



Net Protocol

Mat Nickoson

KC8NZJ



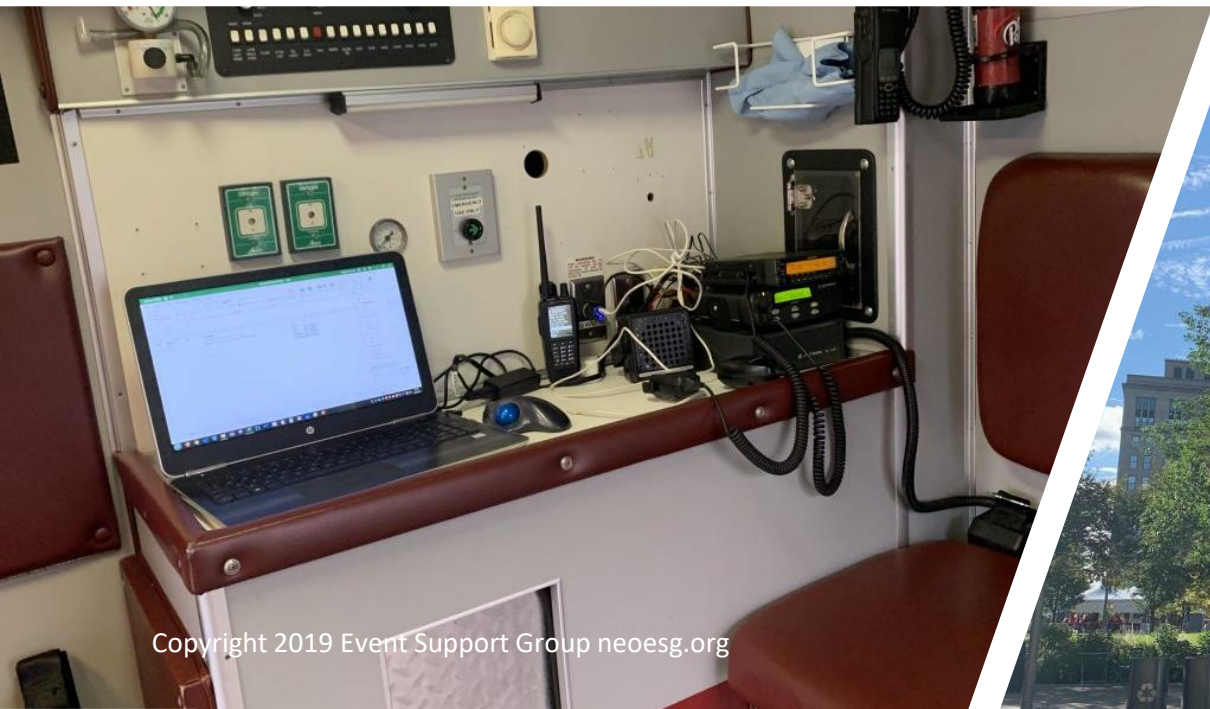
Event Support Group

- Non-Profit Corporation
- 501(C)3 Tax Exempt
- Never accept payment for services
- Donations accepted

Communications Vehicle

- Ford E350 Ambulance
- Donated by Life Support Team in Mansfield, OH
- 2 permanent operating positions UHF/VHF
- 1 ad hoc HF operating position





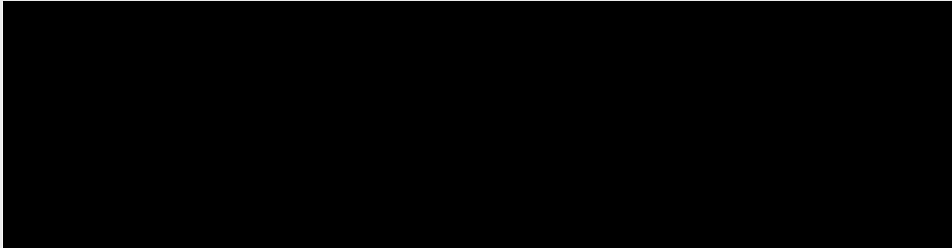


Communications Vehicle Current Equipment

- 3 Computer Monitors- 1 with broadcast TV capability
- Operates on any amateur radio frequency from 160 meters up to 70 centimeters (except for 220)
- Operates on any public safety UHF (400 MHz) and VHF (150 MHz) frequency along with all 700/800 MHz conventional interoperability frequencies specified within the National Interoperability Field Operations Guide (NIFOG).
- P25, DMR.
- On board UHF amateur repeater
- Portable UHF/VHF antenna systems
- Several hundred feet of feed line.
- 360 degree pan, tilt, zoom video camera.
- Access to a fully encrypted UHF repeater system that covers all of Cuyahoga County.
- Icom HF radio, Commercial UHF XTL500, VHF MCS200, 700/800 XTL500 Radios, Connect Systems DMR, TM=V71
- 6 roof mounted NMO antennas
- Antenna to radio patch panel allowing any antenna configuration
- SDS-200 Digital Scanner



