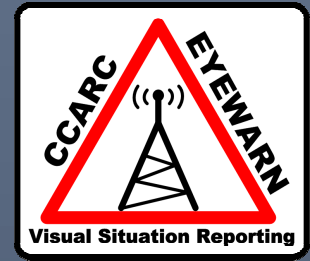


Sponsored by the Clark County Amateur Radio Club

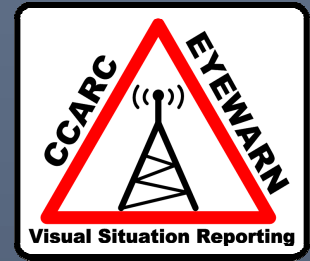
EYEWARN NCS TRAINING

Purpose of this Training



- The Purpose of this training is to provide direction to the NCS operators to foster:
 - Consistency across NCS operators
 - The use of language
 - Using the Script
 - Professionalism
 - Managing responding stations and the Net
 - Proficiency in NCS Operations for the EYEWARN Net
 - Logging Data
 - NCS shift Handoff
 - Responding to Emergencies
 - Responding to Frequency Interference.
 - Repeater, Simplex and Relay Operations.

EYEWARN Mission



EYEWARN is a program sponsored by the Clark County Amateur Radio Club (CCARC) in conjunction with local Emergency Service Agency (CRESA) and the Clark County Amateur Radio Emergency Service (CCARES/RACES).

It is a group of licensed radio amateur volunteers throughout Clark County providing simplified visual reporting in areas where damages or emergencies may exist. The EYEWARN Network provides the Emergency Management Team(s) expanded visibility and situational awareness of the affected area.

EYEWARN: What we do and don't do.



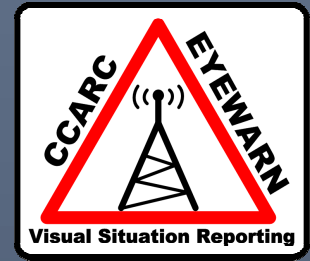
- We gather information. We do not broadcast it.
- We respond to the request of the Agency we are supporting.
- We may self activate if there is a county wide threat such as in-climate weather.
- We are not an Emergency Traffic Net.
- We are not a message Traffic Net
- We are not a social net.

NCS Language



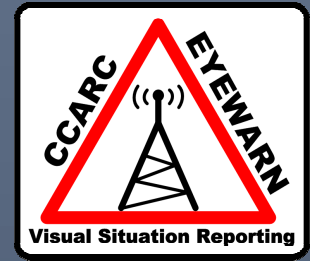
- It is important to be consistent in our use of words when managing a net.
- Consistency between net controllers will help those responding to the NCS request for information.
- It helps in providing clear communications to the two parties that are communicating and others that are listening.
- The language and pro-words we use for an EYEWARN net, may not be the same you are familiar with using for other nets.

EYEWARN NCS Pro-Words



- **THIS IS** - Identifies who is calling. It should precede your call sign in every transmission during a DIRECTED NET operation.
- **OVER** - Use at the end of a transmission when additional communications is expected.
- **OUT** - Use to indicate that no further communication is expected, the conversation between the parties has ended.
- **ROGER** - Means that you understood the transmission of another station. This is not to be confused with answering a question in the affirmative.
- **AFFIRMATIVE** - Means yes: a distinctive sound and clear meaning under noisy conditions.
- **NEGATIVE** - Means no: a distinctive sound and clear meaning under noisy conditions
- **SAY AGAIN** - Tell the other operator that you need a fill or repeat of information that was previously transmitted.

EYEWARN NCS Pro-Words



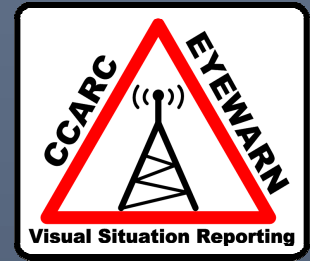
- **CORRECTION** - You made an error and are transmitting again from the last correct word.
 - **WAIT** - Cease transmission until "wait" station resumes communication or signals "out". "Waiting" station is asking the frequency stay clear for a brief period. They are expected to resume communication shortly or end the communication with an "OUT".
- MIXED GROUPS** - Groups of letters and numbers that, taken together, represent a single group. The rule for transmitting mixed groups by voice: If the group starts with a letter, use "I SPELL" if a mixed group starts with a number use "FIGURES".

