



# YOTA Americas Camp Handbook 2024

## Mount Saint Vincent University | Halifax, Nova Scotia



# YOTA Americas Camp 2024 Handbook

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# Youth on the Air (YOTA) Americas Camp Handbook 2024

Updated June 16, 2024

## Camp Overview

### Things to do before camp:

- [Register](#) for D-STAR
- Return all 6 forms completed with signatures
- Download and install the **Telegram AND Discord** messaging apps and the **Google Drive** app to your phone, if you have one.
- If you are attending the Intro to CW session, download the [Morse Key app](#) to your phone. (Android version [here](#))
- If outside of the USA or Canada, bring your IARP or CEPT documentation if possible.
- If outside of Canada, bring the [letter from Canada Border Services Agency](#)
- Check your email for updates at most 1 week before camp.

**Who:** Youth with a current amateur radio license ages 15-25 who are residents of North, Central, and South America (geographic area same as IARU Region 2)

\* Applicants within 1-2 years of the age range will be considered upon recommendation

Up to 50 campers

15 full week staff members (1:4 ratio of adults to campers or lower)

3-4+ parent volunteers

**What:** A week-long camp for young hams to meet other young hams, participate in unique experiences with radio related technologies that may not otherwise be viable, and build relationships with mentors and peers.

**When:** July 7-12, 2024 **Time Zone:** Atlantic Daylight Time (GMT-3)

**Where:** Mount Saint Vincent University, Halifax, Nova Scotia, Canada

Google Maps: <https://maps.app.goo.gl/9vN9wu4HRWmFfShXA>

APRS: VE1YOTA    Grid: FN84eq200U    Lat/Lon: 44°40'13.278" N 63°38'41.939"W  
(44.670355, -63.644983)

Talk-in Repeater: 146.940 - tone 82.5

YOTA Simplex Frequency: 147.550 tone 123.0

**Why:** Our goal is to serve already licensed hams to enrich their amateur radio experience, add to and refine their skills, and to provide mentoring possibilities.



**Cost:** \$100 USD per camper, plus transportation to and from Halifax, NS, Canada, and related expenses (see “other expenses” below). If you can not afford the fee, you can apply for a scholarship to assist with the cost.

**Transportation:** Campers are responsible for their own transportation to and from Halifax. (Airport code: YHZ) Ground transportation (school bus) to/from the airport and Mount Saint Vincent will depart the airport at 2:00 pm, and 4:00 pm ADT (1700 and 1900 UTC) on Sunday, July 7 and Westwood (Residence) at 11:30 am on Friday, July 12. The airport is about 15 minutes from Mount Saint Vincent University. Bus pickup and dropoff will be in front of Westwood (Residence). Airport pickup will be along Silver Dart Drive outside of baggage claim.

For local public transportation, visit <https://www.halifax.ca/transportation/halifax-transit>.

Everyone is expected to be at check in no later than 4:30 pm Atlantic Daylight Time (1930 UTC) on Sunday.

Everyone is expected to stay at camp through the end of camp (11am ADT) on Friday. Any early arrival or late dismissal must be approved by the camp director at least one month before the camp unless it is an emergency.

Once you are at check in on Sunday, we will provide all transportation needs until Friday afternoon. Due to liability and insurance concerns, licensed transportation services (school bus) will be used to transport campers to and from locations designated on the camp schedule. Camp staff are not allowed to drive campers.

If you need assistance with travel, contact the camp director at [director@youthontheair.org](mailto:director@youthontheair.org) for information about fundraising ideas and possible support from donors. We do not want the travel expenses to be the only thing keeping you from attending.

**Lodging:** Housing will be in apartments on the Mount Saint Vincent campus.

- Standard room: 4 campers & bedrooms per apartment, separated by gender and age group, unless staying with accompanying parent
- Single occupancy is available for an additional fee (add additional \$350 USD)
- Guest rooms will include bedding, towels, and toiletries (shampoo/soap/toilet paper)
- Laundry facilities are on each floor (\$1.00/wash, \$1.00/dry). Laundry soap is available at the front desk for a fee.

**See page 6 for more details about the apartments.** Also see [Westwood - Residence Living Options](#) for more details and a [virtual tour](#).

**Pre-arranged rooming can not be canceled after May 25, 2024.** Rooms may be added or traded until June 15, but will be subject to availability.

Extra nights (before and after camp due to travel) and parent rooms are at your own expense, and are payable *to the camp*. **See page 6 for more information reserving and paying for rooms and meals before and after camp and for parent rooms.**

Camp staff will share apartments with each other, but each staff member will have a private bedroom (same as campers). Camp staff will not be required to pay fees. Staff may receive financial assistance for travel if needed.

Campers under 18 years old will be assigned an adult chaperone. Chaperones will check the rooms each night, and place a security strip on the outside door. Doors should not be opened after that time unless there is an emergency. Strips will be checked and removed by the chaperones each morning. If you want to go to bed early or get up early, contact your chaperone to have the security strip removed. Chaperones are required to knock on the door, identify themselves, and ask the camper to open the door.

**Meals:** All meals from Sunday evening through Friday lunch will be provided. Participants with dietary restrictions or allergies must alert the staff in advance so that proper provisions can be made.

**T-Shirt:** All participants will receive several ham radio T-shirts, including an official camp T-shirt.

**Other expenses:** Meals, lodging, admission fees, and local transportation are provided by the camp. Souvenirs or any other purchases, outside of all meals and the provided snacks, will be the responsibility of the camper.

**Alcohol:** Alcohol is not allowed at camp functions.

**Forms:** Required forms will include code of conduct, emergency medical authorization, waiver of liability, photo/video consent, ARISS, and transportation consent. **ALL staff members and volunteers working with campers will also need a background check and Youth Protection Training, which is provided by the camp.**

**Planned Activities (subject to change):**

Introduction to YOTA	Kit/Antenna Building
Contesting	Special Event Station VE1YOTA Operating
Computer Logging	Parks on the Air (POTA) Workshop and
Software Defined Radios (SDR)	Activation
D-STAR Workshop	Tracking Balloon Launch
Contact an Astronaut on the International	Satellite Operations Workshop
Space Station	Train the Trainer
Fox Hunting / Amateur Radio Direction	
Finding (ARDF)	

**Planned Social Activities (subject to change):**

Dinner in Downtown Halifax	Amphibious Tour of Halifax
Shopping / Venues on the Waterfront	Board & Card Games on campus

**Special Event Station:** VE1YOTA will be the callsign of the official special event station. As many as 5 operating positions will be available for use throughout the week. The stations can be used between sessions, as well as a few dedicated times. Some stations will be available by remote. HF rigs will be the IC-7300 or IC-7610. A satellite station will have an IC-9700. ICOM ID-52A D-STAR HTs and IC-705s will be available for campers to use for the week. The VE1YOTA callsign is only to be used when using camp provided equipment either in person or by remote. If you use your own radio or other remotes, please use your own callsign instead.

**Sponsors:** Youth on the Air Camp will be operated by Electronic Applications Radio Service, Inc. (EARS - W9EAR), a 501(c)(3) Indiana not-for-profit educational amateur radio organization. The camp is hosted by Radio Amateurs of/du Canada.

**Equipment Sponsors:** All radio equipment for the camp will be provided by gracious donations from ICOM America, Heil Sound, X-Tronic, and Begali Keys. The IC-7300 or IC-7610 will be the radio used at HF operating positions. Satellite operations will be on an IC-9700, IC-705, and ICOM HTs. Heil Sound will provide headsets, microphones, and headphones. X-Tronic has donated temperature controlled soldering stations.

**Financial Sponsors:** At the time of printing, major financial support to make this camp possible and affordable is coming from: Amateur Radio Digital Communications (ARDC), DX Engineering, the World Wide Radio Operators Foundation (WWROF), the Yasme Foundation, IARU Region 2, Frankford Radio Club, and the Radio Club of America (RCA). The remainder of the funding is from hams across the world that believe in our cause.

**Things you should bring:** Comfortable clothes (NOTE: you will be getting several T-shirts to wear from the sponsors upon arrival!), running/walking shoes, toiletries, necessary medications, sunscreen, a notebook, and writing utensils. Dress for all events, including the opening banquet, is casual. Campers should bring their own laptop computer or tablet if possible, with access to Google Drive. Each camper will receive a drawstring backpack upon arrival. While we do not have swimming options on campus, a swimsuit and towel might be a good addition as we will be along and in the harbor on Tuesday and Wednesday.

All suites are provided with linens; bedding, towels, and toiletries (shampoo/soap/toilet paper). There are laundry facilities on each floor (\$1.00/wash, \$1.00/dry) laundry soap is available at the front desk for a fee.

We will have plenty of ham gear, but you may bring your own if you wish. If you are flying, keep in mind that customs and security agents may question your equipment. If you have your own HF setup, please keep in mind that the camp provided stations may receive co-site interference from your station. The VE1YOTA callsign should only be used when operating an official camp station.

**Things you shouldn't bring:** Firearms, illegal drugs, alcohol, weapons, bed sheets, and bad attitudes.

**Communications During Camp:** For transparency and safety, all communications between campers or between campers and staff should be conducted on the camp simplex frequency (**147.550 tone 123.0**) or the YOTA Camp Telegram channel.

**YouTube Coverage:** The opening and closing ceremonies and the space station contact will be streamed live on the [Youth on the Air YouTube Channel](#). A short, recorded highlight video will be posted on YouTube each day. Impromptu live streams may also appear throughout the week. Family and friends are encouraged to watch these daily.

[Link to playlist of 2024 videos](#)   [Direct Link to live stream feed of ARISS contact](#)

**What is YOTA?:** This camp is heavily modeled after the Youngsters on the Air camp that has been held since 2011 in IARU Region 1 (Europe/Middle East/Africa/Northern Asia). Two of our working group members, Sterling Mann, NØSSC and Sam Rose, KC2LRC, attended the Region 1 camp in Austria in 2016 with the intent to learn about the camp in an effort to replicate it in the US. We are working with the YOTA Region 1 organizers to coordinate our efforts, but also realize some changes are necessary due to cultural and legal differences.

Our working group has already arranged for the workshop leaders, most of whom are also campers or under the age of 30. We have both male and female chaperones for minors.

YouthOnTheAir.org is our official website, and we have social media accounts (yotaregion2) on Facebook, Twitter, Instagram, and YouTube. The “official” hashtag is #YOTAR2.

Questions? Contact Neil Rapp, WB9VPG at [director@youthontheair.org](mailto:director@youthontheair.org).

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# Mount Saint Vincent University Apartment Information and Additional Rooms & Meals

## **Contact Information:**

Phone: 1-902-457-6777    Email: [conference.office@msvu.ca](mailto:conference.office@msvu.ca)

**Hours of Operation: 9 am until 10 pm (ADT).** After 10 pm, the front desk will be closed - instead you will have to pick up your suite key at the security desk located in Assisi Hall (85 Seton Rd).

## **Reservations:**

*Camper rooms for Sunday through Friday & staff rooms for Saturday through Friday already have reservations.* For additional nights and/or visitor rooms, do not contact the university directly. Contact the Camp Director Neil Rapp at [director@youthontheair.org](mailto:director@youthontheair.org) by May 25 to add additional rooms and/or meals.

*The prices below are ONLY for visiting parents and campers who want to add on days before or after camp beyond the provided days.* Campers do NOT pay for rooms & meals for Sunday evening through Friday afternoon. Staff and invited volunteers do NOT pay for rooms & meals for Saturday evening through Friday afternoon. These are paid by the camp.

The exchange rate is typically \$ 0.73 USD = \$ 1.00 CAD.

## **Rooms and Rates:**

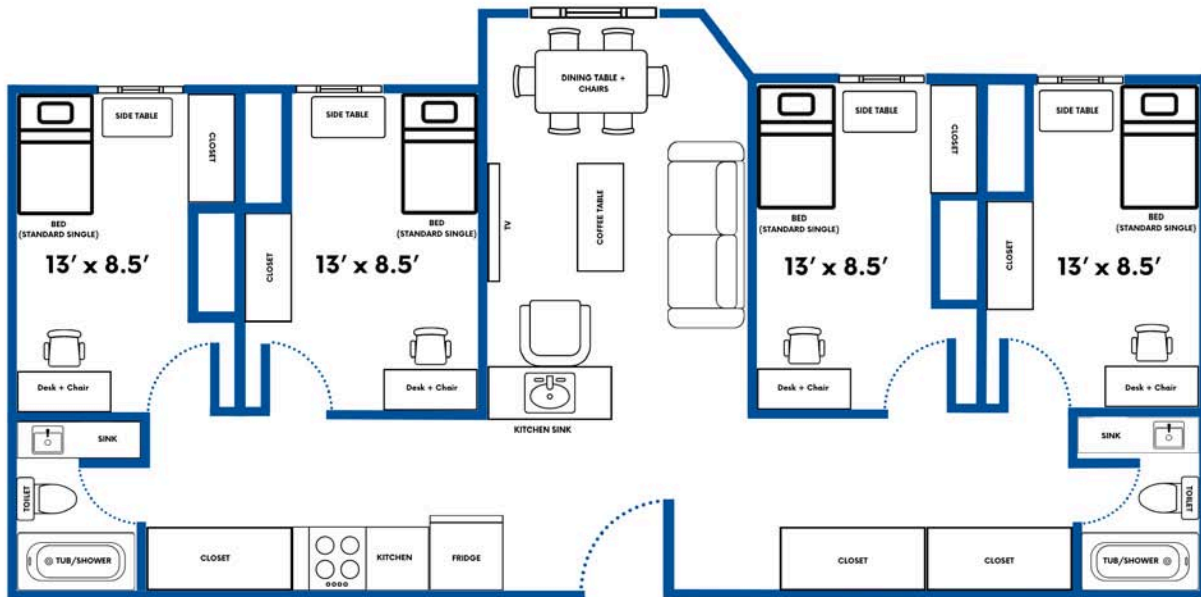
Westwood Apartments Contain:

Full kitchen (stove, oven, fridge with freezer, microwave, toaster, and kettle)  
Furnished living room  
High-speed internet  
A phone  
Flat Screen TV



OPTION 1: 4 Bedroom apartment - \$159.12 CAD per night including taxes & all 4 bedrooms

4 bedroom apartments will have 1 bed in each of the (13' x 8.5') bedrooms, including captain's bed, desk, and chair, bookshelf, wardrobe with shelves and night side table, and 2 shared (full) bathrooms. Each person is assigned one private bedroom inside the apartment.



Floor plan of the standard 4 bedroom apartment

OPTION 2: 2 Bedroom apartment - \$122.85 CAD per night including taxes & both bedrooms

**Linens & Toiletries:**

All suites are provided with linens; bedding, towels, and toiletries (shampoo/soap/toilet paper). There are laundry facilities on each floor (\$1.00/wash, \$1.00/dry). Laundry soap is available at the front desk for a fee.

**Parking:**

Passes will be provided upon check-in for anyone in need of parking with no extra fee; there are spaces available outside of the Westwood building as well as throughout the campus.

**Additional/Guest/Parent Meals: CAD (payable to the camp)**

Breakfast - \$13.46 / Lunch - \$18.14 / Dinner - \$18.14 (\$44/day)

# Foreign license info

## **If your license is issued in the United States:**

You will need a valid ID (passport) and your US amateur radio license. You can operate with your US callsign and add /VE1 on the end without any additional licensing. According to FCC rule 97.119(g), at least once during the communication you must state your geographical location, like "30 km north of Halifax."

