



The Comprehensive Field Operations & Emergency Communications Checklist

Introduction

Effective field communications during an emergency or planned event depend on a disciplined, systematic approach to preparation. An operator's ability to deploy quickly, establish a functional station, and operate self-sufficiently for an extended period is paramount. This document provides a comprehensive, modular checklist designed to guide amateur radio operators in preparing for car-camping, field deployments, and emergency response scenarios.

The philosophy behind this checklist is built on two foundational principles: modularity and self-sufficiency. It distinguishes between the operator's personal survival needs and the technical requirements of the communications mission. This is accomplished by separating equipment into two primary categories: the **Core Survival Go-Bag**, which contains the universal necessities for personal well-being, and the **Amateur Radio Go-Kit**, which houses the mission-specific communications equipment.

This structure is deliberate. An operator who is not personally prepared—who is cold, hungry, dehydrated, or injured—cannot effectively perform their communication duties. Such an individual risks becoming a liability to the very response effort they are there to support. Therefore, personal preparedness is the non-negotiable foundation upon which all technical and operational readiness is built. This checklist is designed to be a scalable tool, allowing operators to tailor their loadout to the specific duration, location, and complexity of any given deployment.

Section 1: Core Survival Go -Bag (72-Hour Personal Kit)

The Core Survival Go-Bag is the operator's personal, self-contained survival system. Its contents are mission-agnostic and should be sufficient to sustain one person for a minimum of 72 hours without external support. This kit should be packed in a durable, easy-to-carry bag (such as a backpack or duffel) and be ready for immediate deployment. The existence of this independent kit provides critical flexibility; it can be taken for a personal emergency or evacuation just as easily as it can be paired with the technical Go-Kit for a communications deployment.

1.1 Water & Hydration

Water is the single most critical supply for survival. Dehydration can impair cognitive function and physical performance within hours. The universal standard, recommended by FEMA, the Red Cross, and ARRL, is a minimum of one gallon of water per person, per day, allocated for both drinking and basic sanitation. ¹ A 72-hour Go-Bag should therefore contain at least three gallons of water.

- **Bottled Water:** Minimum of 3 gallons per person, stored in sturdy, sealed containers.
- **Water Filtration System:** A portable, reliable filter (e.g., Sawyer Squeeze, Lifestraw) serves as a critical backup, allowing for the replenishment of water supplies from questionable sources like streams or lakes.
- **Water Purification Tablets:** Chemical tablets (iodine or chlorine dioxide) provide a lightweight, long-lasting secondary method for making water potable.
- **Durable Water Bottle/Container:** A metal or high-impact plastic bottle (e.g., Nalgene) for carrying water during mobile tasks away from the primary kit.

1.2 Food & Nutrition

Sustaining energy levels is crucial during a deployment, which often involves long hours and

stressful conditions. The Go -Bag must contain a minimum three-day supply of non-perishable, high-energy food that requires little to no cooking.¹

- **Non-Perishable Food:** A 3-day supply of items such as energy bars, protein bars, dried fruit, nuts, peanut butter, canned meats or fish, and military -style Meals Ready-to-Eat (MREs).² Focus on calorie-dense options.
- **Manual Can Opener:** Essential for accessing canned goods when power is unavailable. This is a frequently overlooked but critical item recommended by multiple agencies.¹
- **Eating Utensils:** A simple mess kit with a spoon, fork, cup, and plate or bowl.² Reusable plastic or metal utensils are preferable.
- **High -Energy Snacks:** Items like granola bars or trail mix for quick energy boosts during operational periods.

