Prince William County ARES

Quick Reference Guide

version: 7.0
Printable (PDF) Version
Return to PWCARES

Index

- Contact Information
- IN THE EVENT OF AN ACTIVATION
- Preprogrammed Memory Channels and PWCARES Frequency List
- Local Frequencies (Virginia)
- Local Frequencies (Maryland)
- Go-Kit Essentials
- Incident Command System Forms
- CSALTT
  - Resource Form
- Traffic Handling Quick Reference
  - *Hotel* Codes
  - Group One
  - Group Two
- Maps
  - Shelters
  - Hospitals
  - Other places of interest
- Templates and other tools
  - Clarence Box
  - Forms
    - ICS Forms
  - Misc
  - FT–8800 Quick Reference Guide
  - IC–2820 Quick Reference Guide

Contact Information

Name	Home	Cell	Work
David A. Lane, KG4GIY, EC	(703) 361–3042	**(703) 628–3868**	(571) 527–6539
Larry Bates, K0LB, AEC	(703) 590–2695	(571) 352–2996	
Andy Gamponia, KJ4MTP, AEC		(703) 786–4651	

Ray Hutt, AA4SI, AEC (703) 670–2879 (703) 203–2210

If a repeater goes off-line, monitor the OUTPUT for instructions on which frequency to turn to!

IN THE EVENT OF AN ACTIVATION

1. Make sure your home and family are secure before responding to any request for help.
2. If instructed, tune to the frequency indicated by the phone call or email. Otherwise, tune to 147.240+ or 146.970– and check into the Net.
3. Add the last minute items to your "go-kit" and make sure you have direc- tions to your deployment location and the necessary identification.
4. Report as indicated. Remember that you may be the first operator on scene. Be polite and helpful and if possible, choose the best tactical loca- tion to set up the station.
5. If asked to move by a site manager, MOVE. If you can ascertain the rea- son for the move, please note it and pass it on to the EC for the after action report.
6. Always remember to get permission to "check-out" of a net, even if it is for a bathroom break. Never leave your radio without telling the NCS.
7. At the end of an activation, return the operating space to "normal." Make sure the site manager knows you are leaving. Check-out of the net, unless you have already been instructed to secure.

Index

Preprogrammed Memory Channels and PWCARES Frequency List

Memory Channel	Memory Name/Purpose	Frequency	Tone
1	OVH2M/Operations and Logistics	146.970 -	100 Hz
2	WWI2M/Operations and Logistics	147.240 +	107.2 Hz
3	NVFM2M/Fairfax ARES	146.790 -	77.0 Hz
4	NVREGN/Northern Virginia Regional Operations and Coordination	146.910 -	77.0 Hz
5	SKYWARN/National Weather Service—Sterling	147.300 +	146.2 Hz
6	MDREGN/Maryland Regional Operation and Coordination	147.105 +	
7	MTVERN/Mount Vernon (Alexandria)	146.655 -	141.3 Hz
8	ALEX2M/Alexandria ARES	147.315 +	
9	ARL2M/Arlington ARES	145.470 -	
10	FAQ2M/Fauquier ARES	147.165 +	167.9 Hz

11	LOU2M/Loudon ARES	145.310 -	
12	DULLES/Dulles Airport 2m machine, max 15w out	147.330 +	203.5 Hz
21	OVH440/Command and Control/Operations and Logistics	442.200 +	
22	WWI440/Command and Control/Operations and Logistics	444.900 +	127.3
23	FALLSC/Fall Church ARES	442.425 +	91.5 Hz
24	NERA/Main Repeater, linked system	442.725 +	107.2 Hz
25	NERA/DC	449.975 -	107.2 Hz
26	KT4ER/Bull Run Mountain	448.325-	100.0 Hz
27	NERA/Bull Run Mountain	447.775 -	67.0 Hz
28	OVHMAN/Ole Virginia Hams Manassas Repeater	443.500 +	110.9 Hz
31	VHF1/PWCARES VHF Channel 1/Operations and Logistics	147.525	
32	VHF2/PWCARES VHF Channel 2/Operations and Logistics	146.475	
33	MEDCOM/InterHospital communications/MedComm back-up	146.445	
34	ARC-CHP/Red Cross Chapter-to-Chapter communications	146.535	
35	ARC-FLD/Red Cross Field Operations	146.420	
36	XBAND1/Combine with 147.525—VHF1 (left)	445.950 (right)	100.0 Hz
37	XBAND2/Combine with 146.475—VHF2 (left)	446.050 (right)	100.0 Hz
38	XBAND3/Combine with 146.970—OVH2M (left)	445.975 (right)	100.0 Hz
39	XBAND4/Combine with 147.240—WWI2M (left)	446.025 (right)	100.0 Hz
40	Packet	145.730	
41	APRS	144.390	

Index

Local Frequencies

Virginia

Jurisdiction	Primary Repeater	Secondary Repeater	Simplex
Virginia Region 146.910 (Primary)	147.300 (alt/liaison) 145.210 PL 141.3 (Western Counties)		3947 kHz 7240 kHz (alt) 145.730

Alexandria	146.655 PL 141.3	147.315	146.490
Arlington	145.470		146.580
Fairfax	146.790	146.910 and 224.100 145.340 (DV) 448.035 (DV)	146.415
Falls Church	447.425 PL 91.5	147.210	445.975 147.435
Fauquier	147.165 PL 167.9		146.430/147.500
Loudoun	145.310	443.225 PL 103.5 (Portable) 147.330 PL 203.5 (Dulles Airport 15W)	147.480
Prince William	146.970 (Manassas) PL 100 147.240 (Woodbridge) PL 107.2	444.900 (Woodbridge) 442.200 (Manassas) 442.5125 (Manassas DV) 147.345 (Quantico) PL 167.9	147.525 (Primary) 146.475 (Secondary) 445.925 (Secondary)
Skywarn	147.300		
Medcomm			146.445
American Red Cross (Chapter to Chapter)			146.535
American Red Cross (On-Site)			147.420
Northern Virginia Traffic Net			147.300

Index

Local Frequencies

Maryland

Jurisdiction	Primary Repeater	Secondary Repeater	Simplex
Maryland Region	147.105	146.730	3920 kHz
Anne Arundel	146.805	147.105	
Calvert	146.985 PL 156.7		146.580
Charles	145.390 PL 186.2	443.700	
District of Columbia	147.090	147.045	146.505
Frederick	145.430		
Hagerstown	147.060		
Montgomery	146.955	145.450	146.460
Prince George	146.610	146.880 and 147.150 PL 114.8	147.540
Skywarn	147.300		
Towson	147.030		

American Red Cross (Chapter to Chapter)		146.535
American Red Cross (On-Site)		147.420
Baltimore Traffic Net	146.67	

Index

Go-Kit Essentials

Must Have Gear

- Identification (driver's license, FCC license, hospital IDs)
- Radio (at least a 5w 2m/440 HT w/ batteries and a copy of the manual)
- Antenna (1/4 wave, magnetic mount preferred)
- Stationary Supplies (Paper, pen-cil/pen, TP/paper towel, ARRL message form, IC–213)
- Personal medications
- Appropriate clothing and foot-wear (including a hat and rain coat)
- Food and water (snacks, etc.)

Important Things

- Money (small bills, change)
- Extra power (spare dry cell battery case and batteries, "wall wart" charger, pig tails, power strips)
- Antenna connectors (SMA/BNC/PL259 and assorted others)
- Noise reductions devices (headphones/boom mikes)
- Reference material (frequency charts and repeater/net guides)
- Flashlight, multi-tool, duct/gaffers tape, loose wire, cable ties, work gloves
- First-aid kit

Index

Incident Command System Forms

As of 2013, FEMA has consolidated the forms into a single PDF book. Relvant forms are in the Forms if you need single forms.

The entire book is available at http://www.pwcares.org/html/ics.html

205 Incident Radio Communications Plan
205a Communications List
213 General Message
214 Unit Log

All ARES/RACES members should become familiar with the forms listed above. At a minimum, each

member should have a copy of ICS–213 and ICS–214 with their kit at all times, in addition to the ARRL radiogram form.

AECs and NCSs should become familiar with all the forms, especially the work-sheets as they may be used to draft a communications plan that is beyond the current plan, as conditions warrant, or as part of an overall support function to the County in the event of a RACES activation.