EYEWARN NCS Pro-Words



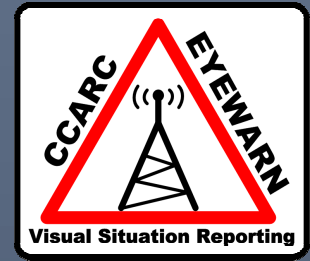
- **I SPELL** - Use the phonetic alphabet. Many words in the English language sound alike but have entirely different meanings. In order to make certain that the recipient of information understands what word we're using, when you encounter words you cannot pronounce, words that sound like other words, or uncommon words, phonetically spell them out.
- **INITIAL** - A single letter will be phonetically spelled preceded by the proword "INITIAL". The words "I" and "a" are considered words, not initials, should not be pronounced phonetically.
- **FIGURES** - Use to advise that you are about to transmit a group of numbers, or, a mixed group containing both numbers and letters but beginning with a number.
- **NUMBERS** - Use to advise that you are about to transmit a group of numbers only.

EYEWARN Scripts



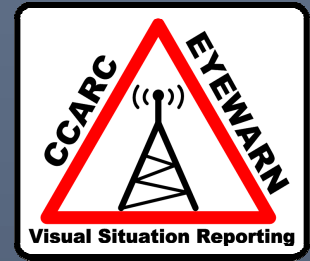
- There are 2 scripts for a controlling an EYEWARN net.
 - Exercise Script – This will be the script used for the weekly exercise nets.
 - Event Script – This will be used during an actual regional emergency or local disaster when EYEWARN has been activated.
- Both scripts need to be revised by the Net Controller for the exercise scenario or the actual event. This cannot be done ad-hoc. This has to occur before the Net is opened.

EYEWARN Scripts



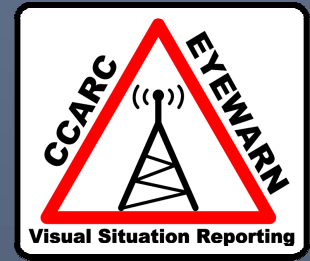
- Prior to the opening the Net, revise the script and email a copy to the NCS team. If during an Event and there is no Email capabilities, the backup Net Controllers will need to revise their own copies of the script to match the Net Controller that is opening the Net.
- Avoid improvising the language in the scripts.
- Even if you are not the designated NCS or backup, you may need to take over as the backup or NCS if the other two stations fail during the net. Be prepared.

EYEWARN Scripts



- Updates to the Exercise Script for the Weekly Net.
 - Is there a repeater link?
 - What is the exercise scenario?
 - Will there be a follow up Simplex Net?
- Updates to the Event Script based on the Agency's request for information.
 - One or two passes through the zip codes will be used to determine the areas where damage has occurred. Subsequent passes may focus on only these zip codes with damage. With a more detailed follow up on the types of damage. This will depend on the needs of the agency.

NCS Professionalism



- Although we are Amateur by name per the FCC, the Agencies we support want to work with Professionals of their craft.
- We project professionalism in our:
 - Demeanor
 - The way we respond to others
 - Consistency
 - The recognition with respect.
 - The language that we use.
 - The manner in which we respond to unexpected situations.