Communications Vehicle Future Equipment

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- Weather Station
 - Lightning Detector
 - Rear RV Air Conditioning Unit
 - Sturdier Antenna Mast vehicle mounted
 - Cache Radios UHF VHF
 - On board UHF business band repeater P25/DMR capable



Types of Nets

Club Nets

- Informal
- Lots of chatter
- Trivia questions
- Social atmosphere

Event Nets

- Formal
- Open or Closed
- Similar to public safety dispatch

Skywarn

- Formal
- Generally less traffic
- Possibly only check in, no traffic
- May not even take check-ins



Prerequisites

- Proper, decent equipment
 - NO PORTABLES!
 - Good antenna
 - Solid Signal
- Clear speaking voice
- Ability to multitask
 - Handle multiple issues
 - Talk on multiple radios/frequencies
 - Handle simultaneous conversations off air
- Remain calm in stressful situations
- Good listener
- Thorough knowledge of radio used
- Good decision making skills
- Knowledge of the ICS



Responsibilities

- NCS is in charge of the frequency
- Directed Nets
 - All traffic must pass through the NCS
 - All stations should receive permission from the NCS before transmitting their traffic
- Open Nets
 - Stations are permitted to contact other stations direct
 - Transmissions should be short
 - Do not interrupt
 - Be aware of net closure due to active emergency
- NCS/Logger should keep a detailed log of events including times



Radio Etiquette

- Sound professional to listeners
 - Served agencies
 - Other government agencies, state, local, federal
 - News media
- PTT = Push THEN Talk, wait at least 1 second before talking
- No idle chatter
- No codes or jargon no need to say OVER, PLAIN ENGLISH
- PROPER PHONETICS!
- Speak clearly, take your time, do not stop to think with the mic keyed



Weak Stations

- Ask for repeat
- Check repeater input
- Advise station to increase power or change location
- Ask other stations to listen to the input and relay
- After a few tries, move on



Intentional Interference (Bozo/Lid)

- DO NOT ACKNOWLEDGE THE INTERFERENCE
 - Make them think their radio is broken
- Document date and time
- Document details
 - Type of interference
 - Comments made
 - Background noise
- Listen to input, note signal strength
- Check input on an HT and note signal strength
- Notify repeater trustee as soon as practical



Open Mic

- Advise over the net ONCE
- Increase power to attempt to overcome
- Have someone call volunteers via telephone (listen for ringer on repeater)
- If all else fails, move to backup frequency. The one person who doesn't show up has the open mic
- After mic is fixed, advise all stations to check their mics because there was an open mic in a professional non-confrontational way



Repeater Failure

- Move to secondary frequency
- Advise all stations to change frequencies on the output frequency
- Designate a station to periodically make announcements on output of primary repeater

ICS 205 Instructions

Block Number	Block Title	Instructions
1	Incident Name	Enter the name assigned to the incident.
2	Operational Period <ul style="list-style-type: none">• Date and Time From• Date and Time To	Enter the start date (month/day/year) and time (using the 24-hour clock) and end date and time for the operational period to which the form applies.
3	Basic Local Communications Information	Enter the communications methods assigned and used for personnel by their assigned ICS position.
	<ul style="list-style-type: none">• Incident Assigned Position	Enter the ICS organizational assignment.
	<ul style="list-style-type: none">• Name	Enter the name of the assigned person.
	<ul style="list-style-type: none">• Method(s) of Contact (phone, pager, cell, etc.)	For each assignment, enter the radio frequency and contact number(s) to include area code, etc. If applicable, include the vehicle license or ID number assigned to the vehicle for the incident (e.g., HAZMAT 1, etc.).
4	Prepared by <ul style="list-style-type: none">• Name• Position/Title• Signature• Date/Time	Enter the name, ICS position, and signature of the person preparing the form. Enter date (month/day/year) and time prepared (24-hour clock).

ICS 205 Example

INCIDENT RADIO COMMUNICATIONS PLAN (ICS 205)

1. Incident Name: Ride for Miles	2. Date/Time Prepared: Date: 9/2/14 Time: 12:00	3. Operational Period: Date From: 9/7/14 Date To: 9/7/14 Time From: 09:00 Time To: 14:00
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4. Basic Radio Channel Use:										
Zone Grp.	Ch #	Function	Channel Name/Trunked Radio System Talkgroup	Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode (A, D, or M)	Remarks
	1	Primary Net	146.790		146.790	CS	146.190	88.5		
	2	Secondary/Backup	443.800		443.800	466	448.800	466		DPL REQUIRED
	3	SAG Talkaround	446.100		446.100	CS	446.100	CS		
	4	APRS	144.390		144.390	CS	144.390	CS		APRS Tracking Only
	5	REACT CH 2	462.625	REACT	462.625	DPL 152	462.625	DPL 152		Do not use without prior authorization.

5. Special Instructions: In case of radio failure, contact Mat Nickoson KC8NZJ via Cell P [REDACTED]
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6. Prepared by (Communications Unit Leader): Name: <u>M. Nickoson</u> Signature: _____