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## **If your license is issued in:**

Argentina, Brazil, El Salvador, Panama, Peru, Trinidad and Tobago, Uruguay, or Venezuela. (IARP)

Or

Participating for France: Corsica, Guadeloupe, French Guyana, Martinique, St. Bartholomew, St. Pierre and Miquelon, St. Martin, Reunion and its Dependencies, Mayotte, French Antarctica, French Polynesia and Clipperton, New Caledonia, and Wallis and Futuna (CEPT)

you must apply for your IARP or CEPT permit from your home country. Contact your home country's national organization for more information.

If your country is a member of the IARP or CEPT agreement and you obtain the permit, you will be able to use VE1/your callsign as your callsign while you are in Canada. Be sure to apply for the permit and bring your IARP/CEPT documentation and your license with you to camp.

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**If your license is issued in a country not on either of the two above options**, you can still operate VE1YOTA at camp with a control operator present.

In order to operate *independently*, you will have to get a letter of authority from the Amateur Radio Service Center ([https://www.ic.gc.ca/eic/site/025.nsf/eng/h\\_00010.html](https://www.ic.gc.ca/eic/site/025.nsf/eng/h_00010.html)) or take a Canadian license exam. See <https://www.rac.ca/how-to-begin/> for more information about obtaining a Canadian license.

\*If you operate with a letter of authority from the Amateur Radio Service Center, you will also need to include your location at least once during each communication. You will use VE1/your callsign as your Canadian callsign. See [https://www.ic.gc.ca/eic/site/025.nsf/eng/h\\_00006.html#tao4](https://www.ic.gc.ca/eic/site/025.nsf/eng/h_00006.html#tao4)

# Canada Operating Privileges for YOTA Camp

By Dave Goodwin VE3KG, Regulatory Affairs Officer, RAC

1. US citizens: Canada and the US have a treaty dating from 1952. In short:

- A US Citizen with a US licensee may operate in Canada where his or her US frequency and mode privileges intersect with Canadian privileges. So, no US ham May operate in Canada on 20m SSB below 14.150 MHz, for example.
- The US ham identifies with his or her US call sign **FIRST followed by** “/” or “mobile” or “portable” **followed by** the Canadian call area. For example, you would sign as WB9VPG/VE1.

2. Hams from countries participating in CEPT T/R 61/01:

- The foreign ham may operate as if they were a Canadian Advanced Amateur, with no frequency or mode restrictions.
- The foreign ham identifies with the Canadian call area prefix **FIRST followed by** “/” or “mobile” or “portable” **followed by** their call sign from home. So, if PJ2ABC is here, he or she would sign VE1/PJ2ABC.

3. Hams from countries participating in the IARP:

- If they have a Class 1 IARP, the foreign ham may operate as if they were a Canadian Advanced Amateur, with no frequency or mode restrictions.
- if they have a Class 2 IARP, the foreign ham may operate on Canadian Amateur allocations above 30 MHz
- The foreign ham identifies with the Canadian call area prefix **FIRST followed by** “/” or “mobile” or “portable” **followed by** their call sign from home. So, if LU1XYX is here, he or she would sign VE1/LU1XYX.

4. A bilateral agreement between Canada and some other country: such a ham will have to apply to ISED for permission to operate. They would normally identify with the Canadian call area prefix **FIRST followed by** “/” or “mobile” or “portable” **followed by** their call sign from home. So, if JA1AAA is here, he or she would sign VE1/JA1AAA.

YOTA highlights a fifth opportunity that can apply to anyone, no matter what their level or country of qualification:

5. If anyone, including an unlicensed person, is operating the VE1YOTA station under the **direct supervision of someone holding a Canadian Advanced certificate**, they may operate as if they were a Canadian Advanced Amateur, with no frequency or mode restrictions.

# Code of Conduct

Camp Faculty, Adult Staff, & Campers  
Youth on the Air



The following guidelines are designed to make your experience at Youth on the Air Camp satisfying to you and to all others attending. The individual rights, safety and property of others must be respected.

## 1. Respect the rights and property of others.

- Do not touch other camper's belongings without checking first.
- Disrespectful and/or abusive language will not be a part of camp
- Do not damage or deface camp facilities or property.
- Rudeness, lack of courtesy, and disrespect for authority will not be tolerated.
- Fighting and threatening physical abuse is not acceptable behavior.
- Boys are not allowed in the girls' rooms; Girls are not allowed in the boys' rooms
- All clothing worn shall be within the bounds of decency.
- Do not take inappropriate pictures/video/audio of others or yourself
- Do not post inappropriate pictures/video/audio to social media

## 2. Be concerned for the safety of campers and staff.

- Campers under 18 cannot leave the directed areas on the camp schedule without an adult and must have the Camp Director's or staff's permission.
- Campers under 18 must have a chaperone, and should not be isolated 1 on 1 with camp staff at any time.
- Campers should be with at least one other camper at all activities - **EXCEPTION: If the camper has graduated from high school and is 18 or older** (noted on name badge)

## 3. YOTA Camp is a fun experience and everyone is to participate in the planned activities.

- Be on time and ready to participate.
- Don't spend excessive time on your phone unless part of the activity itself
- If ill, report to the camp staff.
- Be a positive team member for your group.
- "Lights Out" means quiet and in bed.
- Everyone must check in/out with the Camp Director or Staff if leaving or coming into camp is necessary.

**4. The following items and activities are not allowed** at the camp facilities: alcoholic beverages, knives, firearms, fireworks, illegal drugs, matches, and tobacco. Exception: adults may smoke in designated areas only.

Gambling or betting with money, over-display of affection between anyone, fighting, threatening/physical abuse, stealing, tampering with emergency equipment, and being under the influence of drugs are NOT allowed at camp. Those over drinking age are not to provide alcohol to minors in any case, and alcohol is not permitted at any and all camp functions due to liability concerns. Boys are not allowed in the girls' rooms; Girls are not allowed in the boys' rooms.

Campers, teen counselors and adult staff having or doing anything in section 4 will be sent home at the first infraction and at their own expense.

**CONSEQUENCES:** The following steps will be followed if a camper or adult staff member does not abide by the rules (except for section 4, which is immediate dismissal)

*1st Infraction:* Discuss the inappropriate behavior with an adult staff member and clarify the rule.

*2nd Infraction:* Camp Director or staff will discuss the inappropriate behavior and give a "time out" or appropriate consequence. Camper's appropriate attitude and/or behavior will be discussed.

*3rd Infraction or Any Behavior Listed in Rule # 4:* Camp Director or staff will request the parent to pick up the camper and take him/her home at their expense and camp fee will not be refunded. Adult Staff members will be asked to leave camp immediately. Additional consequences may include: releasing the individual to the nearest law enforcement agency, assessing the cost of damages and repairs in the event of destruction of property, and barring the individual from future YOTA activities. Parents will be notified of any action taken.



## Morse Code Alphabet

A	·-	N	-·	0	-----
B	-...·	O	---	1	·-----
C	-...·	P	·--·	2	··-----
D	-...·	Q	---·-	3	···---
E	·	R	·-·	4	····-
F	···-	S	···	5	·····
G	--·	T	-	6	-.....
H	····	U	··-	7	--.....
I	··	V	···-	8	-----·
J	·---	W	·--	9	-----·
K	-·-	X	-··-	.	·-·-·-
L	·-...·	Y	-·--	,	---·-·-
M	--	Z	---··	?	··-...·

# Super Simple Code Practice Oscillator

## A Beginner's Electronics Kit

David Cripe NMØS  
Four State QRP Group



As the name implies, this is a simple, easy-to assemble kit, intended for first time kit builders and young hobbyists. This kit is an ideal project for Boy Scouts as a requirement for the Electronics Merit Badge, or for STEM groups wishing an introduction to electronic construction.

### Supplies Needed:

- Phillips Screwdriver
- Diagonal Cutters
- Soldering Iron and Solder
- Sandpaper or Emery Board
- 9 volt battery

Obtain all supplies before beginning. Open the bag of parts, and inventory the contents against the parts list at the end of the instruction manual. If you are short on any parts, contact your instructor.

Qty	Type	Description	Marking	✓
2	Capacitor	0.1uF	104	
2	Resistor	15k	Brown-Green-Black-Red	
2	Resistor	470	Yellow-Violet-Brown	
2	Transistor	2N2222A	2N2222A	
2	Screw	6-32 x 3/8"		
4	Screw	6-32 x 1/4"		
1	Screw	8-82 x 3/8"		
6	Nut	6-32 hex		
1	Knob			
2	Spacer	#6 x 1/8"		
1	9v battery clip	male		
1	9v battery clip	female		
4	feet	adhesive rubber		
1	speaker	8 ohms, 0.5W		
1	PC board			

Once the kit has been inventoried, the assembly can begin.

First take the PC board, and snap off the section at the right side of the board. The section has been grooved, so it breaks off readily.

Next, take sandpaper or an emery board, and smooth off the rough edges where the boards were separated.

## **SPEAKER**

■ The first item to mount on the board is the speaker. Flip the board so that the component side is down. Take the four 6-32 x 1/4" screws and insert them through the component side of the board so that they face upward. Take the speaker, and place it against the board so that the two solder terminals are facing the front toward the two round solder pads on the board.

■ Attach the nuts to the screws, and finger-tighten the four nuts until they are contacting against the speaker. Using the Philips screwdriver, snug down the screws.

## **SOLDERING**

Because of the simplicity of this kit, it will have appeal as a first project for beginning kit-builders. For those with little or no experience with soldering, there are a few things to keep in mind before starting.

It is recommended that a low wattage, 20 to 30 watt, pencil-tip soldering iron be used. Only rosin-core solder may be used, as acid core plumbers solder will corrode the board and components. Either lead free or tin-lead solder may be used, though the builder should be aware of the potential toxicity of lead based solders. It is important to wash hands after working with lead-based solder to avoid absorbing any into your body.

Soldering is not hard if the proper procedure is followed. The soldering iron is to be used to heat up the PC pad and component lead, and the solder applied to the pad, where it melts and flows into the hole.

Do not melt the solder onto the tip of the iron and then attempt to dab it onto the joint – a defective connection will result! After soldering, check the top (component side) of the board, to be sure the solder has filled the hole completely, and wicked up around the component lead. Re-heat and apply more solder if necessary.

## **BATTERY CLIPS**

■ Plug in your soldering iron and let it reach working temperature.

■ Take your 9v battery, and hold it so that the terminals are to the left, and the smaller positive terminal is furthest from you. Snap on the battery clips, and insert the clips into the board. Be certain that the positive polarity clip is inserted into the position marked '+'.  
'+'.

☐ Solder the battery clips into place, and then remove the battery. By soldering the clips into place while attached to the battery, we make sure that their spacing is correct.

☐ Locate the two 15k resistors. Their color code is 'brown-green-black-red'. Bend the leads at right angles to the body, and insert into their locations on the board. Turn the board over, and spread the leads slightly so that they don't fall out of the board when it is flipped over.

☐ Solder the resistors into place, and then clip the leads close to the board. Save two of the snipped off leads.

☐ Repeat with the 470 ohm resistors (yellow-violet-brown).

☐ Repeat with the 0.1uF capacitors (marked 104).

☐ Locate the two metal can transistors, labeled 2N2222A. Notice there is a small tab on one side of the can. This must be lined up with the transistor outline printed on the board, and the transistor legs inserted through the holes. Position the transistors so that they are spaced up off the board approximately 1/16" of an inch. Spread the legs slightly on the bottom side of the board to hold them in place. Solder and clip their leads.

☐ Find the 8-32 x 3/8" screw, which is a larger diameter than the rest of the screws. Pass it through the silvered side of the narrow strip of PCB, and tighten it into the knob.

☐ Find the two 6-32 x 3/8" screws, the aluminum spacers, and two nuts. Insert the screws through the red side of the narrow PCB strip, and slide the spacers over the other side. Insert the screws through the two holes at the upper right corner of the board, and tighten the nuts on the screws on the bottom side of the board.

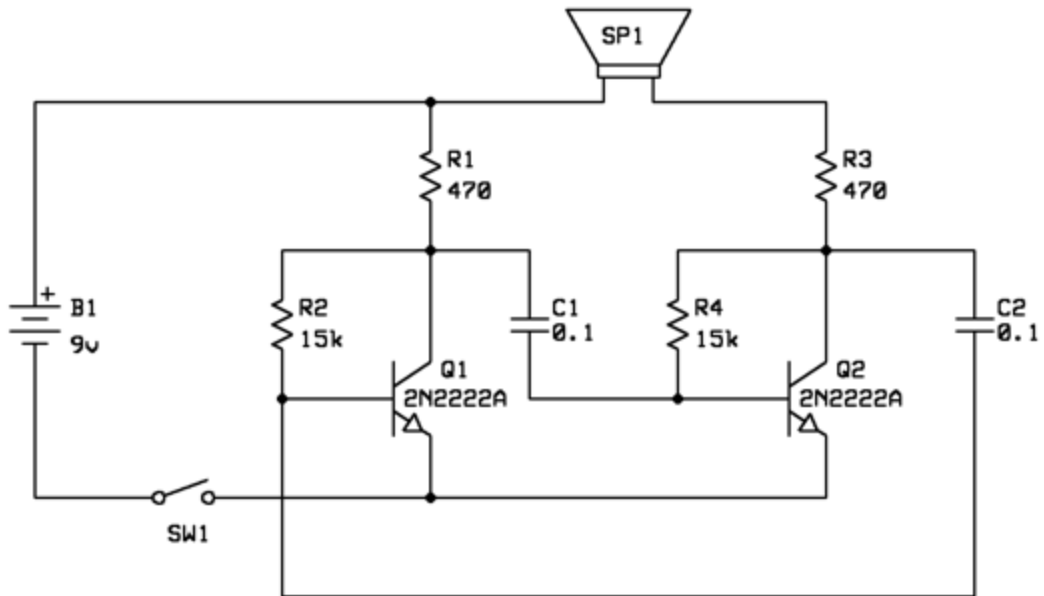
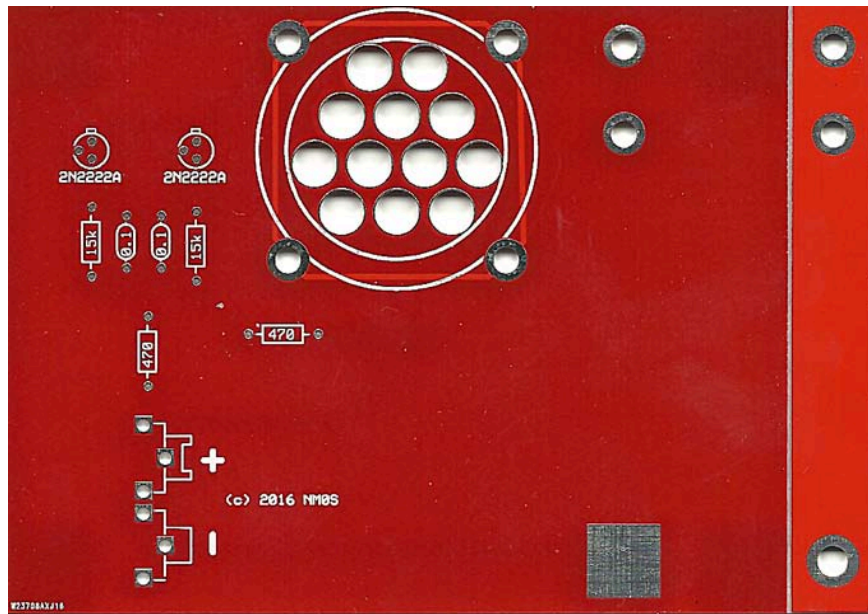
☐ Take two of the clipped off resistor leads, and solder them to the speaker terminals. Clip the lengths to end at the midpoint of the solder pads. Solder them down to the solder pads.

