

September 2016

NEXT MEETING IS SEPTEMBER 13



Is this Adam's new amplifier—or is it a Navy version capable of 55 KW at 50-150 kc (kHz)? Come to the meeting and find out. Ed, WA7ETH, will speak of his experiences as a First Class Radioman at the Naval Air Station Jim Creek in Oslo, WA.

**Rob's 125th Street Grill, 125th and Aurora Avenue North Dinner at 6:30 p.m.,
program at 7:30 p.m. Dinner is \$ 20 including tax and tip.**

Please RSVP your dinner plans to Adam, K7EDX at k7edx@arri.net

The President Speaks

Adam Blackmer, K7EDX

Well, I hope all of you had a great summer. The weather seems to be making changes sooner this year, so Fall is definitely around the corner. Hopefully we will start to see some better radio conditions soon.

The Salmon Run is just a few weeks away, so get ready! Jim Fenstermaker, K9JF, will be hosting W7DX in Skamania County. I am sure the county hunters will be excited when they hear him and his team on the air.

So will you chase all the counties looking for a clean sweep? Will you run on the bands from a coveted county? Will you be a rover activating the most needed counties? No matter what your goal is, the Salmon Run sure helps to bring all of us Washington hams together. It's just great fun!

A special thank you to the Willamette Valley DX Club for doing a great job hosting the Pacific Northwest DX Convention. Every rotation seems to bring in a slightly different mix of hams, which is great. Paul, N6PSE, and Craig, K9CT, were two of the featured speakers who spoke about their recent DXpeditions--Paul to South Georgia and the South Sandwich Islands and Craig to Palmyra Island. [Editor's note: Our President and Rob, N7QT, were also featured speakers and did a great job]. I know that Craig is on the list of operators for Bouvet in 2018. A nice addition to that team is Hal, W8HC. Hal went with Rob, N7QT, and me to Willis Island. He's also a really great guy. Anyone need Bouvet?

Right after the Salmon Run the contest season kicks off with CQWW RTTY the next weekend. I look forward to being on the air for that contest.

I hope to see you at the next club meeting.

73 and hopefully good DX!

Random Comments From the Editor

Every once in awhile you're lucky enough to stumble across something that makes you glad you're living in an era of amazing technological progress. That was the case this morning as I watched a video produced by Nodir, EY8MM. If that call is familiar, it should be: Nodir is a very active DXpeditioner and was part of the teams that went to VP8ORK (South Orkney), FT5ZM (Amsterdam Island) and many others. Nodir has put together a time-lapse video of his home country Tajikistan and it is really stunning. Joe Bob says check it out—it's just over six minutes and is called "When the Day Meets the Night"—at <http://dxnews.com/day-night-ey8mm/>

The CY9C group that was recently on seemed to work lots of folks but they also did stuff that is “unusual” for a DXpedition: operating simplex, turning up on different frequencies each time they appear on a band, seemingly eager to have “ragchews” with their pals back home, operating on 60 meters the first day, etc. Nothing to really worry about—unless you were waiting to get them for a new one. From my West Coast perspective, I think they failed to realize that our sunset was about their bedtime (they’re four hours ahead of us). I was there every night on 160 and they seemed to go QRT just about 8:30 p.m. local time here, when the sun was just about gone. ClubLog shows some Zone 3 QSOs on 160 (and also on 10 and 12) but I’ve asked around and it looks like many (all?) of those QSOs resulted from enriching the owners of Remote Ham Radio. Perfectly legal and the folks at the DXCC Desk will count them—if you want them to.

Listening to the CY9C phone pileups reminded me again that DXpedition operators, with rare exception, really don’t care where you live. It seemed like every other guy, after hearing his call and 59, responded with “You’re also 5 by 9 in West Virginia” or even “You’re 5 by 9 near Wheeling, West Virginia.” Not only is the DXpedition operator uninterested in your location but the logging program has no place to put it—indeed, most of them don’t even record the report—call signs only. No big deal, you say? Well, no harm done except for this: say it takes a second to say “near Wheeling, West Virginia.” Saying it 60 times equals a minute; 3,600 times is one hour. The CY9C group finished with just over 64,000 QSOs so if my math is correct that results in 17.8 hours spent communicating useless information. This overstates it, of course, as not every guy included his city or state but enough did to result in wasted hours for the DXpedition that could have been used making QSOs. Just sayin’.

