

Acronyms, Abbreviations, and Terms

AFSK - Audio Frequency Shift Keying - A digital mode of radio communications where the RF carrier stays on the air throughout the transmission and a modulating audio tone is shifted in frequency.

AEC - Assistant Emergency Coordinator A position of leadership within the ARES organization reporting to the EC.

AM - Amplitude Modulation A modulation system that maintains a continuous carrier and applies the audio to vary the level of amplitude equally on both sides of the base carrier frequency.

AMTOR - Amateur Teleprinting Over Radio. Uses time diversity to minimize the effects of fading. Sent in either ARQ or FEC mode.

APRS - Automatic Position Reporting System A packet based communication system where information from a Global Positioning System (GPS) is fed over the radio to another computer for use.

AQS - Amateur Quiescence System. A form of digital signaling.

ARES - Amateur Radio Emergency Service - The ARRL Field Services program for organizing amateur radio operators into a reserve of emergency communicators. The name "ARES" is a trademark of the ARRL and may only be used by Emergency Communications groups affiliated with the ARRL.

ARQ - Automatic Repeat Request - AMTOR communication mode where a repeat is sent only when requested by the receiving station.

ARRL - American Radio Relay League - The national organization of amateur radio operators headquartered in Newington, CT.

ATV - Amateur Television. Television signals sent over amateur radio. Usually refers to FSTV.

CB - Citizens Band - An unlicensed radio service for personal communications using low powered (5 AM and 12 watt SSB) 27 Megahertz transceivers. CB is regulated under Part 95 of the FCC Rules & Regulations.

CERT - Community Emergency Response Team A program enabling citizens to organize into neighborhood response teams.

CONTROLLED NET A net, run by an NCS where all traffic is authorized by the NCS. Casual discussions are discouraged.

CP - Command Post - See ICP, Incident Command Post

CTCSS - Continuous Tone Coded Squelch System A form of sub-audible tone squelch that is used to minimize interference caused by intermodulation.

CW - Continuous Wave. A synonym for morse code.

DEC - District Emergency Coordinator. A position of leadership within the ARES organization reporting to the SEC. Generally responsible for several contiguous counties.

DIRECTED NET - A Directed Net is on the air radio net STRICTLY controlled by the Net Control Station (NSC) following established procedures to accurately and rapidly move information for a served agency or a specific purpose. Stations are NOT permitted to communicate directly without express permission from Net Control.

DSP - Digital Signal Processor - A high-speed numeric processor IC chip that improves audio signals.

DTMF - Dual Tone Multi Frequency. A signaling and control method using two simultaneous tones. The same method as used in telephones. Most modern VHF and UHF amateur radios are capable to transmitting DTMF tones.

EAS - Emergency Alert System. A system used by broadcasters to enable emergency management authorities to alert and inform the community via TV and radio.

EC - Emergency Coordinator. A position of leadership within the ARES organization reporting to the DEC. This position is usually at the county level.

EComm - Emergency Communications The *REACT* program in Emergency Communication.

EmCom - Emergency Communications The ARRL's Continuing Education program in Emergency Communication.

EOC - Emergency Operating Center or Emergency Operations Center - A facility at which the coordination of information and resources to support incident management activities takes place. An EOC may be a temporary facility but is most often a permanently established facility. This is generally NOT the location for Incident Command (on scene management of emergency response).

Faith Based Organizations - A category of nongovernmental organizations that are operated, controlled, or sponsored by a religious organization. The term is usually applied to those parts of a religious organization performing functions that are not specifically religious in nature. Examples include disaster relief programs sponsored by various religious denominations.

FCC - Federal Communications Commission - The federal agency with oversight of communications activities, including radio communications.

FEC - Forward Error Correction - One of the two modes of AMTOR communications. In this mode each character is sent twice.

FEMA - Federal Emergency Management Agency.

FIPS - Federal Information Processing Standards codes. A system of five digit codes assigned by the federal government to designate each county in the country.

FM - Frequency Modulation - The frequency of the carrier is varied in accordance with the variations in modulating signal.

FRS - Family Radio Service - an unlicensed personal radio service using low powered (1/2 watt) UHF (462 and 467 MHz) transceivers. Some FRS frequencies are shared with GMRS. FRS is regulated under Part 95 of the FCC Rules & Regulations.

FSK - Frequency Shift Keying - The transmitter shifts between two predetermined frequencies (mark - 1 or space - 0). The standard shift is now 170Hz.

FSTV - Fast Scan TV - An Amateur Radio image communication mode that closely resembles the picture quality available in commercial broadcast.

GMRS – General Mobile Radio Service – A licensed personal radio service using 23 frequencies at 462 and 467 MHz. GMRS is regulated under Part 95 of the FCC Rules & Regulations.

HF - High Frequency - the radio spectrum from 3 to 30 Megahertz.

ICP - Incident Command Post - The field location where primary command functions are performed. The ICP may be co-located with other incident facilities.

ICS - Incident Command System - A concept of command and control for emergency situations that is scalable to handle events of any size. The Incident Command System is *the* standard for handling emergency incidents at all levels in the United States.

ID - Identification

IF - Intermediate Frequency

ITU - International Telecommunications Union

JNOS - A Network Operating System (NOS) used as a platform for exchanging messages using a wide range of methods such as Internet, amateur radio, TCP/IP.