☐ Install the four adhesive rubber feet to the bottom corners of the board

☐ Install the battery – you are finished!

If the screw for the knob contacts the main PCB, the tone will sound continuously. You can slightly bend the key lever PCB upward until it no longer contacts the board.





<b>WN0BSA</b>		
<b>Code Practice Oscillator</b>		
D. Cripe	Rev 1.0	Page #1 of 1
	10/23/2014	

# Manual Morse Key

designed by LA4ZCA – Manual and kits by KØNEB

## DESCRIPTION

*This is a compact 3D-printed manual Morse key. The design offers precise movement with adjustable force and travel, in a very simple 3D-printed design. Compact and lightweight, the key is suitable for portable use such as POTA and SOTA.*

## ASSEMBLY

*Materials:*

- Two 3D printed parts, base and arm – can be any color
- Five M3 screws, 1x 16mm, 2x 8mm and 2x 5mm length
- One M4 washer and spring
- Two solder lugs
- Audio cable with plug

First, prepare the 3D-printed parts by removing any protruding edges and bumps by gently filing the surfaces only if needed. Be sure that the arm has a loose fit between the side walls of the base, and that the oversized hole in the middle of the arm, for the end stop screw, is fully open.

As illustrated in Figure 1, mount the arm onto the base with two 8mm screws as hinges. The screw holes should be tight enough that the screws self-thread into the plastic wall. Looking at Figure 1, the cable is routed through holes in the base forming a 90-degree bend, which acts as a strain relief: First, route the cable into the well underneath the knob by making a loose bend outside the "window" in the side wall, as shown in the picture above. Then compress the bend and pull out excess cable to make a sharp bend inside the base.



Figure 1

Carefully strip the outer jacket of the cable 1 3/8", exposing the red and white wires and the bare wires that form the shield. Twist the bare wires together to form a single wire. Strip 1/4" of insulation from the ends of the red and the white wires and twist the ends of the red and bare wires together. Solder one lug to the end of the red/bare wire pair and the other lug to the end of the white wire as shown in Figure 2.

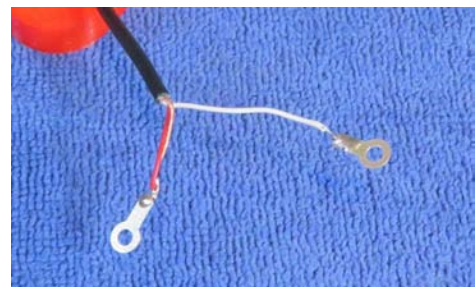


Figure 2

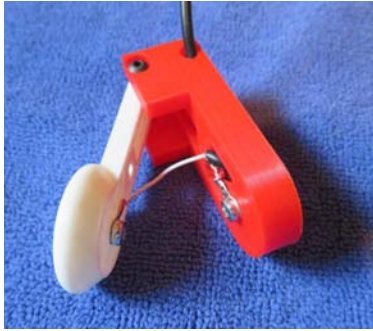


Figure 3

Use the 5mm screws to secure the lugs in the base and underneath the knob of the arm, as shown in Figure 3. Use the white wire for the top and the red/bare wires for the bottom.

Referring to Figure 4, put the spring in place in the slot underneath the arm. If needed, the spring tension can be adjusted by moving it forward or backwards in the slot.

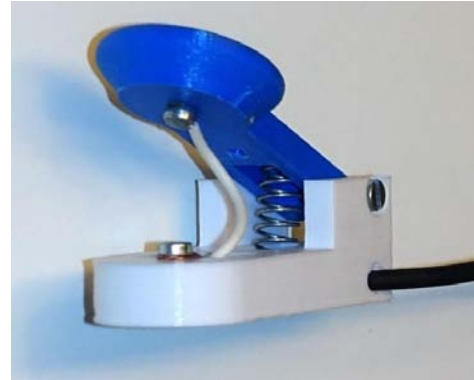


Figure 4

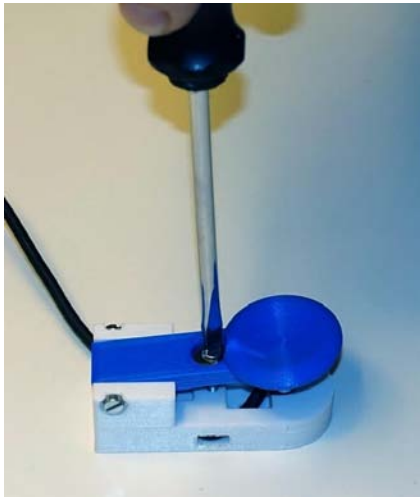
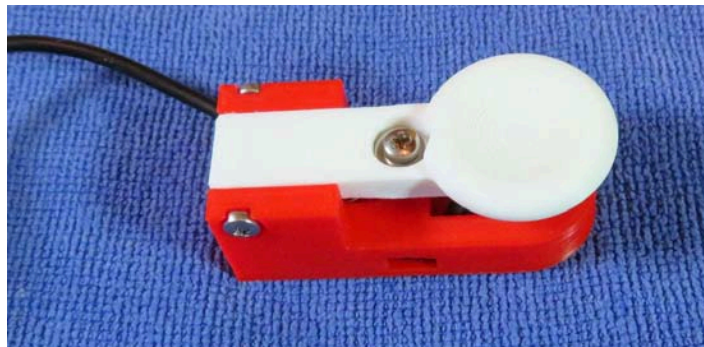


Figure 5

For the end stop and key contact gap adjustment, first place the M4 washer in the bottom of the recess on the top of the arm, then insert the 16mm screw from the top. See Figure 5. Hold the arm down enough to allow the screw to continue into the hole in the base. The arm should move freely without friction in the hinge, side walls or end stop screw. The contact gap is adjusted by turning the end stop screw from the top.

The key can be mounted to a heavier piece of wood or metal to make it more steady, if desired. Use screws through the two holes in the base, underneath the hinge and in the bottom of the wire well. Double sided adhesive tape can be used as well.



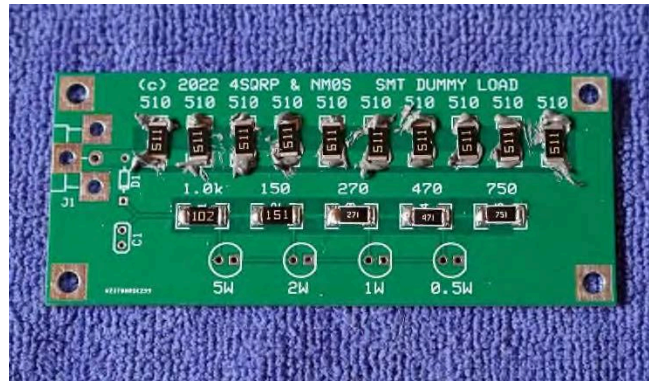
Have fun on the air! 73 de KØNEB

# Dummy Load

## SMT Dummy Load Kit Assembly

### Manual v 1.0a

#### 5-3-22 Four State QRP Group Kit -



Designed by David Cripe, NMØS

For many builders this kit might be your first introduction to working with surface mount parts. The extra large SMT parts used in this kit make it easy and a great learning experience as well.



#### Step 1 – Surface Mount Parts

There are two methods most commonly used to mount surface mount parts by hand. Because the surface mount parts in this kit are larger, either method works fine and should be easy, even for a first-time SMT experience.



The first method is using your regular soldering iron and solder to mount them. Be sure to use a small tip to be sure to apply the solder only where it is needed. To use this method, simply place a small amount of solder on one pad of each surface mount part, leaving the other bare. Place the part on the board and using tweezers, bring the part in line with the pad that has the solder on it while heating that pad with the iron. You should be able to align the part so it is even between the two pads while the solder is melted and lifting the iron from it will allow the solder to cool. Next, simply apply solder to the other pad using just enough solder to securely mount that side of the part. You can “touch up” the solder on the first pad if needed to remove excess solder or add solder.

Start the SMT installation with the five values on the lower row. The 1.0K ohms resistor is marked “102”, 150 ohms is marked “151”, 270 ohms is marked “271”, 470 ohms is marked “471” and 750 ohms is marked “751”.

Follow that row with the installation of the top row of 510 ohm resistors, each marked “511”.

#### Step 2 – LEDs

The four LEDs all install facing the same direction. Place the flat side of each LED facing the right and double check to be sure each is in correctly before soldering.

### Step 3 – Signal Detector parts

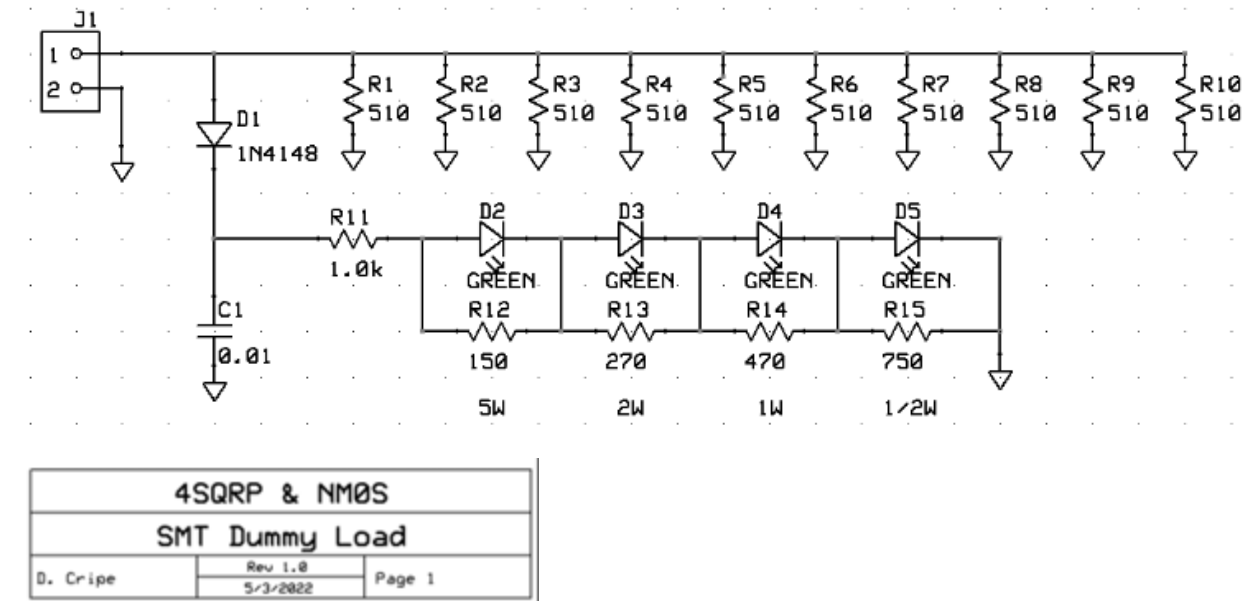
Install diode D1 with the black stripe facing the same way as the marked diode stripe on the board closest to C1 and install the disc capacitor C1 next to the diode.

### Step 4 – BNC Connector

Turn up the heat on your soldering iron to perform the installation of the BNC connector. This connector has a lot of metal which draws the heat away from the connection. Solder just the center pin first to be sure you have the connector mounted straight. It is easier to move it if you need to reheat just the center conductor. Once you are satisfied the connector is straight, solder the 3 mounting pins using enough solder and heat to make a firm connection. Lightly sanding these mounting pins before mounting the connector will allow for a better solder connection. Be sure to allow enough time for the heat to flow the solder and make good adhesion to the pins and the PC board.

Inspect your work and test it using an ohmmeter by checking the resistance between the center pin of the BNC and the ground part of the connector. You should see about 51 ohms resistance.

Connect your QRP RF power source and see which LEDs light up to determine your approximate RF output power level.

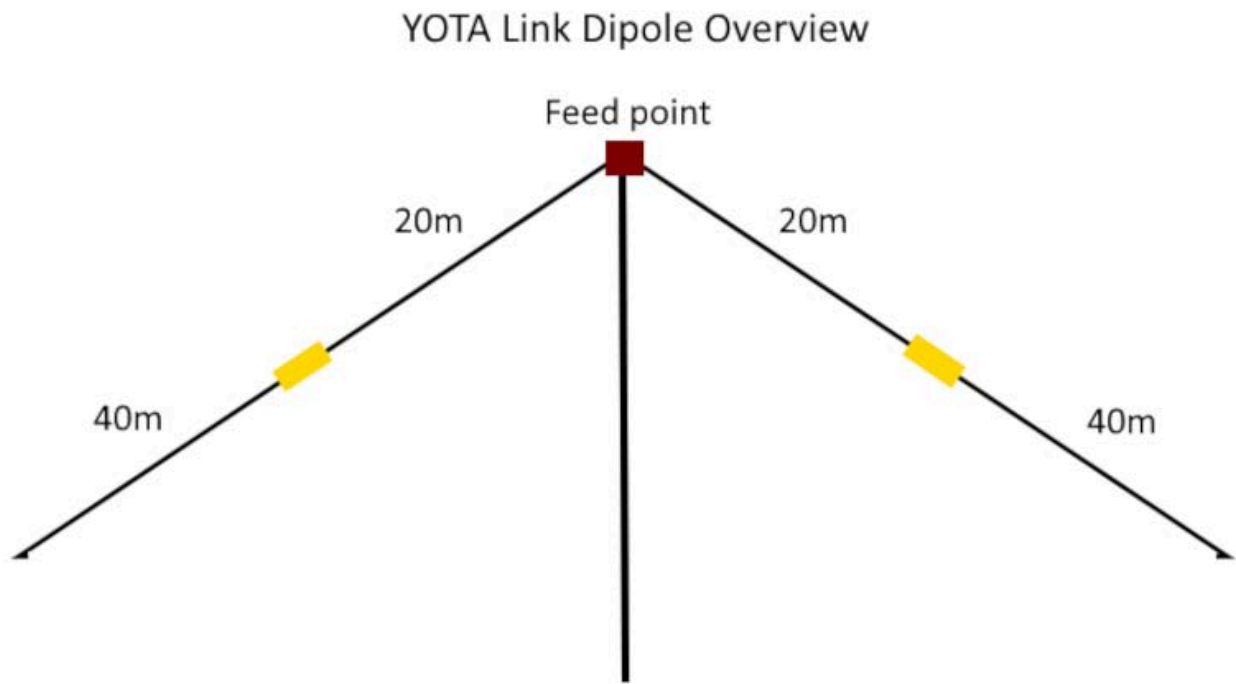


Manual written by Joe Eisenberg, KØNEB



# Antenna Assembly Instructions

## YOTA Link Dipole (20m & 40m)



Links open for 20m and closed/connected for 40m

This link dipole is designed to work best as an inverted V with the center being raised 15-20ft (5-6m) above ground. The center insulator has two supports, one for a rope (A) and the other for a small mast (B). This dipole design only requires one soldering connection and five crimp connections.



