



## **WINNIPEG ARES MOBILE RADIO KITS**

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This replaces the document issued MAR 2011

Winnipeg ARES Mobile Radio Kits include:

1. Kit # 1 with HTX-242 transceiver
2. Kit # 2 with TM-261 transceiver
3. Kit # 3 with FT-2800 transceiver
4. Kit # 4 with GE Phoenix transceiver
5. Kit # 5 with HTX-242 transceiver
6. Kit # 6 with IC-28H transceiver
7. Kit # 7 with IC-229 transceiver (no DTMF)
8. WPS FT-212RH transceiver (No DTMF)

Mobile Kits 1-3 and 5 look virtually identical on the outside. Mobile Kit # 5 has slightly less “stuff” than Mobile Kits 1-3.

We also have three HT kits, a 2m Beam Kit and a 2m Ringo Kit.

## **MOBILE KIT #1 CONTENTS**

HTX-242 2m Mobile Transceiver S/N 0000264 Marked "VE4YWG-I"

Pyramid PS-12KX AC Power Supply 10A constant/ 12A surge "VE4YWG-Y"

DC Cable, power supply to transceiver

DC Cable, HD cigarette lighter plug to transceiver

AC Extension Cord

MFJ 1/4 Wave 2m Mag Mount Antenna "VE4YWG"

RG-8X coax, 25 feet with PL-259s and 1 PL-258 Coupler

Comet CTC-50M Under-Door Coax Pass-Thru Device

DCI Intermod Filter for 2m Use "VE4YWG-F" and RG-8X Patch Cord

8 Ohm Extension Speaker and 2 Sets 8 Ohm Headphones, with "Y" adapter

ARES Traffic Vest "YWG-1"

ARES Traffic Vest "YWG-2"

4 Fuses for transceiver, 1 roll Electrical Tape, Pen & Pencils

1 Red Duotang with:

HTX-242 Memory List  
WPGARES Emergency Plan  
HTX-242 Operators Manual

Sherlock Streetguide

Envelope of Logsheets and Tactical Message Forms

"Cheater" Plug for WFPS Mobile Command power cords

Cable Ties

ARES Desk-top Sign & Envelope with 10 ARES Brochures

DC Powerpack & AC Charger (not kept in kit but should accompany kit)



Mobile Kit # 1 mostly unpacked.

Intermod Filter, AC Extension cord and some small accessories not shown.

Envelope of log sheets and message forms are under red duo-tang.

Folding table is for display purposes only, not part of the kit.

## **MOBILE KIT #2 CONTENTS**

TM-261A 2m Mobile Transceiver S/N 90601008                      Marked “VE4YWG-D”

Pyramid PS-12KX AC Power Supply 10A constant/ 12A surge “VE4YWG-J”

DC Cable, power supply to transceiver

DC Cable, HD cigarette lighter plug to transceiver

AC Extension Cord

MFJ 1/4 Wave 2m Mag Mount Antenna “VE4YWG”

RG-8X coax, 25 feet with PL-259s and 1 PL-258 Coupler

Comet CTC-50M Coax Pass-Thru

DCI Intermod Filter for 2m Use “VE4YWG-C” and RG-8X Patch Cord

2 Sets 8 Ohm Headphones, with "Y" adapter

ARES Traffic Vest “YWG-3”

ARES Traffic Vest “YWG-4”

Pens& Pencils, 1 roll Electrical Tape

4 Fuses for transceiver

1 Blue Duotang with:

TM-261 Memory List  
WPGARES Emergency Plan  
TM-261 Operators Manual

Envelope of Logsheets and Tactical Message Forms

Cable Ties

“Cheater” Plug for WFPS Mobile Command power cords

ARES Desk-top Sign & Envelope of 10 ARES Brochures

Powerpack & AC Charger not kept in kit but should accompany kit

### Mobile Kit # 3

Yaesu FT-2800 2m Mobile      S/N 7J760469    Inscribed VE4YWG-AT  
Pyramid PS-12KX Power Supply      Inscribed VE4YWG-AR  
DC Cord for FT-2800 with HD Cig Lighter Plug      Marked WPGARES  
DCI 2m Intermod Filter S/N 21051      Inscribed VE4YWG-AU  
6 foot RG-8X Patch Cord      Labelled VE4YWG  
2m MFJ ¼ Wave Mag-Mount Antenna    Inscribed VE4YWG  
25 Feet RG-8X Coax    (with coupler)      Labelled VE4YWG  
Two Pair Headphones with “Y” Adapter    Labelled VE4YWG & WPG ARES  
6 Foot AC Extension Cord      Labelled VE4YWG  
Comet CTC-50M Coax Pass-Thru

Red Duotang contains:

- Quick-Start Guide PowerBox 800
- FT-2800 Memory List
- Winnipeg ARES Emergency Plan
- FT-2800 Operating Manual (copy)
- Tactical Message Forms
- Log-sheets

Sherlock Streetguide

Fuses, pens & pencils, 25 cable ties, “Cheater” plug for WFPS Mobile Command

Blue plastic 19” Mastercraft toolbox (marked Winnipeg ARES Kit #3 on the outside, MBQ’s WPGARES business card taped inside lid).

