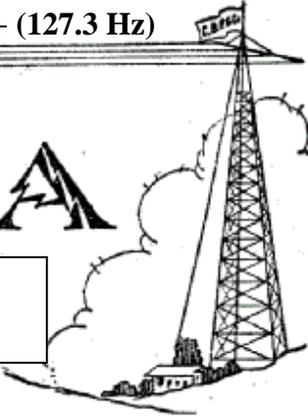


147.165 + (136.5 Hz)



443.500 + (127.3 Hz)



*The*  
**ANTENNA**

**The Brandon Amateur Radio  
Society Newsletter**

OVER 37 YEARS OF PUBLIC SERVICE TO THE BRANDON AREA  
BRANDON, FLORIDA, USA

VOL XLI, NUMBER 11

DECEMBER 2014

**No BARS Meeting This Month  
January Meeting Thursday 22nd**

A reminder: there is no meeting this month. The January 2015 meeting will be on the FOURTH Thursday, January 22<sup>nd</sup>, at the Golden Corral Come on out to the eating meeting at 6:30 p.m. and enjoy the social side of Ham Radio. We will put out another newsletter in January to remind everyone.

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**Searching for Signals**

The Christmas season is a great time to spend more time in the ham shack! The summertime thunder boomers are gone and CQWW for SSB and CW are over. Let's get outside the ham bands and do some listening to all the other fun stuff HF radio has to offer. Most of us keep a log sheet based on what we heard or what station we worked at a different time. That kind of log might look like what we see listed in **Figure 1**. below:



## SHORT WAVE STATION LOG

Page 1 Rcvr:

Antenna

| Date | Time<br>Z | Frequency | Station<br>Identification | SINPO<br>(RST) | Mode | Remarks | QSL |   |
|------|-----------|-----------|---------------------------|----------------|------|---------|-----|---|
|      |           |           |                           |                |      |         | S   | R |
|      |           |           |                           |                |      |         |     |   |
|      |           |           |                           |                |      |         |     |   |
|      |           |           |                           |                |      |         |     |   |
|      |           |           |                           |                |      |         |     |   |

**Figure 1 Standard Log Format**

There is a different approach to compiling a log. This format is broken down by time of day. Forexample you have a log sheet for 7 a.m. (12:00 GMT) There might be activity for different dates, but all of that occurred at 7 a.m. Logging activity this way gives you a different perspective of what is going on at a particular time of day. If you are running intercept activity from 6 a.m. to 10 p.m. you will need a sheet for every hour or 17 pages. For the beginners, we will confine our search activity to the short wave broadcast allocations. Here is a sample log sheet.

### Short Wave Intercept Log

Local Time 7 a.m. EST

GMT 12:00

| Date                   | Frequency                  | Station Identification | SINPO | Remarks   |
|------------------------|----------------------------|------------------------|-------|---|
| 5 Dec 14<br>*10 Dec 14 | 9.875<br>13.650<br>*17.570 | Voço de La Ribelantoj  | 44534 | In English at 12:00Z changes to German at 13:00Z. I think this is out of South America. |
| 11 Dec 14              | 13.525                     | Kafirstan Radio        | 3     | Fair signal in Pashtu off at 12:55Z   |
|                        |                            |                        |       |   |
|                        |                            |                        |       |   |

**Figure 2: Hourly Intercept Log Format**

Some of these columns might be a little longer because you might have several frequency entries for a given station as you see in the example above (these are not real entries). Doing this log on the computer makes that easier because the spaces will increase automatically as you type in the information. Some hams who have not been following this newsletter for the past few years might not be familiar with SINPO. It is a slightly more detailed signal reporting format than the QSA/QRK of the commercial services or the RST reporting of the Amateur Radio Service. It covers signal strength, interference level, noise, Propagation (fading), and overall merit. As a result, the five numbers provide a very detailed signal report.



**Figure 3** provides the SINPO signal reporting chart.

### SINPO Signal Reporting System

| # | Signal         | Interference | Noise    | Propagation/Fading | Overall Merit |
|---|----------------|--------------|----------|--------------------|---------------|
| 5 | Excellent      | Nil          | Nil      | Nil                | Excellent     |
| 4 | Good           | Slight       | Slight   | Slight             | Good          |
| 3 | Fair           | Moderate     | Moderate | Moderate           | Fair          |
| 2 | Poor           | Severe       | Severe   | Severe             | Poor          |
| 1 | Barely Audible | Extreme      | Extreme  | Extreme            | Unusable      |

**Figure 3: SINPO Signal Reporting Chart**

Most international broadcasters and even pirate stations understand and use this system of signal reception reporting. It is very concise, but it does provide a lot of information. Often while actually logging entries I will just use one digit for the overall signal quality for those times I don't want to go into a lot of detail about the reception quality.