1.3 First Aid & Medical

An operator must be able to manage common injuries and personal medical needs independently. A well-stocked first aid kit is not optional. While a 3 -day supply of medications is a common baseline, a more robust 7-day supply is recommended to account for potential deployment extensions or travel delays.³

- **Comprehensive First Aid Kit:** The kit should go beyond basic adhesive bandages. It must include sterile gloves, various sizes of sterile dressings and gauze pads, adhesive tape, antiseptic wipes, antibiotic ointment, burn ointment, eyewash solution, a thermometer, and basic trauma supplies like a tourniquet and pressure dressings.²
- **Prescription Medications:** A minimum 7-day supply of all personal prescription medications. This should be accompanied by a waterproofed list detailing each medication, its dosage, the prescribing physician, and any allergies.
- **Non-Prescription Medications:** A supply of common over-the-counter drugs such as pain relievers (ibuprofen, acetaminophen), anti-diarrhea medication, antacids, and laxatives.¹
- **Vision Correction:** An extra pair of prescription eyeglasses and/or a supply of contact lenses and solution.¹

1.4 Shelter, Warmth & Clothing

Exposure to the elements can quickly incapacitate an operator. The Go -Bag must contain items to provide basic shelter and protection from cold, heat, and precipitation.

- **Emergency Shelter:** At least one emergency space blanket or Mylar "survival" blanket, which is lightweight and reflects body heat. ² For more robust shelter, include a small tarp or bivy sack.
- **Complete Change of Clothing:** A full set of clothing appropriate for the local climate, packed in a waterproof bag. This should include layered options, synthetic or wool socks, underwear, a long-sleeved shirt, and durable pants. Sturdy, waterproof, and broken -in shoes or boots are essential.¹
- **Rain Gear:** A quality poncho or waterproof rain jacket and pants. ² This is critical for staying dry, which is key to preventing hypothermia.
- **Warmth Accessories:** A warm hat (e.g., fleece beanie) and gloves, even in moderate climates, as temperatures can drop significantly at night.

1.5 Sanitation & Hygiene

Maintaining personal hygiene during a deployment is critical for health, morale, and preventing the spread of disease. The Go -Bag should contain a compact kit with essential sanitation supplies.

- **Toiletries Kit:** A small bag containing a toothbrush, toothpaste, bar soap in a container, and deodorant.
- **Moist Towelettes & Hand Sanitizer:** For cleaning hands and body when running water is not available.¹
- **Toilet Paper:** Remove the cardboard tube to save space.
- **Garbage Bags with Ties:** Heavy-duty bags are multi -purpose tools for waste disposal, sanitation, and waterproofing gear. ¹
- **Feminine Supplies:** As required.¹

1.6 Light, Fire & Tools

The ability to see, work, and signal for help in the dark is fundamental. This category also includes essential tools for common tasks and repairs.

- **Primary LED Flashlight:** A durable, waterproof LED flashlight with extra batteries stored

separately or reversed in the device to prevent accidental discharge. ¹

- **LED Headlamp:** A headlamp is invaluable as it allows for hands -free operation when setting up equipment or navigating in the dark. ² Include extra batteries.
- **Multi -Tool:** A quality multi -tool (e.g., Leatherman, Gerber) provides pliers, wire cutters, screwdrivers, a knife, and other essential tools in a single compact package. ²
- **Whistle:** A loud whistle is a simple but effective tool for signaling for help, requiring less energy than shouting. ¹
- **Fire Starting Kit:** Multiple methods for starting a fire, stored in a waterproof container. This should include a lighter, waterproof matches, and a ferrocerium rod with a striker. ¹
- **Duct Tape:** A small roll of high-quality duct tape for repairs. Wrap a length around a pencil or old credit card to save space.
- **Work Gloves:** Durable leather or synthetic gloves to protect hands during setup, teardown, or debris removal. ³

1.7 Critical Documents & Finances

In a disaster or evacuation scenario, access to identification, financial resources, and important records can be critical. All documents should be stored in a waterproof, portable container.

