### Recommendations for VHF/UHF Mobile Radio in ARES Service

This recommendation is guided more by the capabilities of the radio versus a specific brand. The preferred radio is a Dual Band model. A Dual Band radio gives you the ability to utilize more than just a band. Typically a Dual Band radio will contain both the VHF (2-meter band) and the UHF (70-cm band). There are essential differences in Dual Band radios. They fall into two basic categories a single receiver and a dual receiver radio.

A single receiver only allows you to listen to one band at a time. The radio will only display a single band on the face of the radio. It is possible to switch between bands such as VHF to UHF, but you are only able to monitor one band at a time. The single receiver radio is the least expensive option.

A dual receiver will allow you to monitor two bands at the same. The radio face will display both available bands at the same time. A dual receive radio can only transmit on one band at a time, but it can receive on two simultaneously. The ability to receive two bands at the same time can be a handy feature if you need to monitor two repeaters simultaneously or a repeater and a simplex frequency simultaneously. These scenarios are common at public service events or emergency deployments. Another feature to look for in a dual receive radio is whether it can crossband repeat. Crossband repeating allows utilizing your higher power mobile radio to boost the signal of your low-power handheld radio. APRS capability is another option found in some dual receive radios. APRS is Automatic Packet Reporting System. APRS is a system that uses amateur radio to transmit position reports, weather reports, and messages between users. A dual receive Dual Band radio is a more costly option, but it is the preferred radio for ARES deployments.

Recommending a specific radio model or brand is not easy to do since everyone's opinions and experiences can differ significantly. I think most will agree that the best VHF/UHF amateur radios come from three large Japanese manufacturers: Icom, Kenwood, and Yaesu. Asking which is better is like asking whether Ford, Chevrolet, or Dodge is better. Also quite popular are the Chinese units under many different brand names. These are generally a copy or clone based on a particular model from one of the three Japanese manufactures. The cost of these units makes them very inviting, especially as an entry-level radio.

### Links

#### Manufacturers:

Icom America: <a href="http://www.icomamerica.com/en/">http://www.icomamerica.com/en/</a>

Kenwood USA: <a href="https://www.kenwood.com/usa/com/">https://www.kenwood.com/usa/com/</a>

Yaesu: https://www.yaesu.com

Alinco http://alinco.com/global.html

#### **Amateur Radio Dealers:**

Main Trading Company (Paris, TX) https://www.mtcradio.com

> **Gigaparts** <u>https://www.gigaparts.com</u>

> HRO (Plano, TX) https://www.hamradio.com

DX Engineering https://www.dxengineering.com

Radioddity https://www.radioddity.com

Baofeng Tech https://baofengtech.com

BridgeCom Systems https://www.bridgecomsystems.com

Connect Systems, Inc. https://www.connectsystems.com/amateur.html

> R & L Electronics http://store.rlham.com/shop/catalog/

## **Examples of Dual Band / Dual Receive Radios**

Icom: IC-2730A & ID5100

Kenwood: TM-V71A & TM-D710GA

Yaesu: FTM-300DR & FTM-400XDR

Alinco: DR-735T

Anytone: AT-D578UV-PRO

BTECH: UV50X2

TYT: TH-7800 TYT: TH-9800

There are more brands of the Chinese "clone" radios available on the market today but the buyer needs to be aware and make sure these radios have the ability to dual receive and crossband repeat.

Peer Reviews:

https://www.eham.net/reviews/index

# Additional Equipment Manufactures:

Antennas: Comet, Diamond, Tram-Browning, Jetstream, Arrow, N9TAX Slim Jim Pole, KB9VBR J-Pole, N5BOY 2-Meter Resonant Dipole.

Coax: ABR Industries, Coax Experts, Davis RF, Belden, Times Microwave LMR, Tram.

Power Supplies: Astron, Samlex, Daiwa, Powerwerx, Alinco, Diamond, Jetstream, MFJ

Power Distribution: West Mountain Radio, MFJ

Wiring & Anderson PowerPoles: Powerwerx, Quicksilver, Wireman