

Watts News

Monthly Newsletter of the Olympia Amateur Radio Society

July 2017

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Club Information Page

OARS Officers			
President	Lee Chambers	KI7SS	951-2538
Vice President	Adam Barbera	W2NCC	870-7894
Secretary	Rue Palmer	W7RUE	790-5633
Treasurer	Ed Fitzgerald	N7WW	491-2289
Member at Large	Barry Russell	W7BRR	977-5882
Key Contacts			
RFI Committee	Ghery Pettit	N6TPT	867-0756
Repeater Committee	Fred Baker	W7SIX	791-2444
Repeater Committee	Ken Dahl	K7TAG	534-9357
Club License Trustee	Duane Braford	WB7ROZ	412-1902
Information Net	Lee Chambers	KI7SS	951-2538
ARES Net	Tom Bohon	KE7EJJ	456-6260
Web Site	George Lanning	KB6LE	438-5797
Newsletter	George Lanning	KB6LE	438-5797
Classes	Lee Chambers	KI7SS	951-2538
License Exams	Klaus Neubert	AC7MG	280-2428
Equipment Custodian			
OARS Website: www.olyham.org			

License Exam Sessions
 6:00 pm before each monthly OARS meeting
 Walk-ins allowed
 To apply contact Klaus Neubert
 280-2428
oars-ve@comcast.net
In an effort to provide the best testing environment possible, the examiners request non-candidates remain outside for the duration of the exam session.
 —Thank you.

Membership Application	
<input type="checkbox"/> New <input type="checkbox"/> Renewal	
Date	
Call	
Name	
Address	
City, State	
Home Phone	
Cell Phone	
email	
Annual Dues: \$ 50 single or family Pay to Treasurer at any meeting, or mail to: OARS PO Box 2861 Olympia WA 98507	

OARS Net Check-ins			
The following stations checked in one or more times on the OARS General Information Net in June 2017:			
AC7MG	KD7PLJ	KI7SS *	W6EGV
AD7KC	KD7SQU	KI7XM	W7BRR
AF7IO	KD7TQW	KI9FKQ	W7RUE
AG7BA *	KF7KJI	KL7SK	WA7BAM
K3AL	KF7VWA	N6TPT	WA7SH
K7AU	KG7CCE	N7GQP	WB7QEU
K7HTZ	KG7HBE	N7ITT	WB7ROZ
K7TAG	KG7VQP	N7TIF	WC7I
KA7FRZ	KI7CQ	N7TLF	WV7S
KB7HPP	KI7FKQ	N7WW	NW7J
KD7OQ	KI7MTA	NW7J	
* Net Control Stations			
The net meets at 7:30 every Tuesday evening on the 3 linked OARS repeaters: 147.36, 224.46, and 441.40 MHZ. All Hams are invited to check in.			

President's Message

Ten minutes with Tom

During SeaPac I had the good fortune to talk one on one with Tom Gallagher, the CEO of the ARRL. Besides being a very approachable person he is thinking far into amateur radios future. Several times he stated that the number one problem facing the radio hobby and service today is where are the next generation of leaders going to come from?

Attracting new members to the hobby is needed, but finding people with enough enthusiasm to become leaders is a step above. He has stated in his QST column that the Makers movement is one such place generating such enthusiasm. One of the newest area for builds is using micro computers and controllers such as the Raspberry Pi 3 and Arduino units. Listening to a recent podcast about just the capabilities of the Arduino controller to build an interface between my old CDE rotator and popular radio operation computer software quickened my pulse. Den (WV7S) and I attended a workshop at SeaPac building a Pi based radio. Once we get our homework done, expect a presentation. Getting on the air for hundreds instead of thousands of dollars will draw more people to the hobby.

Tom also talked about getting radio involved with our 3 local colleges. Annually we can inform college counselors of scholarships available from the ARRL. Additionally, the ARRL had great success with their first meeting for the College Amateur Radio Initiative (CARI). To see the happenings visit the Facebook page at <https://www.facebook.com/groups/ARRLCARI/>

Field Day found us beset with challenges of all types. While logging around 380 QSO's in 24 hours of operation is notable, the fact that it was done with 2 stations most of the time shows the work we hams accomplished. I want to thank everyone who participated. The teamwork, cooperation, enthusiasm, lack of sleep, and energy are all to be proud

of. A special thanks to Duane (WB7ROZ) is needed for hosting the event.

As a newish ham, I have been amazed at the quality of individuals in this hobby. For example, very close to all the thousands of dollars of equipment is accounted for and in the hands of it owner, year after year. What other group in American society could accomplish this feat?

A group sharing of the challenges of this year's event and solutions will happen at the July meeting. Solutions will be discussed and applied to make next year's Field Day even better.