- **Waterproof/Fireproof Document Bag:** This should contain physical copies of:
 - Driver's License, Passport, and Birth Certificates. ²
 - Insurance Policies (Home, Auto, Health). ¹
 - Bank Account Records, Deeds/Titles to property. ¹
- **Digital Copies:** An encrypted USB flash drive containing scanned copies of all important documents and family photos.
- **Cash:** A supply of cash in small denominations, as electronic payment systems and ATMs may be non-functional. ¹
- **Emergency Contact List:** A physical, laminated card with contact information for family, friends, and emergency services. Do not rely solely on a cell phone's contact list. ²
- **Local Maps:** Physical, waterproof maps of the local area and region. Electronic navigation may fail or be unavailable. ¹

Section 2: Vehicle -Based Support & Mobility Kit

For deployments involving a vehicle, the vehicle itself becomes an integral part of the operational system. It is more than mere transportation; it is a power source, a supply depot, a mobile communications platform, and a primary shelter. The "Car-Camping & Field Ops" context requires a dedicated kit that integrates with the vehicle to enhance mobility, extend operational endurance, and ensure the platform's reliability. FEMA specifically recommends maintaining an emergency kit in your car in case you are stranded.¹

2.1 Vehicle Readiness & Recovery

A vehicle that cannot reach the deployment site or becomes disabled on -site compromises the entire mission. This kit focuses on keeping the vehicle operational and recovering it if necessary.

- **Fuel:** Always deploy with a full tank of fuel.
- **Jump Starter:** A portable lithium -ion jump starter is more versatile and safer to use than traditional jumper cables.
- **Tire Inflation & Repair:** A portable 12V air compressor, a quality tire pressure gauge, and a tire plug kit.
- **Automotive Tool Kit:** A basic socket set, wrenches, screwdrivers, and pliers specific to the vehicle.
- **Recovery Gear:** A properly rated tow strap (not a recovery rope), shackles, and a sturdy shovel.
- **Vehicle Fuses:** A set of extra fuses of the types used in the vehicle.
- **Fire Extinguisher:** An ABC-rated fire extinguisher securely mounted within reach of the driver.¹
- **Extra Keys:** An extra set of car keys is a simple but crucial item to prevent being locked out.³

2.2 Bulk Supplies

The vehicle's cargo capacity should be used to carry bulk supplies that supplement the 72 - hour Go-Bag, extending the operator's self -sufficiency to a week or more. This aligns with the Red Cross's recommendation to prepare for longer -term scenarios.³

- **Extra Water:** A case of bottled water or several large, durable water jugs (e.g., 5 -7 gallons).

- **Bulk Food Box:** A plastic tote containing additional non -perishable food items.
- **Extra Fuel:** Properly secured and rated fuel cans (gasoline or diesel). Check local regulations for legal transport limits.
- **Propane Cylinders:** Small propane cylinders (1 lb) for cooking stoves or heaters.
- **Large First Aid Kit:** A more comprehensive trauma and medical kit than the one carried in the personal Go-Bag.

2.3 Navigation & Area Information

While the Go-Bag contains basic maps, a vehicle allows for a more comprehensive navigation and information package.

- **Road Atlas:** A detailed regional or national road atlas.
- **Topographical Maps:** Detailed maps of the specific operational area.
- **GPS Unit:** A dedicated GPS unit (e.g., Garmin) that does not rely on cellular data.
- **Compass:** A quality baseplate or lensatic compass.
- **Reference Documents:** Physical copies of local repeater directories, frequency lists, and emergency communications plans.

2.4 Vehicle - Integrated Communications

The vehicle serves as an excellent platform for a permanent or semi -permanent mobile radio installation, providing higher power and greater range than a handheld transceiver.

- **Mobile Radio:** A professionally installed VHF/UHF or multi-band HF mobile radio.²
- **High -Gain Antenna:** A properly mounted and tuned external antenna for the mobile radio.
- **Direct Power Connection:** The radio should be powered directly from the vehicle's battery via a fused connection to avoid noise from the vehicle's electrical system.
- **Microphone & Accessories:** A comfortable hand microphone or headset for safe operation while stationary.

