

JOTA/JOTI 2024

Connect with people in scouting all over the world
Oct 18,19,20

Activities:

Treasure Hunt

Battleships over radio

Lego over radio

Radio Fox Hunt

HF radio contacts with other scouts from all over the world

VHF radio contacts with people from all over the region

UHF radio contacts with people from around the city

Digital Radio contacts with other scouts from all over the world

Morse Code Radio contacts

Learn about: Weather radio, Marine radio, The Ionosphere, and more

Radio Scouting

Activities we can bring to you:

Battleships over radio,

Lego over radio

Radio Fox Hunt

HF radio contacts with other scouts from all over the world

VHF radio contacts with people from all over the region

UHF radio contacts with people from around the city

Digital Radio contacts with other scouts from all over the world

Morse Code Radio contacts

Radio nets

Badge work

Learn about: Weather radio, Marine radio, The Ionosphere, and more

Treasure Hunt

Activity: b,c,s,v,r,l,p

- Goals: Have Fun, see neat things at the museum
- There is a different treasure hunt for Beaver, Cubs, Scouts, Venturers.
- Leaders and parents can do the same treasure hunt as the Venturers

Battleships over radio

Sections: c,s,v,r,l,p

- Goals: Have Fun, Learn how to communicate effectively over radio
- Equipment supplied by us:
 - Radios, playing field sheets
- Supplied by you
 - Pencils, and writing surface (table, book, etc)
 - Two locations far enough apart, they have to use the radios
- This is the classic game of Battles ships, but with an 8X10 grid to make the game go a little faster. The grid uses the phonetic alphabet, the grid used at location 1 is different from location 2
- The players cannot see each other, and have to use UHF radios to communicate

Lego over radio

Activity: b,c,s,v,r,l,p

- Goals: Have Fun, Learn how to communicate effectively over radio
- Equipment supplied by us:
 - Radios, lego set
- Supplied by you
 - Two locations far enough apart, they have to use the radios
Player 1 is in one room, and player 2 is in another room.
- Player 1 has a item made out of Lego, and has to give instructions to player 2, so that player 2 can build the item. All instruction are given over the UHF radios

Radio Fox Hunt

Activity: c,s,v,r,l,p

- Goals: Have Fun, Learn about radio
- Equipment supplied by us:
 - Radios
- Outdoor event, dress appropriately
- Radio transmitters (FOXes) are hidden on the scout grounds
- Players use radio receivers with directional antennas to hunt down and find the FOXes (transmitters)

HF Radio contacts with other scouts from all

Activity: b,c,s,v,r,l,p

- Goals: Have Fun, Learn how to communicate effectively over radio
- Equipment supplied by us:
- HF radios bounce their signals off of the ionosphere, and can reach anywhere in the world.
- Players will be able to talk to other people in scouting from around the world.
- Players will get a certificate for this activity, as well as the coveted 2024 JOTA crest

VHF radio contacts with people from all

Activity: b,c,s,v,r,l,p

- Goals: Have Fun, Learn how to communicate effectively over radio
- Equipment supplied by us:
 - Radios
- The VHF radios will bounce their signals off of repeaters in the Ottawa/ Gatineau area ~100 km radius
- Players can talk to other people in scouting from all around this area

UHF radio contacts with people from around the city

Activity: b,c,s,v,r,l,p

- Goals: Have Fun, Learn how to communicate effectively over radio
- Equipment supplied by us:
 - Radios
- Players will be able to talk to people from the local area
- UHF radios use Line of sight Propagation

Digital Radio contacts with other scouts from all over the world

Activity: c,s,v,r,l,p

- Goals: Have Fun, Learn how to communicate effectively over radio
- Equipment supplied by us:
 - Radios
- Players will be able to communicate with people from around the world
- Several digital mode will be used, including:
 - FT8, FT4, WSPR, APRS

Morse Code Radio contacts

Activity: b,c,s,v,r,l,p

- Goals: Have Fun, Learn how to communicate effectively over radio
- Equipment supplied by us:
 - Radios, keys or paddles, oscillators
- Supplied by you
 - Pencils, paper. and a writing surface (table, book, etc)
- Players can experience morse code in several different ways
 - Using practice code oscillators
 - Doing low power over the air communications
 - Using HF radios to communicate to people from all over the world

JOTI – Jamboree on the Internet

Activity: b,c,s,v,r,l,p

- Goals: Have Fun
- Equipment supplied by us:
 - Computers, software, and internet connection
- Players will be able to communicate to other people in scouting from around the world, over the secure web system created for this event
- Voice, Text and Video communication will be possible

WSPR – Weak Signal Propagation Reporting System

Display: c,s,v,r,l,p

- WSPR – is a digital communication system that automatically send out very low power signals (~2W)
- These signals go all around the world, and are picked up by other amateur radios operators.
- The contacts are then reported to the internet. and displayed on a website

CB radio

Display: b,c,s,v,r,l,p

- CB radios are unlicensed low power radios
- They are still used today
- They have many fun uses

Weather radio

Display: b,c,s,v,r,l,p

- In north America weather information is transmitted over VHF am radio
- This information is very useful to people hiking, canoeing, and doing activities in the wilderness

Marine Radio

Display: b,c,s,v,r,l,p

- Marine Radio is a must for anyone on the water
 - Large commercial ships to canoeists use marine radio to stay safe on the water

APRS – Automatic Packet reporting system

Display: c,s,v,r,l,p

- This digital system send out packets over VHR radio repeaters
- Digipeaters distribute the packets over the world
- Igates take the packets from the air and puts them on the internet
- Websites display the data

Q-Codes

Display c,s,v,r,l,p

- Q-codes are used by radio operators as a short cut for common phrases
- It is useful when doing voice communications, but is an absolute must for CW(morse code) communications

Radio Spectrum

Display: c,s,v,r,l,p

- Radio frequencies are decided up into bands and are allocated for different uses
- They display shows how the frequencies are divided up

Hamclock

Display: c,s,v,r,l,p

- This system running on a raspberry PI tell you every thing that you wanted to know about radio propagation and current state of the ionosphere, but were afraid to ask.

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

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

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

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