICS, Red Cross, MARS, radiograms, etc
- FLWRAP - File encapsulation / compression
- FLRIG – Rig Control Program
- FLAMP - Amateur Multicast Protocol - file transfer program
  - Breaks up message into blocks for transmission
  - Missed blocks can be retransmitted by request

Digital modes may also be required to exchange information.

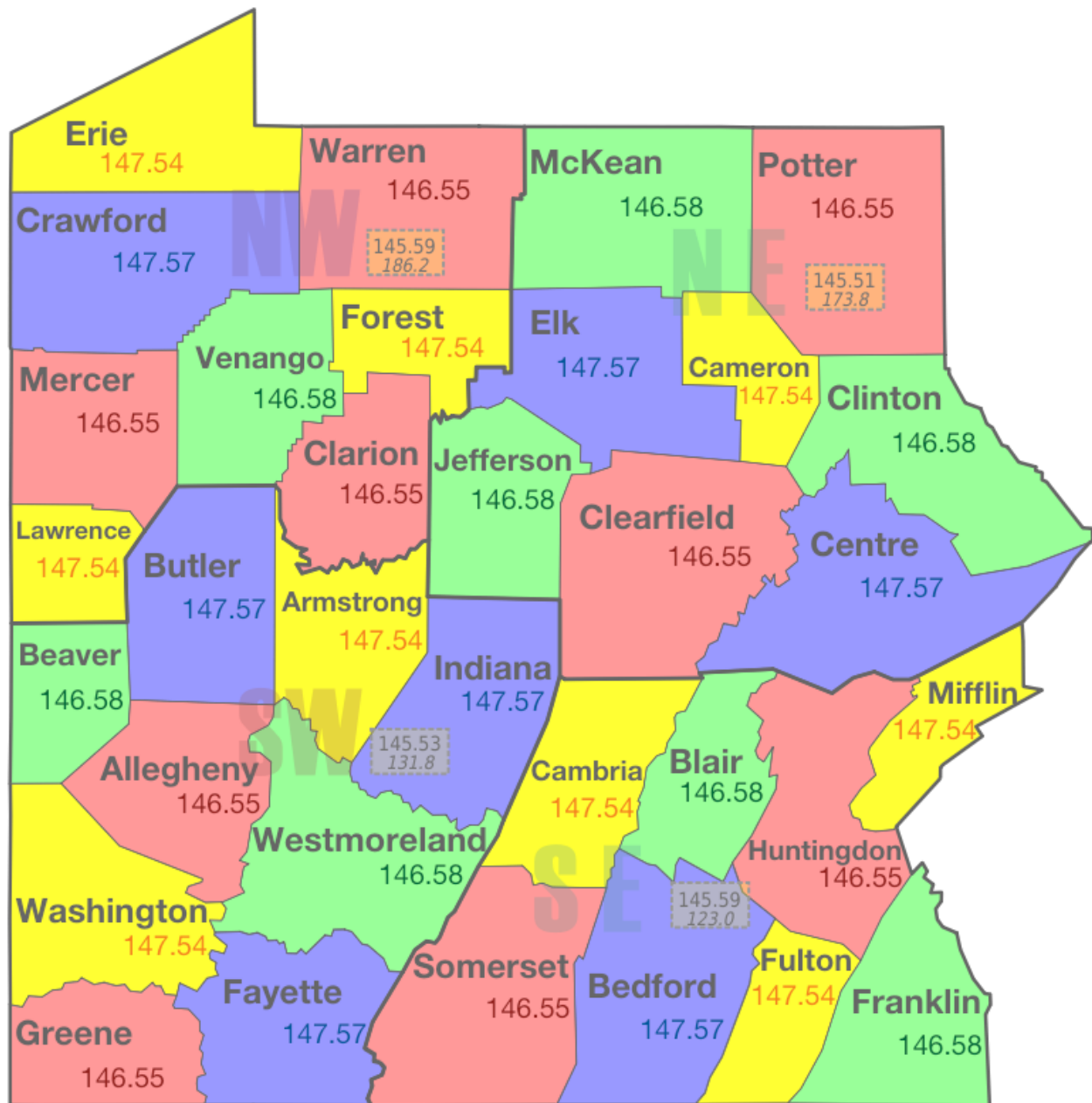
Modes:

- MT63-2000L also referred to as MT63-2KL
  - This mode is typically for 2 meter FM
- Contestia 4-250 or Thor 22
  - These modes are typically for HF USB operation
  - Used for check-ins and short messages
- MFSK-32
  - This mode is used for HF USB operation
  - Used in conjunction with FLAMP to pass larger blocks of data

Digital can be passed on the K3PSP repeater system or the county's backup simplex frequency of 147.54 Mhz, but should be coordinated by the Net Control Station

- PA NBEMS frequency is 3.583 USB
- Center 1500 on Waterfall
  - Modes
    - Check-ins - Thor 22
    - Traffic – MFSK32
  - Alternate frequencies and modes may be used when needed.

## WPA ARES Simplex Frequency Map



## Recommended Simplex Radio Programming

Channel #	Channel Name	Frequency
1	ALT-1	145.51 MHz
2	CALL-2	146.52 MHz
3	ALT-3	145.53 MHz
4	TAC-4	147.54 MHz
5	TAC-5	146.55 MHz
6	Call-446	446 MHz
7	TAC-7	147.57 MHz
8	TAC-8	146.58 MHz
9	ALT-9	145.59 MHz

## PEMA Frequencies

Statewide            7.2505 MHz LSB  
                          3.9935 MHz LSB  
                          5.3465 MHz USB  
                          5.4035 MHz USB

Eastern              7.2275 MHz LSB  
                          3.9875 MHz LSB

Western             7.2720 MHz LSB  
                          3.9905 MHz LSB

PANBEMS	7.0725 MHz USB	1000 Hz Center Waterfall	Olivia 8/500
PANBEMS	3.5835 MHz USB	1000 Hz Center Waterfall	Olivia 8/500

## Emergency Contact Phone Numbers

PEMA    717-651-2001  
FEMA    202-646-2828  
DHS     202-282-8000  
FCC     202-418-1122  
ARRL    860-594-0200