Section 3: Amateur Radio Go -Kit (Mission -Specific)

This is the technical core of the operator's deployment package. A simple, flat list of equipment is insufficient for managing the complexity of a modern field station. The most effective methodology is to organize the Go-Kit into a series of interdependent, functional modules. Each module contains a complete subsystem (e.g., Power, Antennas) that can be packed, tested, and deployed as a unit. This systems-based approach simplifies packing, ensures no critical components are forgotten, and dramatically speeds up both on-site setup and troubleshooting under pressure.

3.1 Primary Station Module

This module contains the core radio and user interface components, typically housed in a protective case or a pre-wired "Go-Box."

- **Primary Transceiver(s):** The main radio for the mission, whether it be an HF/VHF/UHF multi-band transceiver or a dedicated single-purpose radio.
- **Handheld Transceiver (HT):** A secondary VHF/UHF HT with fully charged spare batteries and a high-gain whip antenna. This is essential for local communication or if the primary station fails. ²
- **Microphone / Key / Paddles:** The specific input devices required for the intended operating modes (voice, CW).
- **Headphones:** Essential for hearing weak signals in a noisy environment and for maintaining operational security. A headset with a boom mic is ideal for hands-free logging and operation.
- **Cabling:** All necessary power and data cables for the transceiver, clearly labeled.
- **Protective Case:** A rugged, waterproof case (e.g., Pelican, Nanuk) or a custom-built Go-Box to protect the equipment during transport and operation.

3.2 Power System Module

Reliable power is the lifeblood of a communications station. The choice of power source has a cascading effect on the entire mission, determining operational duration and capabilities. A simple voice operation with an HT has minimal power needs, whereas an HF digital station requires a significantly more robust power system. This module must be a complete, self-contained system.

- **Primary Battery Source:** A high-capacity battery, such as a Lithium Iron Phosphate

(LiFePO₄) or Absorbed Glass Mat (AGM) battery. The capacity (in Amp-hours) must be calculated based on the expected power draw of the equipment and the required operational period.

- **Battery Charger:** A smart charger capable of running on both AC (grid/generator) and DC (vehicle) power.
- **Solar Power System:** For extended deployments, a system including portable solar panels, a charge controller, and all necessary cabling.
- **Generator:** For long-term or high-power operations, a small, quiet inverter generator with a supply of fuel, oil, and a basic maintenance kit.
- **Power Distribution:** A fused power distribution panel (e.g., using Anderson PowerPoles) to safely connect all equipment to the power source.
- **Inverter:** A small pure sine wave inverter to power AC devices like a laptop charger.
- **Power Analyzer:** A voltmeter or inline power analyzer (e.g., Watt Meter) to monitor voltage, current, and battery capacity.

3.3 Antenna System Module

An effective antenna system is arguably the most important part of the radio station. This module contains everything needed to deploy one or more efficient antennas for the required frequency bands.

- **Primary Antennas:** A selection of portable antennas suited to the mission, such as resonant dipoles for HF, a portable vertical, or a small directional Yagi for VHF/UHF.
- **Coaxial Cable:** High-quality coaxial cable jumpers and main feedlines of appropriate lengths.
- **Antenna Tuner:** A portable antenna tuner if using non-resonant antennas.
- **Mast/Tripod System:** A lightweight, portable mast or tripod for elevating antennas, complete with guying ropes, stakes, and a small hammer or mallet.
- **Antenna Launching Kit:** A throw line and weight for hoisting wire antennas into trees.
- **SWR Meter / Antenna Analyzer:** To verify antenna system performance upon setup.
- **Adapters & Connectors:** A comprehensive kit of coaxial adapters (e.g., PL-259, BNC, SMA, N-type) to solve any connection mismatches.
- **Grounding System:** A portable grounding rod or counterpoise wires, a clamp, and a length of heavy gauge wire to ensure a safe and effective station ground.