A



B

## Specifications

Total Length: 65ft/20m

Antenna Area: 55ft/17m (Inverted V)

Connector: SO-239 (UHF)

Maximum power: 15-20 watts SSB, 10 watts CW & Digital.

\*\*You can use more power (100 watts) by using a choke on your coax at the feed point.

Examples:

LDG UNUN RU-1-1

<https://www.dxengineering.com/parts/ldg-ru-1-1>

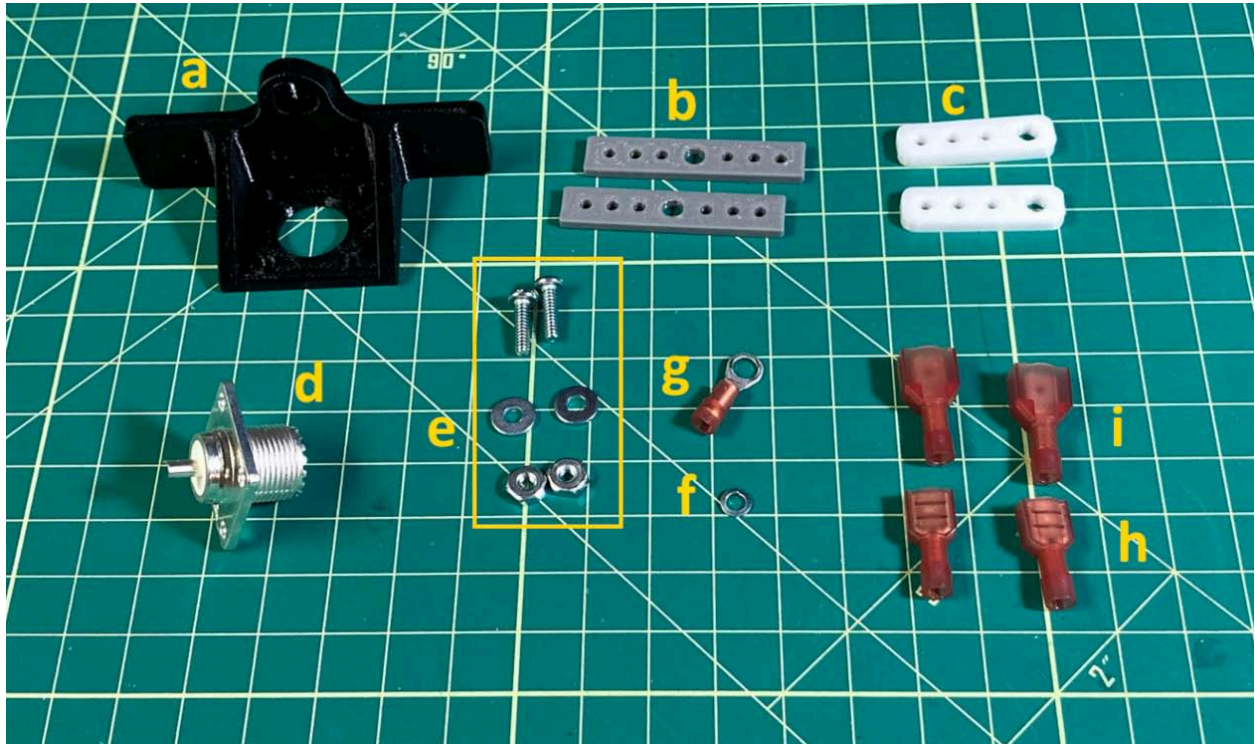
Wireman #8231

<https://thewireman.com/product/balun-11-current-type-w2du-10m-80m/>

## Tools required

- 1- Phillips screwdriver
- 2- Needle nose pliers
- 3- Wire Stripper and Crimper
- 4- Soldering Iron + Solder

## Parts list



- a- Center Insulator (Black)
- b - Link Insulator (Grey)
- c- End Insulator (White)
- d- SO-239 Chassis connector
- e- Screws, Nuts, Washers x 2
- f- Lock Washer
- g- Ring Terminal
- h- Blade Connector (F) x 2
- i- Blade Connector (M) x 2

### Not Shown:

- j- Wire Elements x 4 (192")
- k- Paracord (10ft - 3m) x 2
- l- Winder

## Tips

Turn on your soldering iron/station before you begin, you should only need it for step 2. Start the build with only two pieces of wire elements (j), you will need the other wire elements (j) in step 6 to complete the antenna.

More information (and STL (3-D printing) files if you want to print your own plastic parts) are available online:

<https://youthontheair.org/yotadipole2024>

## Building Instructions

1- Align the SO-239 Chassis (d) connector with the BOTTOM of the Black Center Insulator (a). Secure the SO-239 to the Black Center Insulator (a) using 1 screw, washer and nut (e). Choose the hole on the TOP LEFT side, see picture below.

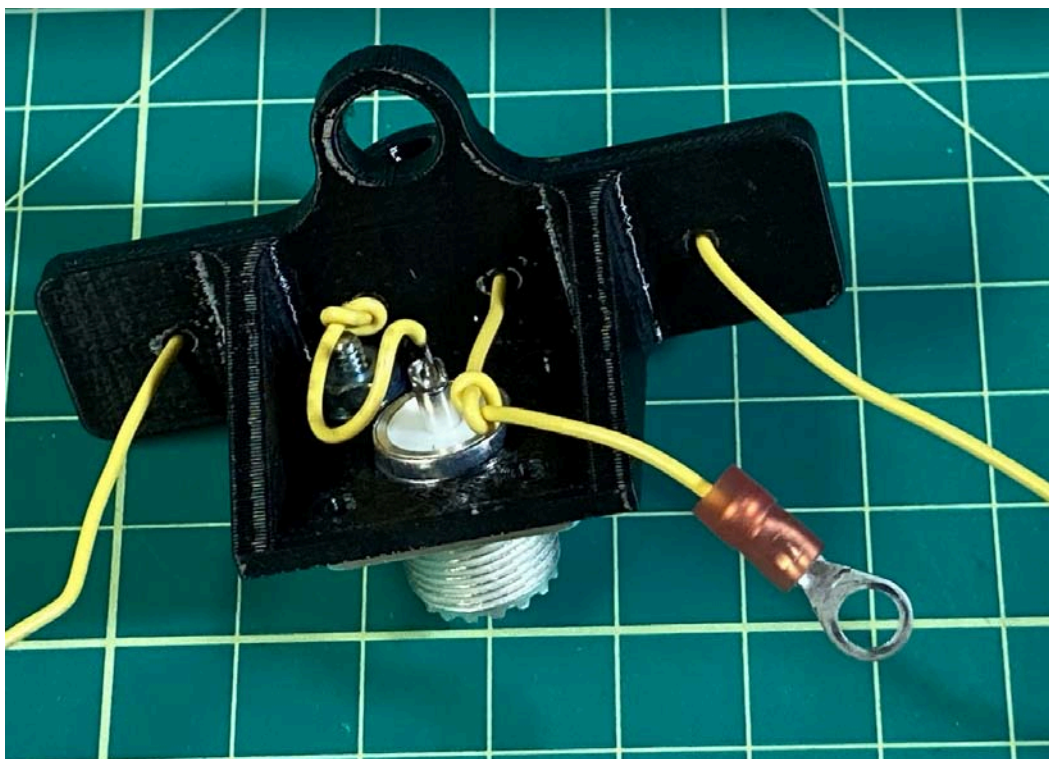




2- Take one segment of wire/element (j), run through the holes in the Black Center Insulator (a) on the LEFT side. Make an overhand knot about 2 inches/50mm from the end. The knot is for strain relief. Strip about 1/4 inch/5mm of insulation from the end of the wire using the wire strippers and then solder it to the center pin of the SO-239. Turn off the soldering iron, you shouldn't need it anymore..



3- Take another piece of wire/element (j), run through the holes in the Black Center Insulator (a) on the RIGHT side. Make an overhand knot about 2 inches/50mm from the end. The knot is for strain relief. Strip about 1/2 inch/10mm of insulation from the end of the wire using the wire strippers. Double back the exposed wire on itself and then crimp it to the Ring Terminal (g).



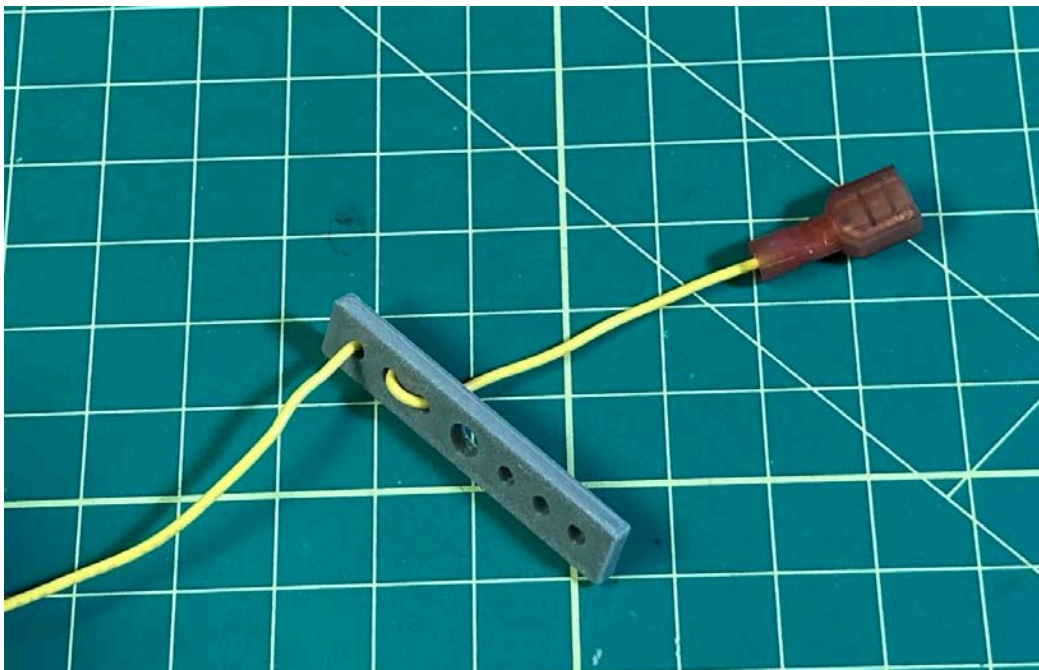
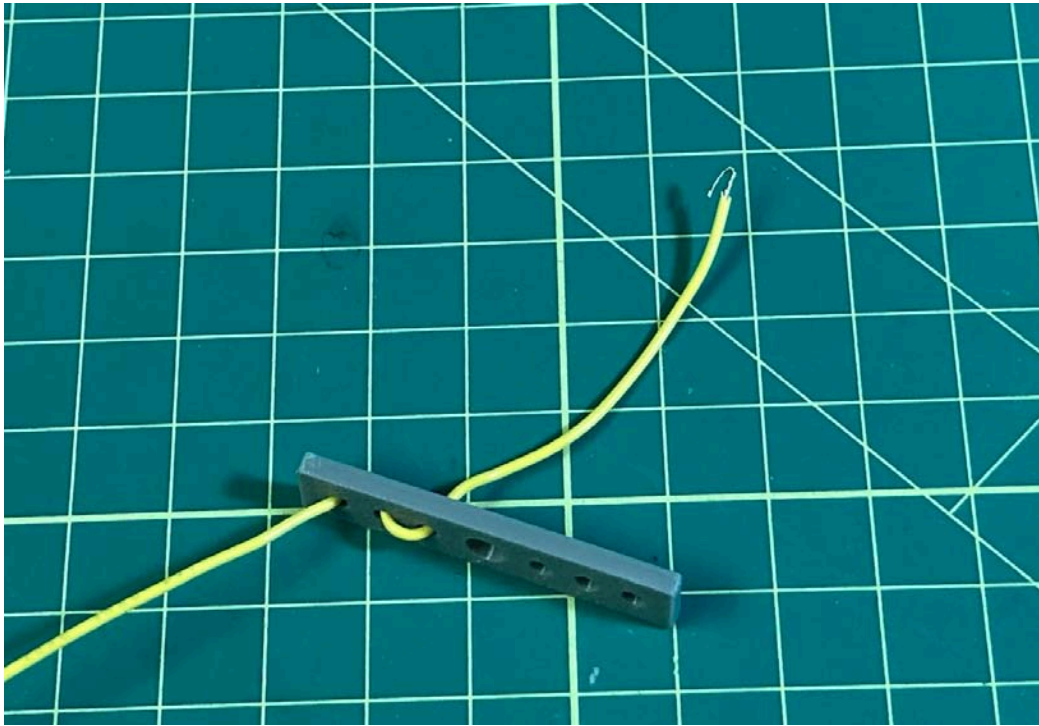
4- Insert the screw, washer (e), Ring Terminal (g), Lock Washer (f) and nut in the BOTTOM RIGHT side of the Black Center Insulator (a).



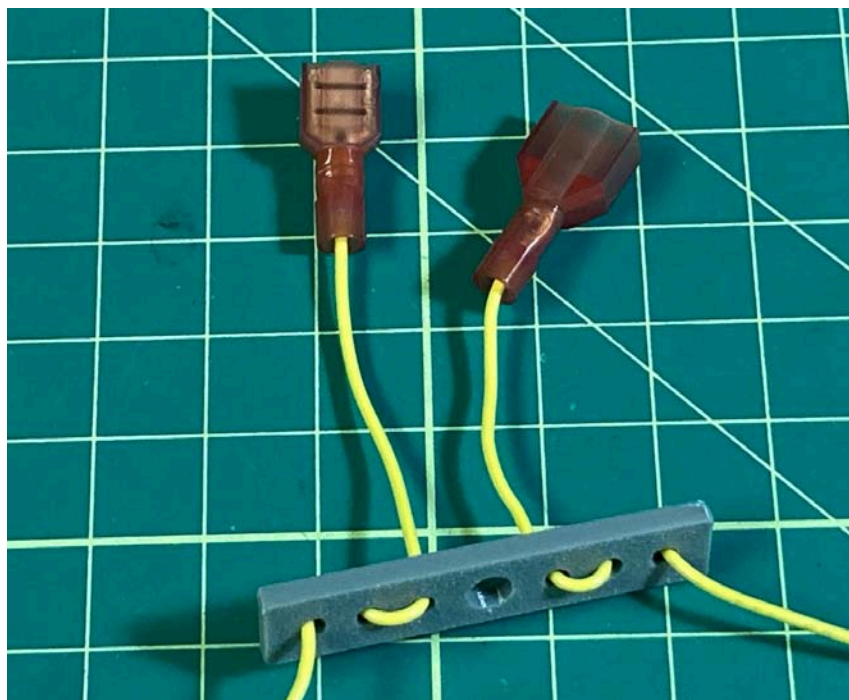
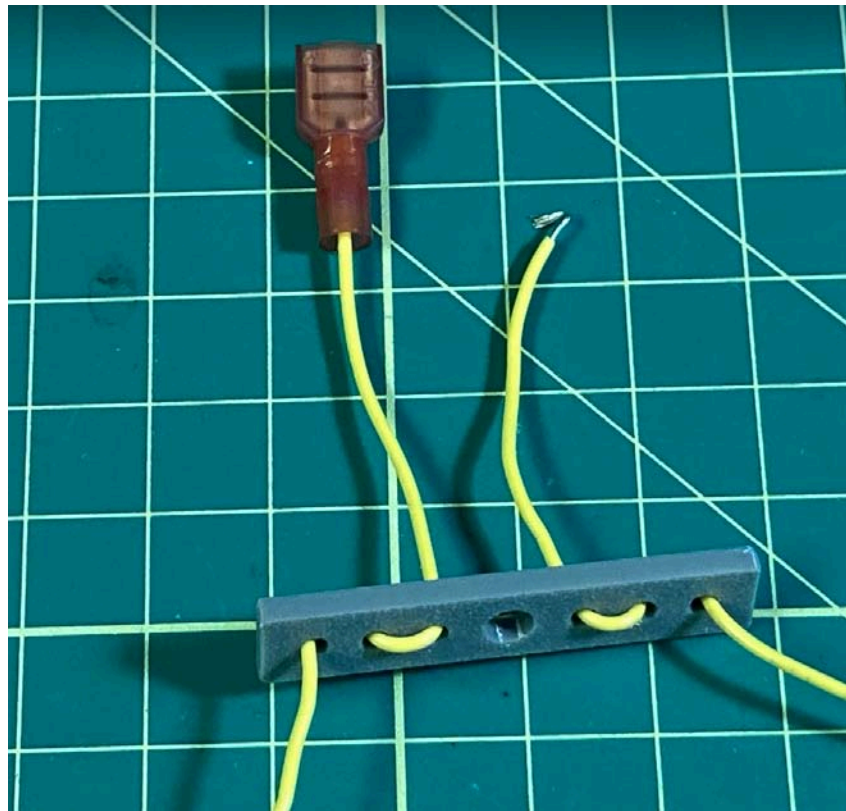
You now have a 20m dipole 😊