LSB - Lower Sideband

MARS - Military Affiliate Radio Service.

MOA - Memorandum of Agreement.

MOU - Memorandum of Understanding. The terms MOA and MOU are often misused interchangeably. An MOA is a more specific formal document and a binding agreement while an MOU is more general in nature.

MRE - Meals Ready to Eat. The current form of prepared packaged individual meals used by the US military. Occasionally used for emergency feeding in disasters.

MURS – Multi-Use Radio Service. An unlicensed personal radio service created by the FCC in November 2000 utilizing low-power (2W ERP) radios on five VHF frequencies. MURS is regulated under Part 95 of the FCC Rules & Regulations.

NAWAS - National Warning System. The federal telephonic notification system used to inform and coordinate regional and national emergency management.

NCS - Net Control Station The person charged with maintaining orderly flow of information during a net.

NET - On the air meeting of radio operators to handle messages and/or pass information relating to a scheduled or unscheduled event. May be conducted by an NCS.

NGO - Nongovernmental Organization. Organizations, particularly emergency response or relief organizations, that are not part of the government. For example, the Red Cross.

NIMS – National Incident Management System A systematic proactive approach guiding government agencies at all levels, the private sector, and nongovernmental organizations to work seamlessly to prepare for, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life or property and harm to the environment.

NOAA - National Oceanic and Atmospheric Administration. The administration under the federal Department of Commerce responsible for oceanic and atmospheric study. NOAA is the parent agency of the National Weather Service.

NTS - National Traffic System - The ARRL organization of daily local, regional and national radio nets that passes messages nationwide.

NVIS - Near Vertical Incident Skywave. The mode of HF propagation that uses the ionosphere overhead as a reflector for a vertical radio signal and provide HF coverage for a service radius of approximately 250 miles. Usually from a half-wave dipole mounted no more than 1/8 wavelength above the ground.

NWR - National Weather Radio service. The 162 MHz community radio service offered by the National Weather Service to provide timely weather information and alerts.

NWS - National Weather Service. The weather forecasting arm of the National Oceanic and Atmospheric Administration.

OPEN NET A net that may be run by an NCS but only to designate who is to speak next. Casual conversation is accepted and traffic is handled on a first-come-first-served basis.

OSCAR - Orbiting Satellite Carrying Amateur Radio

Packet Radio - A digital mode of radio communications where the information is sent as a "packet" containing the call of the source and destination stations, error correction information and the data.

PACTOR - A digital mode of radio communications.

PBX - Private Branch Exchange

PSK - Phase Shift Keying - The phase angle of the transmitted signal is shifted in response to the modulating signal.

PSK31 - Phase Shift Keying 31 Baud - A point to point communication mode that works very well in low signal strength situations. Worldwide communication is possible with as little as one watt of output power.

RACES - Radio Amateur Civil Emergency Service - A program for organizing amateur radio operators registered with civil defense organizations into a reserve of emergency communicators. RACES is specifically controlled by state or local government emergency management agencies. There is no federal level RACES. RACES is legally authorized as a radio service which could remain on the air if the Amateur Radio Service were to be shut down by Executive Order under the presidential War Powers Act.

REACT – Radio Emergency Associated Communications Teams. A public service organization comprised of private radio operators serving travelers and their communities alike with radio communications. Member volunteers are dedicating to improving their communities by providing voluntary, two-way communications.

RF - Radio Frequency.

RIT - Receiver Incremental Tuning. A method (usually a control) for making fine adjustments in the receive frequency of a radio without changing the transmit frequency.

RTTY - Radio teletype - A digital mode of radio communications.

SAME - Specific Area Message Encoding. An alert messaging scheme used by the National Weather Radio (NWR) service to alert specific counties of emergency conditions. SAME uses FIPS codes to address the counties.

SATERN - Salvation Army Team Emergency Radio Network. An organization of amateur radio operators supporting the Salvation Army in disaster and emergency services.

SEC - Section Emergency Coordinator. A position of leadership within the ARES organization charged with leading a Section who reports to the Section Manager.

SKYWARN - A network of community weather spotters serving the National Weather Service. This program is managed at the local NWS office level and varies widely from one area to another.

SM - Section Manager. A position of leadership within the ARRL Field Services organization just below national level.

SOP - Standard Operating Procedure

Single Resource - Individual personnel, supplies, and equipment items, and the operators associated with them. A 5-ton dump truck with driver is a Single Resource. You and your radio are a Single Resource.

SSB - Single Side Band

TNC2 - Terminal Node Controller, Version 2 - A piece of equipment for packet radio communications.

Transceiver - A radio that combines a transmitter and receiver into one unit.

TCXO - Temperature compensated crystal oscillator

UHF - Ultra High Frequency - The radio spectrum from 300 to 3,000 Megahertz

USB - Upper Sideband - A mode of radio communications.

VHF - Very High Frequency - The radio spectrum from 30 to 300 Megahertz.

VOAD - Volunteer Organizations Active in Disasters

VOM - Volt-Ohm Meter or Volt Ohm Milliammeter. A meter capable of measuring voltage, resistance, and current. Also sometimes called a Multimeter.

VOX - Voice Operated Transmit - a circuit that will cause a transmitter to automatically transmit when the microphone picks up voice or loud sounds.

XIT - Transmit Incremental Tuning. A method (usually a control) for making fine adjustments in the transmit frequency of a radio without changing the receive frequency.