



THE

# PROPAGATOR

The Monthly Newsletter of the South Orange Amateur Radio Association

October 2013

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## What about the Kids??

All are invited to the next general SOARA meeting on Monday, October 21 at 7pm at Norman P Murray Center in Mission Viejo.

Topic for the meeting: What about the Kids??

What about them? Lets say a small thing happens like a 300 acre forest fire. Average, even small for Southern California . And you have about 200 kids. They all weigh between 1,200 to 1,800 pounds (each) and you gotta get them out of here. Now I might be helpful "if" you had a few friends to help, how about the whole neighborhood? But how do you get them?

You know the emergency, because you're a HAM and have every known radio to man and maeshens. But you're just one guy, one voice, the knowing one. But you are still just one.

This is the problem I had, during the 2007 fires in the OC. Come to the meeting on Oct 21st and see how I solved it. Learn how the "horses" lead the evacuation with out ever speaking a word. Let me unfold your important roll in the next emergency, even if you don't leave your ham shack.

I'll show you how you to can keep your non radio operating, scared to tears neighbors informed, directed, and un-panicked.

See ya at the next emergency,  
Dave Seroski  
KG6QCI  
WQDW669  
43-687  
Hay Dave, works too!



## Meeting

October  
21st, 2013

7:00 PM  
N.P.  
Murray  
Center  
Veterans  
Way  
Mission Viejo

Don't have your call-sign or change yet? Well, the FCC had been closed, along with much of the rest of the Federal government, delaying all sorts of FCC updates, including your call signs. More info is on the [SOARA Website](#).

Here is the link for the video of the September meeting on the SOARA website.

[Amateur Radio in the 21st century... mainstream or backwater?](#)

## SOARA Holiday Party Registration Now Open!

WHEN: First Sunday in December  
(December 1, 2013)

TIME: 6:30pm - 9:30pm

WHERE: Antonucci's (Italian), 24190  
Alicia Pkwy, Mission Viejo CA 92691

COST: \$30.00 per person

More information and payments accepted at: <http://www.soara.org/activities/holiday-party/>

## NCDXF Beacon Log

There are 18 beacons placed around the world, transmitting on the very specific frequencies. (See [www.ncdsf.org](http://www.ncdsf.org) for information on the beacons.) I use Faros 1.4 software to plot the beacon, using my KX-3 as the receiver. The software produces the chart like the one attached to the right.

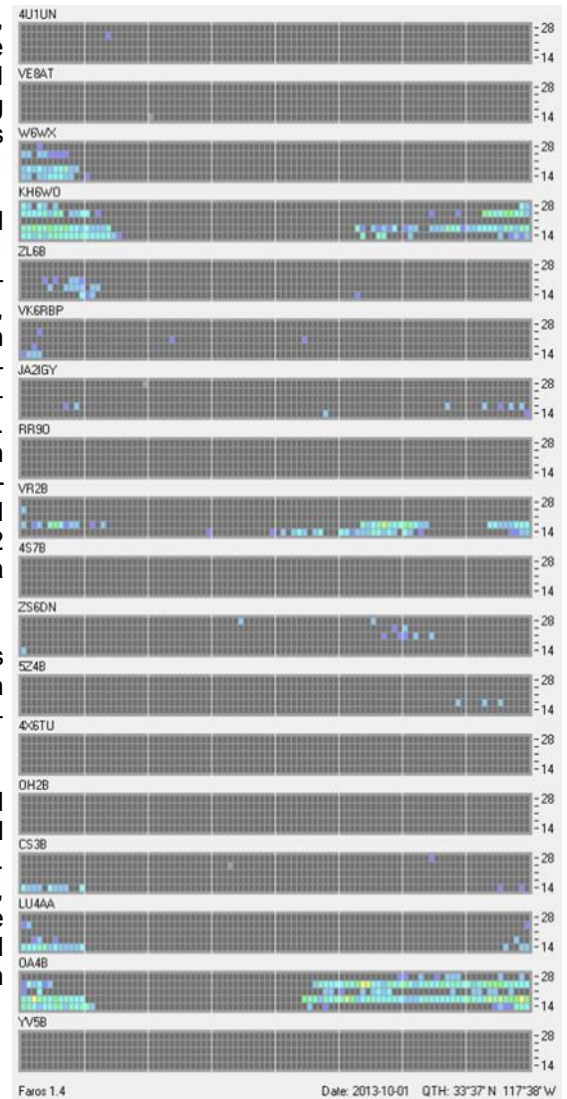
Each row represents a specific beacon, identified by the call sign.