Logging Data



ZIP CODE	CALL SIGN	NCS	TEL	Q1. Road closure?	Q2. Power Outage?	KEYWORD	LOCATION	DAMAGE/Remarks
98684	K7GJT	P	Y	NO	NO			
98662	KF7OJA	A	Y	NO	NO			
98661	NO7DE	Y	Y	YES	NO			
98607	WA7DL			NO	NO			
98629	N7TTK			NO	NO			
98642	KE7ZWP			NO	NO			DID NOT RESPOND TO CALL BACK
98662	N9YQ			NO	NO			
98662	W7JB			NO	NO			
98666	KG7EEE			YES	NO			
98671	KF7WKR			NO	NO			
98682	WA7JRP			NO	NO			
98682	W5CLE			NO	NO			
98682	KF7QCU			NO	NO			
98682	AF7CJ			NO	NO			
98683	KA7CTT			NO	NO			
98684	N7DEP			NO	NO			

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NCS Shift Hand Off



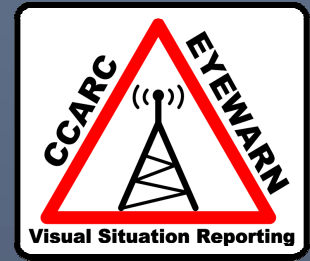
- An actual event may last several hours or several days. Even if the Net is not open continuous over a period of time, Net Control will need to do a shift change to another Net Controller.
- During the initial check-ins, the alternate Net-Controller is identified by the NCS.
- The best time for a hand off is when the script loops back to the beginning of the check-ins.
- Equipment failure for the primary Net Controller may happen at any time.

NCS Response to an Emergency Request



- We are not an Emergency Net.
- If a station identifies they have an Emergency,
 - Do they have a phone, if yes, call 911.
 - If No, Contact the Backup Net Controller with a phone and ask them to contact 911.
 - The Net is turned over to the Backup NCS to handle the Emergency.
 - Copy: Name, Address, Nature of Emergency.
 - Call 911, convey information and Identify reporting party is on the radio and that you can relay information.
 - At the end of the 911 call, the backup NCS returns the net to the primary Net Controller.

Responding to Frequency Interference



- Often we hear people interfering with a net or one person on the net.
- Ignore it. The best way to get them to stop is not to identify that it exists.

Repeater, Simplex and Relays



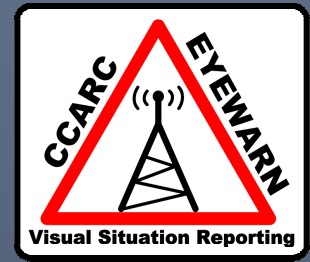
- The primary frequency for EYEWARN is the 147.240 repeater. This currently linked to the 443.125 repeater to provide nearly pervasive coverage of Clark County. These repeaters may be unlinked during a disaster. EYEWARN Director (John Gaynor) or the Assistant EYEWARN Director (TBD) will notify the NCS team if the repeaters are unlinked.
- Simplex operations may be necessary if the Repeater systems fails. For full county wide coverage using simplex, stations may need to relay information back to NCS.

Equipment



- A single NCS station should be prepared to operate continuously for 4 hours. This implies the radio and power supply must be able to support a continuous net for this period of time.
- A hand held radio will not be sufficient for this type of operation.
- A disaster or an emergency could result in a loss of power across the region. An NCS station must be able to operate without the power for the grid up to 4 hours.

Equipment



- A Handheld Radio is not adequate for an NCS Station
 - Lacks RF Power
 - Lacks sufficient battery power for long term sustained communications
 - Antennas are poor RF radiators
 - Works poorly in buildings
 - Not designed to sustain long periods of communications.
 - Consider your HT as a temporary means of communication until you get your fixed mobile station connected.

Equipment



- A mobile radio can handle 10 watts of power continuously for extended periods of time and can provide 50 watts for simplex use.
- A magnetic mount antenna on a cookie sheet can provide an affective antenna.
- A deep cycle battery can sustain the power for the fixed mobile radio for at least 4 hours.
- Having a small generator is nice but not necessary. You will need to consider how you will recharge the battery.





NCS Reporting Hierarchy

- EYEWARN supports CRESA. The reports received by the NCS are sent to the EYEWARN Director (or their backup) where the data is organized and transmitted to CRESA.
- This may be by email, phone or ARES team 9 at CRESA

