



# The SKYHOOK



HOLIDAY CITY AMATEUR RADIO CLUB

[www.hcarc.us](http://www.hcarc.us)

August 2014

Toms River, NJ

## Program for Our August Meeting

Amateur Radio has many facets, including Public Service, Education, Fellowship, Craftsmanship, and Contests. What you need to begin, depends on what you want to accomplish.

We'll focus on the most-often asked questions new hams ask, like "What do I need to buy?", "Where do you get that?", "What do I need to know?".

But the answers are often more questions, like "What do you have now?", "What do you want to do?" or "What kind of person do you want to be?"

We want to work with you, so let's talk.

## For Your Calendar

- Aug 7 at 7 pm**    **Our Monthly Meeting** (see above and below)
- Aug 4 & 18        Noon get-togethers at Holiday City Diner
- Aug 13 at 7 pm**    **License Exams by our VE crew**
- Aug 20 at 7 pm    ARES Meeting at Miller Air Park OEM
- Aug 27 at 10 am    Our Board Meets
- Sept 4 at 7 pm**    **Our September Meeting**

## Birthdays & Anniversaries

### Happy birthday to:

Dave Ottenberg [WA2DJN](#)  
Jamie Punderson [W2QQ](#)

### Happy anniversary to:

Carl & Jane Lee  
Jamie & Sarah Punderson  
Norm & Delores Smith  
Stan & Marjorie Stafiej



## What to Ask at a Hamfest



1. What is it?  
Know what you're buying.
2. When was it made?  
Everything deteriorates with age, and some stuff is really obsolete. If it has tubes, it had better be cheap.
3. When was the last time it worked?  
Consider the seller's credibility.  
Most licensed hams are fairly honest.
4. Is it "street legal"?  
Beware of worn screwheads & strange additions.
5. Does it come with a manual?  
If there is one, it's a definite plus.  
Reading some of it can help you decide.
6. Are there any parts missing?  
Also be sure hard-to-get parts are undamaged.
7. Do I really want it?
8. How badly do I need it?
9. How trustworthy is the person selling it?  
Don't buy it if you suspect it's been stolen.
10. How much do I really expect to pay after haggling?  
Remember the seller is trying to get rid of it.
11. Can I get the seller's name, phone number, and callsign before closing the sale? (Also should I give him mine?)  
He may find spare or missing parts for it.

**NEXT MEETING:**  
**Thursday August 7 at 7:00 PM**  
Bldg A, Meeting Rm. #1  
Holiday City South Clubhouse  
Santiago Drive at Mule Road  
Toms River, NJ

## Ocean County



## ARES® News

The next meeting of Ocean County ARES will be on August 20 (Wednesday) at 7:00 PM at the Ocean County EOC, Robert J. Miller Airpark, Berkeley Township. There will be hands-on training of the Yaesu FTM-400DR Mobile and FT1DR HT Fusion radios in both FM and Digital modes. There will be no training net that evening due to the meeting. Refreshments will be served.

A bit of history from the ARRL Letter, Dated 7/17/14:

During the 1950s and 1960s, The USSR and the US were in the midst of the so-called "Cold War." Fearing that Soviet bombers could home in on radio signals to find their targets, the CONELRAD (CONtrol of Electromagnetic RADiation) system went into effect from 1957 to 1962. For their part hams were required to (1) monitor an AM broadcast station at least every 10 minutes to be sure it was still on the air; and (2) shut down, if broadcast stations went off the air. In the event of such an emergency, key 50 kW AM stations would move to either 640 or 1240 kHz to broadcast emergency information. The stations on each of those frequencies would go on and off the air in a continually varying sequence, while all carried the same audio to provide continuous information to the public. -- Al Brogdon, W1AB

Facebook is now allowing Hams to add their callsign to their profile. If you are on Facebook and want to display it, here's how it's done:

- 1st) Open up "Settings".
- 2nd) Under "General Account Settings", on the line that says "Name", click "Edit".
- 3rd) Enter your callsign in the space marked "Alternate name".
- 4th) Check the box for "Include this on my timeline".
- 5th) Save these settings by entering your Facebook password in the box marked "Password".
- 6th) Click on the box marked "Save Changes".
- Now return to your Main page and your callsign will appear under your name in parentheses.