The row is divided into five finer rows, which represents, from low to high, 14MHz, 18MHz, 21MHz, 24.9MHz, 28MHz band. The color on each square, if not gray, is where the beacon is detected. The color represents the S/N ratio of the signal. Faint blue is -5dB, and light green is +20dB. The chart is vertically divided into 8 columns, each represents 3 hour period, or with 8 columns, 24-hrs. It starts at 00 UTC to 00UTC (5PM to 5PM PDT). Each of that column is subdivided into 12 horizontal dots, so each dot represents ¼ hr or a 15 minute period.

The software reads 18 beacons (each beacon is 10 seconds wide), spends 3 minutes on each band, then move on to the next band, so the process repeats every 15 minutes.

Since the beacons are on 20 meter band and above, they mostly disappear after late night until the following morning when the sun comes up. You can see that Peru (OA4B) is the strongest, with Venezuela and Argentina are heard in the late afternoon. New Zealand, Japan, Australia are kind of faint. Notice that South Africa can be heard in the morning hours.

...continued on page 4.



**SOARA**  
Saturday  
Oct 26

**SOARA**  
Fall Auction  
Nov 18

**SOARA Holiday**  
Party  
Dec 1



**VEC**  
License  
Exams

Next session:  
(6:00pm),  
before the  
meeting at the  
Norman P.  
Murray Center  
Contact Sean  
[AJ6B](mailto:AJ6B) for info.

Walk-ins ok.

Extra | General |  
Technician  
Exams

[SOARA](#)  
[Website](#)

### SOARA Raffle:

Hal Silverman

This month, the \$5 raffle is an Astron Power Supply. It is 20A @ 13.8 volts. For the one dollar raffle will be a 2013 ARRL handbook. There will be 2 more prizes from Harbor Freight and 2 more prizes from HRO. Please note that this is the last raffle of the year, as the raffle gives way to the Fall Auction next month.

We will need about 27 \$5 tickets in order to sell the power supply.

73.....Hal

If there are any comments or suggestions for either the \$1 prizes or a future \$5 prize, please contact me at [WB6WXO@SOARA.org](mailto:WB6WXO@SOARA.org)







### Propagation de K7RA

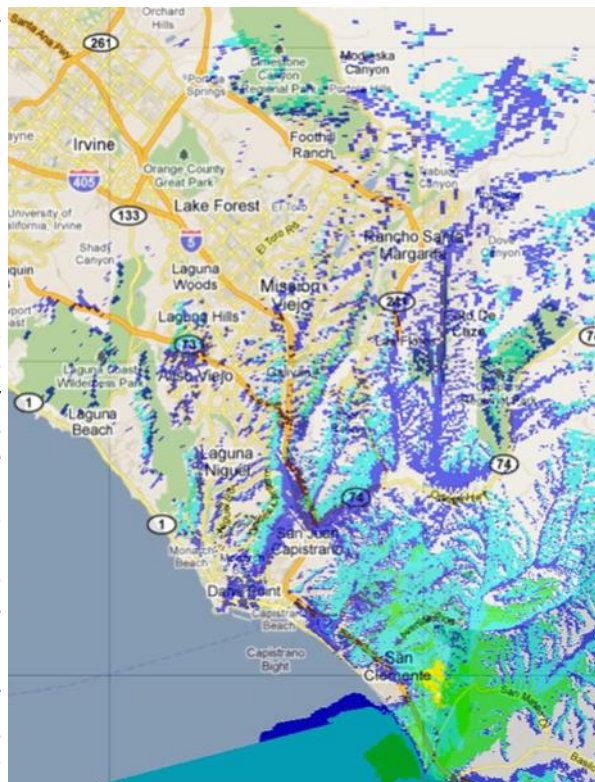
Recent solar activity took a healthy jump this week, with the average daily sunspot number increasing nearly 48 points to 126.9, a positive change of 60 percent compared to the previous week. Average daily solar flux was up 16.4 points to 126.5.