3.4 Digital Operations Module

Digital modes like Winlink or VARA FM are increasingly critical in emergency communications. This requires a dedicated module for computer -based operations, as suggested by the inclusion of a laptop in the ARRL's gear list.²

- **Laptop / Tablet:** A ruggedized laptop or tablet pre -loaded with all necessary communications software (e.g., fldigi, Winlink Express, JS8Call). All software should be tested and configured before deployment.
- **Sound Card Interface:** A digital mode interface (e.g., Signalink, RigExpert) to connect the radio to the computer.
- **Interface Cables:** All necessary USB, audio, and serial cables to connect the interface, computer, and radio.
- **Device Chargers:** Both AC and 12V DC chargers for the laptop/tablet.

3.5 Station Accessories & Reference

This module contains the small but vital items needed for station management, logging, and reference.

- **Logging Supplies:** A paper logbook, pens, and pencils. Paper is a reliable backup to electronic logging.¹
- **Message Forms:** A supply of standard message forms, such as the ICS -213 General Message Form or ARRL Radiogram forms.
- **Credentials:** A copy of the operator's FCC Amateur Radio license and any ARES/RACES or other agency identification cards.
- **Reference Materials:** Laminated copies of band plans, frequency charts, and operational procedures. Operator's manuals for all equipment should be available as PDFs on the laptop and/or in paper form.
- **Basic Tool Kit:** A small kit with pliers, diagonal cutters, screwdrivers, a roll of electrical tape, and zip ties for minor repairs.
- **Gaffer's Tape:** For securing cables and preventing tripping hazards.

To ensure rapid and accurate operation upon arrival, all critical mission parameters should be consolidated onto a single reference sheet *before* deployment. This cognitive tool reduces stress and minimizes errors by placing all essential information in one location.

Table 1: Mission Reference Data

Parameter	Value
Mission/Event Name:	
Date/Time Group:	
Primary Contact (Name, Call, Phone):	
Served Agency Contact (Name, Title, Phone):	
VHF/UHF Repeaters (Name, Freq, Offset, Tone):	1. 2.
Simplex Frequencies (Tactical, Command):	1. 2.
HF Net Frequencies (Primary, Alternate):	1. 2.
Digital Frequencies & Settings:	
Key Locations/GPS Coordinates:	

Section 4: Field Camp & Deployment Site Kit

A communications deployment can last for many hours or days, often in austere conditions. Operator effectiveness is directly linked to operator welfare. A fatigued, cold, or hungry operator is prone to making critical errors in message handling or technical operation. The equipment in this section is not about luxury; it is about operator sustainment. This gear ensures the human component of the communications system can be maintained at peak

efficiency throughout the mission.

4.1 Shelter & Sleeping System

Adequate rest is essential for maintaining focus and cognitive function.

- **Shelter:** A tent, tarp, or bivy sack appropriate for the expected weather conditions.
- **Sleeping Bag:** A sleeping bag rated for temperatures at or below the expected nightly lows.
- **Sleeping Pad / Cot:** To provide insulation from the cold ground and improve sleep quality.
- **Ground Tarp:** To place under the tent for added moisture protection and durability.

4.2 Field Kitchen

The ability to prepare simple, hot meals can significantly boost morale and provide necessary calories.

- **Portable Stove & Fuel:** A small backpacking or car -camping stove with an adequate supply of fuel.
- **Cookware:** A cook pot, pan, and a mess kit with utensils. ¹
- **Cooler:** A quality cooler with ice or ice packs for perishable items, if the mission allows.
- **Cleaning Supplies:** Biodegradable soap, a sponge, and a collapsible water container for washing dishes.

4.3 Site Management & Comfort

These items create a more organized, efficient, and sustainable operating position.