Index

CSALTT

for ordering provisions, resources, or teams

C-capability being requested
S-size
A-amount being requested
L-location the mission/resources are being deployed
T-FEMA Type
T-time the supplies/resources are needed

Index

Prince William County's Resource Form

PRINCE WILLIAM COUNTY EOC RESOURCE REQUEST FORM | MISSION #_____

A. REQUEST FOR ASSISTANCE ALL 9 FIELDS REQUIRED – Use "UNK" if unknown or "N/A" if not applicable.		
1. Requestor's Name (please print)	2. Title	3. Section / Branch / ESF
4. Requestor's Dept. or Organization	5. Phone # (10 digit)	6. Email Address

7. Description of Requested Assistance (use plain language – NO acronyms)			
C-Capability			
S-Size			
A-Amount			
L-Location	Delivery Site Location (Address, City, Zip)	Site Point of Contact - Name and Title	
	Delivery Site Geolocation (☐USNG or ☐Decimal Degrees)	Site 24 Hr. Phone #	Site Radio Talkgroup
T-Type	Tier I/II Resource Typing (if known)		
T-Time	Date & Time Needed By	Estimated Duration of Need (days)	
8. Priority	☐ Lifesaving ☐ Life Sustaining ☐ High ☐ Normal	9. Date & Time Form Completed	

B. EOC OPERATIONS SECTION REVIEW			
Branch Review (Name & Branch)		Date & Time	
Recommended Action			
Operations Chief Review (Name)		Date & Time	
ROUTING	☐ PWC Direct Support _____	☐ Procurement ☐ State / Mutual Aid	
Mission Controller Name, Date, Time		Checked for Duplicates?	
PWC EOC Mission Number		Event Name	

Resource CSALTT Section 1

B. EOC OPERATIONS SECTION REVIEW			
Branch Review (Name & Branch)		Date & Time	
Recommended Action			
Operations Chief Review (Name)		Date & Time	
ROUTING	☐ PWC Direct Support _____	☐ Procurement	☐ State / Mutual Aid
Mission Controller Name, Date, Time		Checked for Duplicates?	
PWC EOC Mission Number		Event Name	

C. EOC LOGISTICS SECTION ROUTING		
DIRECT SUPPORT	PROCUREMENT	STATE / MUTUAL AID
Assignment to: ESF(s) or Response Partners	Cost Tracking Info: Ascend PO or P-card holder name & last 4	SMAA Info: for VDEM WebEOC

D. RESOURCE IDENTIFICATION			
Resource Description			
Point of Contact Name		24 Hour Phone (10 Digit)	
Delivery Location	☐ As Requested (Part A) ☐ Other:		
Anticipated Arrival (Date & Time)		Provider Tracking #	

E. RESOURCE UNIT TRACKING AND MISSION DISPOSITION			
STATUS	DATE	TIME	BY (NAME)
Resource provider is **MOBILIZING**			
Resource(s) are **IN ROUTE** to location			
Resource(s) have **ARRIVED** at location			
Resource(s) are **DEMOBILIZING**			
Mission **COMPLETE**			
Mission is **ON HOLD** or **CANCELLED**			
Notes:			

Form PWC ###; Rev. 3/2018 WHITE COPY – Resource Unit | YELLOW COPY – Logistics | BLUE COPY – Operations | GREEN COPY – Requestor

Resource CSALTT Section 2

Index

Traffic Handling Quick Reference

Hotel Codes

HXA (Followed by number) Collect landline delivery authorized by addressee within [x] miles. (If no number, authorization is unlimited.)
HXB (Followed by number) Cancel message if not delivered within [x] hours of filing time; service originating station.
HXC Report date and time of delivery (TOD) to originating station.
HXD Report to originating station the identity of station from which received, plus date and time. Report identity of station to which relayed, plus date and time, or if delivered report date, time and method of delivery.
HXE Delivering station get reply from addresses, originate message back.
HXF (Followed by number) Hold delivery until (date).

HXG Delivery by mail or landline toll call not required. If toll or other expense involved, cancel message and service originating station.

Group One—For Possible *Relief Emergency* Use

Emergency/priority messages originating from official sources must carry the signature of the originating official.

ARL Code	Meaning
ONE	Everyone safe here. Please don't worry.
TWO	Coming home as soon as possible.
THREE	Am in [name of] hospital. Receiving excellent care and recovering fine.
FOUR	Only slight property damage here. Do not be concerned about disaster reports.
FIVE	Am moving to new location. Send no further mail or communication. Will inform you of new address when relocated.
SIX	Will contact you as soon as possible.
SEVEN	Please reply by Amateur Radio through the amateur delivering this message. This is a free public service.
EIGHT	Need additional [number] mobile or portable equipment for immediate emergency use.
NINE	Additional [number] radio operators needed to assist with emergency at this location.
TEN	Please contact [name]. Advise to standby and provide further emergency information, instructions or assistance.
ELEVEN	Establish Amateur Radio emergency communications with [operator] on [frequency] MHz.
TWELVE	Anxious to hear from you. No word in some time. Please contact me as soon as possible.
THIRTEEN	Medical emergency situation exits here.
FOURTEEN	Situation here becoming critical. Losses and damage from [event] increasing.
FIFTEEN	Please advise your condition and what help is needed.
SIXTEEN	Property damage very severe in this area.
SEVENTEEN	REACT communications services also available. Establish REACT communication with [operator] on channel [number].
EIGHTEEN	Please contact me as soon as possible at [number/location].
NINETEEN	Request health and welfare report on [individual] . (State name, address and telephone number.) *Should not be used*.
TWENTY	Temporarily stranded. Will need some assistance. Please contact me at [number/location].
TWENTY ONE	Search and Rescue assistance is needed by local authorities here. Advise availability.
TWENTY TWO	Need accurate information on the extent and type of conditions now existing at your location. Please furnish this information and reply with-out delay.
TWENTY THREE	Report at once the accessibility and best way to reach your location.
TWENTY	Evacuation of residents from this area urgently needed. Advise plans for help.

FOUR	
TWENTY FIVE	Furnish as soon as possible the weather conditions at your location.
TWENTY SIX	Help and care for evacuation of sick and injured from this location need-ed at once.

Group Two—Routine Messages

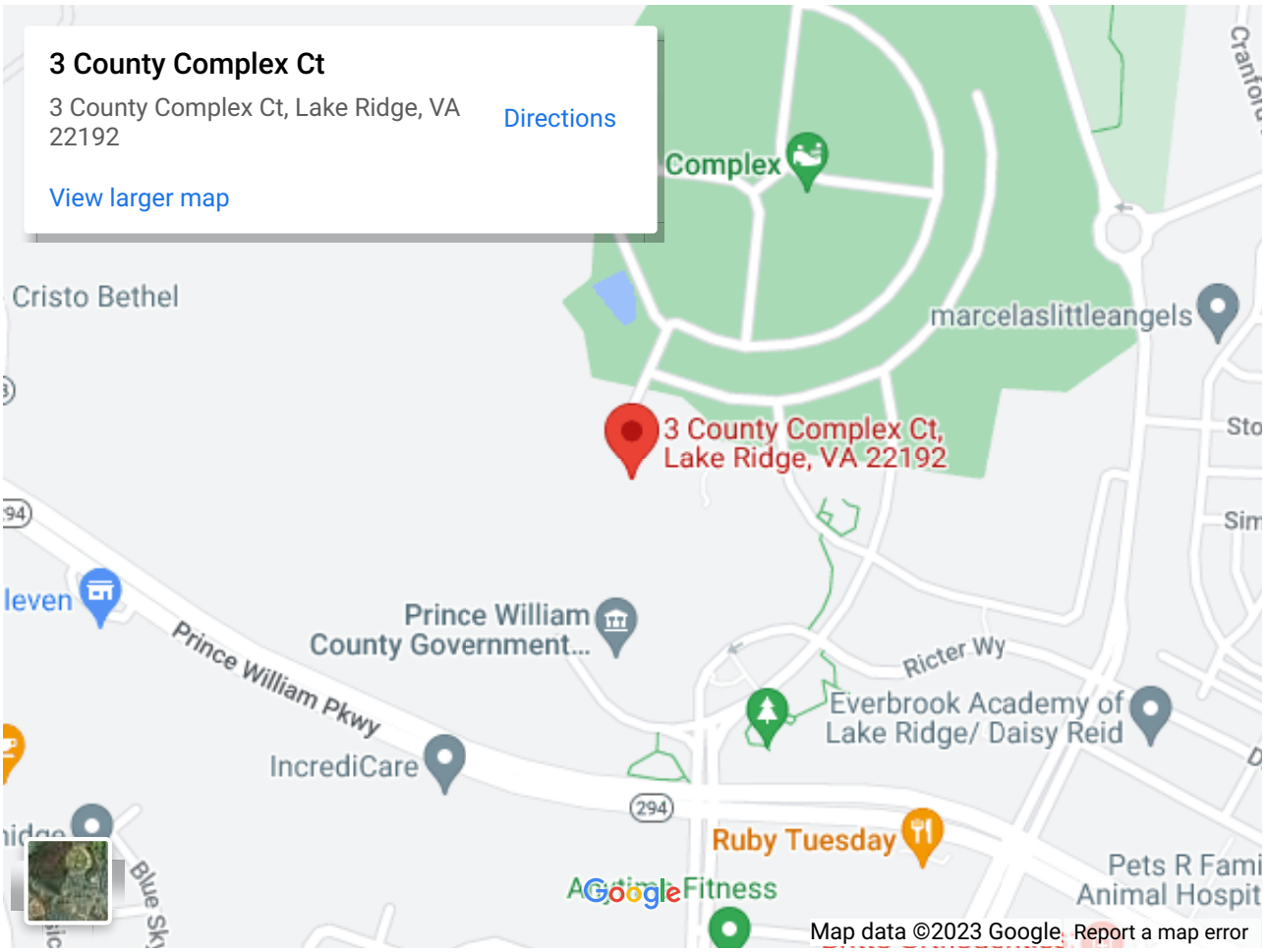
ARL Code	Meaning
FORTY SIX	Greetings on your birthday and best wishes for many more to come.
FIFTY	Greetings by Amateur Radio.
FIFTY ONE	Greetings by Amateur Radio. This message is sent as a free public service by ham radio operators at [club]. Am having a wonderful time.
FIFTY TWO	Really enjoyed being with you. Looking forward to getting together again.
FIFTY THREE	Received your [item]. It's appreciated; many thanks.
FIFTY FOUR	Many thanks for your good wishes.
FIFTY FIVE	Good news is always welcome. Very delighted to hear about yours.
FIFTY SIX	Congratulations on your [event], a most worthy and deserved achievement.
FIFTY SEVEN	Wish we could be together.
FIFTY EIGHT	Have a wonderful time. Let us know when you return.
FIFTY NINE	Congratulations on the new arrival. Hope mother and child are well.
SIXTY	Wishing you the best of everything on [date].
SIXTY ONE	Wishing you a very Merry Christmas and a Happy New Year.
SIXTY TWO	Greetings and best wishes to you for a pleasant [holiday] holiday season.
SIXTY THREE	Victory or defeat, our best wishes are with you. Hope you win.
SIXTY FOUR	Arrived safely at [location].
SIXTY FIVE	Arriving [at location] on [date/time]. Please arrange to meet me there.
SIXTY	DX QSLs are on hand for you at the [regional] QSL Bureau. Send [quantity] self addressed