The daily sunspot number rose to 148 on October 15, the highest it's been since August 21, when it was 149. Higher numbers prior to that were 161 on August 19 and 186, 212 and 198 on May 15-17.

## T-Hunt Report

Richard, K6RBS & Mike, NM6X hid the T this month on Sunday 10/13. It was a cool, ideal, day for hunting.

However, the signal was not (easily) heard in much of South OC. I didn't hear it from my house in Mission Viejo on the vertical discone antenna, but I probably should have tried the tape measure beam from my deck (the T was horizontal). I did guess right, however, as I decided to drive South to see if it was in San Clemente (again). I didn't hear it at all on my car whip antenna (vertical once again) and as you can see from the coverage map on the right, it would have been difficult even if I had a horizontal antenna. After not hearing it in Dana Point, I thought it might be North or in North Laguna. So, I drove up PCH and ended up making a stop at Temple Hill. I first heard the T up there and was astounded by the bearing of 120-130 degrees, since that was to the SE! The T ended up being hidden about 100 yards from the county border in San Clemente



and was a 13 element beam, pointed at SOARA's 2m repeater in San Clemente. Luckily, no hiking was required once we got to the T. Goodies and drinks were available and it was a refreshing way to end the hunt and catch-up. Karl & Dale were the winning team and will be hiding the T next month (11/10). We look forward to seeing all of you then!  
Mike, K6MSM

## Silent Keys

From the ARRL Letter September 19, 2013

Ham Radio Publications Pioneer, Visionary, Iconoclast **Wayne Green, W2NSD, SK**  
Wayne S. Green II, W2NSD ("Never Say Die"), of Hancock, New Hampshire, died September 13. He was 91. A well-known and often outspoken figure during what some consider Amateur Radio's golden years in the 1950s and 1960s, Green helmed CQ Magazine for 5 years before becoming the self-proclaimed "El Supremo and Founder" in 1960 of 73 magazine, which he published until 2003.

Palomar Engineers President **Jack Althouse, K6NY, SK** (AKA "Kurt N. Sterba")  
Palomar Engineers President John E. "Jack" Althouse, K6NY, of San Diego, California, died September 15 after suffering a massive stroke. He was 90. With his death, his alter ego "Kurt N. Sterba," who penned the "Aerials" columns from 1999 until 2012 and authored books on antennas for WorldRadio, also passes into Amateur Radio history.

...Continued from page 2 [NCDXF Beacon Log](#)

Now if you can't hear the beacon, it does not mean you can't contact these countries / zones. Beacon hardware is standardized and they are not big guns (100 watts on a short vertical). So they represent "average" stations like ours, and if you can hear it, then it represents a good chance that you can get many contacts during that time.

To set this up on your own, you need two things:

First, the beacon software. There are several listed in ncdxf site, but I'm using Faros. It seems all monitoring stations using this, and it produces the same graphics that those monitor sites publish. It is not freeware, however. I think it costs \$25, but they give you 30-day trial, so you can test it out for some time before you decide to keep it.

Next, you need a rig control utility that runs between Faros and the OS.