The Salmon Run is coming up soon and I really hope every club member gets on for it. Even if you don’t think of yourself as a “contester,” the SR is a fun event and it can be as high-paced or as low-key as you want it to be. If you’re entering seriously, you’ll find plenty of stations who are eager to work you and most will give you the exchange in a fairly prompt manner. Yes, you’ll have to grit your teeth when you hear “I QSL your 59 Kitsap, please copy my 59 West Virginia” but just smile and keep going. On the other hand, you can do it the casual way, handing out your name and actually having a QSO with the guy/gal on the other end. You might even discover that the “friendly” approach garners more QSOs from those that dislike contests but like ham radio. With 10 and 15 almost sure to be non-productive, I think the idea of WA stations all crammed onto 20 meters during the day and 40/80 during darkness will be pretty neat. Just stay off “my” frequency!

2016 Washington Salmon Run, September 17-18

Jim Hadlock, K7WA

The 25th Washington Salmon Run is coming up September 17 and 18-- information is on the WWDXC website. The County Activity List is filling up. Tom, NU7J, and Jim, K9JF, will be heading up the W7DX Bonus Station operation this year from Jim's QTH in Skamania County. It's hard to believe we've been doing this for 25 years now - so many members have contributed to making the Salmon Run the success it has become! Please plan to get on for Salmon Run and hand out your County to those looking for Washington QSOs, whether it's CW, SSB, or RTTY, for an hour or for the weekend. The Salmon Run always generates a lot of activity. Check out the Awards on the website - Kirk, N7UK, can arrange for a Plaque sponsorship if you'd like to provide a special award for the category of your choice.

We'll see YOU in the Washington Salmon Run!

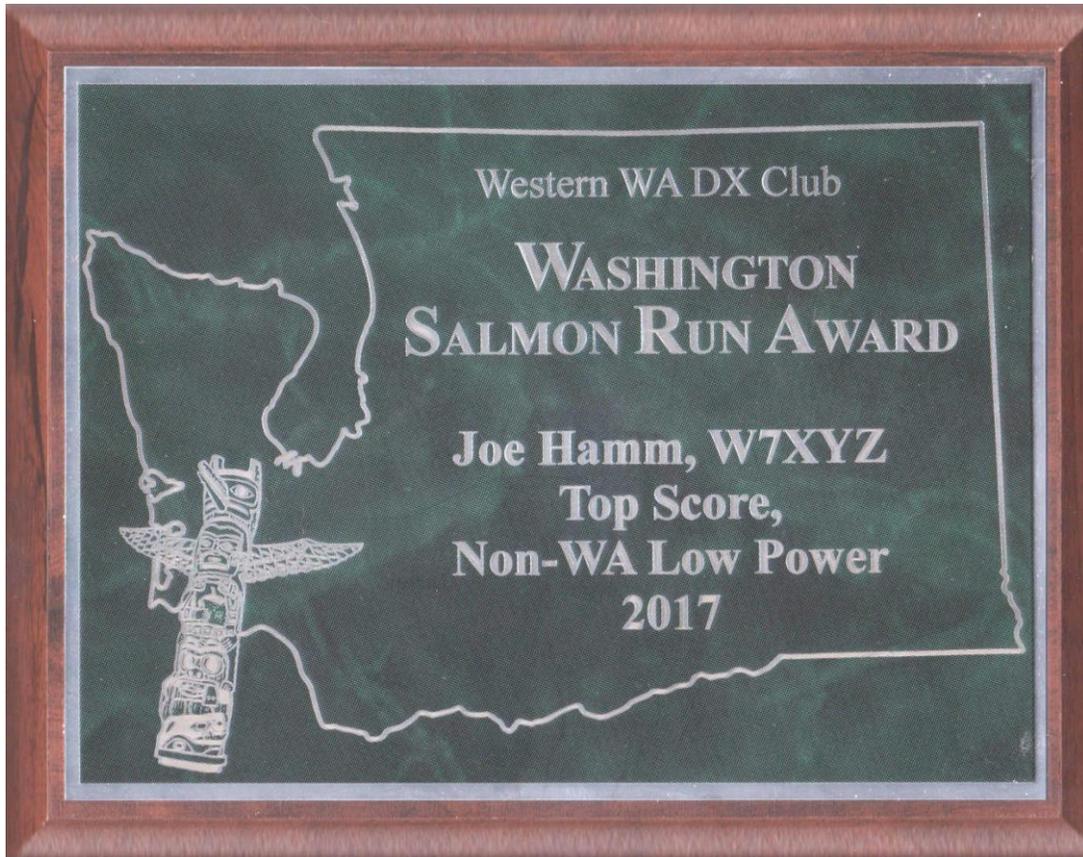
Plaques for Salmon Run and Member Awards

Kirk Bellar, N7UK

The WWDXC Board recently decided to bestow plaques to the winners of our annual membership awards (Member of the Year, Most Valuable Player, Rookie of the Year, etc.), going back to 2014. The Board asked me to come up with a standard design for a WWDXC plaque, one that we can have engraved as desired for membership awards, Salmon Run awards, or other awards, and that would be a less-expensive alternative to the Salmon Run plaques I've been sponsoring for the past 16 years. These plaques were carved in the outline of the state and consequently were rather expensive, at nearly \$100 each.