SIX	envelopes.
SIXTY SEVEN	Your message number [message number] undeliverable because of [reason]. Please advise.
SIXTY EIGHT	Sorry to hear you are ill. Best wishes for a speedy recovery.
SIXTY NINE	Welcome to the [organization]. We are glad to have you with us and hope you will enjoy the fun and fellowship of the organization.

Index

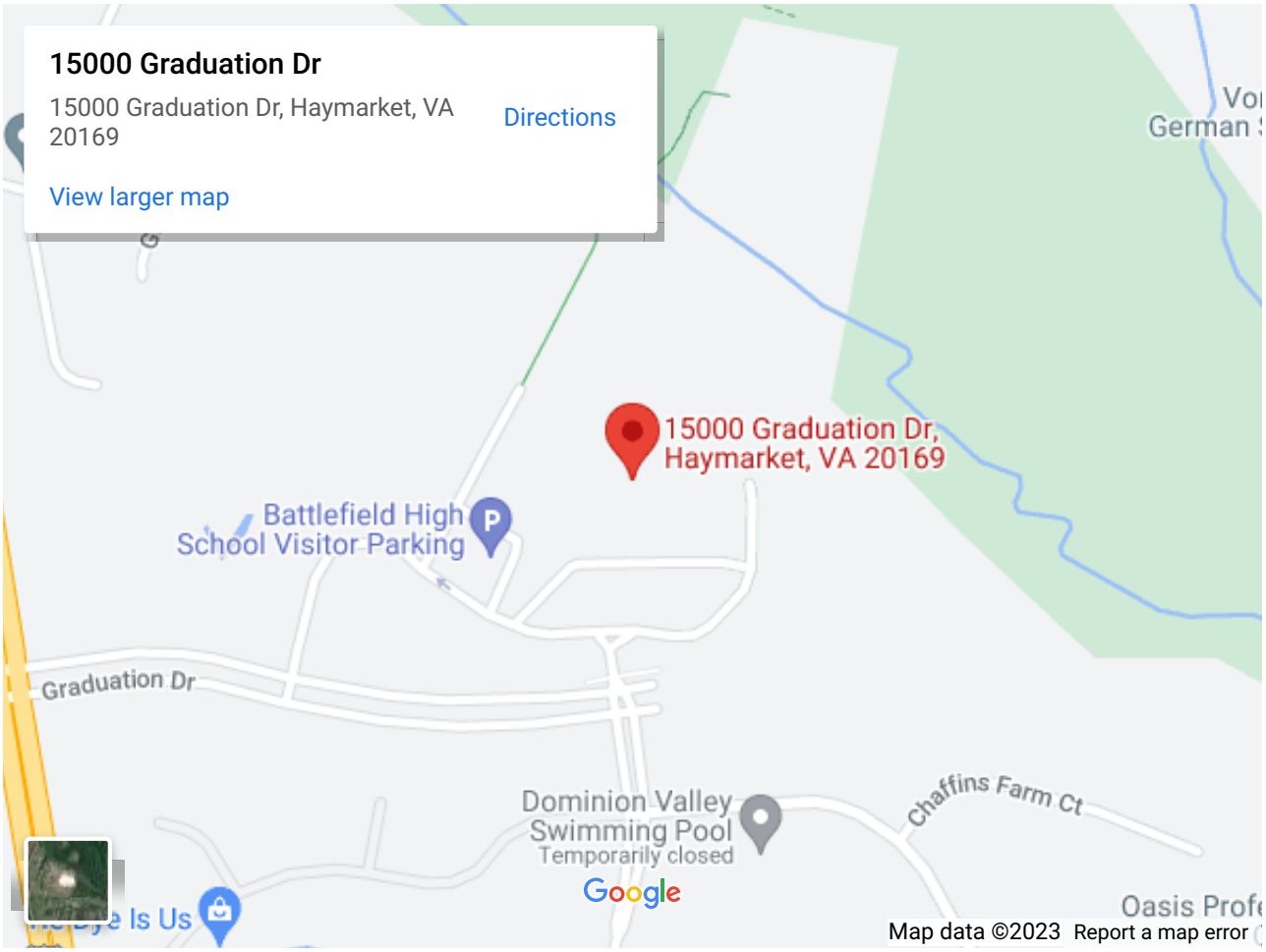
Maps

Prince William EOC: 3 County Complex Court, Prince William, VA

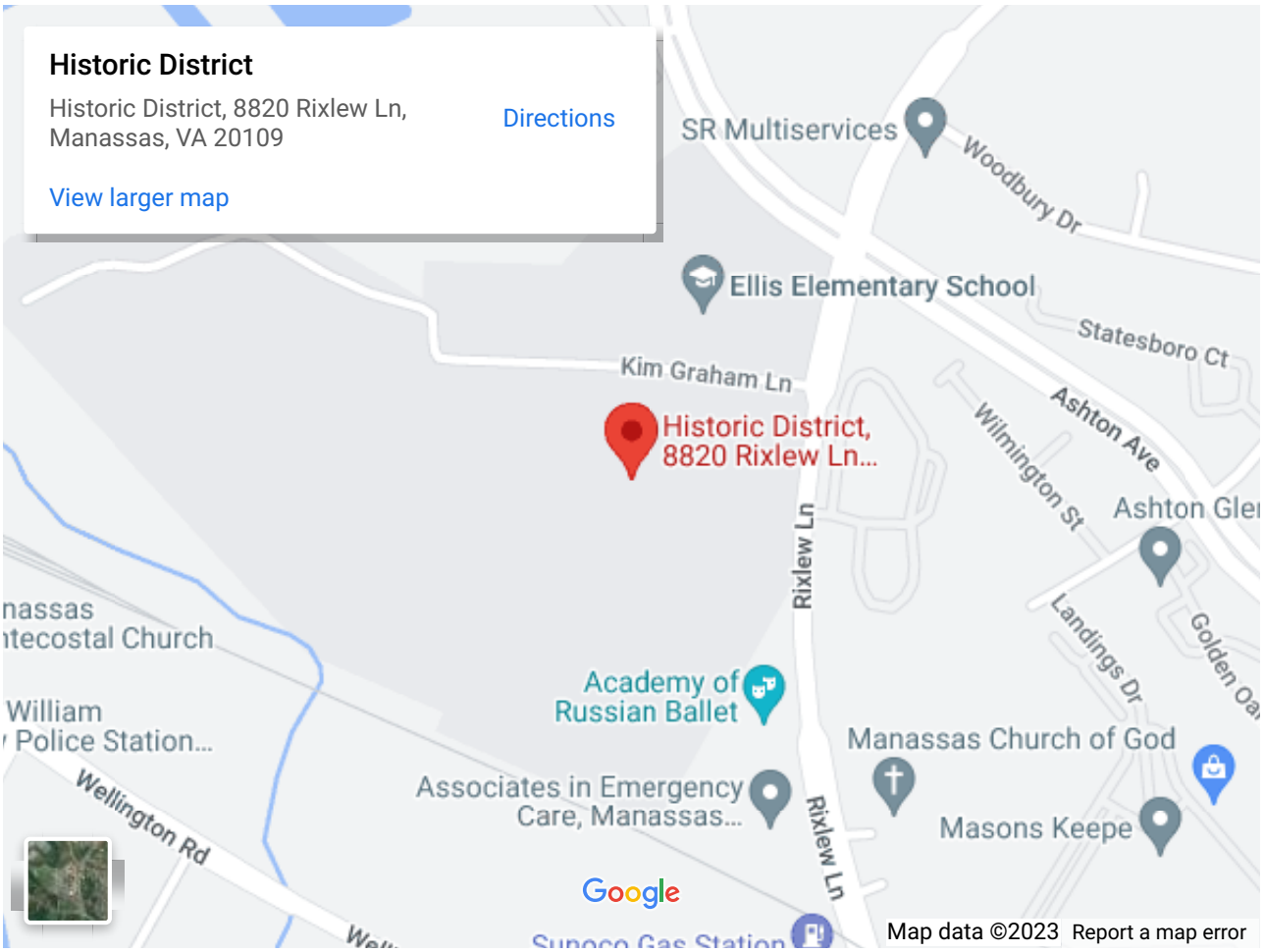


Shelters

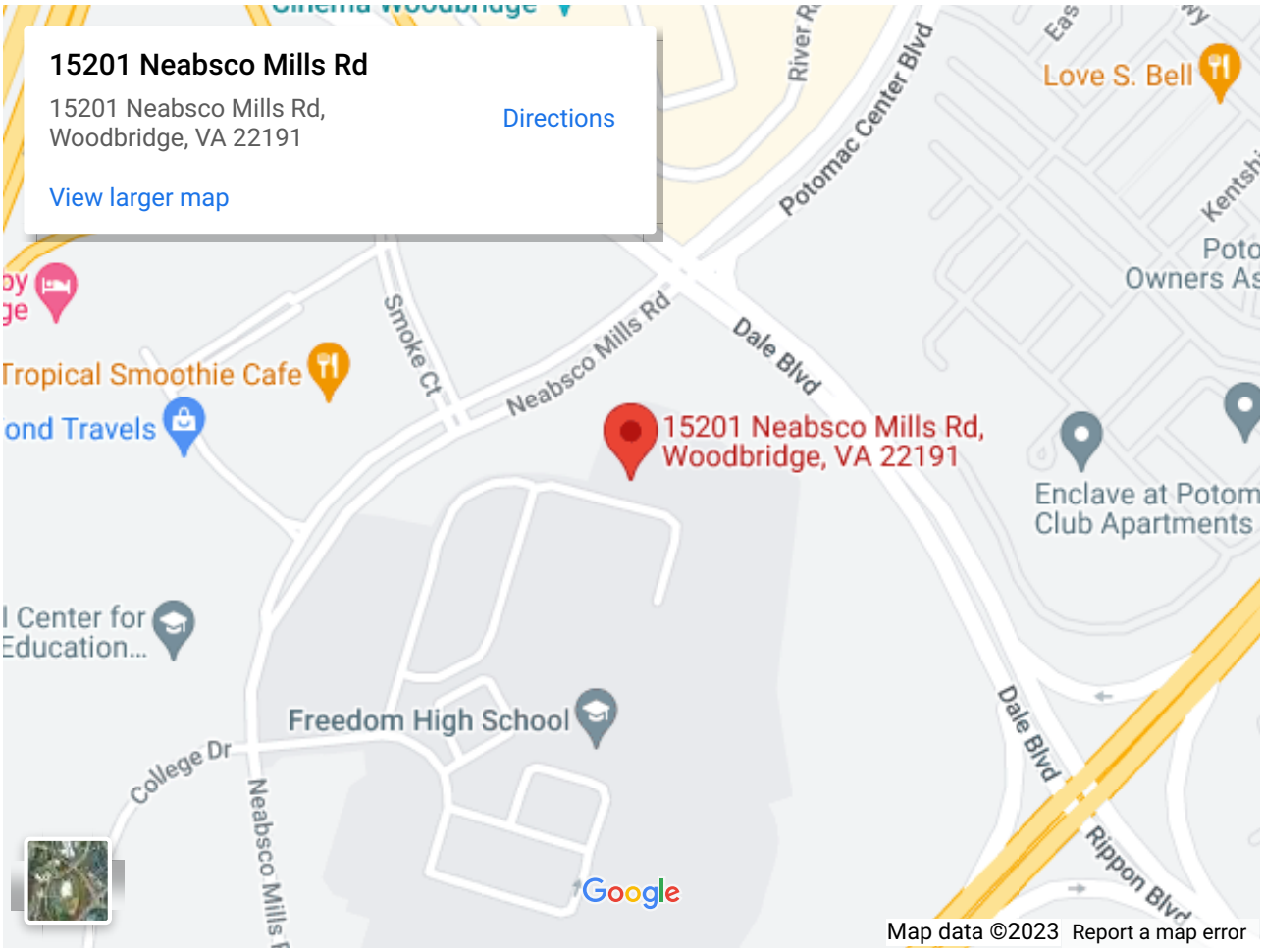
Battlefield High School: 15000 Graduation Drive, Haymarket, VA