Loaner Vest YWG-BB # 11 & Loaner Vest YWG-BB # 12

ARES Desk-top Sign and envelope of 10 ARES Brochures

PowerBox 800 PowerPack with Inverter is **separate** from the toolbox  
S/N C 14983441      Inscribed VE4YWG-AS

Accessory bag for PowerBox 800 is a **separate** HD nylon bag with AC & DC Chargers and Jumper Cable set tied onto PowerBox 800 unit.

## **Mobile Kit # 4**

Aluminum tool-case marked "WPGARES VE4YWG Kit #4" normally kept in WFPS Mobile Command Unit.

GE Phoenix 16 channel VHF Radio S/N 5120108 "VE4YWG-X"

Channels programmed include ARES Simplex frequencies, city-wide and local repeaters and three major rural repeaters (most of our frequency list but not all)

Astron Power Supply S/N 98492124 Marked "VE4YWG-AV"

2 pair headphones with "Y" adapter

"cheater" plug to allow connection from radio direct to WFPS Mobile Command DC plugs

ARES logsheets & tactical message forms

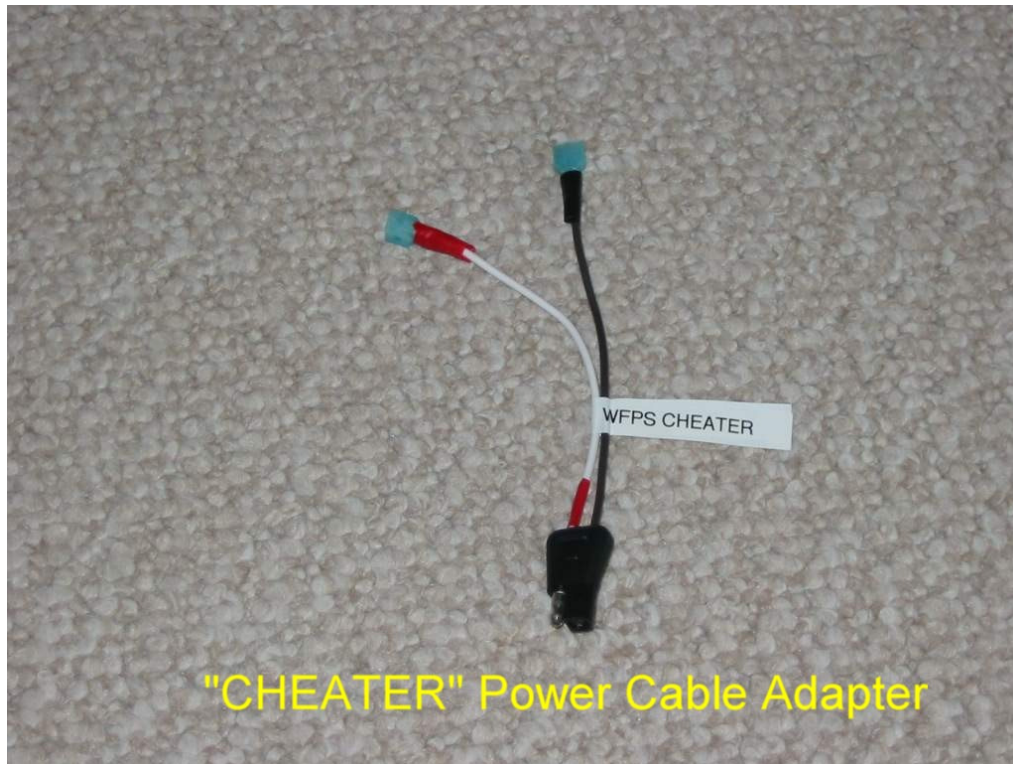
WPGARES Emergency Contacts List

List of programmed frequencies

Note in a page protector:

"You must be a licenced Amateur Radio operator to legally transmit with this radio"

## WFPS “CHEATER” PLUG



The DC plugs available in the rear of the WFPS Mobile Command vehicle are “trailer” type – it is their vehicle not ours so we must conform to their vehicle’s infrastructure.