As I write this newsletter, the time is approaching that we landed on the Moon exactly 45 years ago. I remember being glued to my friends TV set (black and white, of course) watching the event live. I was amazed by the ability to communicate back and forth with the astronauts even though they were as far away as I could ever imagine. It was an event that I will never forget. Forty five years have really changed technology. No Internet, no GPS (you could get a map in a gas station and fuel was \$0.29 a gallon). At least I still have my tube, Hallicrafters receiver from the era. It has more memories than I could ever list!

73 de WX2NJ

Bob Murdock, WX2NJ

Ocean County Amateur Radio Emergency Service®/EC

## Working DX



Is it possible to work DX with just 5 watts or less output and simple wire antennas? The answer is a resounding YES. Of course it's not as easy as working DX with 1 kilowatt and stacked 4 over 4 beams, but it's not as hard as many hams think. Let me tell you how to go about it.

I was one of those who never thought that QRP and DX could mix. However, I've proved myself wrong by making over 18,500 DX QSO's from 219 countries since 1993. I believe that anyone, without a great deal of effort, can get the basic DXCC award using nothing more than QRP and a wire antenna. I worked 100 countries in just the first 78 days of the year 2000 as part of the ARRL Millennium Award program.

The most important thing to remember about DXing, no matter what power or antennas you are using, is to LISTEN before you do anything. Of course, before you can work the DX, you have to be able to hear it.

Once you can hear the DX station, you then listen some more to see where the DX is listening for replies. If you hear him work a station right on his frequency, then you know he's listening there. Zero beat him and get ready to call, but again don't jump in too quickly.

Listen to find out the pattern of the DX station's exchange. Sometimes after the exchange of info, the DX station will just say TU, and then start listening for replies. Other times he will send QRZ?, or QRZ? de X2XXX, or just X2XXX. Some stations send dit dit. Whatever it is, learn when the DX station is done with a QSO and ready for the next call before you jump in.

Now you are ready to try the station. When that telltale signal comes from the DX station, send your call once, nothing else. If you are fortunate, the station will answer you by sending something like (in my case) K3WWP 599. You respond with TU 599. He will acknowledge you and move on to the next QSO. Lightning quick, but you now have a new DX country in your log.

Of course that is the ideal situation, and it is not going to work that way every time, even for the most powerful station in the world, and certainly not for the QRPer with his wire antenna. Not to say it doesn't happen, though. A few times I have beaten out a fair sized pileup to work a DX station. Why? Often it is simply favorable propagation, but there are also things you can do to help.

Be sure your signal is as clean and crisp as possible and your keying is as close to perfect as possible. DX stations often mention that it is not always the strongest signal that is easiest to copy in a pileup, but often a weaker clean signal with perfect keying is easier to copy. If you have a memory keyer, use that to send your call. It is possible to get nervous when trying for some rare DX, and be sloppy sending even our own call.

Another thing that helps at times is to delay for a second sending

[Continued on page 3]

[Continued from page 2]

your call so that the last letter or two extends past the main buzz of the pileup. In my case, the DX station would then hear the WP and send WP? Then I send my call again, and make the QSO. That is assuming there is no other WP in the pileup, and everyone acts properly and does not transmit again if their call doesn't contain a WP. And we know the odds of that. Generally anyone who has a W in their call transmits, everyone with a P transmits, and others will transmit even though their call has nothing close to a WP in it. The best of the DX stations in this case will send WP? KN KN and keep doing this until everyone else shuts up except the WP station. If a DX station does this often enough, he can really take control of a pileup and make it manageable.

If you keep calling him without an answer, try to figure out why. It could be that propagation is currently favoring another area. If he is working one W6 after another, and you are a W1, that could be the case or he may have his beam pointed to California at the moment. This is a good time to just note his frequency or store it in a memory in your receiver, and look for someone else. Come back later and see if the DX station is working stations in your area. If so, jump in and try again.

Some QRP stations like to sign /QRP at the end of their call in a pile-up. I don't think it's necessary, and I don't do it for the following reasons:

1. I don't feel my QRP should be pointed out as a special situation. I'm just another station in the pile, not someone special because I'm only using 5 watts or less.
2. I am sure some QRO stations cheat and sign /QRP, and I certainly don't want to be accused of that by those who don't know that I am a 100% QRPer.
3. It does take an appreciable amount of time to send /QRP when you are dealing with running hundreds of stations per hour, especially if it has to be repeated. If I make a contact, there's a chance I'll have to repeat my info since my sigs are weak, and repeating /QRP along with the other info may annoy not only the DX station, but others waiting in the pile. I hate slowing down DXpeditions or contesters like that.