Unity Reed High School: 8820 Rixlew Ln., Manassas, VA



Freedom High School: 15201 Neabsco Mill Road, Woodbridge, VA

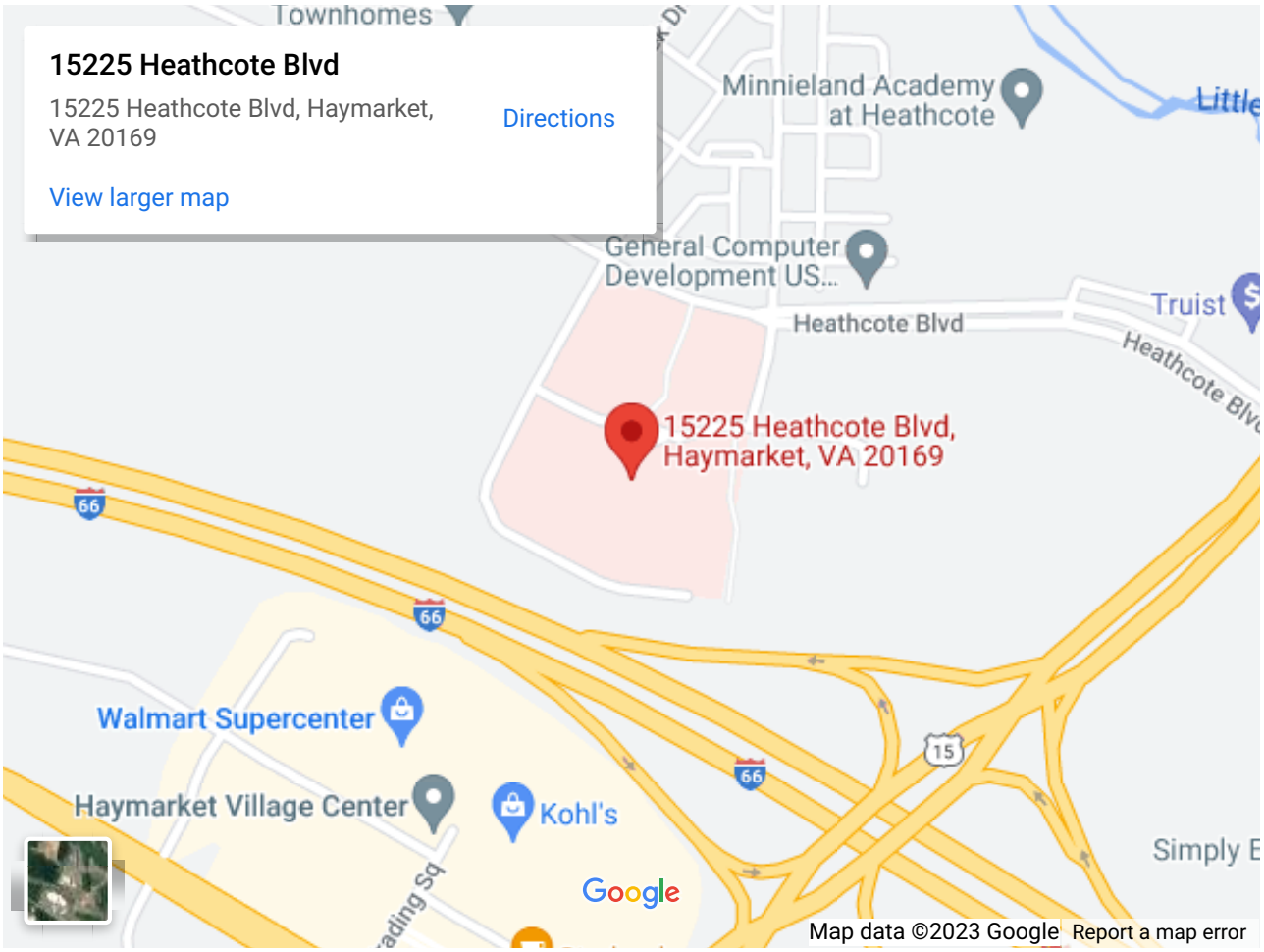


Hospitals

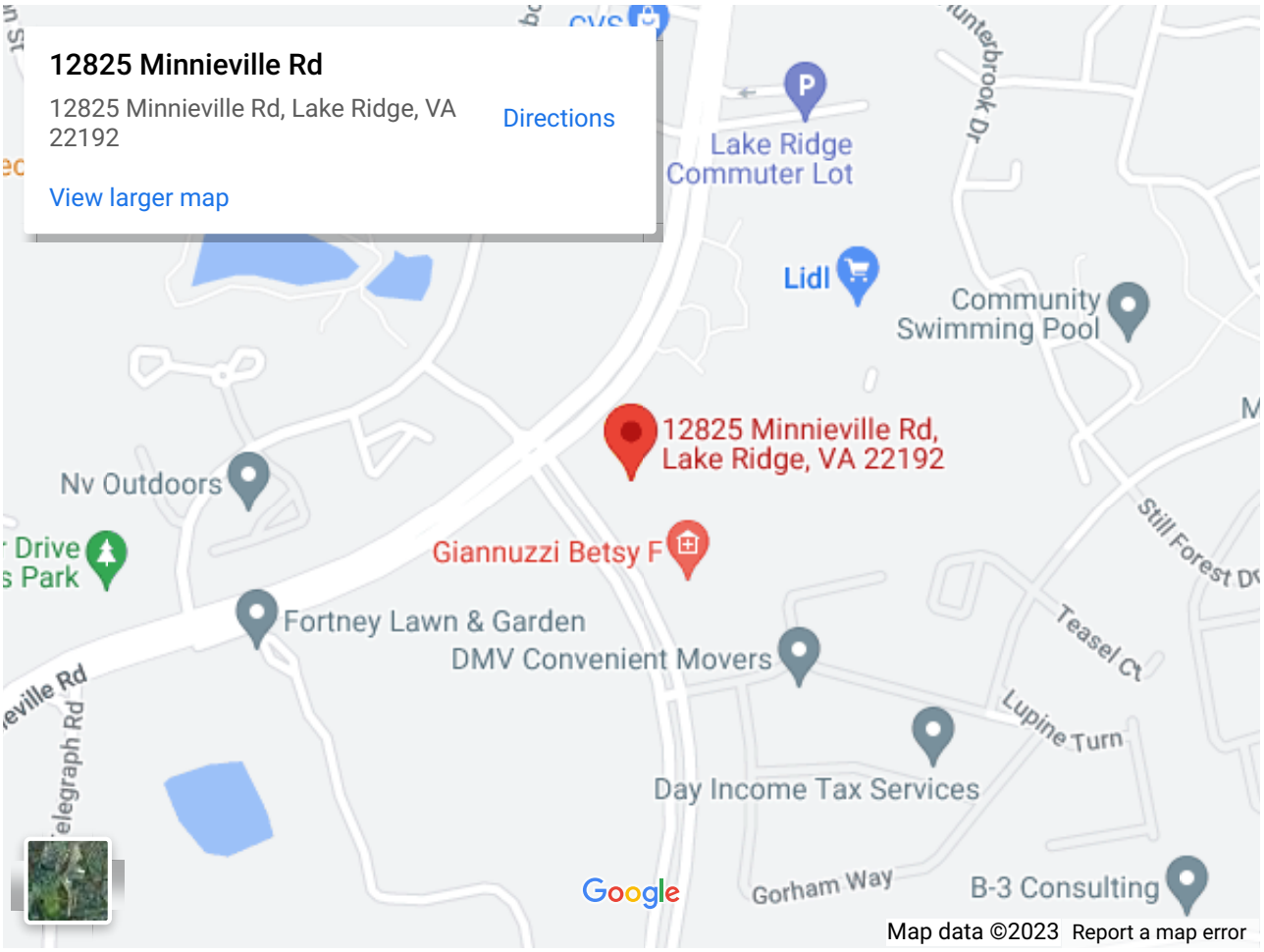
Novant Prince William: 8700 Sudley Road, Manassas, VA

Sentara Potomac: 2300 Opitz Blvd, Woodbridge, VA

Novant Heathcote: 15225 Heathcote Blvd, Haymarket, VA



Sentara Lakeridge: 12825 Minnieville Rd, Lake Ridge, VA

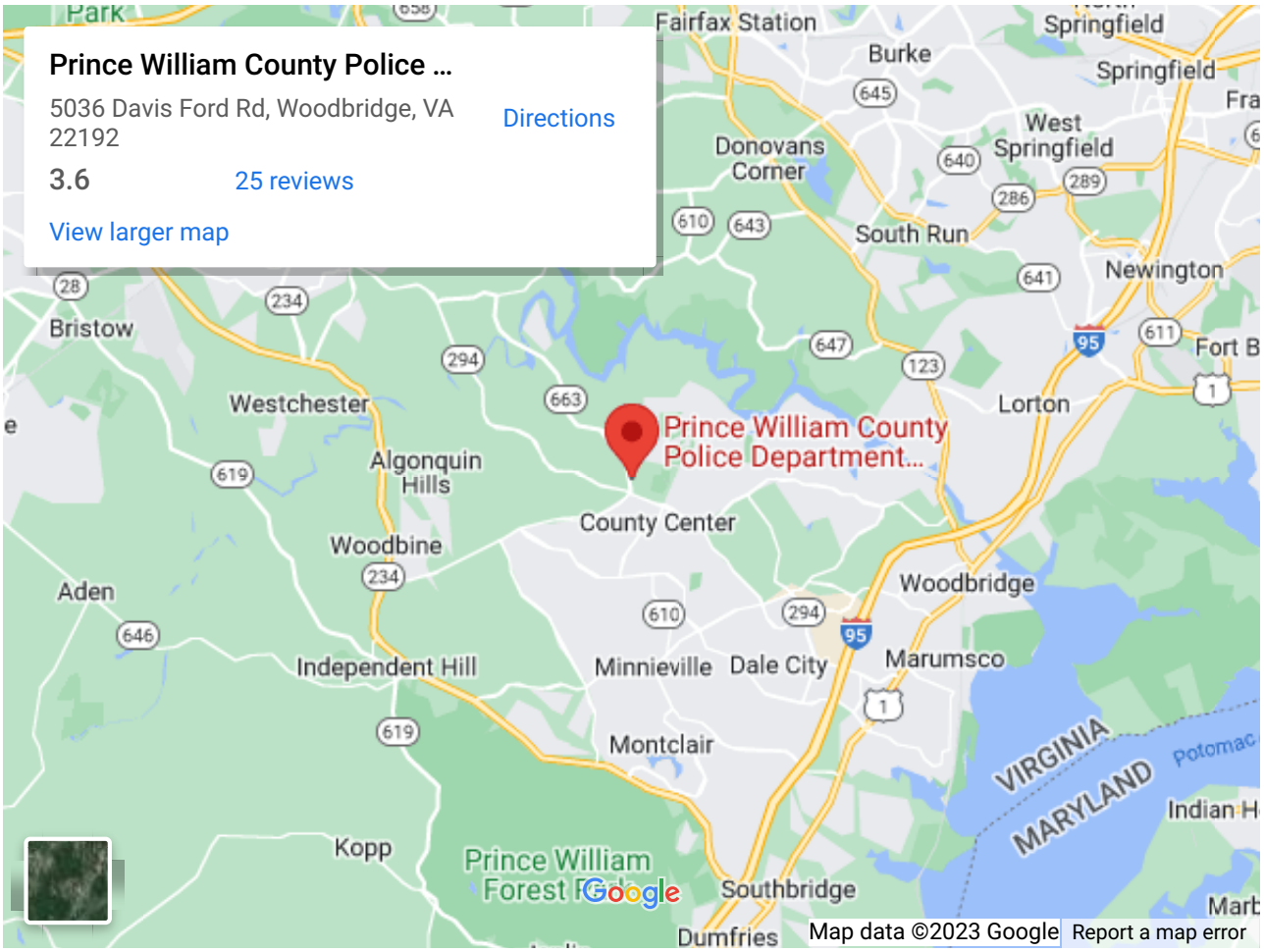


Other places of interest

Eastern District Police Department: 15948 Donald Curtis Drive, Woodbridge, Virginia 22191

Western District Police Department: 8900 Freedom Center Blvd, Manassas, VA 20110

Central District Police Department: 5036 Davis Ford Rd, Woodbridge, VA 22192



[Index](#)

Templates and other tools

Clarence Box

In the early part of 2000, Clarence Meese, K4CNM (SK) showed up with an interesting kit. It was a self-contained radio kit housed in an audio rack case. This idea caught on in the cadre and several others created boxes of their own, using a variety of things from ammo cans to tool chests. Clarence may not have originated the idea, but he did spur a whole new wave of *go-kit* creation. In 2018, Prince William County Office of Emergency Managment purchased a number of radios and associated gear for a radio cache. These radios are housed in 6U Gator cases. In honor of our friend Clarence, we refer to these, and similar cases as *Clarence boxes*. These instructions are only applicable to the Clarence boxes in storage at the EOC/Radio Cache. They do not apply to other variations.

Power Up from Storage

1. Make sure the box is right side up. The Gator case logo should be on the bottom right hand side.
2. Remove the covers by undoing the clips on each cover. Careful, there is an inverter, and several cables

in the rear cover.

3. The front of the case has the radio face, the rear has a six unit grill. Open the grill. If you are using commercial power, you will find the power cord for the power supply under the shelf. It is about six feet long, pull it gently out of the box. It should be attached to the power supply. Do not pull it out of the supply!
4. Attach the antenna cable to the radio once you have attached it to the antenna.
5. Plug in the power supply and turn it on with the switch in the front.
6. Inside the box, on the top rear, you will find a PowerGate. When you switch on the power supply, a solid green light and a blinking green light should be visible. Press the red button on the PowerGate

(labled **Suspend** in the picture) for about five seconds. When you release, the flashing green light will likely turn to a flashing blue light. It may go solid blue depending on when the battery was last charged.

