



**Reminder NO MEETING IN DECEMBER
Come to the Club Eating Meeting January 28th**

As is the usual case, **we do not have a December club meeting.** Our next meeting will be in 2016 **on January 28th at the Golden Corral starting at 6:30 p.m.** Make plans now for next month to come on out and enjoy the food and fellowship.

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Answers to the November Radio Quiz!!

Here are the answers to the quiz in the November newsletter along with some brief explanations.

1. Currently the BARS 2-meter net starts every week at
C. At 0100 UTC Tuesdays We are currently 5 hours behind UTC (we are back on Eastern Standard Time), so 8 p.m. Monday local time is Tuesday 0100 UTC. See question #3 for more about UTC. We also have a time conversion chart at the end of this issue.
2. PSK stands for :
D. Phase Shift Keying.
3. UTC is generally synonymous with:
C. GMT (Greenwich Mean Time) We have published time conversion charts in past issues of *The Antenna*
4. What is a good general rule regarding wave propagation on HF?
D. Lower frequencies at night; higher frequencies in the daytime. This rule of thumb applies to Medium Frequency as well. HF frequencies bounce off of ionized layers in the ionosphere. During the daytime there is a layer that instead of reflecting radio waves absorbs signals in the MF and lower HF ranges during daylight hours.
5. WWV weather broadcasts can be heard at what times?
C. At 8 and 9 minutes past each hour
6. What is radio station CHU?
B. A time and frequency standard station in Canada. They give the time in both English and French.

**Check out the BARS website:
brandonhamradio.org**

7. What are some frequencies for CHU?
A. 3.330, 7.850, and 14.670 MHz
8. What is the approximate frequency range of the 31-meter band?
B. 9-9.5 MHz This was found in the shortwave frequency chart in the November newsletter.
9. After the earthquake in Haiti emergency communicators realized that they could coordinate the movement of injured personnel to the U.S. Navy hospital ship on VHF Marine emergency channel 16. What is the frequency of that channel?
D. 156.800 MHz. A few years ago we had a program on the assistance efforts provided by medical personnel from the Tampa area. This was one of the points that the speaker mentioned.
10. What the frequency of 600 meters?
D. Both B and C are correct. Frequency in MHz can be found by dividing 300 by the wavelength in meters in meters.300 divided by 600 equals .5MHz which is equal to 500 KHz. .

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It's The Holiday Season Time to Start Thinking About Shortwave Listening!

In last month's shortwave listening introduction we said that one of the best ways to get started in Ham Radio and build a good foundation for understanding HF radio communication is to start out listening to shortwave radio. This month we are going to take a look at some the activity on the Short Wave Broadcasting bands as well as some other non-broadcast (point-to-point) transmissions.

For this article we are going to concentrate on early morning and evening times. These are the times when most foreign broadcasters beam broadcasts toward the USA.

In an exception to usual radio operating practice, the entries in the log sheet below will be in Eastern Standard Time (local time) instead of UTC. When the mode of transmission is different than amplitude modulation (AM) that will be listed as the first entry in the "remarks" section

Shortwave Reception Log December 2015

Date	Time	Frequency MHz	Station Identification	SINPO	Remarks
11	7 a.m.	4.840	WWCR	5	CSC Talk Radio.
11	7:02 a.m.	5.930 11.780	Anguilla Radio	5	Gene Scott (recording; he has been dead for several years,but is still on short wave)
11	7:05 a.m.	9.580 12.065	Radio Australia	4	Also on 12.085
11	7:08 a.m.	9.760 11.760	Radio China Int'l	4	Also on 13.660 13.670 with good signals. Sounds like a US type morning show.
11	7:19 a.m.	5.830	WKWW (TN)	5	Religious program and political commentary
11	7:30 a.m.	6.070	?Canada	3	Talk show with investment advice.
11	7:38 a.m.	6.317	WLO	5	CW marker transmission.
11	7:40 a.m.	13.580	Radio Romania	4	Also on 17.765 and 15.460 good signals and interesting programming.

As you can see from the above, it didn't take long to snag a bunch of stations. Some of these have BIG signals. I logged the first four BEFORE I hooked up the coax to the antenna!

Let's move to 8 a.m. These were also logged on Friday 11 December.