Kit # 4 Closed



Top View, Kit # 4 Open

## **Mobile Kit # 5**

Realistic HTX-242 2m Mobile                      S/N 0000007    Inscribed VE4YWG

Pyramid PS-14KX Power Supply                      Inscribed VE4YWG

2m ¼ Wave Mag-Mount Antenna                      Inscribed VE4YWG

30 Feet RG-8X Coax (with coupler)                      Labelled VE4YWG & Wpg ARES

HTX-242 Programmed Memory List

WPGARES Frequency List

ARES Roster

Tactical Message Forms

Log-sheets

Two 15 Amp DC Fuses (for mobile radio power lead)

Envelope of ARES Brochures

Sign “For use by licenced Amateur Radio operator only” to leave over radio

Blue plastic 21” Mastercraft toolbox (marked Winnipeg ARES Kit #5 on the outside, MBQ’s WPGARES business card taped inside lid).

This kit is intended for a stand-by application where 2m capability is required in a communications disruption but otherwise will not be in use – an example would be an Emergency Social Services Reception centre during a flood event.

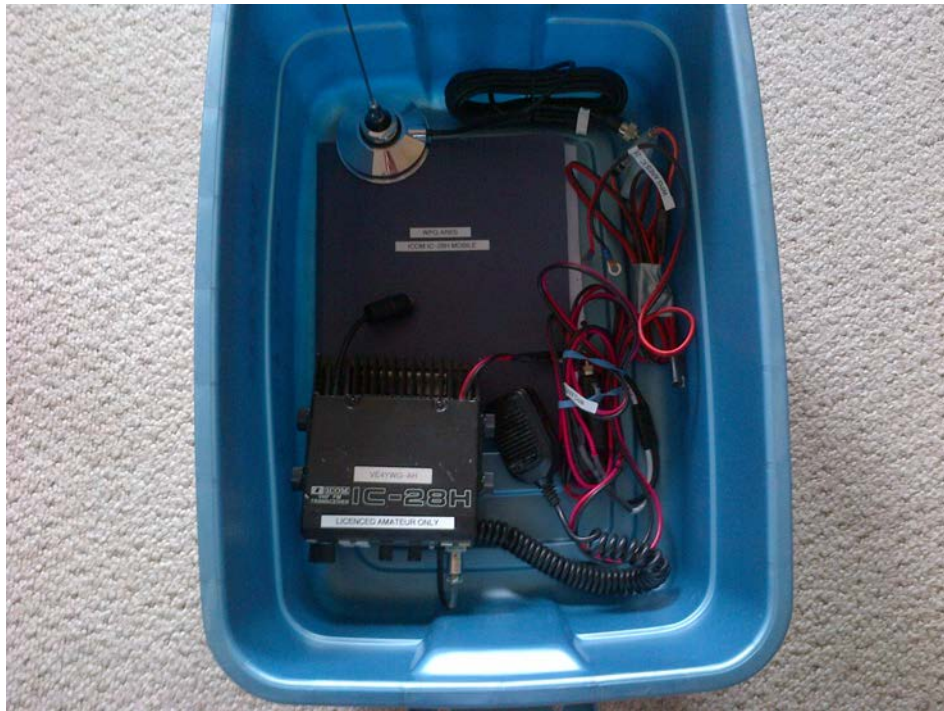
### **Mobile Kit #6**

This is a minimal kit intended for mobile use only. IC-28H 2m transceiver with CTCSS tone board so that it always transmits a 127.3 Hz CTCSS tone.

Radio, HD DC power cable ending in a cigarette lighter plug, DC power cable ending in Ring Terminals, mag-mount antenna, and duo-tang with memory list and operator's manual all contained in a blue plastic tub.



Kit # 6 Closed



Kit # 6 Open

## Mobile Kit # 7

This is a minimal kit intended for mobile use only. IC-229H transceiver with no DTMF function.

Radio, HD DC power cable ending in a cigarette lighter plug, DC power cable ending in Ring Terminals, mag-mount antenna, and duo-tang with memory list and operator's manual all contained in a blue plastic tub.



Kit # 7 Open



## WINNIPEG POLICE SERVICE YAESU FT-212RH AMATEUR TRANSCEIVER

Normally stored in **Police Command Unit** (WPS #3082), a converted "Handi-Transit" van. Has "cigarette-lighter" type plug on power cord as well as DC power Cord to a small AC power supply. ARES Message Forms in lid of case (behind the foam padding). Radio programmed per ARES frequency list with all ARES simplex frequencies, city-wide repeaters, local repeaters and three major rural repeaters.

Red duo-tang contains:

- Emergency Contact List
- Operator's Manual
- Programmed frequencies list.