7. Press the grey **On-Off** button

on the RigRunner. It should indicate watts and Amps.

8. You should be able to make room in the bottom right corner of the rear to close the grill. Close the grill.
9. Turn on the radio. Complete your set up.

Power Down for Storage

1. Turn off the radio.
2. Disconnect the antenna cable from the radio. Leave all other connections in place.
3. Press the grey **On-Off** button

on the RigRunner until the LEDs go out. Should take three seconds.

4. Press the **Suspend** button on the PowerGate. In about six to ten seconds, the charge light (usually blue, could be flashing) will turn green.
5. Turn off the power supply (if you turned it on).
6. Pack the power cable into the space under the shelf.
7. Put the inverter and cables into the cover that will go over the back part of the case. Attach the covers to the case, logo down.
8. Pack up the antenna, stand, and cables.
9. Deliver to pick up location as indicated in the demobilization instructions.

Forms

ARRL Radiogram

THE AMERICAN RADIO RELAY LEAGUE

RADIOGRAM

VIA AMATEUR RADIO

NUMBER	PRECEDENCE	HX	STATION OF ORIGIN	CHECK	PLACE OF ORIGIN	TIME FILED	DATE

TO

TELEPHONE NUMBER

THIS RADIO MESSAGE WAS RECEIVED AT

AMATEUR STATION _____ PHONE _____

NAME _____

STREET ADDRESS _____

CITY, STATE, ZIP _____

REC'D FROM	DATE	TIME	SENT TO	DATE	TIME

THIS MESSAGE WAS HANDLED FREE OF CHARGE BY A LICENSED AMATEUR RADIO OPERATOR, WHOSE ADDRESS IS SHOWN IN THE BOX AT RIGHT ABOVE. AS SUCH MESSAGES ARE HANDLED SOLELY FOR THE PLEASURE OF OPERATING, NO COMPENSATION CAN BE ACCEPTED BY A "HAM" OPERATOR. A RETURN MESSAGE MAY BE FILED WITH THE "HAM" DELIVERING THIS MESSAGE TO YOU. FURTHER INFORMATION ON AMATEUR RADIO MAY BE OBTAINED FROM ARRL HEADQUARTERS, 225 MAIN STREET, NEWINGTON, CT 06111

THE AMERICAN RADIO RELAY LEAGUE, INC. IS THE NATIONAL MEMBERSHIP SOCIETY OF LICENSED RADIO AMATEURS AND THE PUBLISHER OF *QST* MAGAZINE. ONE OF ITS FUNCTIONS IS PROMOTION OF PUBLIC SERVICE COMMUNICATION AMONG AMATEUR OPERATORS. TO THAT END, THE LEAGUE HAS ORGANIZED THE NATIONAL TRAFFIC SYSTEM FOR DAILY NATIONWIDE MESSAGE HANDLING.

PRINTED IN USA

ARRL Radiogram

ICS Forms

ICS 205 Radio Communications Plan

INCIDENT RADIO COMMUNICATIONS PLAN (ICS 205)

1. Incident Name:	2. Date/Time Prepared: Date: Time:	3. Operational Period: Date From: Time From: Date To: Time To:

4. Basic Radio Channel Use:

Zone Grp.	Ch #	Function	Channel Name/Trunked Radio System Talkgroup	Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode (A, D, or M)	Remarks

5. Special Instructions:

6. Prepared by (Communications Unit Leader): Name: _____ Signature: _____

ICS 205 | **IAP Page** _____ | Date/Time: _____

ICS 205 Radio Communications Plan

ICS 205a Communications List

COMMUNICATIONS LIST (ICS 205A)

1. Incident Name:	2. Operational Period: Date From: Time From:	Date To: Time To:

3. Basic Local Communications Information:

Incident Assigned Position	Name (Alphabetized)	Method(s) of Contact (phone, pager, cell, etc.)

GENERAL MESSAGE (ICS 213)

1. Incident Name (Optional):		
2. To (Name and Position):		
3. From (Name and Position):		
4. Subject:	**5. Date:**	**6. Time**
7. Message:		
8. Approved by: Name: _____ Signature: _____ Position/Title: _____		
9. Reply:		
10. Replied by: Name: _____ Position/Title: _____ Signature: _____		
ICS 213	Date/Time: _____	

ICS 213 General Message Form

ICS 214 Unit Log

ACTIVITY LOG (ICS 214)

1. Incident Name:	**2. Operational Period:** Date From: Time From:	Date To: Time To:
3. Name:	**4. ICS Position:**	**5. Home Agency** (and Unit):

6. Resources Assigned:

Name	ICS Position	Home Agency (and Unit)

7. Activity Log:

Date/Time	Notable Activities

8. Prepared by: Name: _____ Position/Title: _____ Signature: _____

ICS 214, Page 1 Date/Time: _____

ICS 214 Unit Log Page 1

ACTIVITY LOG (ICS 214)

1. Incident Name:	2. Operational Period: Date From: Time From: Date To: Time To:
7. Activity Log (continuation):	
Date/Time	Notable Activities

Request for Volunteers

(Complete one form for each job description.)

Request # _____ Today's Date:_____ Start Date:_____ End Date:_____

Title of Volunteer Position: _____

Agency Name: _____ Agency Contact: _____

Agency Address: _____ Phone: _____ Ext:_____

Duties: _____

_____

Volunteers must be physically able to:_____

Number Needed: _____ Dates/Hrs Needed:_____

For this position, volunteers must be at least ____ years of age.

Skills Needed (If computerized, select from skills listed on Disaster Volunteer Registration Form)

Job Skill #	Description		Job Skill #	Description

Follow-up Contacts with Requesting Agency / Clarification of Need

Date	Comments

Volunteers Referred

Name	Date	Name	Date

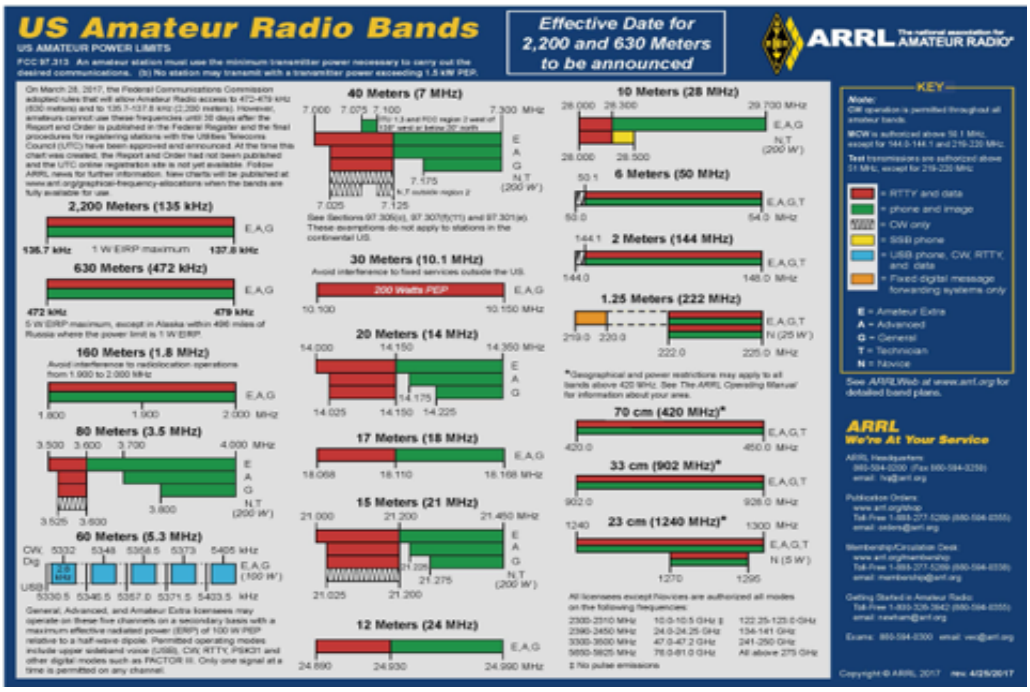
Request closed on ___/___/___ Completed ☐ No placements possible ☐ No longer needed ☐

Volunteer Prince William Volunteer Reception Center
Revised 12/7/17

VOAD Request for Volunteers

Misc

Band Plans



Band Plans

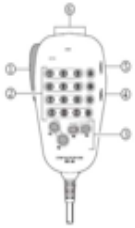
FT–8800 Quick Reference Guide

- FT–8800 (PDF)
- FT–8000 QRC Page Images

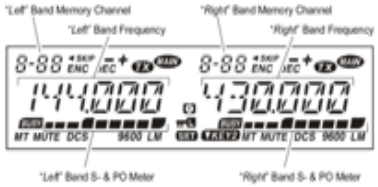
Yaesu FT-8800R Basic Operations

These instructions are not a substitute for reading the manual

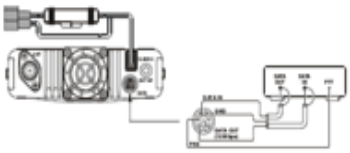
FT-8800R Front Panel: 1) *Left* Dial Knob, 2) *Left* VOL/SQL Knob, 3) Hyper Memory Buttons, 4) *Left* Side Keys 5) Set Key, 6) *Right* Side Keys, 7) *Right* VOL/SQL Knob, 8) *Right* Dial Knob



MH-48 Mic: 1) PTT Switch, 2) Keypad, 3) P buttons, 4) Lamp switch, 5) Lock switch, 6) Up/down button.