I opted for a slightly smaller, rectangular plaque with an engraved outline of the state and the totem, and found a trophy shop that would laser-engage them for a total cost of \$40 ea. + tax. The Board approved the new design in July and I ordered and received the plaques in August. Adam presented the 2015 Member of the Year plaque to Rich Stempien W6RS at the August 29 Board meeting and he'll present the remaining plaques to the 2014 and 2015 winners attending this month's general meeting (see <http://www.wwdxc.org/category/activities/awards/?print=pdf-search> for the complete list of winners). For those not in attendance, the Board will have to figure out the logistics of hand-delivery or parcels, so we're hoping to see as many of the winners as possible at our September 13 meeting.

Meanwhile, with the 2016 Salmon Run rapidly approaching, we're looking for other members to sponsor some of the new-and-improved (and did I mention cheaper?) plaques in order to entice more hams to participate in the contest. Plaques aren't limited to the existing awards; if you want to create your own category (within reason). If you're interested in sponsoring a plaque, contact Jim K7WA at k7wa@arrl.net



Contesting, Yesterday and Today

Jim Neiger, N6TJ

[Editor's Note: I suspect you all know Jim Neiger, N6TJ. As you'll see below, Jim has been around high-level contesting for a very long time. We were talking last year about all of the changes to ham radio in general and contesting in particular and I found his perspective fascinating, especially about all of the technology "enhancements." So I asked Jim if he'd write something for the Tabloid and he agreed to do so.]

" My dear friend W6SZN asked me to pen a few words about the subject of contesting that may be of interest to the readers.

YESTERDAY: I was first licensed as WN7WJB in Keizer, Oregon in 1954. I immediately joined the Salem Amateur Radio Club and soon marveled at the enthusiasm of its operators at the W7SAA annual Field Day. My station (in the attic of my parents' home) wasn't much: Heathkit AT-1 (forty watts on a good day), Hallicrafters SX-71, an 80 meter dipole, a 2-element 20 meter beam (boom was a 2 by 4 piece of lumber - one can only imagine), but it was good enough to get me on CW and an introduction to contesting. In my second year at Oregon State University, I met Stan Griffiths W7TML (now W7NI), and we were soon multi-oping from his parents' home in Lake Oswego, OR. Great fun and the solar maximum of the late 1950s definitely showed us that we could DX Contest from the wonderful Northwest. Our hero was Katashi Nose, KH6IJ. When I grow up, I want to "sound just like him"!

The years went by, went to grad school in New York, and ended up on the Greenland icecap for a summer job in 1961. My operations from there as KG1BA and KG1CC (Camp Century, the nuclear city under the ice) definitely got me hooked on "being" DX.

In 1964, I enrolled at the University of Washington and was privileged to meet Rush Drake and operate his W7ESK station in Bellevue, before he became W7RM. What an inspiration Rush was to so many of his "young tigers," as he would call us.

I got my first taste from the DX end in a contest: KX6DB from the Marshall Islands in the 1967 CQ WW CW. I could only operate on three bands for 27 hours but still made the Top Ten. And my hero was still KH6IJ - I seem to remember he was No. 1 that year.

The next year, I took a job running some tracking radars on Ascension Island on the USAF Eastern Test Range and soon I was signing ZD8Z. And this gave me even more chances to improve my operating skills--a Collins 32S-3/75S-3 and a Hallicrafters HA-1 keyer. Everything was long hand: no computer, no memory keyer, pencil and paper logging. And NO PACKET and NO SKIMMERS!

Back then the ARRL DX Contest was two 48 hour weekends and I operated 88 of the 96 hours. I probably sent ZD8Z over 10,000 times that contest. KH6IJ taught me to sign my call every QSO: it tells you (1) who I am, (2) I QSL your report, and (3) tells the rest of the pileup that I'm ready for you. My good friend on Ascension, John Beck, ZD8J, had won the prior year's version of that contest (a tough one to win from Africa - most victories these years are from the Caribbean or northern South America), and John pretty much goaded me into trying it, something like "Neiger, with your fancy electronic keyer, you're not nearly as good as you think you are" :-). For most of his radio career, John used a bug, and his VQ9J, VP7BT, TI9MHB, VP2AAA and ZD8J operations are for me still of legendary proportions. Anyway, propagation from ZD8 to North America is pretty much 24 hours/day, except for a

few hours after 40 closes to the USA around 0900Z and before 20 opens maybe at 1200Z. It was John Beck who taught me: if you're going to win a contest, you have to be in the chair 48 straight. Lesson well learned, and I've been doing it ever since. Today, at my age of 77, I usually defer to sanity and typically operate no more than 46 of the 48. To end this story, I made 5,700 QSOs that contest and broke John's World Record. He was not too happy with me after that.....