I also want to thank everyone volunteering for the events listed on the calendar. We staffed 5 events in June and have 7 to staff in July. We are busy either getting out the good word about our hobby or providing needed communication services for events in the community. We could still use 3-4 hams to staff the upcoming Night Riders event. This new event, designed to teach both riders and horses night riding skills, probably was not going to happen until the organizers discovered us during the Olympia Arts Walk. A more thankful and gracious group would be hard to imagine. And if you arrive early enough, they will feed us! Doesn't get much better than that.

Proof of our success informing the community about amateur radio is that we have received 4 unsolicited invitations to participate in the last few weeks. Feel good about this accomplishment.

Get on the radio, make quality noise and have fun!

—Bruce, WA7BAM



Treasurer's Report

AS OF JUNE 1

GENERAL FUND (CHECKING ACCOUNT)

PREVIOUS BALANCE	\$ 1,928.82
INCOME	175.20
EXPENSES	0.00
ENDING BALANCE	2,104.02

REPEATER / PACKET FUND (SAVINGS ACCOUNT)

PREVIOUS BALANCE	\$ 1,052.74
INCOME	0.00
EXPENSES	0.00
ENDING BALANCE	1,052.74

— ED FITZGERALD, N7WW, TREASURER

— ... —

INSPIRE-2 Ground Controllers Turn to Amateur Radio, Rescue Stalled Satellite

06/19/2017

Amateur Radio came to the rescue of the [INSPIRE-2](#) CubeSat, built by the University of Sydney in collaboration with the Australian National University, and the University of New South Wales. According to Wireless Institute of Australia (WIA), the CubeSat is designed to “explore the lower thermosphere, for re-entry research and in-orbit demonstration of technologies and miniaturized sensors” and is part of the QB-50 constellation of research CubeSats. Its operational frequency was coordinated by [IARU](#) to be in the satellite segment of the 70-centimeter Amateur Radio band.

After its deployment from the International Space Station (ISS) in late May, INSPIRE-2 showed no signs of life. The engineering group on the ground tested various scenarios on the INSPIRE-2 engineering model, concluding that the spacecraft's battery had depleted due to the CubeSat's extended stay on board the ISS prior to

orbit. The ground controllers theorized that the satellite was trapped in an endless loop, but still listening while trying to deploy its antenna, making reception of signals from Earth difficult.

The ground team devised a set of commands that, if received, would instruct the satellite to wait until its battery was charged before attempting to deploy its antenna. UNSW and ANU ground stations transmitted the recovery command without success, however, eventually deciding that more power was needed to overcome the lack of receiver sensitivity caused by the still-stowed antenna.

PI9CAM at the CAMRAS Foundation Dwingeloo Astronomic Observatory in Leiden, the Netherlands, responded to a call to the moonbounce community and offered to transmit a high power signal using a 25-meter dish that's normally used for radio astronomy but also for EME.

Success of the approach was confirmed on June 11, and Dimitrios Tsifakis, VK1SV, who is part of the ANU team, subsequently was able to send commands to the satellite from the ANU Earth station for the first time. The satellite had come back to life!

WIA called it, “a wonderful example of successful collaboration between radio amateurs and the academic community.”

The QB50 program involves a coordinated launch of 50 CubeSats from the ISS to undertake three integrated space research studies, supplemented by additional research investigations by individual CubeSat teams; some QB50 participating spacecraft carry Amateur Radio payloads. —
—*Thanks to WIA News*

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You're Pulling My Leg

One evening after dinner, my five-year-old son Brian noticed that his mother had gone out. In answer to his questions, I told him, “Mommy is at a Tupperware party.” This explanation satisfied him for only a

moment. Puzzled, he asked, "What's a Tupperware party, Dad?"

I've always given my son honest answers, so I figured a simple explanation would be the best approach. "Well, Brian," I said, "at a Tupperware party, a bunch of ladies sit around and sell plastic bowls to each other." Brian nodded, indicating that he understood. Then he burst into laughter. "Come on, Dad," he said. "What is it really?"

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June 2017 Meeting

No minutes were taken. However, the following is a copy of the agenda for the meeting:

Welcome and introductions

Field Day Gear 2017---CALL SIGN

EVERYTHING

1. Generators-Bruce and Duane
2. Tents-12x12 and shade tarps-Bruce
3. 100' extension cords-Jim & Ken-Thanks Ken
4. Radios: FT100D for PSK31(Duane, Bruce)
FT990-Lee
Flex 6300-Bruce(sign in table-listen only)
TS2000-Bruce (VHF)
FT991-Den
Art-JT65
Winlink?
1. Tuners-300W MFJ & 100W(Bruce)
Dentron Super Tuner Plus-Den
1. Power supplies-Bruce, Den
2. Misc-power strips, tables(2-more needed), chairs(6), sunscreen, Band plans,
1. Antennas-Horse fence(10-80, Bruce)
Buckmaster 80 OC-Den????
Hamsticks-Phil
40-80 meter NVIS (Bruce)
Who is picking up mag loop????
1. Drinking water, soda, sunscreen,
2. Pictures
- 1.
2. Duane—Locations of equipment on property

1. Duane and Steve—Education by antenna design, construction and testing
 1. Thurston County Fair—Deck Building next to stage area, a lot of electricity in building, metal roofed building. Possible to put up dipole (grounds available before and after fair) and mag mount 2 meter to roof—Fulfilling STEM purpose?
 2. Staffing August 2-6, how many days can we staff?
1. Spud gun safety if time
2. What did I forget?