To back up what I say in item 3 above, famous DXpeditioner G3SXW in his book "Up Two" urges operators calling him not to use /QRP. Then there is this quote from the 3B9C DXpedition web site to further denounce using /QRP: "We have received a few e-mails demanding that we amend logs to show /QRP. We are aware

[Continued on page 4]

## Internet and e-Mail Address Links

Internet addresses and most call signs in The SKYHOOK are now hyperlinks to web sites or email addresses. If clicking on the link does not bring up what you want, copy the address and paste it into your search box.

### **Our VE Crew**

Murray [KD2IN](#), John [K2JWH](#), Ed [W1EAP](#), Larry [K2QDY](#),  
John [KQ4WR](#), Stan [KB2PD](#), Steve [N2WLH](#), Kevin [W2FA](#)  
Walter [KC2LFD](#), Paul [N2QXB](#), Larry [WA2VLR](#).

*License exams are given at 7pm on the second Wednesday of each month at Holiday City South Clubhouse, Bldg A, which is at the corner of Mule Rd. and Santiago Dr. Call Larry Puccio, K2QDY, at 732-349-2950 for information.*

*Directions: From either Route 37 W or Davenport Road, take Mule Road to Santiago Drive. Turn into the parking lot from Santiago Drive, and park near the pool. Enter the building nearest the intersection.*

### **CLUB COMMITTEES**

Refreshments: Ed Baranowski

Webmaster: Steve [N2WLH](#), Carl [W2PTZ](#)

Publicity: Ed [W1EAP](#)

Programs: Lawrence [WA2VLR](#)

Sunshine: Dave [WA2DJN](#)

Field Day: Larry [K2QDY](#)

VE Sessions: Larry [K2QDY](#) 732-349-2950 & the crew

Skyhook: John Roberts [KQ4WR](#) 732-350-1162

Fund Raising: vacant

Membership: Doug Poray [KC2TZC](#) 732-928-2316

## **HOLIDAY CITY AMATEUR RADIO CLUB**

### **Toms River, New Jersey**

Web Site [www.hcarc.us](http://www.hcarc.us)

President	Carl Lee	<a href="#">W2PTZ</a>	732 237-2421
Vice President	John Roberts	<a href="#">KQ4WR</a>	732-350-1162
Secretary	Ed Picciuti	<a href="#">W1EAP</a>	732 736-0955
Treasurer	Larry Puccio	<a href="#">K2QDY</a>	732 349-2950
Executive Board	Larry Loscalzo	<a href="#">WA2VLR</a>	732 431-9082
Executive Board	Tom Chicino	<a href="#">KC2RSE</a>	732 240-7395
W2HC Trustee	Kevin Wagner	<a href="#">W2FA</a>	732 279-0532

Membership is open to all interested persons. Ham license is not required. Dues are \$20.00 per year, payable Jan 1<sup>st</sup>. Members joining during the year will have the dues prorated. Family membership \$30.00 per family.

Meetings are held on the first Thursday of every month, at 7:00 pm.

Location: Meeting Room #1 in the Holiday City South Clubhouse.

Directions: From either Route 37 W or Davenport Road, take Mule Road to Santiago Drive. Turn into the parking lot from Santiago Drive and park near the pool. Enter the building nearest the intersection.

The SKYHOOK is published monthly.

Editor and Publisher:

John Roberts [KQ4WR](#) phone: 732 350-1162 E-mail [KQ4WR@arrl.net](mailto:KQ4WR@arrl.net)

Send all newsletter items to: John Roberts

7 Lincoln Ct. Whiting, NJ 08759-1505, or e-mail [KQ4WR@arrl.net](mailto:KQ4WR@arrl.net)

[Continued from page 3]

that some operators at 3B9C have been logging /QRP but it is DXpedition policy that we do not do so. /QRP does not form part of the legal callsign in any country and, as far as we are aware, no QRP awards require the callsign to be suffixed with /QRP.

Therefore the /QRP suffix has no place in the 3B9C DXpedition log. You know whether you worked us on QRP or not and that should be all that is needed."

If a pileup gets too huge and the pile obliterates the DX station, then the DX operator will switch to split frequency operation. This is when the DX station transmits on one frequency, and listens on another, usually higher, frequency.