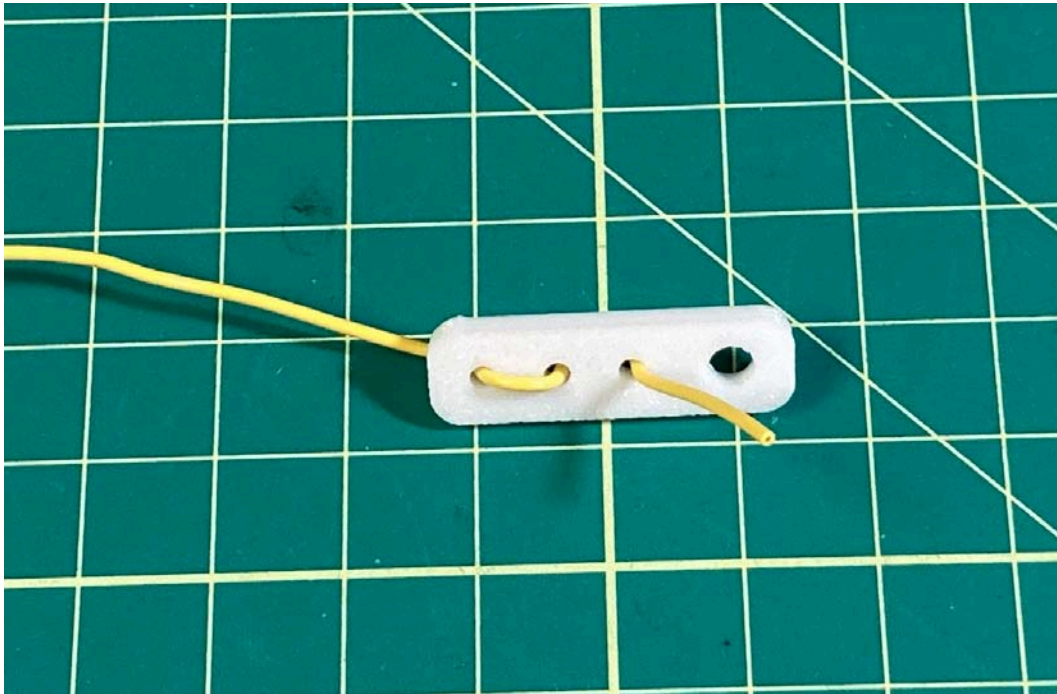
5- Insert the free end of the wire/element (j) into the Grey Link Insulator (b), Strip about 1/2 inch/10mm of insulation from the end of the wire using the wire strippers. Double back the exposed wire on itself and then crimp it to the Blade Connector F(h). REPEAT for the other 20m element (j).



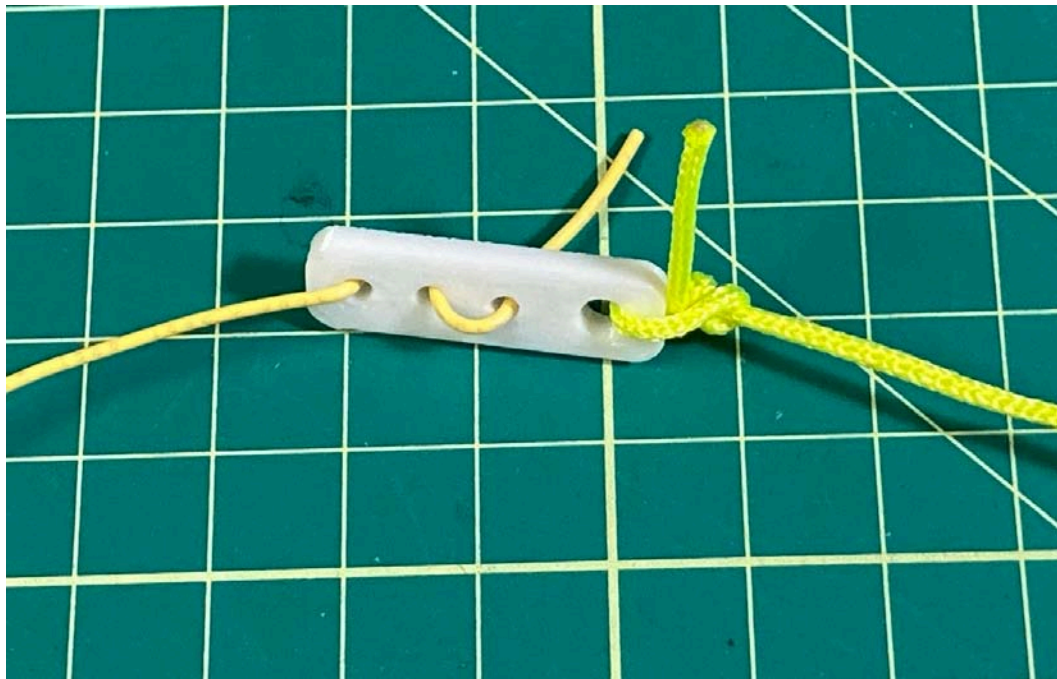
6- You should have 2 wire elements left, Insert a wire element (j) into the Grey Link Insulator (b), Strip about 1/2 inch/10mm of insulation from the end of the wire using the wire strippers. Double back the exposed wire on itself and then crimp it to the Blade Connector M (i). REPEAT for the other 40m element (j).



7- Insert the end of the 40m element (j) into the White End Insulator (c). REPEAT for the other 40m element(j).

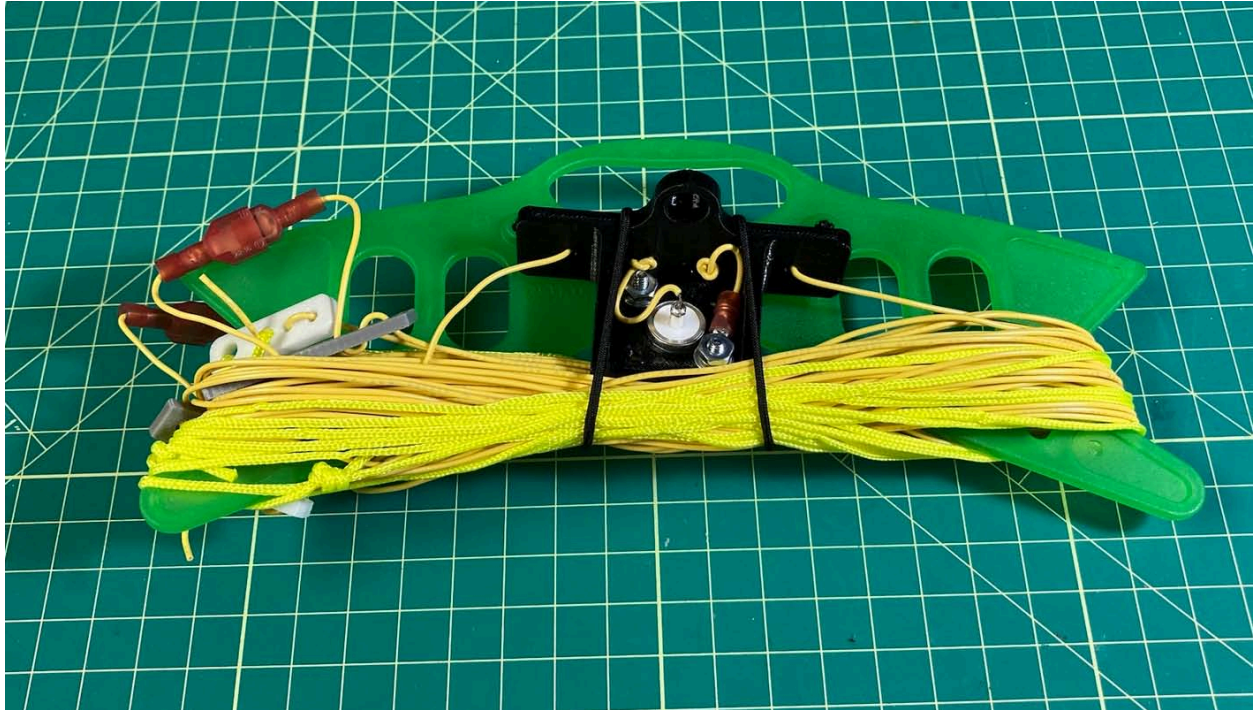


8- Attach the Paracord (k) to the White End Insulator (c). You can use a double overhand knot or a fisherman's knot or any other knot to secure it. REPEAT for the other 40m element (j).





9- Wind your antenna on the Winder (I) provided for easy storage.



Congratulations, you now have a linked dipole for 20m & 40m.

NOTE: The end of the antenna will be low to the ground (about 3 feet), make sure it's set up in a safe environment.

## Adjusting the resonant frequency

There's two different ways to adjust the resonant frequency. The height above ground and the angle between the two elements from the feed point.

### Height:

The higher the antenna is elevated the shorter the antenna will appear. i.e. The resonant frequency will be higher. You can also lower the antenna to lengthen it and lower the resonant frequency. This effect trails off as the antenna nears a significant fraction of its wavelength tall..

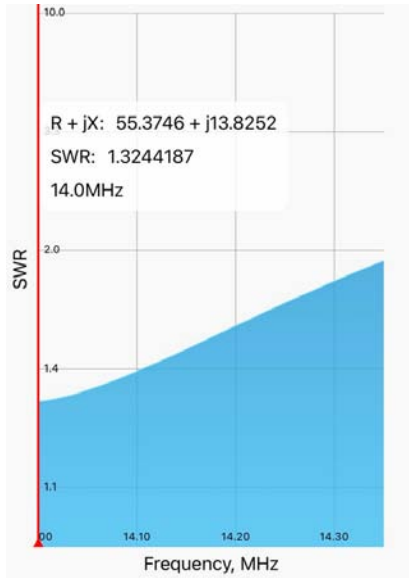
### Angle:

The antenna is tuned to be deployed around 150 degrees, it should be resonant in the middle of the band. At 120 degrees the resonant frequency will be higher, at 180 degrees the resonant frequency will be lower.

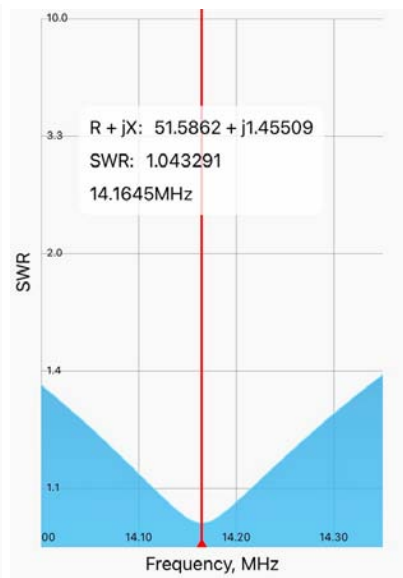
NOTE: Changing any of these factors will impact the radiation pattern but don't worry too much about that. The antenna will work and make contacts!

# SWR Charts

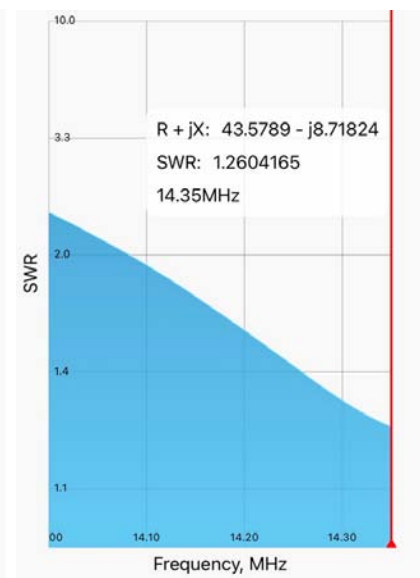
Antenna setup as an inverted V, feedpoint at 20ft/6m.



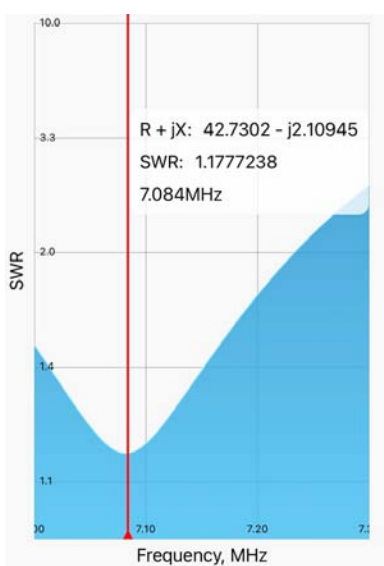
20m - 180 degrees



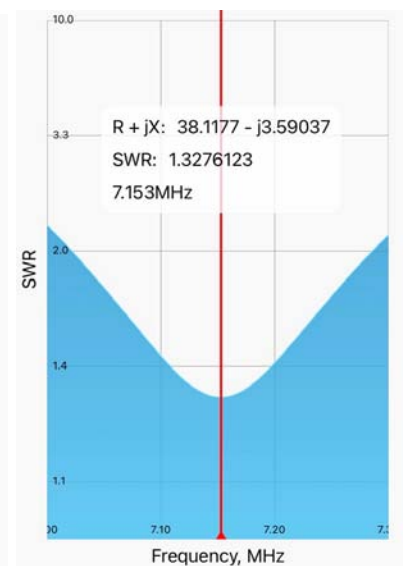
20m - 150 degrees



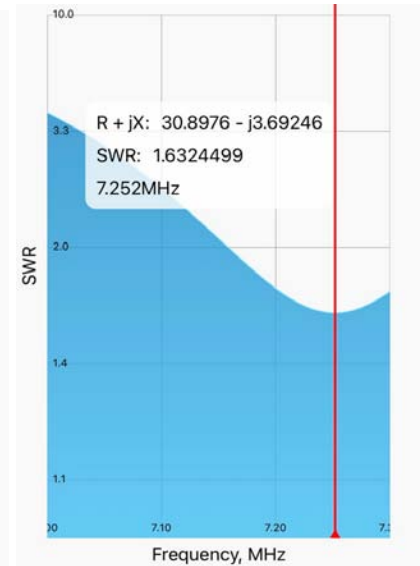
20m - 120 degrees



40m - 180 degrees



40m - 150 degrees



40m - 120 degrees

## Build your own at home

\*\* The STL files will be available for anyone who wants to print more insulators at home at:

<https://youthontheair.org/yotadipole2024>

SO-239 Chassis UHF Connector:

<https://www.dxengineering.com/parts/aml-83-798-2>

High Visibility Wire (24 awg)

<https://www.dxengineering.com/parts/cew-viz24-yel200>

RG8X Coax

<https://www.dxengineering.com/parts/dxe-8xdx050>

Winder

<https://www.dxengineering.com/parts/sbm-winder-gr>

#6-32 screws with #6 nuts, #6 washers and #6 lock washer.