Date	Time	Frequency MHz	Station Identification	SINPO	Remarks
11	8:02	9.470	BBC	3	Signal not beamed to the US.
11	8:05 a.m.	9.570 13.670	Radio China	4	1.760 QRM 11.900
11	8:07 a.m.	9.580 12.065	Radio Australia	5	Also on 12.085
11	8:10 a.m.	9.700	Radio New Zealand	5	
11	8:12	9.370 9.985	Overcomer Ministry	5	Also on 21.670. religious program
11	8:13	10.051	New York Radio	5 USB	Air terminal WX

As you can see, lots of activity in the early hours on the lower bands below 15 MHz. If you have done any searching on your own you will find the higher bands start opening up in the mid-morning and are good through the late afternoon.

Let's take a quick look at some of the early evening activity. We will add more to these entries in next month's newsletter, but these are a start.

Here are a few entries for 7 p.m. local time.+

Date	Time	Frequency MHz	Station Identification	SINPO	Remarks
10	7 p.m.	5.035 5.040	Radio Havana Cuba	5	They put a strong signal into Florida.
10	7:10 p.m.	9.265	WINB	5	Broadcasting out of PA.
10	7:15	9.570	Radio China Int'l	5	Heard this with the coax disconnected, too.
10		9.975	True News	4	This might be from KVOH, but did not get any other station ID
10	7:43 p.m.	5.930	WHRI	5	Religious program
10	7:45	6.115	WWCR	5	Political program
10		7.520	WWCR		CSC Talk Radio

Let's move to 8 p.m. These were heard on Thursday 10 December

Date	Time	Frequency MHz	Station Identification	SINPO	Remarks
10	8:00	9.570	China Radio Int'l	5	Beijing Hour (a news feature)
10		6.175	Voice of Vietnam	4	News at 8 p.m.
10		6.145 7.345	Voice of Romania	3	I could probably hear this better if I hooked up the outside antenna!
These first three were all picket up without the antenna being hooked up to the coax! China and Vietnam were still rolling in with a good signal!					
10		5.920	WHRI	5	Religious program.

A very good internet source for frequency listings and times of SW broadcasts is Prime Time Short Wave.
<http://www.primetimeshortwave.com/>

Their frequency list organized by time (UTC) can be found at : <http://www.primetimeshortwave.com/time.txt>
 You can use the list to search for stations or as a help in identifying the stations you have picked up. Here is a sample listing for 8 pm EST (0100Z)

as-Ascension, au-Austria, bt-Botswana, bu-Bulgaria, ch-China, cu-Cuba,

cy-Cyprus, fr-France, ge-Germany, gr-Greenville USA, ka-Kazakhstan, ko-South Korea, ku-Kuwait, ma-Madagascar, ml-Mali, mo-Moldova, nm-North Mariana Islands, om-Oman, pa-Palau, ph-Philippines, ro-Romania, ru-Russia, rw-Rwanda, sa-Sao Tome e Principe, se-Seychelles, si-Singapore, sl-Sri Lanka, sp-Spain, ta-Taiwan, th-Thailand, tj-Tajikistan, uk-United Kingdom, uz-Uzbekistan, va-Santa Maria Vatican, wb-WWRB USA, wc-WWCR USA, wh-WHRI USA, wi-WINB USA, wq-WBCQ USA, wr-WRMI USA, wt-WTWW USA. za-South Africa

Notes -- Days of week: Su-Sunday, M-Monday, Tu-Tuesday, W-Wednesday, Th-Thursday, F-Friday, Sa-Saturday, exW-except Wednesday

Target areas: Af-Africa, Am-America, As-Asia, Eu-Europe, LA-Latin America, ME-Middle East, NA-North America, Oc-Oceania/Australia; Other: alt-alternate frequency, drm-Digital Radio Mondiale, occ-occasional use, le-Learning English G24-Global 24 Radio