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July Calendar

July

3- Lacey Fireworks (ARES)

8-Midnight Rider horse trail ride, dinner at 5:30 to about 2 am, Kennedy Cr. Area

11- L&I preparedness fair (ARES)

13- City Emergency Managers Meeting (ARES)

22, 23—Bigfoot 100K & 40 miles <http://www.bigfoot200.com/home.html>

29-TCARES 5th Saturday exercise

29 & 30- Tacoma Trail Cruisers Smuggler Poker Run—Clarence, AG7BA is lead

See <http://www.tacomatrailcruisers.org/smuggler-poker-run.html>

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Region 1 Intruder Watch Reports the Usual Suspects

International Amateur Radio Union Region 1 Monitoring System (IARUMS) volunteers continue to document many of the same signals intruding on Amateur Radio bands — some of them audible in other parts of the world, according to the latest editions of the IARUMS Region 1 [newsletter](#). IARUMS Region 1 Coordinator Wolf Hadel, DK2OM, [reported](#) last month that his own band monitoring activity has been hampered by interference from a neighbor's LED lamp, and that Germany's telecoms

regulator was not helpful in resolving the situation, which Hadel says affects all bands from 80 through 10 meters. Nonetheless, he has worked around the local interference to document many of the same bad actors that show up in the IARUMS Region 1 newsletter month after month. IARU Region 1 includes Europe and Africa.

These usual suspects include a Russian Navy F1B RTTY signal on 14.180 MHz in Sevastopol in Crimea, “still active, not regarding official complaints.” Last fall IARUMS had reported that complaints were successful in silencing the intruder. Another Russian F1B RTTY signal had been showing up on 7.051 MHz, “mostly idling and every evening,” Hadel reported in May. German telecoms regulators registered an official complaint, apparently successful in that instance. Hadel also reported “daily” transmissions of music on 7.050 MHz (LSB), possibly originating in Russia.

The “mysterious beacon ‘D’” from Asian Russia has been reported on CW on 7.093.3 kHz, with spurious transmissions on 7.078.6, 7.117.9, and 7.157.2 MHz, as well as outside the band.

Broadcaster Radio Hargaysa in Somalia continued to be reported on 7.120 MHz (AM) daily. Hadel indicated that the signal is audible in Australia and Japan, as well as in Europe and Africa. On 7.175 MHz, Radio Eritrea continues to be jammed daily with white noise transmissions attributed to Radio Ethiopia. IARUMS reported jamming of Radio Taiwan on 7.200 MHz, apparently originating in China and audible “every evening” in Europe. The Chinese “foghorn” over-the-horizon radar (OTH-R) continues to intrude on 20 meters, with signals on 14.211 MHz “jumping to 14.290 and 14.302 MHz.” The Russian “Konteyner RLS” OTH-R remains a problem on 14.280 MHz

In late April, DK2OM monitored a Chinese wideband OTH-R on 15 meters between 21.280 and 21.458 MHz. “No woodpecker, as some hams believe,” Hadel noted. Several OFDM transmissions originating in Moscow have been heard on 20 meters.

Brazilian “pirates” again have been observed on 21.000 MHz (USB). “They are abusing this [frequency] like a telephone between Rio and northern Brazil,” Hadel reported in April. “We suppose fishery traffic.” Just below that signal and barely outside 40 meters (6.999 MHz) was USB interference attributed to Spanish fishing interests, splattering up into the low end of the band. An Iranian radar was reported back on 28.960 MHz, heard in Europe via E-skip.



Digital modes – best option in the face of declining propagation

Anyone who has turned on their radios of late need not be reminded of poor band conditions. “Poor” is a relative term, of course. For me it means tough propagation to distant places on the higher bands. Fortunately there is an antidote. The digital modes including CW make it possible for me to still work DX. I am limited to an inverted vee dipole only 35 feet or so at the apex, a ¼ wave ground plane for 30M, and no more than 100 watts. But even with those challenges I can still add to my DXCC totals. June highlights include Thailand and Hong Kong (30M JT-65), Belarus (20M JT-65), and Denmark and Slovenia on 30M CW. Please send me (kh6xt@arll.net) your reports or observations including anything on Six Meters and higher for sharing on Watts News.