<https://www.homedepot.com/p/6-32-x-1-2-in-Combo-Round-Head-Zinc-Plated-Machine-Screw-8-Pack-803021/204274603>

<https://www.homedepot.com/p/Everbilt-6-32-Zinc-Plated-Machine-Screw-Nut-12-Pack-802131/204274121>

<https://www.homedepot.com/p/Everbilt-6-Zinc-Flat-Washer-30-Pack-802451/204276448>

<https://www.homedepot.com/p/Everbilt-6-Zinc-Plated-Lock-Washer-30-Pack-802541/204276512>

Ring Terminal

<https://www.homedepot.com/p/Gardner-Bender-22-18-AWG-Stud-and-8-10-Stud-Vinyl-Insulated-Barrel-Ring-Terminal-Red-10-Pack-15-102/205846711>

Blade Connector

<https://www.homedepot.com/p/Gardner-Bender-22-18-AWG-0-250-Fully-Insulated-F-Disconnects-in-Red-15-Pack-15-151F/202523072>

<https://www.homedepot.com/p/Gardner-Bender-22-18-AWG-1-4-in-Fully-Insulated-M-Disconnects-Red-15-Pack-15-151M/202523103>

Arborist Throw Line

<https://www.amazon.com/Weaver-Arborist-Throw-Weight-Line/dp/B0044TXY56>

Manual written by Joceyln Brault, KE8VRX/VA2VRX



# Satellite Cheat Sheet

By Paul, KEØPBR - at ke0pbr.wordpress.com

SO-50	67 Hz	
<b>Preset #3</b>	Up (FM)	Down (FM)
AOS		436.805
2		436.800
Mid	145.850	436.795
4		436.790
LOS		436.785

AO-91	67 Hz	
<b>Preset #2</b>	Up (FM)	Down (FM)
AOS		435.240
2		435.245
Mid	435.250	145.960
4		435.255
LOS		435.260

PO-101	141.3	Schedule
	Up (FM)	Down (FM)
AOS	437.490	
2	437.495	
Mid	437.500	145.900
4	437.505	
LOS	437.510	

SO-121		
<b></b>	Up (FM)	Down (FM)
AOS		436.673
2		436.668
Mid	145.875	436.663
4		436.658
LOS		436.653

@Diwata2PH on Twitter

LilacSat-2	No tone	
<b></b>	Up (FM)	Down (FM)
AOS		437.210
2		437.205
Mid	144.350	437.200
4		437.195
LOS		437.190

ISS	67 Hz	
<b></b>	Up (FM)	Down (FM)
AOS		437.810
2		437.805
Mid	145.990	437.800
4		437.795
LOS		437.790

\*ISS SSTV 145.800

Tevel 2-8		
<b></b>	Up (FM)	Down (FM)
AOS		436.410
2		436.405
Mid	145.970	436.400
4		436.395
LOS		436.390

Red indicates doppler is high to low

# Schedules

ALL TIMES ARE ATLANTIC DAYLIGHT TIME (GMT-3)

**When you arrive** at Mount Saint Vincent University, check into your suite at the Westwood residence front desk to receive your apartment key and parking pass, if needed. If you made special arrangements to arrive before Sunday afternoon, be advised that if you try to check in after 10 pm the front desk will be closed - instead you will have to pick up your suite key at the security desk located in Assisi Hall (85 Seton Rd).

## Sunday, July 7, 2024

Everyone should check into the camp at the YOTA registration table at the Westwood residence front desk (161 Seton Road) on Sunday afternoon between 1 and 4:30 pm (even if you checked into your room early). You will receive your name badge and bag of swag.

1:00 pm        Camp check in begins and continues until 4:30 pm  
                  Led By: Katie Campbell, KE8LQR

2:00 pm        Shuttle from YHZ airport  
and 4:00 pm    Led By: Orren, N7WDA & Rebecca, KI7TXO Squires

4:30 pm        Check in ends

4:45 pm        Meet in Multi Purpose Room, Rosaria Student Centre  
                  3rd floor (see maps on [pages 47 & 48](#) - enter from Assisi Hall/Seton Road entrance OR one floor down from the Westwood/College Road entrance).

## OPENING CEREMONY

5:00 pm        **Official Welcome** - Multi Purpose Room, Rosaria Student Centre  
(2000Z)        Led By: Neil Rapp, WB9VPG, Camp Director (will be  
                  streamed on the [Youth on the Air YouTube Channel!](#))  
                  National Anthems  
                  Opening comments  
                  Welcome from Hosts, Meal instructions

<b>Things to Bring</b>  Pen or pencil This book
--

5:20 pm        Meal begins [location - either Multi Purpose Room or Dining Hall](#)

6:00 pm        **The Future of YOTA** - Multi Purpose Room, Rosaria Student Centre  
                  Led By: Neil Rapp, WB9VPG Camp Director  
                  Recognition of sponsors, staff, volunteers (Live Stream Resumes)

6:30 pm      **Welcome** - Jason Tremblay, VE3JXT, Community Officer,  
Radio Amateurs of Canada

6:45 pm      **Rules of the Road** - Neil Rapp, WB9VPG, Camp Director  
Code of Conduct, University Rules, Shirt days & Camp  
Photo, Video & Photo Booth, Ham Radio Safety

END OF OPENING CEREMONY

7:30 pm      **Ice Breaker / Team Building** (Live Stream Ends)

8:00 pm      **Shack Orientation** by Camp Hosts & Operating Time

11:00 pm     Everyone Should Be in Assigned Room

11:30 pm     Lights out

## Monday, July 8, 2024 - ICOM T-Shirt Day

- 8:00 am Everyone should be awake by now!  
Breakfast in Rosaria Dining Hall
- 9:00 am Team Check In & Announcements
- 9:05 am Official Camp Group Photos - location?????  
**Be sure to bring ALL your shirts you were given on arrival**
- 9:30 am *Session 1* - Camper Choice, but logging is required if you don't know how!  
Multi Purpose Room, Rosaria Student Centre

### Things to Bring

ALL Camp T-Shirts  
(wear ICOM)  
Pen or pencil  
This book  
Computer, if available

### **Logging** (Room A) - **If you have not logged contacts before, this is REQUIRED.**

The logging session will teach you how to log contacts using N1MM+ log software, which we will use throughout the camp

Led By: Joe Hammond, N1JOE and Jack Roberts, W9RFT

**Software Defined Radio (SDR)** (Room B) - this session will explore the theory and uses of software defined radios, specifically GNU radio - bring computer if possible

Led By: Caleb Smith, KZØP & Adrian Kaczmarczyk, VA3NB

- 10:30 am *Session 2 - Radio distribution & D-STAR demos* - ICOM Canada  
Multi Purpose Room, Rosaria Student Centre  
Led By: ICOM Representative

- 12:00 pm Lunch in Rosaria Dining Hall

- 1:00 pm Team Check In & Announcements

- 1:05 pm *Session 3 - Pico Balloon* prep, launch, tracking (Room A & Outside)  
Led by: Wintta Ghebreiyesus, VA3WGY & Stefen Teodorescu, VA3STQ

- 3:00 pm *Session 4* - Camper Choice - Intro to CW or Nets  
Multi Purpose Room, Rosaria Student Centre

**Intro to CW** (Room A) - This session will introduce you to morse code and give you helpful strategies to learn the code

Led by: Katie Campbell, KE8LQR

**Nets** (Room B) - This session will explain how nets work, how to check in, how to be a net control station, and offer youth friendly net choices

Led by: Lyle Strachan, KEØZNV

- 4:00 pm      *Session 5 - Sharing Session*  
Multi Purpose Room, Rosaria Student Centre  
Campers will share information about youth programs, clubs, nets, and contests  
Led By: Neil Rapp, WB9VPG & Sterling Mann, NØSSC
- 5:00 pm      Dinner in Rosaria Dining Hall & Staff meeting (if needed)
- 6:00 pm      Shack Operating Time / Social Time
- 7:00 pm      **Train the Trainer** (OPTIONAL) - for those interested in hosting future YOTA  
Events  
TODAY'S TOPIC: Interested in hosting a region-wide or subregional camp?  
We'll discuss what's involved and some things we have learned.
- Multi Purpose Room, Rosaria Student Centre  
Led by: Neil Rapp, WB9VPG - Camp Director
- 10:30 pm     Shack closed
- 11:00 pm     Quiet Hours Begin
- 11:30 pm     Lights out

**Tuesday, July 9, 2024**

- 8:00 am Everyone should be awake by now!  
Breakfast in Rosaria Dining Hall
- 9:00 am Team Check In & Announcements
- 9:05 am *Session 6* - Camper Choice (Choose 1)  
Multi Purpose Room, Rosaria Student Centre

**Things to Bring**

Your radio  
Pen or pencil  
This book  
Sunscreen?  
Shopping money?

**Kit Build - Beginner Level** (Build Area)

Campers will learn how to solder and build kits to take home, as well as some theory of how the circuits work.

1. YOTA [Super Simple Code Practice Oscillator](#)
2. KØNEB 3-D Printed Morse Code Straight Key

Led By: Tony Milluzzi, KD8RTT, Mia Boudreau, VA1ALO, Sam Rose, KC2LRC, and Jocelyn Brault, VA2VRX

**Fox Hunt "ARDF"** (Room A & Outside)

A competition where campers triangulate the location of a hidden radio transmitter using directional antennas

Led By: Samantha Lytch, KM4NSF & Devin Spielman, KE8PEQ

- 11:15 am *Session 7* - (OPTION 1) **Contact with the International Space Station** ([Live Stream](#) will start about 11:30 am on the [Youth on the Air YouTube Channel](#))  
Multi Purpose Room, Rosaria Student Centre  
Led by: Asst. Camp Director Ruth Willet, KM4LAO & Samantha Lytch, KM4NSF

- 12:06 pm ARISS contact begins (about 10 minutes)

- 12:30 pm Lunch in Rosaria Dining Hall

- 1:30 pm Team Check In & Announcements

- 1:35 pm *Session 8* - Camper Choice (Choose 1)  
Multi Purpose Room, Rosaria Student Centre

**Kit Build - Intermediate Level** (Build Area)

Campers that already know how to solder will build slightly more complex kits to take home.

1. HF Antenna Kit
2. YOTA [Dummy Load Kit](#) (uses surface mount parts)
3. Optional: YOTA [Super Simple Code Practice Oscillator](#)

Led By: Tony Milluzzi, KD8RTT, Mia Boudreau, VA1ALO, Sam Rose, KC2LRC, and Jocelyn Brault, VA2VRX

**Fox Hunt "ARDF" (Room A & Outside)**

A competition where campers triangulate the location of a hidden radio transmitter using directional antennas (repeat of morning session)

Led By: Samantha Lytch, KM4NSF & Devin Spielman, KE8PEQ

- 4:00 pm Finish Builds / Shack / Social Time
- 5:15 pm Take bus/duck downtown
- 5:30 pm Social Outing - Dinner  
Dinner at Food Court downtown  
Halifax [Harbour Hopper](#) Tours (Duck)
- 9:00 pm Shack / Social Time
- 10:30 pm Shack closed
- 11:00 pm Quiet Hours Begin
- 11:30 pm Lights out



## Wednesday, July 10, 2024 - Heil Sound T-Shirt Day

- 8:00 am Everyone should be awake by now!  
Breakfast in Rosaria Dining Hall
- 9:00 am Team Check In & Announcements
- 9:05 am *Session 9 - Satellites*  
Multi Purpose Room, Rosaria Student Centre

### Things to Bring

Your radio  
Small notebook  
Pen or pencil  
Sunscreen  
Computer?  
Wear Heil shirt

### **Satellite operation** (Room A & Outside)

Led By: Samantha Lytch, KM4NSF & Ruth Willet, KM4LAO

- \*\*10:20 am (BACKUP OPTION) **Contact with the International Space Station**  
([Live Stream](#) will start about 10:45 am on the [Youth on the Air YouTube Channel](#))  
Multi Purpose Room, Rosaria Student Centre  
Led by: Asst. Camp Director Ruth Willet, KM4LAO & Samantha Lytch, KM4NSF
- \*\*11:18 am ARISS contact begins (about 10 minutes)
- \*\*11:40 am Resume Satellite Session
- 1:00 pm Lunch in Rosaria Dining Hall
- 2:00 pm Team Check In & Announcements
- 2:05 pm Presentation: Maritime Launch  
Led By: Dr. Yaroslav "Yarko" Pustovyi, Director of Safety. Maritime Launch
- 3:00 pm *Session 10 - Parks on the Air Preparation*  
Multi Purpose Room, Rosaria Student Centre  
Led by: Anderson Ray, K4RAY & Daniel Alvarez, VE3FCT
- 5:00 pm Dinner in Rosaria Dining Hall & Staff meeting (if needed)
- 7:00 pm Shack Operating Time / Social Time  
OR
- 7:00 pm **Train the Trainer** (OPTIONAL)  
TODAY'S TOPIC: What does your local club offer for youth? What do you wish they did offer?  
Multi Purpose Room, Rosaria Student Centre  
Led by: Neil Rapp, WB9VPG - Camp Director
- 10:30 pm Shack closed
- 11:00 pm Quiet Hours Begin
- 11:30 pm Lights out

## Thursday, July 11, 2024 - Official YOTA Camp Shirt Day

- 8:00 am Everyone should be awake by now!  
Breakfast in Rosaria Dining Hall
- 9:00 am Team Check In & Announcements
- 9:05 am Special Presentation
- 9:15 am Bus leaves for downtown Halifax
- 9:30 am *Session 11* - POTA & Museum Ship

### Things to Bring

Your radio  
Small notebook  
Pen or pencil  
Sunscreen  
Shopping money?  
Wear YOTA shirt

**Museum Ship Activation** - Maritime Museum of the Atlantic  
Operate from the [HMCS Sackville](#) POTA ID CA-5821,  
[C.S.S. Acadia](#) POTA ID CA-5432, or the [Wireless Room](#) in the museum

**Parks on the Air (POTA) & Lighthouse Activation** - [Georges Island National Historic Site](#) POTA ID CA-4838 ILLW ID CA0053  
Grid FN84fp 44.6413, -63.5594

Likely the closest thing to a DXpedition we can give you! We will go to Georges Island and activate a POTA park that has never been activated before and an ILLW registered lighthouse with no power, running water, or food on the island. We will carry our own. Composting restrooms are available, and the ferry to and from the island runs every half hour.  
Led by: Anderson Ray, K4RAY & Daniel Alvarez, VE3FCT

- 12:00 pm Lunch (at the Museum? Boxed?) & Water Taxi to trade locations
- 1:00 pm *Session 12 - POTA & Museum Ship*  
See session 11 above - trade locations
- 4:00 pm Travel Time & Return Gear to Shack
- 4:45 pm Bus back to campus
- 5:00 pm Dinner in Rosaria Dining Hall & Staff meeting (if needed)
- 6:00 pm Shack Operating Time / Social Time
- 7:00 pm **Train the Trainer** (OPTIONAL)  
TODAY'S TOPIC: How can we share ideas about activities for youth?