If you hear a DX station say UP (or UP1, UP2, etc.), that means he is listening to a frequency higher than his. The number is the number of kHz higher than his transmitting frequency. Leave your receive frequency on the DX station, and set your transmit frequency UP to where the DX is listening. If he just says UP with no number, generally that means UP 1, but not always. Then you have to find the pileup yourself. Once you determine where the DX station is listening, follow the same procedures listed for simplex or same frequency operation. Just be sure you are transmitting and listening on the right frequencies. Every rig seems to have a slightly different way of accomplishing this.

If the pileup is huge, you might be better off transmitting slightly higher than the main pile. The DX station will often explore the upper (usually) edge of a pileup if he can't pick out calls from the main section of the pile. This is where the clever QRPer can often steal a QSO from the QRO stations. It's really a chess game, and whole sections of DXing books have been devoted to breaking a pileup.

Often times the DX station will be operating split frequency but not saying so. This is where listening comes in. If you hear the DX working one station after another, but don't hear any of the stations he is working, it's time to tune UP and see if he is indeed working split frequency. Or you can go ahead and transmit on the DX frequency, and the self appointed DX policemen will very impolitely and illegally tell you the DX is listening UP. It's always better to know what's going on before you do any transmitting.

That's enough about the pile-up type of DXing. If you want to know more, just get on the air and practice, or read one of the many excellent books that have been written about DXing.

Let's touch on a few other DX topics. What about the QRPer calling CQ DX using his wire antenna. It's probably useless most of the time, but I have had DX stations answer my regular CQ's many times. This usually happens on 10M when conditions are really good, but it also happens on other bands. I currently have about 3 dozen countries worked via answers to my CQ's. Strangely, my most distant QSO ever came when VK6HQ answered my regular CQ on 30M one evening. I was so shocked and excited I could hardly send. Even after the QSO, I was wondering if it was really true that I worked a VK6. It was, because I received his QSL card in a couple of weeks. However something like that is the exception rather than the rule for QRP CQ's. Once in a while lightning strikes

twice and a couple years later John, VK6HQ again answered my CQ on 30M. This time it led to a long distance phone call from John, and follow up Emails between us. This is one of the rewards of DXing - having one of your contacts become a friend.

The easiest time to work DX is in contests, because the best operators in the world often go to exotic locations for contests to make themselves more desirable or just to activate some rare country. Plus you have the super contest stations in various countries operating with their huge antennas and state of the art receiving equipment. They are the ones who can dig out the weakest of signals, and are glad to do so for those few extra points they will get in the contest. Those points may just help them beat out another top notch contester. You may have a tough time beating the pileups at the beginning of a contest, but often these super contest stations almost go begging for QSO's near the end of a contest period. Then is the time you may easily work them.

Also for the week or so just before the big DX contests, many of the stations setting up for the contest will check out their equipment by working as many folks as possible. At these times they may also operate on the WARC bands (30, 17, 12) which are not available for operation in the contest itself. They often stay at their locations for a few days after contests also.

Always let the DX station dictate the type of QSO. If you answer a DX station outside a pileup, and he still sends just a report, you do the same. If he sends RST, QTH, and Name (OP), then you may be fortunate enough to find yourself with a DX rag chew. Send your QTH (maybe just the state), and name, and maybe mention you are running QRP. It doesn't happen too often, but I have had some very nice rag chews with DX stations. I recall a few I especially enjoyed. I chatted for a half hour with a German who was on vacation in the Canary Islands. A PJ2 wanted to know all about my QTH. I had a nice chat with an Italian talking about my Italian heritage (my mother was Italian). A German asked me all about my QRP rig. A station in Haiti was new to operating CW and asked me several questions about it. There were others as well. These are the DX QSO's I find really rewarding, although I appreciate the RST only ones also. You CAN rag chew with DX using QRP when conditions are good.

I hope you'll be as successful as I have been working DX. I KNOW you can be if you just apply yourself. 73 and gud DX.

John Shannon, K3WWP

## HCARC Official Badge Ordering Information



The club's official badge maker is the Capital Engraving Co. in Longview, WA. To order a badge, simply call Capital at 1-800-628-4985 after 1PM M-F. All that is required is to give your call and first name and your mail address. Use your credit card to pay. Cost is \$12.50 plus \$2 S&H. Al Ross WA7UQE will take care of you and put the official logo and club name on your personal badge.

## Exam Credit for Expired Licenses

A new FCC ruling now makes it easy for many former radio amateurs to get a new license of equal value.

