

AMATEUR RADIO PUBLIC SERVICE COMMUNICATIONS

Quick Reference Ordering Guide -

For ARES, RACES, EmComm and Public Service Resources¹

Amateur Radio Resource Typing identifies amateur radio communicator function types and enables Emergency Managers, Staging Managers, EmComm Leaders and Event Coordinators to identify, request and receive standardized amateur radio resources in support of an emergency, disaster or event. This guide identifies resource types and equipment for each function amateur radio communicators typically perform. By implementing Resource Typing, amateur radio resources are easier to request and supply allowing assignments to be filled quickly.

This Guide is an aid in ordering resources for all Amateur Radio mutual aid and EmComm groups.

Amateur Radio Resource² (ARR)

◇ All ARR Resource kits are portable or mobile ◇

Basic Resource Functions - A qualified Amateur Radio Operator implements each function

◇ Amateur Radio Resource - Type S

Function = Shadow | VHF/UHF

ARR-S - Defines a "foot mobile" station shadowing an event or incident official.

◇ Amateur Radio Resource - Type B

Function = Base | VHF/UHF

ARR-B - Defines a Portable Base, Rest/Aid Stop, Shelter, Net Control, EOC or similar type fixed station.

◇ Amateur Radio Resource - Type M

Function = Mobile | VHF/UHF

ARR-M - Defines a portable station temporarily installed in a vehicle such as a car, truck, van, aircraft, boat, bus, etc.

◇ Amateur Radio Resource - Type H[]

Function = Long-Range Communications | HF

ARR-H[] - Defines a portable HF long to intermediate range communications station. A General Class or higher License is required. [Sub Functions]: **p** - Field Portable; **m** - Mobile (suitable for in vehicle use)

Specialty Resource Functions - A qualified Amateur Radio Operator implements each function

◇ Amateur Radio Resource - Type TM[]

Function = Tactical Data Messaging | VHF/UHF

ARR-TM[] Denotes an amateur radio communicator and listed equipment functioning as a "last mile" (Tactical) messaging system providing traceable messaging and/or "radio email" with attachments.

[Sub Functions]: w - Winlink capable; u - User group's messaging software (specify if known)

◇ Amateur Radio Resource - Type SM[]³

Function = Strategic - Long Range Data Messaging | HF

ARR-SM[] - Defines a portable HF long range data messaging system providing traceable messaging and/or "radio Email" capability. [Sub Functions]: **p** - Pactor; **f** - Winlink forwarding station⁴; **s** - sound card (WINMOR/FLDIGI/PSK31)

◇ Amateur Radio Resource - Type DA

Function = Data - APRS Operations | VHF/UHF

ARR-DA - A portable Automatic Positioning/Packet Reporting System providing event or incident official(s) with a "view" of resource positions in real time along with short messaging capability.

* At a minimum, 1 ARR-RT should be ordered with this resource

◇ Amateur Radio Resource - Type RT

Function = Data - Resource Tracking | VHF/UHF

ARR-RT Denotes amateur radio equipment implementing an asset tracker. This resource is attached to designated assets and transmits position data for monitoring with the AAR-DA resource. Equipment is configured by an amateur radio communicator.

1 each of this resource should be ordered for each item of equipment or location that is to be tracked

◇ Amateur Radio Resource - Type DN[]

Function = Data Networking | MESH / LAN / WiFi

ARR-DN[] identifies equipment implementing the communications function for a portable 802.[] resource providing a wireless LAN node(s) and "WiFi" in support of event or incident communications.

[Sub Functions]: **h** - HSMM MESH; **a** - AREDN MESH; **c** - Commercial

◇ Amateur Radio Operator - ARO - [Any Base or Specialty Function]

ARO-[] - An amateur radio communicator without radio equipment, capable of operating any of the listed functions. Append function designator to ARRO (i.e., ARRO-B) An ARO will always carry a AAR-S kit.