After 15 months on Ascension, I transferred to the big USAF radar on Trinidad and won a couple of CQ WWs as 9Y4AA in the fall of 1969. Ever since, (too) many contest DXpeditions to the Caribbean Islands (8P6J, ZF2TJ, V29J P40T, 9Y4W, etc.), South America (4M4UA, ZX5J, ZW5B, PT7A, HC5J,) North Africa (EA9KF, D44BC, EA9UK, AM8ZS, SU1ER) , Jordan (JY7Z), Europe (T77C, IR4A, OJ2F, LA1H), Phoenix Islands (KB6DA, VR1W) and then in 1989 my work took me back to ZD8Z for another 20 years of contesting from there. Often today, it's simply easier to fly to Hawaii and visit my friends KH6LC and KH7M for a CQ WW or two.

TODAY: Like for so many of us who have been contesting for 60+ years, today is definitely different and we all profess to remember things as being better back then--before technology introduced us to packet, RBN, skimmers, etc. I started out my radio career chasing DX and to be successful obviously one had to have some skills. Many today enjoy packet, clusters, etc. and with limited time, perhaps, that's just what they want to do. And I think that's fine. Anything to encourage radio activity, especially as we head into the dark despair of another solar minima.

Sometimes I'm asked about how to enhance one's CW skills and I always state the obvious: practice, practice, practice. If someone finds SSB easier and more compelling, I advise them to give their microphone to their significant other and tell them you don't want to see the mike for another year. And just do code, over and over. And it will help if you turn off packet and find the DX yourself and learn how to copy their calls in the most trying of conditions.

Sometimes I'm told, "You don't understand, it's so hard to find DX openings up here in the Northwest, so to do well in a contest I must use packet". I'd like to suggest that you can REALLY have fun: find a DX station overseas willing to host you for a contest weekend. And there are so many available, sometimes it might be a rental, but so what? For that endeavor, I prefer one of the Oct/Nov CQ WW DX Contests. But ARRL DX can be fun from overseas, and I really love running the world's best operators: U.S. and Canada. The CQ WPX can be fun, but if I'm going to fly somewhere, I want to OPERATE and having only 36 of the 48 hours to operate—well, you get the picture. Often there are multi-operator stations looking for operators too. WARNING: once being on the DX end is in your blood, get ready to want to buy plane tickets every year!!

Today the testers that are the most fun to work are those who send their call, one time, in the right place and at the right time. On SSB, everything is pretty much zero beat, so timing is paramount. On CW, with skimmer today, EVERYONE calling is zero beat with one another. Trying to pick out a call from maybe 100 calling, all maybe S5, and zero beat. Uh, not fun. Guys who know me well will call 1 to 2 KHZ up. That will work 99% of the time. And just sign your call once.

To summarize, DXing and contesting can quickly become a life's endeavor and passion. Maybe for you it's good to keep it all in perspective. For me, it's too late. I plan to be trying some contest expeditions during the next solar maximum. I hope you all will be around to enjoy it with me.

73, Jim, N6TJ"

RM-11708—Some Opinions

In November 2013, the ARRL filed a petition with the FCC to remove the 300 baud limit on the HF frequencies. According to the League, "HF data emissions are now limited to symbol rates that are based on the long-obsolete technology of the early telephone modems. Regulation by symbol rate is not appropriate for present and future generations of digital data modes because it prohibits the use of some new, efficient modes but does not prevent the introduction of digital data modes that have much wider bandwidths than are now in use." Rather than simply ask for removal of the 300 baud limit, the League apparently proposed a 2.8 kHz emission bandwidth limit, the same bandwidth limit as SSB signals. The FCC accepted the idea of removing the 300 baud limit but has proposed in an NPRM (Notice of Proposed Rule Making) that data signals have unlimited bandwidth. The NPRM has generated tons of comments. To give you some flavor for the nature of the dispute and the predicted consequences if this becomes the law, I have selected from among the comments I've seen the views of three amateurs—N9NB, NØAX and N6AA. I don't have a dog in this fight and am not endorsing any of these opinions; rather, I thought that reprinting them would be of interest to club members. I am reprinting these comments exactly as they were posted, with no editing.