People who have had a General or Advanced Class license, but had let it expire for more than the 2 year renewal grace period, can get a new General license, just by passing the basic Technician Class exam.

Still better, the holders of an expired Extra Class licenses can get new Extra Class licenses by passing the easy Technician Class test.

The only drawback is that you don't get your old call sign, as it may have been assigned to someone else.

Our Volunteer Examiners are ready to help. See VE Crew list on page 3.

### Some 2-meter Nets

Jersey Shore ARS Traffic Net daily 7:30pm 146.91,-,127.3

Central Jersey Traffic Net daily 8:00pm 146.76,-,156.7

South Jersey Traffic Net daily 8:00pm 145.47,-,127.3

Ocean County ARES Net Wednesdays 8:30pm:

except third Wednesdays of months 145.17,-,131.8

third Wed of odd numbered months only 146.835,-,127.3

no ARES Net on third Wed of even-numbered months

### Area Repeater Lists

**Southern New Jersey and Eastern Pennsylvania:**

<http://www.arcc-inc.org/>

**Northern New Jersey and Metropolitan New York:**

<http://www.metrocor.net/>

Most, but not all repeaters are listed. Those which are not listed are not coordinated, and may suffer interference from coordinated ones, which have legal priority.



### About Russ Young WA2VQV

#### An autobiography

I had been interested in radio as a young boy. In the scouts I used to read about it in Boys Life magazine and from a schematic built a crystal set with a 1N34 germanium diode, a small variable capacitor and a ferriloop stick. I learned Morse with wig-wag flags in the Scouts. In 1953 got an S53A receiver for Christmas and was an SWL. In 1954 in AF [Air Force] basic training they asked me what I wanted to do and I told them airborne radio op. That didn't happen but they made me a 23 WPM radio intercept op and I copied Russkie and Polish AF CW traffic for 3 years from '55 thru '58 in Germany. Had a great time there.

My first rig was from the 1961 handbook, a 30 watter using a 6DQ6B on 80, 40 & 15M along with the S53A and my left-handed Vibroplex bug. Then I built an EICO 720 kit, 90W, with a 6146 and later got a HQ145X RCVR. I rebuilt the first rig into a plate modulator with two 6DQ6Bs in push-pull. Still use the old D-104 mic from those days as well as my AF HS-33 headset. There's probably an old supply sergeant in Germany wondering when I will return my HS-33.

40 used to be my favorite band when I started in ham radio in the early 1960s. My first antenna was a 1/2 wave 40M dipole which ran from our 2nd floor living room window down the driveway to the garage (we had the upper two floors in a two-family house in Brooklyn, NY back then). It was only about 15 feet high. I replaced that with a Gotham V-80, 23 feet of aluminum tubing with a big inductor at the bottom, and fed with RG-59 72 Ohm Co-ax. Worked about 20 countries with it.

By the early '70s, I had gotten married, been promoted to management at work and that caused a long hiatus away from radio until 1994 after I retired. I thank my XYL for a renewed interest as she urged me to get the extra ticket and get back on the air. Glad I did.

So that's the story.

73, Russ [WA2VQV](http://www.wa2vqv.com/)

**WA2VQV worked:**

Call	Date	Time	Mode	Band	Entity	C/IOTA	from FM28hv		Grid	Miles	Dir
							ITU CQ				
J48TSL	18-Jun-14	2215Z	CW	17M	Skyros I., Greece	EU-060	28	20	KM28gu	5059	NE
TG9AHM	30-Jun-14	1833Z	RTTY	12M	Guatemala	NA	12	07	EK44ro	1915	SSW
A71AE	6-Jul-14	0041Z	RTTY	15M	Qatar	AS	39	21	LL55ri	6828	NE
YL2CI	6-Jul-14	0119Z	RTTY	20M	Latvia	EU	29	15	KO26bx	4345	NE
A71AE	6-Jul-14	0129Z	RTTY	20M	Qatar	AS	39	21	LL55ri	6828	NE
ZY14RR	9-Jul-14	2000Z	CW	15M	Brazil	SA	12	21	FJ92pt	2659	SSE
LZ1810PPW	9-Jul-14	2031Z	RTTY	17M	Bulgaria	EU	28	20	KN22dq	4893	NE
TM0HQ	12-Jul-14	0022Z	SSB	15M	France	EU	28	14	JN18eu	3764	NE

