

# Guidelines for Amateur Radio Operators

JOTA is a spectacular opportunity to introduce Scouts to amateur radio. For many, this will be their first exposure to the world of ham radio. Some will go on to become hams, enjoying the hobby for a lifetime. A few will even find the basis of a career in science and technology.

We've assembled a fair bit of information here to help you work with your Scouting partner in setting up this event. You should also consult the American Radio Relay League information at [www.arrl.org/jamboree-on-the-air-jota](http://www.arrl.org/jamboree-on-the-air-jota).

## Licensing Regulations

As a licensed amateur radio operator, you must, of course, comply with FCC regulations regarding frequencies, power, quality of signal, etc. Third-party traffic is approved by the FCC. Therefore, Scouts can talk with other Scouts when both stations are licensed by the FCC. When the station you are in contact with is outside U.S. jurisdiction, a third-party agreement must exist between the U.S. and that country's telecommunications authority. If an agreement exists, then Scouts in the U.S. may talk directly to the Scouts in that country. If not, then the licensed ham radio operator must talk for the Scouts. The full list of countries with a designation of which countries have third-party agreements with the U.S. is at this link: [www.arrl.org/third-party-operating-agreements](http://www.arrl.org/third-party-operating-agreements).

## Operating Rules

- » All radio operators must operate their station strictly in accordance with FCC regulations.
- » Stations should try to contact each other by calling "CQ Jamboree" or "CQ JOTA" or by answering other stations sending this call.
- » Any authorized amateur radio frequency may be used. It is suggested that the frequencies listed below be used, at least for a starting point. Once contact is established, you can move to another frequency to leave the calling frequency open for others.
- » Any amateur mode of operation can be used such, as CW, SSB, PSK, SSTV, FM, and satellite. The more modes in operation, the more exciting the event will be for the Scouts.
- » JOTA is not a contest. The idea is to contact other Scout stations and allow as many Scouts as possible to talk to other Scouts and learn about who they are and what they are doing. You might think about counting the Scouts on both sides of the QSO rather than the number of QSOs!

## Suggested Frequencies

- » All frequencies are shown as megahertz.
- » Primary HF recommendations are for General Class licensees. Technicians may take advantage of 10 m and VHF/UHF for voice communications.
- » After contact is made on Calling Channel or frequency, move to another channel or frequency for QSO.
- » Experiment with modes prior to JOTA or Radio Scouting demo. 'Murphy's Law' prevails!
- » Use web search tools to find lots of helpful information about any of the modes commonly used for JOTA and Radio Scouting.
- » WOSM (World Organization of the Scouting Movement) calling frequencies are shown to indicate center of international activity.

## HF SSB Voice

Band	WOSM Calling Frequencies	Suggested Band Segment for US Stations	Notes
80 m	3.940 & 3.690(1)	3.920 – 3.940 3.670 – 3.690 (1)	(1) Extra segment
40 m	7.190 & 7.090 (2)	7.180 – 7.200 7.270 – 7.290	(2) 7.090 not available in Region 2
20 m	14.290	14.270 – 14.290 14.320 – 14.340	
17 m	18.140	18.140 – 18.150	
15 m	21.360	21.360 – 21.400	
12 m	24.960	24.960 – 24.980	
10 m	28.390 (3)	28.350 – 28.400 (3)	(3) Includes Novices & Techs

## HF CW

Band	WOSM Calling Frequencies	Suggested Band Segment for US Stations	Notes
80 m	3.570 (3)	3.560 – 3.570 (3)	(3) Includes Novices & Techs
40 m	7.030 (3)	7.030 – 7.040 (3)	(3) Includes Novices & Techs
20 m	14.060	14.050 – 14.060	
17 m	18.080	18.070 – 18.080	
15 m	21.140 (3)	21.130 – 21.140 (3)	(3) Includes Novices & Techs
12 m	24.910	24.900 – 24.910	
10 m	28.180 (3)	28.170 – 28.180 (3)	(3) Includes Novices & Techs
6 m	50.160	50.150 – 50.160	

## HF PSK-31

<http://bpsk31.com>

Call CQ JOTA. The chart below shows the commonly used frequencies for PSK-31.

Band	Frequency	Notes
80 m	3.580	
40 m	7.080 (4)	(4) Region 2 (USA). 7.040 to 7.060 for Regions 1 & 3
30 m	10.142	
20 m	14.070 (5)	(5) Most activity for JOTA will be on 20 m
17 m	18.100	
15 m	21.080 (6)	(6) Most activity can be found at 21.070
12 m	24.920	
10 m	28.120	

## 2 Meter FM Simplex

147.450, 147.480, 147.510, 147.540\* \* Use 147.540 as Calling Channel. Always listen first to avoid interfering with another QSO or auxiliary or control link. Avoid 146.520, the National FM Simplex Calling Frequency, as well as 146.550, which is commonly used by mobiles and RVers.

## 70 CM FM Simplex

446.000\*, 445.950, 446.050, 446.100, 446.150 \* Use 446.000 as Calling Channel. Always listen first to avoid interfering with another QSO or auxiliary or control link.