- **Folding Chair:** A comfortable chair is critical for long operating sessions.
- **Folding Table:** A stable surface for setting up radio equipment and logging.
- **Area Lighting:** A battery - powered lantern for illuminating the operating position and campsite at night.
- **Waste Bags:** Pack out everything that is packed in. Bring extra bags for waste disposal.

- **Personal Comfort Items:** Sunscreen, insect repellent, and items for downtime such as a book or notepad. ¹
-

Section 5: Operational Procedures Checklist

A perfect kit of equipment is rendered useless without the discipline and procedure to deploy it correctly. This final section transforms the document from a simple packing list into a Standard Operating Procedure (SOP). Following these procedural steps enforces professionalism, standardizes performance, and ensures a consistent state of readiness. This aligns with the ARRL's emphasis on regular training and maintaining a professional posture during events. ²

5.1 Pre-Deployment

- ☐ **Receive and Confirm Mission Briefing:** Understand the objectives, location, duration, and chain of command.
- ☐ **Fill out Mission Reference Data Sheet (Table 1):** Consolidate all frequencies, contacts, and key information.
- ☐ **Charge ALL Batteries:** This includes radios, laptops, phones, flashlights, headlamps, and primary power packs.
- ☐ **Test All Equipment:** Assemble the entire station at home, from power source to antenna, and make a test contact to verify functionality.
- ☐ **Pack Go-Bag and Go-Kits:** Use the physical checklists to ensure every required item is packed.
- ☐ **Notify Family:** Inform your family of your destination, expected duration, and communication plan.

5.2 On-Site Setup

- ☐ **Conduct Site Safety Assessment:** Before unpacking, assess the area for hazards such as overhead power lines, dead tree branches ("widowmakers"), flooding risks, and weather exposure.

- ☐ **Establish Operating Position:** Choose a secure, dry, and safe location for the station.
- ☐ **Deploy Antenna System:** Safely erect antennas, ensuring they are clear of all power lines and properly secured.
- ☐ **Install Grounding System:** Connect the station to a proper RF ground.
- ☐ **Connect Power System:** Connect all equipment to the power distribution panel.
- ☐ **Power On and Test:** Power up the equipment and perform a brief on -air radio check.
- ☐ **Check In with Net Control:** Formally check into the assigned net to announce your station is operational.

5.3 Post-Deployment

- ☐ **Check Out with Net Control:** Formally notify Net Control that your station is securing and going off the air.
- ☐ **Power Down and Disconnect:** Safely power down all electronics before disconnecting cables.
- ☐ **Pack Kits:** Use the checklist in reverse to ensure no equipment is left behind.
- ☐ **Clean and Inspect Site:** Leave the site cleaner than you found it.
- ☐ **Clean and Inspect Equipment:** Upon returning home, clean all gear and inspect for damage.
- ☐ **Recharge All Batteries Immediately:** Place all rechargeable batteries on their chargers so the kit is ready for the next deployment.
- ☐ **Restock All Consumed Supplies:** Replace all used food, water, fuel, batteries, and first aid items.
- ☐ **Participate in Debrief:** Take part in any formal or informal after -action review ("hotwash") to identify lessons learned and areas for improvement.

This final set of post -deployment procedures is arguably the most critical. By immediately cleaning, restocking, and recharging, the operator closes the readiness loop, transforming a single deployment into a cycle of continuous preparedness. This discipline ensures that when the next call comes, the operator and their equipment are truly ready.

Works cited

1. Build A Kit | Ready.gov, accessed September 27, 2025, <https://www.ready.gov/kit>
2. Emergency Prep Kit Checklist, accessed September 27, 2025, <https://home.arl.org/PRODUCTFILES/2012007374/Emergency%20Kit%20Prep%20Checklist%20Flyer.pdf>
3. What Do You Need In a Survival Kit | American Red Cross, accessed September

27, 2025, <https://www.redcross.org/get-help/how-to-prepare-for-emergencies/survival-kit-supplies.html>