0100-0128	NA	Vietnam	V. of Vietnam	6175uk
0100-0200	As	United Kingdom	BBC	12095si, 15310th
0100-0200	NA	China	China R. Int'l	9580cu
0100-0200	As	China	China R. Int'l	6075, 6180, 7370, 11885, 15125
0100-0200	Eu	China	China R. Int'l	7350, 9675
0100-0200	Oc	Australia	R. Australia	15240, 15415, 17840
0100-0200	LA, F-Sa	France	R. France Int'l	11580wr
0100-0200	LA, W	France	R. France Int'l	11580wr
0100-0200	NA	Romania	R. Romania Int'l	6145, 7325
0100-0200	As, ME, Eu	Tajikistan	V. of Tajik	7245
0100-0200	Am, Sa	U. S. A.	WBCQ	5110
0100-0200	Am, Tu-Sa	U. S. A.	WBCQ	7490
0100-0200	Am	U. S. A.	WBCQ	9330
0100-0200	NA	U. S. A.	WHRI	7385
0100-0200	LA, Su-M	U. S. A.	WHRI	7315
0100-0200	NA, Tu-Sa	U. S. A.	WHRI	5920
0100-0200	NA	U. S. A.	WTWW	12105
0100-0300	As, Su	Palau	T8WH	17725
0100-0300	As, Su	Palau	T8WH	17750
0100-0400	LA	U. S. A.	KVOH	9975
0100-0400	LA	U. S. A.	Overcomer Ministry	5050wb
0100-0400	Am, M	U. S. A.	Overcomer Ministry	7490wq
0100-0500	NA	Cuba	R. Havana Cuba	6000, 6165
0100-0500	Am, Su-M	U. S. A.	WBCQ	5110
0100-0600	LA	U. S. A.	WRMI	9955
0100-0700	NA	U. S. A.	TruNews	5850wr, 7455wr
0100-1300	Af	U. S. A.	Wld Univ Network	5935wc
0100-1300	NA	U. S. A.	WWCR3	4840
0100-1400	NA	U. S. A.	Overcomer Ministry	3185wb
0100-2300	Eu	U. S. A.	Overcomer Ministry	11580wr
0115-0130	Af, Su	Cyprus	FG Radio	21675wr
0130-0200	LA, Tu-Sa	Czech Republic	R. Prague	9955wr
0130-0200	As	Myanmar	Thazin R.	6030
0140-0159	As	Vatican City	Vatican R.	7410, 9560

Fire up the radio and start checking these frequencies out!

As you can see, there is a LOT to hear! If you check these out you will discover that everything listed is not audible. You will also encounter stations not listed on the chart.

For your reference here is a time conversion chart:

UTC GMT	EDT	EST CDT	CST MDT	MST PDT	PST
0000	8 PM	7 PM	6 PM	5 PM	4 PM
0100	9 PM	8 PM	7 PM	6 PM	5 PM
0200	10 PM	9 PM	8 PM	7 PM	6 PM
0300	11 PM	10 PM	9 PM	8 PM	7 PM
0400	Midnight	11 PM	10 PM	9 PM	8 PM
0500	1 AM	Midnight	11 PM	10 PM	9 PM
0600	2 AM	1 AM	Midnight	11 PM	10 PM
0700	3 AM	2 AM	1 AM	Midnight	11 PM
0800	4 AM	3 AM	2 AM	1 AM	Midnight
0900	5 AM	4 AM	3 AM	2 AM	1 AM
1000	6 AM	5 AM	4 AM	3 AM	2 AM
1100	7 AM	6 AM	5 AM	4 AM	3 AM
1200	8 AM	7 AM	6 AM	5 AM	4 AM
1300	9 AM	8 AM	7 AM	6 AM	5 AM
1400	10 AM	9 AM	8 AM	7 AM	6 AM
1500	11 AM	10 AM	9 AM	8 AM	7 AM
1600	Noon	11 AM	10 AM	9 AM	8 AM
1700	1 PM	Noon	11 AM	10 AM	9 AM
1800	2 PM	1 PM	Noon	11 AM	10 AM
1900	3 PM	2 PM	1 PM	Noon	11 AM
2000	4 PM	3 PM	2 PM	1 PM	Noon
2100	5 PM	4 PM	3 PM	2 PM	1 PM
2200	6 PM	5 PM	4 PM	3 PM	2 PM
2300	7 PM	6 PM	5 PM	4 PM	3 PM

Next month we will publish more actual loggings of what is out there to hear, and provide some additional internet sources for other Shortwave Radio information.

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Remember our weekly nets:

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