FT-8800R LCD Panel Of note: ENC = Tone Encode (TX T), DEC = Tone Decode (RX T), Main = Main (current TX) band will only appear on left or right, depending on which side is "active," MT = Memory Tune Mode



1200bps Packet Setup

NOTE: The FT-8800 is a dual receive radio with a *left* and *right* side and set of keys and knobs. The active side is identified by a **MAIN** icon in the top "right" corner of the active display. When the instructions refer to **MAIN** key or knob, they refer to the active transceiver side and do not affect the inactive side until the inactive side is made active.

To select the **MAIN** band, either press the P1 key on the mic or the **DIAL** knob on the side you wish to set active.

Prince William County ARES
FT-8800 Quick Reference Guide v 1.4

FT–8800 QRC Page 1

Preprogrammed Memory Channels and Frequencies
FT-8800

Memory Channel	Memory Name/Purpose	Frequency	Tone
1	OVH2M/Operations and Logistics	146.970 -	100 Hz
2	WW12M/Operations and Logistics	147.240 +	
3	NVFM2M/Fairfax ARES	146.790 -	
4	NVREGN/Northern Virginia Regional Operations and Coordination	146.910 -	
5	SKYWARN/National Weather Service—Sterling	147.300 +	
6	MDREGN/Maryland Regional Operation and Coordination	147.105 +	
7	MTVERN/Mount Vernon (Alexandria)	146.655 -	141.3 Hz
8	ALEX2M/Alexandria ARES	147.315 +	
9	ARL2M/Arlington ARES	145.470 -	
10	FAQ2M/Fauquier ARES	147.470 +	167.9 Hz
11	LOU2M/Loudon ARES	145.310 -	
12	DULLES/Dulles Airport 2m machine, max 15w out	147.330 +	203.5 Hz
21	OVH440/Command and Control/Operations and Logistics	442.200 +	
22	WW1440/Command and Control/Operations and Logistics	444.900 +	
23	FALLSC/Fall Church ARES	442.425 -	91.5 Hz
24	NERA/Main Repeater, linked system	442.725 +	107.2 Hz
25	NERA/DC	449.975 -	107.2 Hz
26	KT4ER/Bull Run Mountain	448.325-	100.0 Hz
27	NERA/Bull Run Mountain	447.775	67.0 Hz
31	VHF1/PWCARES VHF Channel 1/Operations and Logistics	147.525	
32	VHF2/PWCARES VHF Channel 2/Operations and Logistics	146.475	
33	MEDCOM/Inter-hospital communications/MedCom back-up	146.445	
34	ARC-CHP/Red Cross Chapter to Chapter communications	146.535	
35	ARC-FLD/Red Cross Field Operations	146.420	
36	XBAND1/Combine with 147.525—VHF1 (left)	445.950 (right)	100.0 Hz
37	XBAND2/Combine with 146.475—VHF2 (left)	446.050 (right)	100.0 Hz
38	XBAND3/Combine with 146.970—OVH2M (left)	445.975 (right)	100.0 Hz
39	XBAND4/Combine with 147.240—WW12M (left)	446.025 (right)	100.0 Hz
40	Packet	145.730	
41	APRS	144.390	

Prince William County ARES
FT-8800 Quick Reference Guide v1.4

FT–8800 QRC Page 2

Power

Turning the power on and off (Pg. 26)

To turn the radio **on**, press and hold the ***right*** VOL knob for 2 seconds (Fig. 1). The LCD will show the current power supply voltage for 2 seconds before switching to normal mode.

Figure 1

To turn the radio **off**, press and hold the ***right*** VOL knob for 2 seconds.

Changing the Transmit Power Level (Pg. 23)

Press the **LOW** key on the active (MAIN) band you wish to modify the power on. There are four settings. For 2m/70cm, Low is 5W, Mid2 is 10W Mid1 is 20W. On 2m, High is 50W and on 70cm High is 35W

Band Management

Selecting the Operating Band (Pg. 26)

Transmission is possible on the side where the **MAIN** icon is lit.

To select the left or right side for transmission:
Mic Press the **PI** button
Pair Briefly press the **DIAL** knob on either the left or the right side as needed.

Selecting the Frequency Band (Pg. 27)

Press and hold the **DIAL** knob to step through the bands in the following progression:
144 MHz → 250 MHz → 350 MHz → 430 MHz → 850 MHz → 144 MHz …

Locking the Radio

Locking the Radio (Pg. 24)

To activate:
1. Press the **SET** key momentarily to enter the set mode
2. Rotate the **MAIN** band **DIAL** knob know to select Menu 21 (LOCK).
3. Press the **MAIN** band **DIAL** knob momentarily, then rotate it to change the setting to ON.
4. Press the **SET** key momentarily to save the setting and exit to normal operations

To deactivate:
1. Press the **SET** key momentarily to enter the set mode
2. Rotate the **MAIN** band **DIAL** knob know to select Menu 21 (LOCK).
3. Press the **MAIN** band **DIAL** knob momentarily, then rotate it to change the setting to OFF.
4. Press the **SET** key momentarily to save the setting and exit to normal operations

MIC Gain Control

The mic input level and monitor bandwidth are coupled in the FT-8800R. Changing the monitor spacing reduces the mic gain. (Pg. 54)

1. Press the **SET** key momentarily.
2. Rotate the **MAIN** band **DIAL** knob and select Menu 44 (WID.NAR).
3. Press the **MAIN** band **DIAL** knob momentarily and rotate it to display NAR-ROW.
4. Press and hold the **MAIN** band **DIAL** knob for 1/2 second to save the setting and return to normal operations.

Prince William Group ARES
FT-8800 Quick Reference Guide v1.4

FT–8800 QRC Page 3

Repeater Offsets

Setting Repeater Offsets (Pg. 27)

The FT-8800R comes preset with the following shifts: On 2m, 600 kHz; on 70cm, 5 MHz.

To manually set the positive (+) or negative (-) or disable the offset follow these steps:

1. Press the **SET** key momentarily.
2. Rotate the **MAIN band DIAL** knob to select Menu 33 (RPT MOD).
3. Press the **MAIN band DIAL** knob momentarily, then rotate the dial to select "-," "+," or OFF.
4. Press and hold the **MAIN band DIAL** for 1/2 second to save the settings and return to normal operations.

CTCSS

CTCSS Operation (Pg. 29)

Enabling CTCSS involves two steps. You have to set the Tone Mode (Set menu 41) and Tone Frequency (Set menu 40).

1. Press the **SET** key momentarily.
2. Rotate the **MAIN** band **DIAL** knob to Menu 41 (TONE M).
3. Press the **MAIN** band **DIAL** knob momentarily and then rotate it so that **ENC** appears on the display (see the LCD figure on page 1). This activates the CTCSS encoder.
4. Rotating one more step will enable **ENC.DEC**, the Tone Squelch mode (TSQL) if required.
5. Press the **MAIN** band **DIAL** knob momentarily and rotate it to Menu 40 (TONE F).
6. Press the **MAIN** band **DIAL** knob momentarily to enter the menu screen and rotate the knob to select the CTCSS tone frequency you need.
7. When it has been selected, press and hold the **MAIN** band **DIAL** knob for 1/2 second to save the setting and return to normal operation.

Cross Band Repeater Operations

Enabling the cross band function (Pg. 56)

1. Configure the band(s) as needed with power and ENC.DEC as needed.
2. Press the **SET** key momentarily.
3. Rotate the **MAIN** band **DIAL** knob to select Menu 45 (X.RPT).
4. Press the **MAIN** band **DIAL** knob momentarily. X-START will appear.
5. Press the **MAIN** band **DIAL** knob again to activate the cross band repeater mode.
6. To exit, press the **SET** key.

Internet Connection Feature

Turning the Internet Connection Feature (WIRES) off (Pg. 50)

The FT-8800R comes with the Yaesu WIRES system. It is very easy to bump it into the ON position. This is how you turn it OFF.

1. WIRES is enabled when the INT is lit in the LCD panel.
2. To disable it, press the *left* **VOL** knob briefly to turn it off.

RF Squelch

Additional RF Squelch Settings (Pg. 26)

1. Press **SET** key momentarily.
2. Rotate the **MAIN band DIAL** knob to select Menu 32 (RF SQL).
3. Press the **MAIN band DIAL** momentarily and rotate to select the signal strength to open the squelch for—options are OFF, S-2, S-5, S-9 or S-FULL. PWCARES default is OFF. Use the SQL knob (with the volume) to set.
4. Press and hold the **MAIN band DIAL** knob for 1/2 second to save the settings and return to normal operations.
5. If you set the values, turn the **SQL** knob fully clockwise (to the right).