Speaking of CW it will be an even more important mode next Field Day. This year I was limited to a few minutes but struck by the number of CW signals on 40M in the middle of the day. I logged two QSOs once we got the G5RV up but the potential was there for many more. I heard a few FD ops sending at about 12-13 WPM, a rate OARS members could find copiable with a little practice before next June.

Getting others to join in the digital fun next year might be easier if we had a dedicated rig or possibly time windows for CW and JT-65 using the Yagi. This would be a sure fire way of increasing our points, particularly if conditions deteriorate further as we race to the bottom of this solar cycle.

— 73, Den WV7S

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How to Copy CW in Your Head

By Dan Romanchik, KB6NU

The second most common question that I get about CW is, “How do I learn to copy in my head?” When I get this question, I give, what to some, is a very unsatisfying answer. One day, I just went cold turkey. I put down the pencil and paper and never copied letter-by-letter ever again.

Carlo Consoli, IK0YJG, author of *Zen and the Art of Radiotelegraphy* (http://www.qsl.net/ik0ygj/enu/ZART_r20101008m.pdf), says that what operators need to do is to program themselves to copy in their heads. He counsels operators to practice relaxation and visualization exercises. Visualize yourself as a high-speed operator, and maybe one day you will be one.

This approach seems to have worked for Consoli. He is a member of the Very High Speed Club (VHSC), First Class Operator’s Club (FOC), and has been clocked at copying over 70 wpm. I’m not sure that this is really going to work for everyone, though.

Another approach is touted by Carl, N7AGK. On his website, Carl writes, “I have created a program to assist you in learning to copy Morse code in your head. Everything you need will be contained on a single USB flashdrive that I will provide to you. In the program there are audio Morse code presentations followed by a visual display. The visual display shows the information in large print and upper case letters. The visual display verifies that you have received the Morse code correctly.” Carl’s program costs \$20 and is available from n7agk.com.

Zeb, HB9FXW, has created a free web application called Seiuchy (<http://www.kb6nu.com/let-walrus-help-copy-head/>) to help people learn head copying. Seiuchy, which Zeb says is Japanese for walrus, simulates on-air contacts. The trick to using this app is that instead of copying exactly what’s sent, you only copy the most important bit of information. The idea is that if you train yourself to do this, then you can concentrate on what’s important rather than getting bogged down in copying what’s not important.

A different take on head copy was sent in by one of my blog readers, Bill, W3MSH. He wrote, “I was a CW op for many years and discovered something fascinating. I first began to hear “dots and dashes”, then letters, words, sentences and at 35+ wpm, thoughts in my head.”

I think Bill may have hit the nail on the head with this comment. I like the idea that copying code in your head is more akin to generating thoughts than it is to copying individual characters or words. Everybody talks about how getting faster is about moving from copying individual characters to copying words to copying entire sentences. I’ve never thought of it that way, although I was at a loss as to how to describe how I do it. I think the idea that when copying in your head, the code creates thoughts directly is a beautiful way to put it.

Isn’t that what’s happening when you talk to someone? When someone talks to me, I don’t consciously parse the sentences and then analyze them to see what was just said. It’s more of an unconscious process. The sounds being uttered are creating ideas in my head.

Shouldn’t we approach head copy in the same way? Instead of thinking about head copy as the process of writing down the characters on an internal blackboard to be read later, it should be about translating the sound of the Morse Code directly into concepts. The sounds “dah di dit...dah dah dah....dah dah dit,” should conjure up the image of a poodle or a pitbull, not the letters “D O G.”

How that translates into a program or a method for learning to copy the code in one’s head is another matter. It might be worth thinking about, though.

Dan Romanchik, KB6NU, is the author of The CW Geek’s Guide to Having Fun with Morse Code and the No Nonsense series of amateur radio study guides. When he’s not head copying on 30m, he blogs about amateur radio at KB6NU.Com

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Health Care for All

Husband: “I’ve just come back from the Social Security Office where I went to sign up for my benefits. She asked to see my birth certificate, but I told her I didn’t bring a copy. She said then I could just unbutton my shirt and let her take a look. I did, and she said that with that mat of gray hair I qualified and will start receiving payment checks next month.

Wife: “That’s very interesting. Why didn’t you also drop your pants? Then you could draw disability.”

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OARS Meeting

**Wednesday, July 20, 7:00 pm
Program to be Determined
South Sound Manor Event Center
455 North Street SE
Tumwater**

If you are a Ham who has received this newsletter, but are not yet a member of OARS, you are cordially invited to join us. Please complete the membership application found elsewhere in this newsletter and mail it to:

OARS

PO Box 2861

Olympia WA 98507

Or, bring it to an OARS meeting and see Treasurer Ed Fitzgerald.

**OARS
PO BOX 2861
OLYMPIA WA
98507**