◇ Assignment Durations

- Short - 12 hours or less in duration (Shift) Medium - 12 to 72 hour duration (Shifts)
 Long - 72 hours or greater duration (Typically an away assignment)

* Resources should be paired. 2 ARR units (any mix) or 1 ARR with 1 ARO

Notes: 1. This guide is an aid for event coordinators and EmComm leaders to create a needs list of response communicators
2. For MARS operations, equipment/capabilities must meet unit's operational requirements
3. VHF data to/from HF data hubbing functions requiring Pactor III equipment
4. To request only an operator, use Amateur Radio Resource Operator (ARRO-[]) with appropriate designation
5. Rotation planning should begin immediately after initial employment
6. Federal Communications Commission, amateur radio service part 97

◇ Each ARR is operated by a FCC⁶ licensed radio amateur proficient in their resource function.

*** Ordering guide for amateur radio communications functions for EmComm and Public Service activities ***

RESOURCE PLANNING INFORMATION FOR LEADERS

NIMS requires that ICS be institutionalized and used to manage all domestic incidents.

Directs that incident managers and response organizations in their jurisdictions train, exercise, and use ICS in their response operations.

Conduct exercises for responders at all levels, including responders from all disciplines and jurisdictions.

Resource Management: NIMS defines standardized mechanisms and establishes requirements for processes to describe, inventory, mobilize, dispatch, track, and recover resources over the life cycle of an incident.

Resource Typing: Resource typing establishes common definitions for capabilities of personnel, equipment, teams, supplies, and facilities. Typing definitions include the following information:

- **Capability:** the core capability for which the resource is most useful
- **Category:** the function for which a resource would most likely be used such as firefighting, law enforcement, health and medical, etc.
- **Kind:** a broad classification such as personnel, teams, facilities, equipment and supplies
- **Type:** a resource's level of minimum capability to perform its function; based on size, power, capacity (for equipment) or experience and qualifications (for personnel or teams)

Resources -Preparedness Activities

- Identify and type all resources according to established standards.
 - Ensure that all personnel are trained properly for the job(s) they perform.
 - Ensure communications interoperability and redundancy
- Before an incident jurisdictions and organizations develop resource plans
- This resource planning includes identifying resource requirements based on an assessment of threats and vulnerabilities and developing strategies to obtain the needed resources.
- Resource management strategies include stockpiling resources, establishing mutual aid agreements to obtain resources from neighboring jurisdictions, determining approaches to reassigning resources from non-essential tasks, and developing contracts to rapidly acquire resources from vendors when needed
- A resource inventory is used to track resource availability and enables organizations to acquire resources promptly when needed for an incident

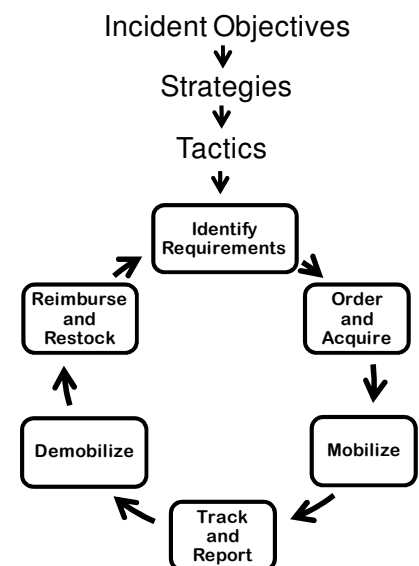
Resources -Activities During an Incident

- The resource management process is the six resource management tasks performed in an incident
- The resource management process includes methods to identify requirements, order and acquire, mobilize, track and report, demobilize and reimburse and restock resources in an incident

Communications and Information Management: NIMS identifies the requirements for a standardized framework for communications, information management (collection, analysis, and dissemination), and information sharing at all levels of incident management.

FEMA plans to use the United States National Grid mapping system for domestic incidents. Response groups should train on using this system

A **volunteer** is an individual who, beyond the confines of paid employment and normal responsibilities, contributes time and service to assist in the accomplishment of a mission.



The Volunteer Protection Act of 1997 provides legal immunity for volunteers working in disaster-related functions who are working within the scope of their assigned responsibilities, are acting in good faith, and are not guilty of gross negligence.

Ref. - National Incident Management System (NIMS) 2017 & National Planning Frameworks