## D-STAR

<http://www.dstarinfo.com>

REF033A has been allocated as a full-time JOTA/Radio Scouting D-STAR Reflector. After contact is established, stations should disconnect from REF033A and connect to one or other repeater or migrate to an unused Reflector.

SIMPLEX Channels: 145.670\*, 145.640, 145.610, 438.010. \* 145.670 and 438.010 are commonly used as the National D-STAR Simplex Channels and should be used only as Calling Channels for JOTA. Always listen first to avoid interfering with another QSO.

## DMR

<http://www.dmr-marc.net>

All wide area talkgroups are permitted for use for JOTA for establishing contacts. After contact is established, stations should utilize as few resources as possible. For international, national, and regional QSO's, stations should move their transmissions to one of the DMR-MARC UA talkgroups or to the DCI TAC-310 talkgroup.

For intrastate contacts, stations may use their area's statewide talkgroup (if applicable). The use of your repeater's local talkgroup (if applicable) is always permitted. A full list of repeaters and their available talkgroups can be found at <http://www.dmr-marc.net/repeaters.html>.

SIMPLEX Channels: 441.0000\*, 446.5000, 446.0750, 433.4500, 145.7900\*, 145.5100. All simplex frequencies operate on time-slot 1 and use color code 1. (\*are commonly used as the National DMR Simplex Channels and should be used only as Calling Channels for JOTA. Always listen first to avoid interfering with another QSO.)

## DMR-Brandmeister

Talk Groups : <https://brandmeister.network/?page=talkgroups>

Reflectors : <http://registry.dstar.su/dmr/reflector.db>

## IRLP

<http://irlp.net>

<http://www.irlptopics.net>

Use Topic Channel Node 9091 as a Common Meeting Place or Calling Channel. After contact, disconnect from 9091 and one station should connect to another's local node.

## EchoLink

<http://www.echolink.org>

Software or apps available for Windows, Mac, iPhone/iPad, and Android. Dedicated Conference Node \*JOTA-365\* (node 480809). When contact is made on a Conference Node, it is recommended the two parties establish direct contact with each other to free up the Conference Node.

## APRS

144.39

<http://aprs.org>

<http://aprs.org/cqsrvr.html>

CQSRVR: CQ JOTA

CQSRVR: CQ SCOUTS (other times of the year)

Insurance

Check your insurance coverage for your equipment and, if the Scouts are visiting your ham station, your premises. This is just one more element to verify before the event to avoid any problems repairing or replacing equipment damaged during the event.

Publicity

You're encouraged to send news releases of the event to your local newspapers and television and radio stations. You can encourage photographers to attend the event. You can also forward photos to your local news media, including weekly papers. A sample news release is included on this website.

General Guidelines

- » Jamboree-on-the Air is about getting young people to talk to each other using amateur radio.
- » Arrange for the use of a club call sign, or apply for a special-event call sign in plenty of time.
- » Prepare some simple diagrams and explanations showing how radio works and how signals can be transmitted around the world as well as to the nearest repeater.
- » Arrange with the Scout leaders regarding venue, QSL cards, patches, participation certificates, other activities, physical arrangements, publicity, and details required for the JOTA report form on this website.

- » Notify the national JOTA organizer of your event using the details on the registration form on this site.
- » Go to Scout meetings beforehand to introduce the subject.
- » Organize activities such as kit building, soldering practice, SSTV, FSTV, packet radio, and weather satellite reception. The simplest of things, such as a closed-circuit RTTY station, can generate a great deal of excitement.
- » Offer to train Scouts for the Radio merit badge.
- » Offer a Technician license preparation course for those interested in learning and doing more with ham radio.
- » Ensure that no more than three Scouts are watching one Scout on the air. Keep Scouts involved and active or they will quickly grow bored.
- » Ensure that the station is safe for young visitors.
- » Observe your license conditions, especially regarding third-party traffic.
- » Involve the Scouts in the contact. The goal is to involve as many Scouts as possible in making a contact. It is not to maximize the number of contacts or the distance of the contacts; it's about the experience for the Scouts.
- » Try to use plain, understandable English where possible. When you do use Q-signals and other ham radio terms, take time to explain them to the Scouts.
- » Don't try to work weak stations from remote locations. Go for stronger, more local stations that unpracticed ears can hear easily and understand. Local FM repeaters can be just as exciting for Scouts.
- » Don't feel you have to keep the station on the air with no Scouts present.

#### Useful Internet Sites

K2BSA Amateur Radio Association  
<http://www.k2bsa.net>

BSA JOTA Information  
<http://www.scouting.org/jota.aspx>

World Organization of the Scout Movement JOTA Information  
<http://www.scout.org/jotajoti/>

ARRL JOTA Information  
<http://www.arrl.org/jamboree-on-the-air-jota>

Scout Camps on the Air  
<http://scota.us>

#### Discussion Groups

Best all-around Radio Scouting discussion group  
<http://groups.yahoo.com/group/ScoutRadio/>

#### Final Thoughts

It's recommended that you also look over the "Guidelines for Scout Leaders." It will give you an idea of the necessary preparation by your partners in the event, and perhaps you'll see areas where you can help.

Best wishes for a great Jamboree-on-the-Air. We look forward to hearing all about it in your JOTA report.