Prince William County ARES
FT-8800 Quick Reference Guide v1.4

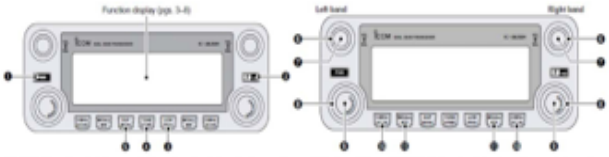
FT–8800 QRC Page 4

IC–2820 Quick Reference Guide

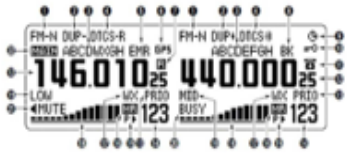
- IC–2820 (PDF)
- IC–2820 QRC Page Images

Icom IC-2820H Basic Operations

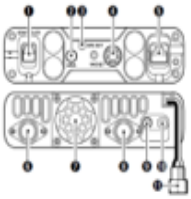
These instructions are not a substitute for reading the manual



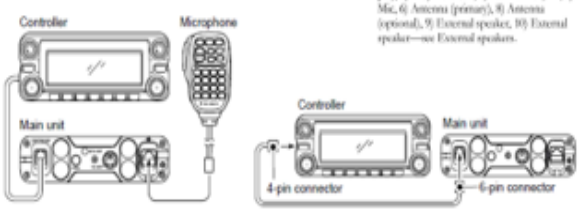
IC-2820 Front Panel: 1) Power, 2) Function/Lock key 3) Output Power/Priority, 4) Tone/DTMF, 5) Duplex/Monitor, (Buttons 2-5 are for the **MAIN** band only), 6) SQL, 7) VOL, 8) DIAL, 9) MAIN band (push), 10) VFO/Tune/Scan, 11) Memory/Call/Memory write.



IC-2820 LCD Panel: Of note: 1) Operating mode indicator, 2) Duplex indicators, 3) Name indicator if programmed, 4) Tone indicator, 5/6) Not relevant without D-Star board, 10) Lock function enabled, 17) Weather indicator if programmed, 19) Power level, 22) **MAIN** band indicator



IC-2820 Main body: 1) Controller connector (6-pin), 2) & 3) Not used, 4) Packet data jack, 5) Mic, 6) Antenna (primary), 8) Antenna (optional), 9) External speaker, 10) External speaker—see External speakers.



The IC-2820 has a magnetic attached face plate. The connector cable may not be attached to the radio initially (use the short one, not the long extender cable). Note that the six-pin end goes into the main unit and the four-pin end goes into the face plate. The microphone should already be attached and covered by a faceplate.

NOTE: The IC-2820 is a dual receive radio with a *left* and *right* side and set of keys and knobs. The active side is identified by a **MAIN** icon in the top "left" corner of the active display. When the instructions refer to **MAIN** key or knob, they refer to the active transceiver side and do not affect the inactive side until the inactive side is made active.

To select the **MAIN** band, either press the **DIAL** knob on the side you wish to set active.

Prince William County ARES
IC-2820 Quick Reference Guide v.1.4

IC–2820 QRC Page 1

Preprogrammed Memory Channels and Frequencies
IC-2820

Memory Channel	Memory Name/Purpose	Frequency	Tone
1	OVH2M/Operations and Logistics	146.970 -	100 Hz
2	WWI2M/Operations and Logistics	147.240 +	
3	NVFM2M/Fairfax ARES	146.790 -	
4	NVREGN/Northern Virginia Regional Operations and Coordination	146.910 -	
5	SKYWARN/National Weather Service—Sterling	147.300 +	
6	MDREGN/Maryland Regional Operation and Coordination	147.105 +	
7	MTVERN/Mount Vernon (Alexandria)	146.655 -	141.3 Hz
8	ALEX2M/Alexandria ARES	147.315 +	
9	ARL2M/Arlington ARES	145.470 -	
10	FAQ2M/Fauquier ARES	147.470 +	167.9 Hz
11	LOU2M/Loudon ARES	145.310 -	
12	DULLES/Dulles Airport 2m machine, max 15w out	147.330 +	203.5 Hz
21	OVH440/Command and Control/Operations and Logstics	442.200 +	
22	WWI440/Command and Control/Operations and Logstics	444.900 +	
23	FALLSC/Fall Church ARES	442.425 -	91.5 Hz
24	NERA/Main Repeater, linked system	442.725 +	107.2 Hz
25	NERA/DC	449.975 -	107.2 Hz
26	KT4ER/Bull Run Mountain	448.325 -	100.0 Hz
27	NERA/Bull Run Mountain	447.775 -	67.0 Hz
33	MEDCOM/Inter-hospital communications/MedComm back-up	146.445	
34	ARC-CHP/Red Cross Chapter-to-Chapter communications	146.535	
35	ARC-FLD/Red Cross Field Operations	146.420	
36	XBAND1/Combine with 147.525—VHF1 (left)	445.950 (right)	100.0 Hz
37	XBAND2/Combine with 146.475—VHF2 (left)	446.050 (right)	100.0 Hz
38	XBAND3/Combine with 146.970—OVH2M (left)	445.975 (right)	100.0 Hz
39	XBAND4/Combine with 147.240—WWI2M (left)	446.025 (right)	100.0 Hz
40	Packet	145.730	
41	APRS	144.390	

Prince William County ARES
IC-2820 Quick Reference Guide v.1.4

IC–2820 QRC Page 2

Power

Turning the power on and off (Pg. 15)

To turn the radio **on**, press and hold the **[PWR]** button for 1 second (Fig. 1). The LCD will show the current power supply voltage for 2 seconds before switching to normal mode.

To turn the radio **off**, press and hold the **[PWR]** button for 1 seconds.

Figure 1

Changing the Transmit Power Level (Pg. 23)

Press the **[LOW-PRIO]** to change the power output levels. Low is 5W, Mid is 15W, High is 50W on 2M and 35W on 70cm.

Memory Mode

Memory Mode Operations (Pg. 61)

The IC-2820 deployed at the EOC and Potomac Hospital have been preloaded with the frequencies listed in this guide. To ENTER memory mode:

1. Press **M/CALL-MW** button once. The MR icon appears on the active frequency. You will need to do this for each active frequency once.
2. Turn the **DIAL** until the desired memory bank is displayed.
3. To enable the name function:
   A. Push the **FUNCTION** key
   B. Push the **LOW-PRIO** button once
   C. Push the **FUNCTION** key twice to return to normal operations

Locking the Radio

Locking the radio (Pg. 19)

Press the **FUNCTION-LOCK** key for 1 second to lock or unlock the frequency.

Band Management

Selecting the Operating Band (Pg. X)

Transmission is possible on the side where the **MAIN** icon is lit.

To select the left or right side for transmission:
Mic: Press the **BAND** button
Face: Briefly press the **MAIN-BAND** knob on either the left or the right side as needed.

Selecting the Frequency Band (Pg. XI)

Press and hold the **DIAL** knob for 1 second, then rotate the **DIAL** to step through the bands.

Direct input with Mic (Pg. XI)

Push the **VFO/LOCK** button, push the **T-OFF/ENT C** button, push the number buttons for the frequency.

Prince William County ARES
IC-2820 Quick Reference Guide v1.4

IC–2820 QRC Page 3

CTCSS

CTCSS Operations

Enabling CTCSS involves two steps. You have to set the Tone Frequency (Pg. 32) and enable the Tone mode (Pg. 30).

Setting the Tone Frequency (Pg. 32)

1. Push the **FUNCTION** key to display the function guide.
2. Push the **MENU (V/MHZ-SCAN)** key (For right).
3. Rotate **DIAL** to select DUP/TONE, then push **MAIN-BAND**.
4. Rotate **DIAL** to select REPEATER TONE then push **MAIN-BAND**.
5. Rotate **DIAL** to select the tone you want, and then push **MAIN-BAND** to set.
6. Push **BACK (V/MHZ-SCAN)** (for right) twice to exit and return to normal operations.

Enabling Tone Mode (Pg. 30)

1. Push **TONE-DTMF** to enable TONE. It rotates through TONE, TSQL, and disabled.

Repeater Offsets

Setting Repeater Offsets (Pg. 30)

The IC-2820 comes preset with the following shifts: On 2m, 600 kHz, on 70cm, 5 MHz

To manually set the positive (+) or negative (-) or disable the offset, push the **DUP-MONI** button to change between off, DUP-, and DUP+

This works ONLY for the active frequency.

Cross Band Repeater Operations

Enabling the cross band function (from KB 74JG461664)

1. Configure the band(s) as needed with power levels and TONE as needed.
2. Press and hold both left and right **MAIN** dials then the **FUNCTION** key together. After two beeps, the lock key will flash in the upper right of the display.
3. When in cross band mode, the VHF frequency is on the left and the UHF frequency is on the right.
4. Repeat step 2 to return to normal operations.

Prince William County ARES
IC-2820 Quick Reference Guide v.1.4

IC–2820 QRC Page 4

Index