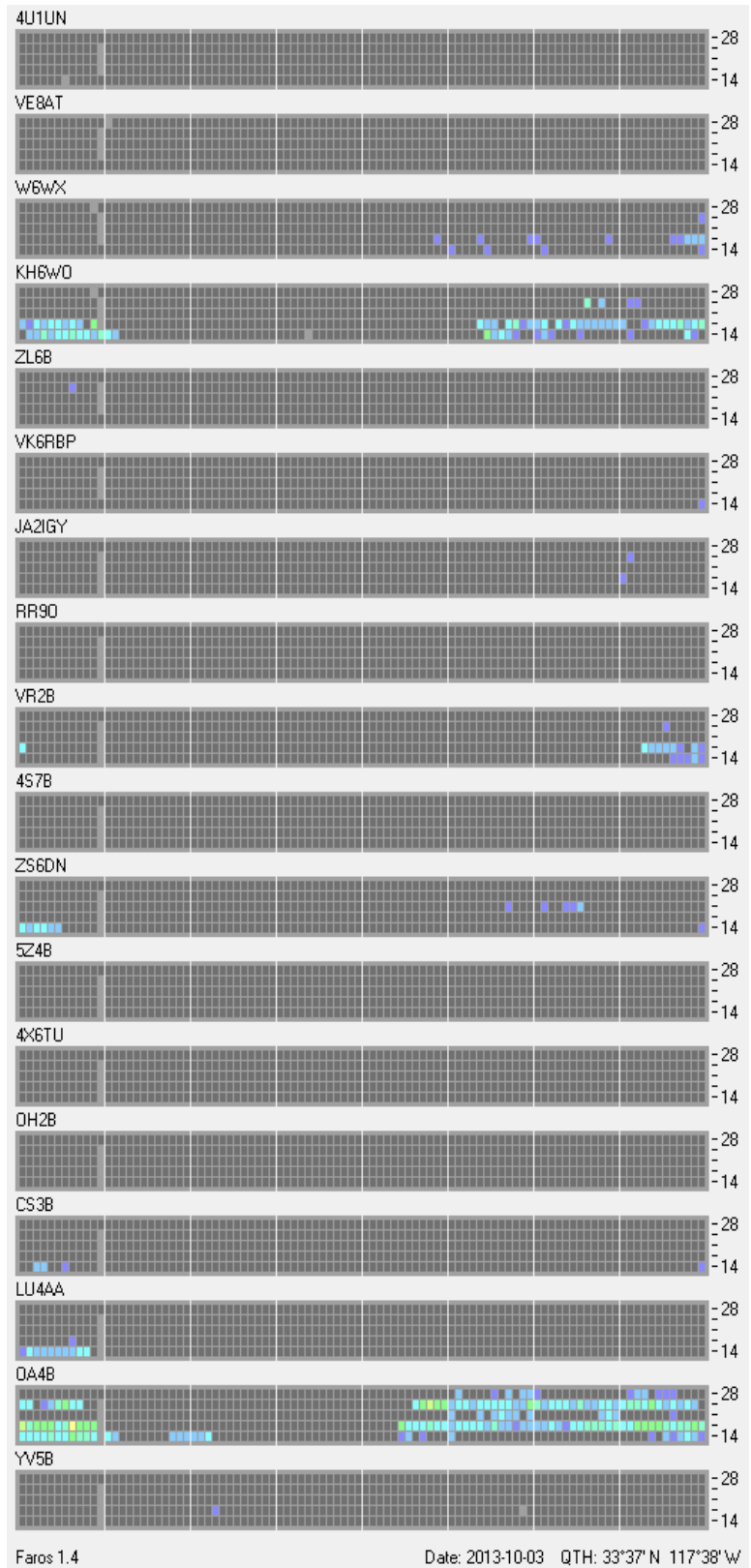
Faros uses Omni-rig, which works with many ham software that uses rig control. This is freeware, and you can get it from DX Atlas ([www.dxatlas.com](http://www.dxatlas.com)) site.

Of course, you need a control link between your PC and the rig. Some uses COM port (most Yaesu and Kenwood), others (like Icom) have proprietary interface. Some actually use USB, but they are still in minority. Omni-rig works with many popular rigs, but you must check the list. And of course, you will need to hook up audio out from the rig to sound card input. Once that's done, the software works relatively easily. Doesn't give much fuss.

Also, you need to have your PC's clock set accurately. I mean, msec accurate. To do so, you can download nisttime from [nisttime.gov](http://nisttime.gov) and set it up. The software periodically accesses the NIST time server and sets your PC's time, to stay accurate within a few msec. It's not a big deal to set up. It is a good idea to startup the software every time you boot. You need that accuracy to know exactly which beacon is transmitting at a given time.