**Joe Militano KC2QLA worked:**

Call	Date	Band	Mode	Power	Time	RST	Country	Grid	Miles	Dir
J68HZ	6/22/2014	10	SSB	100	19:15	59	St.Lucia	FK94mb	1979	SSW
EF6	6/22/2014	15	SSB	100	22:06	59	Balearic Is.	JM19lo	2631	ENE
ER4DX	6/23/2014	15	SSB	100	16:00	59	Moldova	KN38vk	3613	NE
ES5QD	7/4/2014	17	SSB	100	04:20	59	Estonia	KO38cs	3352	NE
LY5A	7/4/2014	17	SSB	100	04:29	59	Lithuania	KO15qu	3289	NE
DK1NO	7/11/2014	15	SSB	100	22:24	59	Germany	JN48oc	2796	ENE
LW3DN	7/11/2014	15	SSB	100	22:46	59	Argentina	FF95mj	5230	SSW
CO6LE	7/11/2014	17	SSB	100	22:47	59	Cuba	FL02aj	2263	WSW
9A7R	7/11/2014	15	SSB	100	23:19	59	Croatia	JN75tn	3132	ENE
RT4F	7/11/2014	20	SSB	100	23:48	59	European Russia	lo23pg	2000	SSE
SP3SLA	7/11/2014	17	SSB	100	23:53	59	Poland	JO82lk	3080	NE
OH4MDY	7/12/2014	20	SSB	100	01:33	59	Finland	KP32nj	3339	NE
DL1BI	7/12/2014	17	SSB	100	01:58	59	Germany	JO31pl	2681	NE
YV5AJ	7/12/2014	15	SSB	100	15:57	59	Venezuela	FK60nm	2365	SW
UW1M	7/12/2014	15	SSB	100	16:03	59	Ukraine	kn98jl	2211	SSE
T49C	7/13/2014	15	SSB	100	00:18	59	Cuba	EL83cd	2421	WSW
TM0HQ	7/13/2014	15	SSB	100	00:21	59	France	JN18eu	2479	ENE
OP0HQ	7/13/2014	20	SSB	100	00:24	59	Belgium	JO10uv	2529	NE
9A0HQ	7/13/2014	20	SSB	100	00:34	59	Croatia	JN85et	3161	ENE
HG3X	7/13/2014	20	SSB	100	00:36	59	Hungary	JN96ee	3246	ENE
PA6HQ	7/13/2014	20	SSB	100	00:47	59	Netherlands	JO21hu	2565	NE
SK9HQ	7/13/2014	20	SSB	100	00:48	59	Sweden	JO99bh	3063	NE
PJ2T	7/13/2014	20	SSB	100	00:58	59	Bonaire-Curacao	FK52kg	2333	SW
ZP5AA	7/13/2014	20	SSB	100	01:33	59	Paraguay	GG14er	4561	S
EF4HQ	7/13/2014	20	SSB	100	01:40	59	Spain	IN80dj	2277	ENE

**Special Events:**

Aug 01-17 1400-2000Z W9ISF Indiana State Fair 7.240 14.245  
28.400 ssb

Aug 07 National Lighthouse Day

Aug 08-13 1800-0600Z K0M Mayo Clinic 150th Anniversary 7.200  
14.300 ssb

Aug 13-16 0000-0000Z N7HG Navajo Code Talkers Days 7.265  
14.265 ssb

Aug 16 1630-2230Z K9Q Dodge Institute of Telegraphy 140th  
anniversary 7.041 14.041 cw, 3.970 7.270 14.273 ssb

Aug 16-17 0000-2359Z K6A,1422-1420Z W2GSB, 1600-2359Z N6P  
International Lighthouse Weekend

**Some August Opportunities:**

Dates	Entity	Call	QSL via	C/IOTA	ITU CQ	Grid	Miles	Dir	Bands	Modes
Jul 31 - Aug 05	Timor Leste	4W/NB3MM	IZ8CCW	OC-048	54 28	PI21sk	9951	NW	30-12m	SSB cw psk
Jul 27 - Aug 16	Nauru	C21BN	JH1NBN	OC-031	65 31	RI39ll	7743	WNW	80-6m	SSB
Jun 17 - Aug 19	Minami Torishima	JD1/JG8NQJ	JA8CJY	OC-073	90 17	QL64xg	7025	NW	HF	CW
Aug 02 - Aug 08	Christmas I	VK9EX	LotW	OC-002	54 29	OH29ln	10400	N	160-6m	All