Multi Purpose Room, Rosaria Student Centre  
Led by: Neil Rapp, WB9VPG - Camp Director

10:30 pm Shack closed - start packing so you can leave on time tomorrow!

11:00 pm Quiet Hours Begin

11:30 pm Lights out

**Friday, July 12, 2024**

- 8:00 am Everyone should be awake by now!  
Breakfast in Rosaria Dining Hall
- 9:00 am Team Check In & Announcements
- 9:05 am Rig Return - ICOM  
Led By: ICOM Representative
- Finish Public Relations Team interviews / Meet Young Ham features  
Led By: Katie Campbell, KE8LQR & Jack Roberts, W9RFT
- 10:00 am Closing Ceremony  
Led By: Neil Rapp, WB9VPG  
(will be streamed on the [Youth on the Air YouTube Channel](#))
- December YOTA Month information - by Zoom  
Led By: Kees Van Oosbree, WØAAE & Blake Pearson, KN4VKY
- Prizes & Giveaways
- Post-Camp Survey
- 11:00 am Move Out/Clean Up - Camp Officially Ends
- 11:30 am Shuttle Bus Leaves for YHZ Airport from Westwood Residence  
Led By: Orren, N7WDA & Rebecca, KI7TXO Squires
- 11:31 am Staff collapses from exhaustion
- 12:00 pm Lunch (optional)
- 1:00 pm Staff Clean Up and Pack Up

<p><b>Things to Bring</b></p> <p>Your radio (including all accessories)</p> <p>Pen or pencil</p>
--

HAVE A SAFE TRIP HOME!

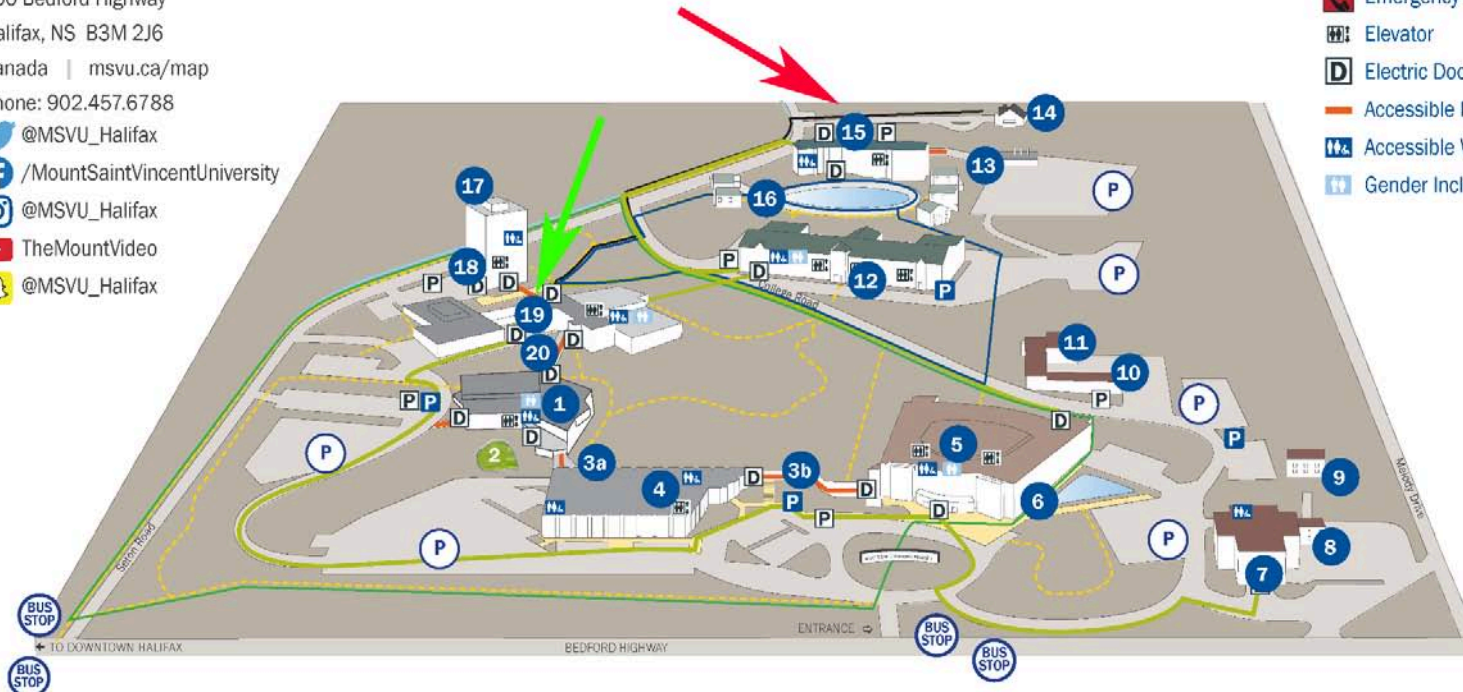


166 Bedford Highway  
Halifax, NS B3M 2J6  
Canada | msvu.ca/map  
Phone: 902.457.6788

- @MSVU\_Halifax
- /MountSaintVincentUniversity
- @MSVU\_Halifax
- TheMountVideo
- @MSVU\_Halifax

# CAMPUS MAP

- Parking
- Accessible Parking
- Emergency Phones
- Elevator
- Electric Door
- Accessible Route\*
- Accessible Washroom\*\*
- Gender Inclusive Washroom\*\*\*



- |   |  |   |
|---|--|---|
| <ul style="list-style-type: none"> <li>1 Margaret Norrie McCain Centre for Teaching, Learning and Research (including McCain Café)</li> <li>2 Riva Spatz Women's Wall of Honour</li> <li>3a RBC West Link</li> <li>3b RBC North Link</li> <li>4 E. Margaret Fulton Communications Centre [EMF] (including Library)</li> <li>5 Seton Academic Centre (including Seton Café)</li> </ul> | <ul style="list-style-type: none"> <li>6 MSVU Art Gallery</li> <li>7 Sheila A. Brown Centre for Applied Research</li> <li>8 Advancement House</li> <li>9 Aboriginal Student Centre</li> <li>10 International Education Centre (Seton Annex)</li> <li>11 Child Study Centre</li> <li>12 Evaristus Hall</li> <li>13 Art Landry Building (Central Heating Plant)</li> </ul> | <ul style="list-style-type: none"> <li>14 The Meadows</li> <li>15 Westwood (residence)</li> <li>16 The Birches (residence)</li> <li>17 Assisi Hall (residence)</li> <li>18 Assisi (including Campus Security, Health Services and Coastal Sports &amp; Wellness)</li> <li>19 Rosaria Student Centre (including Rosaria Dining Hall, Vinnie's Pub, Mount Fitness Centre)</li> <li>20 Student Legacy Lane (pedway)</li> </ul> |
|---|--|---|

## WALKING TRAILS

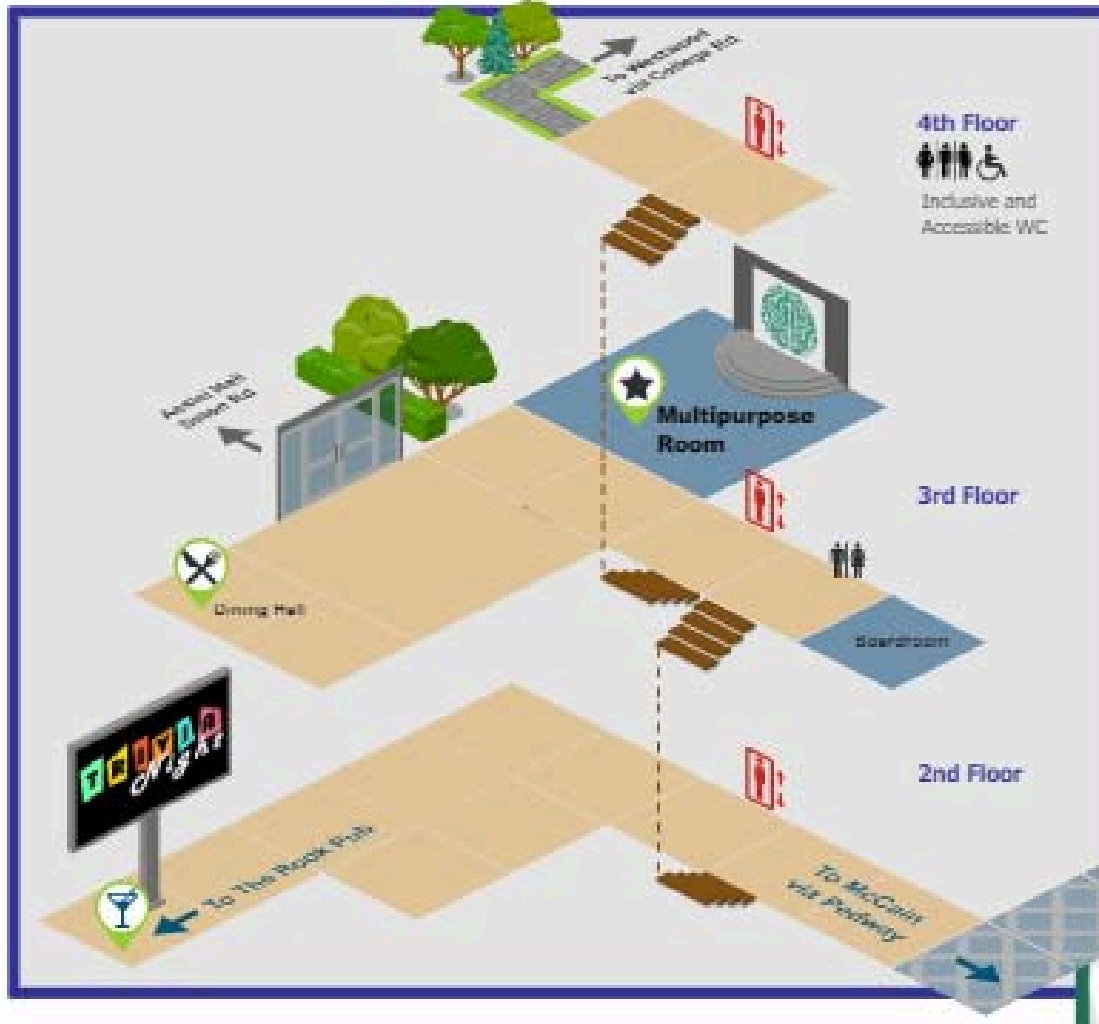
- Walk the Mount - 1340 steps, 304 stairs, 30 minutes
- Pond Tour - 848m, 1147 steps, 10 minutes
- Garden Tour - 352m, 480 steps, 4 minutes
- "Mountain" Tour - 592m, 808 steps, 7 minutes
- Central Campus Tour - 1.306 km, 1782 steps, 15 minutes

\* Note: The Birches is an inaccessible building. Buildings (3), (5), (10), and (14) have limited accessibility. The Indoor tunnels beginning at Rosaria (to Assisi and Evaristus) are accessible via Rosaria only. The pedway to the McCain Centre is available via Rosaria.

\*\* Accessible washrooms are available in Seton Academic Centre (342, 343, 453, 454), Seton Annex (1st Floor), Rosaria Student Centre (4th Floor), Evaristus Hall (C200, 2nd Floor, C300, 3rd Floor, C400, 4th Floor), E. Margaret Fulton Communications Centre (1st Floor), Westwood (3rd Floor), McCain Centre (all washrooms), and Advancement House.

\*\*\* Gender inclusive washrooms are available in Seton Academic Centre (453), Seton Annex (1st Floor), Rosaria Student Centre (402), Evaristus Hall (C200, 2nd Floor, C300, 3rd Floor, C400, 4th Floor) and the McCain Centre (113).

# Rosaria Student Center Map



Rosaria Student Center

Dining Hall  
Multipurpose Room

3rd Floor

# Things To Do Before or After Camp

- See the official Halifax Visitor Guide at <https://discoverhalifaxns.com/plan/halifax-visitor-guide/>

## Halifax Waterfront

As a historic port city, Halifax has always been tightly connected to its waterfront. But where it was once industrial and gritty, it's now vibrant, bustling, and inviting. An urban wanderers' dream, the boardwalk is a four-kilometre (2.5 miles) long harbourside adventure of shopping, beer gardens, museums, restaurants, tours, playgrounds, and public art. Don't rush this iconic experience; plan to stop often for views, treats, and entertainment.

## The Noon Gun

Downtown Halifax is essentially built into the side of a steep hill, and overlooking it all is the [Halifax Citadel National Historic Site](#). This star-shaped fortress overlooks the city and once protected a young Halifax from attack by land and sea. At 12pm listen for the daily cannon fire, known locally as the "noon gun". This ritual has signalled the noon hour every day since 1857.

## Dartmouth

On the Halifax waterfront, there are several harbour tours available, but the easiest way onto the water is the [Alderney Ferry](#), which runs between the Halifax waterfront and downtown Dartmouth. Operated by Halifax Transit, the ferry service is the oldest saltwater ferry in North America. All you'll need is \$2.75 for the fare, and ask for a transfer for your return trip\*. Once you've crossed the harbour, explore the shops, cafés, and public art around downtown Dartmouth.

## Try a Donair

The humble and affordable donair is the official food of Halifax. Popular among locals as a late-night snack, this messy meal with Greek origins consists of a pita filled with spit-roasted shaved beef, tomatoes, onions, and—importantly—a sweet and garlicky donair sauce. You can pick up a donair at plenty of places across the city, including Tony's Famous Donairs & Pizza on Robie Street, Randy's Pizza & Donair on Agricola Street, and King of Donair on Quinpool Road.

**Halifax public gardens** - <https://www.halifaxpublicgardens.ca>

**Kartbahn Racing** - <https://kartbahn.ca/>

200 Prospect Rd, Halifax, NS B3P 1T2

10 min from MSVU

**Burke-Gaffney observatory** - [smu.ca](http://smu.ca)

5865 Gorsebrook Ave, Halifax NS B3H 1G3





**Getting from the Airport to Downtown Halifax**

Taxis, Uber, Turo, and airport car services are available curbside at the Airport area. To travel from the airport to downtown Halifax you can expect to pay roughly \$55-\$70. **Vehicle rentals** are located on the lower level of the airport. **Halifax Transit** also offers a limited stop **Express Route Airport Bus** (320 Metro X) linking Halifax Stanfield International Airport to downtown Halifax. Adult/Student: \$7.25/ Children/ Seniors: \$3.00\*

## Land Acknowledgement

Halifax is Mi'kmaq, the ancestral and unceded territory of the Mi'kmaq people. The people of the Mi'kmaq have lived on this territory for thousands of years and knowledge from a long past, present, and future connects us to this land.

Thank you to the Mi'kmaq nation, and to the Mi'kmaq people who have lived on this territory for thousands of years and knowledge from a long past, present, and future connects us to this land.