Interesting, isn't it? These days, this is what KX-3 is doing when I'm not operating the station.

de W6Si



# 5 2013 SOARA Calendar THE PROPAGATOR

Year 2013	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
<b>General Meeting</b> 7:00 PM	28	25	18	15	20	17	15	19	16	21	18	—
<b>Program</b>	Digital Radio	Tropo Ducting	DX Pedition	K6ACJ	Spring Auction	Field Day Prep	2 DXp's	SOARA Fair	Ham Radio in the 21st Century	"Kids"	Fall Auction	—
<b>VEC Testing</b>	28	25	18	15	20	Field Day	15	19	16	21	18	—
<b>SOARA Saturdays (9am)</b>	Feb 2	Mar 2	23	20	25	—	20	24	21	26	23	—
<b>SOARA T-Hunt</b>	6	10	10	14	12	9	14	11	8	13	10	8
<b>Board Meeting</b>	Feb 4	Mar 4	25	22	Jun 3	24	22	26	23	28	25	—
<b>Special Events</b>		Yuma 15-16			Dayton 17-19	ARRL Field Day 22-23		SOARA Picnic 4		JOTA 19-20		SOARA Holiday Party 1
<b>Major HF Contests</b>		ARRL DX-CW CQWPX RTTY	ARRL DX-SSB CQWPX SSB 30-31		CQWPX CW 25-26	ARRL Field Day 22-23			CQWW RTTY 28-29	CQWW SSB 26-27	CQWW CW 23-24	

**SOARA** meets at the Mission Viejo Community Center, 26932 Veterans Way, Mission Viejo, the third Monday of every month at 7:00 PM. For the months of January and February the third Monday is a holiday and the meeting is held on the fourth Monday.

**License Exams:** Amateur License Exams are given prior to SOARA meetings. **Exams are at 6pm.** Prior registration is not required and walk-in applicants are welcome. For further information, email Sean Reigle, AJ6B, at [aj6b@soara.org](mailto:aj6b@soara.org).

**SOARA Library:** SOARA has many amateur radio related books such as hand books, books about electrical theory, etc. available to lend out to club members. Contact Heiko Peschel [ad6oi@soara.org](mailto:ad6oi@soara.org) for more info.

**Web Site:** SOARA maintains a web site with current club information. The URL is: <http://www.soara.org/>

**Repeaters:** The Laguna Beach, San Clemente, and Trabuco repeaters are open. The Santiago Peak repeaters are closed. For details or questions on the repeaters contact the Repeater director, KG6GI.

- |               |                             |                    |
|---------------|-----------------------------|--------------------|
|               | 2m — 147.645 — (110.9)      | Laguna Beach       |
|               | 2m — 146.025 + (110.9)      | San Clemente       |
|               | 2m — 145.240 — (110.9)      | Trabuco            |
| <b>D-Star</b> | 2m — 146.115 + (K6SOA C)    | Laguna Beach       |
|               | 220 — 224.100 — (110.9)     | Laguna Beach       |
|               | 220 — 224.640 — (123.0)     | Santiago Peak. (C) |
| <b>D-Star</b> | 440 — 445.660 — (K6SOA B)   | Laguna Beach       |
|               | 440 — 447.180 — (131.8)     | Santiago Peak. (C) |
| <b>D-Star</b> | 1.2G — 1282.600 — (K6SOA A) | Laguna Beach       |

**Nets:** UHF/VHF (447.180, 147.645 & 224.640): Tuesdays 8:00 PM  
 D-Star (146.115 C module): Wednesdays 8:00pm  
 40 meter HF (7.200 MHz +/- for QRM), Sundays 8:00 AM.  
 Gordo Net (HF 7.250 MHz +/- for QRM), Weekdays 8:30AM

### SOARA OFFICERS

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### SOARA COMMITTEES

**Activities:** Pierrette Rizco, K6PTR ..... 949-235-2546  
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**Website:** Brian Roode, NJ6N ..... 949-495-5336  
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**Ambassador:** Heiko Peschel, AD6OI ..... 949-859-3868  
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# 6 2014 SOARA Calendar THE PROPAGATOR

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
General Meeting 7:00 PM	27	24	17	21	19	16	21	18	15	20	17	—
Program	TBD	TBD	TBD	TBD	Spring Auction	Field Day Prep	TBD	SOARA Fair	TBD	TBD	Fall Auction	—
VEC Testing	27	24	17	21	19	At Field Day	21	18	15	20	17	—
Educational Classes (Starts)	Tech 8		General 5		Tech		General		Tech		General	
SOARA Saturdays (9am)	Feb 1	Mar 1	22	26	24	21	26	23	20	25	22	—
SOARA T-Hunt	12	9	9	13	11	8	13	10	14	12	9	14
Board Meeting	Feb 3	Mar 3	24	28	Jun 2	23	28	25	22	27	24	—
Special Events		Yuma 14-15	Palm Springs 15	Visalia DX 3-6	Dayton 16-18	ARRL Field Day 28-29		SOARA Picnic 3	ARRL SW 12	JOTA 18-19		SOARA Holiday Party 7
Major HF Contests		ARRL DX-CW TBD  CQWPX RTTY 8-9	ARRL DX-SSB TBD  CQWPX SSB 29-30		CQWPX CW 24-25	ARRL Field Day 28-29			CQWW RTTY TBD	CQWW SSB TBD	CQWW CW TBD	