Several 12 volt outlets in rear of truck.

Amateur 2m antenna on right-front fender. VHF Antenna Cable between dash & front door.

Police Support Unit (WPS #3081) has 2m antenna right-front fender - NO RADIO.



WPS 2m Kit Open

## **Beam Antenna Kit**

The kit consists of a 2m FM beam or Yagi antenna (Cushcraft A148-3S), two pieces of interlocking mast, 30 feet of RG-8X feed-line, some hand tools, and a carrying tube.

### **ANTENNA ASSEMBLY**

The antenna is stored disassembled and must be put together for use. The antenna itself consists of four main parts:

BOOM, 85 cm long with black end caps

REFLECTOR, 104 cm long (color coded YELLOW)

DRIVEN ELEMENT, 96.5 cm long (color coded RED)  
with matching assembly (do not take it apart!)

DIRECTOR, 91 cm long (color coded GREEN)

All three of the elements attach to the boom from the same side, OPPOSITE the “U-Bolt” for the mast.

The REFLECTOR (color coded YELLOW) goes on the boom near the back, next to the U-bolt.

The DRIVEN ELEMENT (color coded RED) goes on the middle of the boom. The white cap on the end of the matching stub should point UP.

The DIRECTOR (color coded GREEN) goes on the end or front of the boom.

### **CARRYING TUBE**

The container for the beam is a 5 1/2ft X4” PVC pipe. It is capped at one end and has a removable cap that is attached to the pipe with a short chain and has an adjustable carrying strap.

Inside, pop riveted at the top and bottom of the pipe are straps to hold the two pieces of 5 ft. mast. These straps will hold the mast in place and prevent them from crushing the beam.

Also enclosed within the 4” pipe is a short piece of 2” tubing containing tools to put the beam together.

## TOOLS

Tools and spare hardware are contained in a two inch tube, inside the large carrying tube.

An envelope of spare hardware is included, in the event that a screw, washer, or nut for attaching the elements to the boom is dropped during assembly. NOTIFY MBQ if this package is opened so that any parts utilized can be replaced.

Hand-tools included are:

Nut Driver 11/32"	element hardware
Slot Screwdriver 3/16"	element hardware, mast clamps
Robertson #2 Screwdriver	spare element bolts
Combination Wrench 1/2"	U-bolt nuts

## MAST

Two pieces of 5 foot galvanized mast are in the carrying tube. The swaged piece is the lower section, it fits into the upper section.

The assembled mast can be attached with hose clamps to an auxiliary lighting mast, railing, or fence.

## TAKE DOWN

When removing the elements from the boom, **DO NOT take the matching stub** off the driven element!

The long bolt on the matching network (by red tape) must be moved back, otherwise assembly is too wide to fit down the carrying tube.

Put the two pieces of mast into the tube FIRST, gently followed by the antenna boom.

Next, slide the TOOLS tube into the carrying tube.

Next, GENTLY slide the elements into the carrying tube. Then place the small plastic bag with the tape and the hose clamps into the tube.

Lastly, put the coax feed-line into the top of the carrying tube.





Beam Kit laid out  
(Coax feed-line not shown)

## **2m Ringo Ranger Kit**

This is a Cushcraft ARX-2 2m vertical, only need to put the major components together for use. It comes with a small tool bag consisting of:

- Medium Slotted Screwdriver

- # 2 Robertson Screwdriver

- ½" Combination Wrench

- ¾" Combination Wrench

- ½" Nut Driver

- ¾" Nut Driver.



ARX-2 Antenna During 2011 Flood Operations

After use, major components should be separated and taped together – don't forget the tools & tool-bag.



Ringo Antenna & Accessories Stowed, Ready for Transport  
(Blue bag with lime color trim contains hand-tools for assembly)

## HT Kits

We have three HT kits. HT Kits # 1 & 2 have a mix of Realistic HTX-202 and Maxon HR-146 2m HTs programmed to the Winnipeg ARES Frequency List (four in each kit). These two kits are each in an aluminum tool case. Each HT has a rechargeable battery.

Accessories in each kit include AC chargers, DC-DC Cords, Speaker/Mics, instruction manuals, “AA” alkaline cases and some AA alkaline cells. HT Kits # 1 & 2 look virtually identical.



HT Kit # 2 Open

HT Kit # 3 is four IC-2AT HTs that have been updated with an SS-64 CTCSS Chip so that they always transmit a 127.3 Hz Tone and two HTX-202s. This kit is in a soft-sided computer bag. AC chargers and some Alkaline Battery Cases.





HT Kit # 3



HT Kit # 3 Open