**Getting Around**

- Bus**  
Halifax Transit offers affordable transportation around these three urban boroughs and beyond. Find routes and schedules at [halifax.ca/transit](http://halifax.ca/transit).
- Taxi/Uber**  
**Casino Taxi** (902-429-6666) and **Yellow Cab** (902-420-0006) are the most popular taxi services in the Halifax region. If you require wheelchair access call **Extra Care Taxi** (902-334-0334). Uber is now available in Halifax via the Uber app.
- Ferry**  
For just \$2.75, enjoy a 15-minute ferry ride across the Halifax Harbour to explore both downtown Halifax and Downtown Dartmouth.
- Walk/Bike**  
Each of the urban boroughs on this map is highly walkable and bikeable due to the small size of our bustling city. New bike lanes are added every year.



## Downtown Halifax

Downtown Halifax is the urban core of the region, complete with hundreds of restaurants, live music venues, unique local shops and world-class attractions. The area is home to the lively Halifax waterfront which boasts one of the longest waterfront boardwalks in the world. This iconic destination offers stunning harbour views and plenty of things to do, from beer gardens and farms to parks to playgrounds and museums.

- Attractions & Landmarks**
- Canada Nova Scotia
  - Centennial Point
  - Dalhousie University and University of King's College
  - Drummen Lighthouse
  - Emera Oval
  - Government House
  - Halifax Brewery Farmers Market
  - Halifax Central Library
  - Halifax City Hall
  - Halifax Convention Centre
  - Halifax Public Gardens
  - Halifax Seaport Farmers Market
  - Neptune Theatre
  - Nova Scotia College of Art and Design (NSCAD)
  - Old Town Clock
  - Pizza Corner
  - Point Pleasant Park
  - Provincetown House
  - Ruggs Square
  - Saint Mary's University
  - Scotiabank Centre
  - Swanmore Playground
  - Wanderers Grounds
  - Waterfront Hammocks
  - The Wharf
- Museums**
- Art Gallery of Nova Scotia
  - Cowdrey Museum of Immigration at Pier 21
  - Discovery Centre
  - Georges Island National Historic Site
  - Halifax Citadel National Historic Site & Army Museum
  - Maritime Museum of the Atlantic
  - Museum of Natural History
- Places You'll Love**
- Alexander Keith's Brewery Tour/Brewery
  - Amos Pevter Gift Shop
  - Art 1274 Halifax Canadian Art Shop
  - Harbour Hopper Tours Land and Sea Tours
  - Northern Waters Knitwear & Tartan Shop
  - Park Lane Mall Shopping Mall
  - Peace by Chocolate Chocolate Shop
  - The Prow Gallery Canadian Art Shop
  - Spring Garden Place Shopping Plaza

**1 Bishop's Landing** [bishopslanding.com](http://bishopslanding.com)

**2 Canadian Museum of Immigration at Pier 21** [pier21.ca](http://pier21.ca)

**3 Discovery Centre** [thediscoverycentre.ca](http://thediscoverycentre.ca)

**4 Harbour Hopper Tours** [harbourhopper.com](http://harbourhopper.com)

**5 Halifax Citadel National Historic Site** [parks.canada.ca/halifaxcitadel](http://parks.canada.ca/halifaxcitadel)

**6 Georges Island National Historic Site** [parks.canada.ca/georges](http://parks.canada.ca/georges)

- Districts**
- Argyle Street** | 20+ eateries, pubs and bars
  - Bishop's Landing** | High end dining & shopping district
  - Brewery Market** | Historic building with shops, dining & brewery
  - Granville Mall Area** | Historic cobblestone shopping mall
  - Halifax Seaport District** | Vibrant urban culture district
  - Historic Properties** | Historic shopping & dining district
  - Park Lane Mall** | Three floor mall with 100+ retailers
  - Queen's Marquee** | New high-end dining & shopping district
  - Salt Street Waterfront** | Parks and shops & food
  - Scotiabank Centre** | Downtown mall with everyday essentials
  - Spring Garden Place** | Boutique shops and dining
  - Spring Garden Area** | Centrally-located shopping district

**DOWNTOWN HALIFAX**  
[downtownhalifax.ca](http://downtownhalifax.ca)

Scan for full business directory.

**Legend**

- Airport Bus 260 Metro X
- Amusement (amusement)
- Church
- Dog-Friendly Park/Walk
- Free Public Wi-Fi
- Historic Cemetery
- Playgrounds
- Public Art
- Shopping Areas
- Skate Park
- Splash Pad
- Suggested Walking Route
- Train Tracks
- Ferry Route
- Bank
- Parking
- Post Office
- Police Station
- Hospital
- Ferry Terminal
- Public Washrooms
- One-Way Street
- Conservation Districts
- North End Halifax
- Parks & Green Space
- Waterfront Districts
- Walkway System
- Halifax HarbourWalk

**Halifax Seaport District**  
[halifaxseaport.ca](http://halifaxseaport.ca)



# North End Halifax

Halifax's North End is known for its diverse and multicultural neighborhoods, award-winning restaurants, local shopping, and thriving arts scene. Visitors will pick up on the relaxed, creative energy of the area, from the colourful saltbox houses alongside trendy craft breweries and distilleries, to the historic landmarks and vibrant murals that form the backdrop of this dynamic community.

### Attractions & Landmarks

- 1 Creative Crossing
- 2 Fivers Oval
- 3 Fort Akerham Memorial Park & Playground
- 4 Halifax Armoury
- 5 Halifax Common
- 6 Halifax Common Playground
- 7 Halifax Scottish Memorial Bell Tower
- 8 The Halifax Forum
- 9 Hope Bazaars
- 10 Hydrostone Market and Park
- 11 The Little Dutch Church
- 12 Memorial Union Post-Office
- 13 North End Freedom Monument
- 14 The Walk-Downward
- 15 St. George's Round Church
- 16 The Walk-Downward
- 17 Lucerne Art Installation

### Places You'll Love

- 1 14 Bells Fine Art Gallery
- 2 Agricola Street Books
- 3 Espresso 46
- 4 Propeller Brewing Company
- 5 Made in the Maritimes Artisan Boutique

### Museums

- 1 Africville Museum and Park
- 2 Halifax Naval Museum



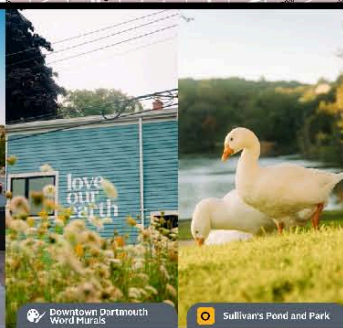
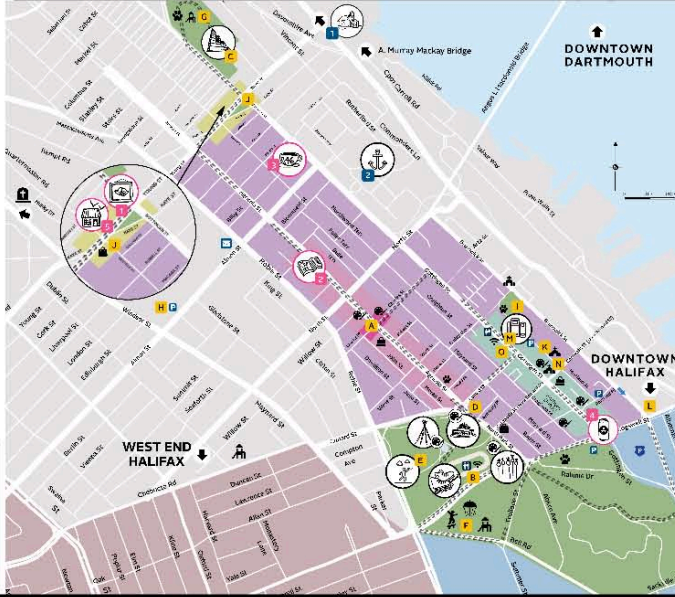
Scan for full business directory.

### Districts

- Agricola Street** | Dozens of local and boutique shops along 10 walkable blocks
- Creative Crossing** | Local dining, arts, and yoga hub on Agricola Street
- Gortingen Street** | Historic area, local shops, and historic murals
- Heritage District** | Vibrant arts and cultural district
- Hydrostone Market** | European-style outdoor market with shops & eateries

### Legend

Dog-friendly Park/area	Bank	Parks and Green Space
Free Public WiFi	Parking	Halifax Harbour
Historic Lawn Cemetery	Post Office	Lowertown-Halifax
Playgrounds	Police Station	West End-Halifax
Public Art	Hospital	
Shopping Areas	Public Washrooms	
Splash Pad	One-Way Street	
Suggested Walking Route		



# Downtown Dartmouth

Downtown Dartmouth is a vibrant community filled with one-of-a-kind shops and restaurants, cozy cafes, craft beer and cider, patios with incredible views of the Halifax Harbour, public art, and beautiful parks.

### Attractions & Landmarks

- A Alderney Gate Public Library
- B Alderney Marina
- C Birch Cove Beach
- D Dartmouth Cancer for Cancer Survivors
- E Dartmouth Astoria Ferry Terminal
- F Dartmouth Bridge Terminal
- G Dartmouth Common
- H Dartmouth Common Skating
- I Eastern Front Theatre
- J Ferry Terminal Park
- K Leighton Dillman Park
- L Park Avenue Community Plaza Open
- M School One Sculpture
- N Strinys's Splash Pad
- O Sullivan's Pond and Park
- P World Peace Pavilion
- Q Zephyrus Sportsplex

### Museums & Galleries

- 1 The Crag Gallery
- 2 The Crag Gallery
- 3 Dartmouth Heritage Museum
- 4 Quaker House
- 5 Royal Canadian Legion Military Museum
- 6 The Shubenacadie Canal Boat Railway

### Places You'll Love

- 1 Alderney Landing Community Culture Centre
- 2 Back to the Sea Centre Touch Tank
- 3 Oxalis Restaurant Fine Dining
- 4 Portland Street Crêperie (Crêpe Shop)
- 5 The Trainyard General Store Local Goods



Scan for full business directory.

### Districts

- Alderney Landing Area** | Community cultural centre, art gallery & market
- Kings Wharf District** | Cafes, shops, eateries, and water front, local shops
- Oxley Street Area** | Cafes and eateries
- Portland Street** | 15+ local eateries, breweries, and shops
- Sullivan's Pond Area** | Green space with a pond, walkway, and geese

### Legend

Alderney 320 Memorial	Bank	Parks and Green Space
Dog-friendly Park/area	Parking	
Free Public WiFi	Post Office	
Historic Cemetery	Hospital	
Playgrounds	Public Washrooms	
Public Art	One-Way Street	
Shopping Areas	Ferry Terminal	
Suggested Walking Route	Hall of Harbour	
Train Tracks	Parks and Green Space	
Walking Trail		



# Camp Faculty, Staff, and Support Staff

THANK YOU to each and every one of you for volunteering your time, money, and talents to make this week a success!

## STAFF & SUPPORT

### ADMINISTRATION

- Neil Rapp, WB9VPG, Director
- Ruth Willet, KM4LAO, Asst. Director
- Abby Kimi Matsuyoshi, KK7CFJ, Asst. Director
- Julie Rapp, Director's Director

### AIRPORT

- Orren Squires, N7WDA
- Rebecca Squires, KI7TXO

### BUILD

- Tony Milluzzi, KD8RTT, Lead
- Jocelyn Brault, VA2VRX

### CHAPERONES

- Colleen Campbell, KB8VAQ
- Emiliano Gutiérrez, LW6EGE
- Mark Strachan, KD6IQW
- Orren Squires, N7WDA
- Rebecca Squires, KI7TXO

### HOST

- Keith Bruce, VE1JKB, Host Lead
- John Bignell, VE1JMB, Halifax ARC
- Jason Trembley, VE3JXT, RAC

### MULTIMEDIA

- Brian Esche, WB9QVR
- James Lea, WX4TV
- Sterling Mann, N0SSC
- Sam Rose, KC2LRC

## SHACK

- Taylor Laub, KE8LWZ
- Rose LeBlanc, VA3RZZ

## CHECK IN

- Katie Campbell, KE8LQR

## PUBLIC RELATIONS

- Abby Kimi Matsuyoshi, KK7CFJ, Manager (remote)
- Katie Campbell, KE8LQR (½ time)
- Alan Griffin, RAC
- Jack Roberts, W9RFT (½ time)

## FACULTY

### SESSION LEADERS

- Logging: Joe Hammond, N1JOE & Jack Roberts, W9RFT
- SDR: Caleb Smith, KZ0P & Adrian Kaczmarczyk, VA3NB
- D-STAR: Rose LeBlanc, VA3RZZ & Taylor Laub KE8KWZ
- ARISS Contact: Ruth Willet, KM4LAO & Samantha Lytch, KM4NSF
- Intro to CW: Katie Campbell, KE8LQR
- Nets: Lyle Strachan, KE0ZNV
- TTT: Neil Rapp, WB9VPG
- Kit & Antenna Build: Tony Milluzzi, KD8RTT, Mia Boudreau, VA1ALO, Sam Rose, KC2LRC, and Jocelyn Brault, VA2VRX
- ARDF: Samantha Lytch, KM4NSF & Devin Spielman, KE8PEQ
- POTA: Anderson Ray, K4RAY & Daniel Alvarez, VE3FCT

- Satellite: Samantha Lytch, KM4NSF & Ruth Willet, KM4LAO
- Pico Ballooning: Wintta Ghebreiyesus, VA3WGY, Stefen Teodorescu, VA3STQ, and Dr. Yarko Pustovyi (Maritime Launch)

#### TEAM LEADERS

- Daniel Alvarez, VE3FCT
- Hope Lea, ND2L
- Theo Pastrana, LU1XOP
- Anderson Ray, K4RAY
- Caleb Smith, KZØP

## Schedule Grid

	Sun 7/7/2024	Mon 7/8/2024	Tue 7/9/2024	Wed 7/10/2024	Thu 7/11/2024	Fri 7/12/2024
8am	Arrivals	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast
9am		Camp Photos :30	ARDF or Kit Build (Beginner)	Satellites  (backup ARISS)	POTA Or Museum Ships	Rig Return/Exit Interviews
10am		Logging OR SDR				Closing Cermony / DYM
11am		Rig Distribution D-STAR	ARISS			Move Out Time / Shuttle 11:30
12pm		Lunch	Lunch 12:30	Lunch	Box Lunch	
1pm	Check In	Balloon Launch	1:30 ARDF or Kit & Antenna Build (Intermediate)	Lunch	POTA Or Museum Ships	Tear Down
2pm	Airport Shuttle			Maritime Launch Presentation		
3pm	Check In	Intro to CW OR Nets		POTA Prep		
4pm	Airport Shuttle	Sharing Session	Travel / Gear Return			
5pm	Opening Ceremony	Dinner	Dinner	Dinner	Dinner	
6pm	Dinner	Station Time / Social Time	Halifax Tour	Station Time / Social Time	Station Time / Social Time	
7pm	Rules	TTT		TTT	TTT	
8pm	Shack Orientation	Station Time / Social Time		Station Time / Social Time	Station Time / Social Time	Station Time / Social Time
9pm	Station Time / Social Time					
10pm						
11pm						

Activity at Main Area	The shack and remotes are available during these times when you have completed the session.
Social/Flex	
Off Campus	
Cafeteria	