## From Membership

We have received dues from 80 members, as of Tuesday, October 15, 2013.

We'll be at the Monday night meeting so please bring your checks or cash to the Monday night meeting

and renew your membership, if you haven't done so already.

Horst and Marie Zitzmann  
KD7JHR and KD7JHS  
Membership Directors  
SOARA

[Online SOARA Membership Application](#)



## New ARRL Books

- NEW 2nd Edition: [Ham Radio for Dummies](#) by Ward Silver, N0AX
- NEW to the Series: [Raspberry Pi for Dummies](#)

# The Considerate Operator's Frequency Guide

**A guide to where on the HF bands various modes and activities are generally found. All frequencies are in MHz.**

The following frequencies are generally recognized for certain modes or activities (all frequencies are in MHz).

Nothing in the rules recognizes a net's, group's or any individual's special privilege to any specific frequency. Section 97.101(b) of the Rules states that "Each station licensee and each control operator must cooperate in selecting transmitting channels and in making the most effective use of the amateur service frequencies. No frequency will be assigned for the exclusive use of any station." No one "owns" a frequency.

It's good practice — and plain old common sense — for any operator, regardless of mode, to check to see if the frequency is in use prior to engaging operating. If you are there first, other operators should make an effort to protect you from interference to the extent possible, given that 100% interference-free operation is an unrealistic expectation in today's congested bands.

Frequencies	Modes/Activities	Frequencies	Modes/Activities
1.800-2.000	CW	14.100	IBP/NCDXF beacons
1.800-1.810	Digital	14.1005-14.112	Automatically controlled data stations
1.810	QRP CW calling frequency	14.230	SSTV
1.843-2.000	SSB, SSTV and other wideband modes	14.285	QRP SSB calling frequency
1.910	SSB QRP	14.286	AM calling frequency
1.995-2.000	Experimental		
1.999-2.000	Beacons	18.100-18.105	RTTY /Data
		18.105-18.110	Automatically controlled data stations
3.500-3.510	CW DX window	18.110	IBP/NCDXF beacons
3.560	QRP CW calling frequency		
3.570-3.600	RTTY/Data	21.060	QRP CW calling frequency
3.585-3.600	Automatically controlled data stations	21.070-21.110	RTTY/Data
3.590	RTTY/Data DX	21.090-21.100	Automatically controlled data stations
3.790-3.800	DX window	21.150	IBP/NCDXF beacons
3.845	SSTV	21.340	SSTV
3.885	AM calling frequency	21.385	QRP SSB calling frequency
3.985	QRP SSB calling frequency		
		24.920-24.925	RTTY/Data
7.030	QRP CW calling frequency	24.925-24.930	Automatically controlled data stations
7.040	RTTY/Data DX	24.930	IBP/NCDXF beacons
7.080-7.125	RTTY/Data		
7.100-7.105	Automatically controlled data stations	28.060	QRP CW calling frequency
7.171	SSTV	28.070-28.120	RTTY/Data
7.285	QRP SSB calling frequency	28.120-28.189	Automatically controlled data stations
7.290	AM calling frequency	28.190-28.225	Beacons
		28.200	IBP/NCDXF beacons
10.106	QRP CW calling frequency	28.385	QRP SSB calling frequency
10.130-10.140	RTTY/Data	28.680	SSTV
10.140-10.150	Automatically controlled data stations	29.000-29.200	AM
		29.300-29.510	Satellite downlinks
14.060	QRP CW calling frequency	29.520-29.580	Repeater inputs
14.070-14.095	RTTY/Data	29.600	FM simplex
14.095-14.0995	Automatically controlled data stations	29.620-29.680	Repeater outputs