#### Setting up a search matrix.

Remember the basic propagation rule for HF: higher frequencies in the daytime, lower frequencies at night. This seems easy enough until you realize you have to keep in mind the situation at the transmitting station as well as your local situation regarding daytime/night time. A lot of Dxers know this and work contacts in the hours of early dawn here to snag the "gray line" contacts. Figure 4 on the next page gives a generalized list of the short wave broadcast frequencies, but you will want to pare that down to the frequencies which will be usable for your reception here in the Tampa Bay area.

#### Generalized Shortwave Broadcast Frequency Allocations

| MHz           | Meters               | MHz           | Meters |
|---------------|----------------------|---------------|--------|
| 2.300-2.495   | 120                  | 13.570-13.870 | 22     |
| 3.200-3.950   | 90                   | 15.030-15.800 | 19     |
| 4.750-5.060   | 60                   | 17.480-17.900 | 17     |
| 5.730-6.295   | 49                   | 18.900-19.020 | 15     |
| 6.890-7.600   | 41 See detailed list | 21.450-21.850 | 13     |
| 9.250-9.900   | 31                   | 25.670-26.100 | 11     |
| 11.500-12.600 | 25                   |               |        |

**Figure 4: Shortwave Broadcast Frequencies**

From my own experience I don't bother with 120 and 90 meters. From time to time I tune through these ranges at night during the winter to hear what is there. Most of the time it is Spanish language broadcasts or stuff in African languages when the bands are really open. For 41 meters this is now broken. Most of the international broadcasters have gotten off the 40 meter ham bands, so skip the 40 meter ham band in the middle of this allocation.

#### Night, Pre-dawn, and Evening Searches

For evening searches concentrate on these frequency ranges:

|        |        |        |        |         |        |        |
|--------|--------|--------|--------|---------|--------|--------|
| 4.750- | 5.900- | 6.890- | 9.400- | 11.560- | 13.470 | 15.100 |
| 5.060  | 6.200  | 7.450  | 9.900  | 12.100  | 13.870 | 15.800 |

If the bands are really open 90 meters might be hopping. If not, you will probably find that above 12 MHz things get pretty dead. If you know some Spanish try the 90 and 120 meter bands, too.

### Daytime Searches

As we get into daylight hours things change.

|         |         |         |         |         |        |         |
|---------|---------|---------|---------|---------|--------|---------|
| 9.400-  | 11.560- | 13.470- | 15.100- | 17.480- | 18.900 | 21.450- |
| 9.900   | 12.100  | 13.870  | 15.800  | 17.900  | 19.020 | 21.750  |
| 25.600- |         |         |         |         |        |         |
| 26.100  |         |         |         |         |        |         |

11 and 13 meters are not always the best bands, but if we are in a high sunspot cycle, they may have a lot of activity.

### Build a search matrix and work through it for those hours you want to research.

Build your matrix for the hours you are interested in. A good starting point would be 6 a.m., 7 a.m., 8 a.m. for the early morning and 8 p.m., 9 p.m., and 10 p.m. for the evening hours. As you search through a given frequency range mark it off. You will find that it may take two or three days to get through all the frequencies for a specific hour's search period.

Check on some of these sites for station and frequency information:

<http://www.primetimeshortwave.com/>

<http://www.klingenfuss.org/swfguide.htm>

<http://www.shortwaveschedule.com/>

<http://www.ac6v.com/swl.htm>

Have fun on short wave radio. There is MUCH MORE to radio than saying: "You're Five Nine in Florida and the rig here is ....". Do this with the grandkids when they come over for Christmas. Get them interested in the beeps and squeaks on the HF bands!

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That's it for this month. Have FUN with radio!

### Keep in Mind Our Weekly Nets and Bulletins

**Monday 8 p.m. The Two Meter Net 147.765 - 147.165 MHz Hosted by Doris Haskell WB9VDT**

**Tuesday 7 p.m. 6-meter Roundtable 50.200 MHz USB followed at 8 p.m. with the 10 Meter Roundtable 28.365 MHz USB**

**Send us your articles AND PICTURES! We do much more in the digital format! I would like to have pictures of BARS members and their ham shacks!**

**Remember to check out the BARS website:**

**brandonhamradio.org**