N9NB: "Today's ham radio RTTY stations use a well-known signaling convention based on the baudot code, and this code uses a speed of up to 300 baud, the maximum signaling speed allowed in the FCC rules for HF. This coding scheme has a natural emission bandwidth of just under 500 HZ. A fast CW signal has an emission bandwidth less than 200 HZ. Psk31 uses less than 100 HZ. Jt65 uses about 200 HZ bandwidth or so.

By asking the FCC to remove the 300 baud rate limit on HF, the ARRL was simply asking the FCC (in their petition 11708 filed in November 2013) to remove an antiquated term and remove the baud rate speed limit (which was naturally about 500 Hz bandwidth). That seemed fair enough. But, sadly, the ARRL asked the FCC to replace the existing 300 baud rate limit with a 2.8 kHz emission bandwidth limit, the same bandwidth limit as SSB signals!

Thus, the ARRL asked the FCC in RM 11708 to allow any data signal, including future RTTY or pactor or new wideband marine modem data signaling types, to be introduced with up to a 2.8 kHz emission bandwidth! This would wipe out the narrow RTTY and CW signals of today, and hog the low end of all the HF bands. The ARRL tried this same thing in 2005 but in the SSB spectrum with its failed RM 11306. In 2007 the ARRL withdrew its petition to the FCC since hams were very upset.

Unfortunately, what's really bad now about RM 11708 is that the ARRL never withdrew it, and last week the FCC took it as a proposed rulemaking. This is the last stage before accepted law!

What is abysmal is the FCC took the ARRL's ideas of eliminating 300 baud limit in HF, but has tentatively ruled that any data signal may use an UNLIMITED bandwidth. This means wide band signals of arbitrary bandwidth will key up on CW and RTTY stations!

A published NPRM means the FCC is about to enact it as law, so unless there is MASSIVE outcry to both ARRL officials and the FCC in both the commenting period and the "reply to comment" period, the precious HF lower CW/data/RTTY bands may be lawfully overrun by serial tone military modems and digitized voice signals and lots of other stuff with vicious signal bandwidths of 2.8, 5, 10, 20 and 25 kHz!!!! Big walls of impenetrable QRM!! Good bye CW and RTTY and DX! Hello Internet and Facebook for boaters.

What we are asking you to do is to contact the FCC and express your disapproval of this proposed rule. We have until October 11, 2016 to submit comments and reply comments by November 10, 2016.

You may submit comments, identified by WT Docket No. 16-239, by any of the following methods:

* Federal Communications Commission's Web site:
<<http://apps.fcc.gov/ecfs/>> <http://apps.fcc.gov/ecfs/>. Follow the instructions for submitting comments.[CLICK ON "SUBMIT A FILING"]

* Mail: Federal Communications Commission, 445 12th Street SW.,
Washington, DC 20554.

* People with Disabilities: Contact the FCC to request reasonable accommodations (accessible format documents, sign language interpreters, CART, etc.) by email: <<mailto:FCC504@fcc.gov>> FCC504@fcc.gov or phone: 202-418-0530 or TTY: 202-418-0432.

There is a 60 day "comment" period after NPRM 11708 published in the federal register, and then after that 60 day window, there is a further 30 day "reply to comment" window where everyone can critique and agree or disagree with some of the previously filed comments.

If we are to successfully revise (it's too late to repel) this frightful proposal, which is in the very last stages of official approval at the Commission (gulp!), we must have tens of thousands of well-reasoned replies that specially call for bandwidth limits!!! Both during the reply period, and then ALSO during the Reply to Comment period, we need tens of thousands of comments so the FCC sees this is a problem! Otherwise, there is no hope and they will accept the NPRM as written and published in July 28, 2016!"

NØAX: "Regarding the FCC's recent RM-11708, proposing to eliminate the symbol rate limit on our HF allocations - first, I do agree with N9NB that there needs to be a bandwidth limit in the amateur bands - this has been confirmed by the FCC in numerous communications and opinions about overly-wide phone signals and also by 97.307(f)(1) which limits the modulation index of angle-modulated phone emissions to less than 1 at the highest modulating frequency. Clearly, the idea of a maximum bandwidth is considered good practice in the phone sub-bands and a similar limit in the RTTY/data sub-bands does not need to strangle technical innovation. Nevertheless, it is not sufficient to rely on the "necessary" and "good practice" wording in 97.303(1) because neither is strong enough to be meaningful without creating endless arguments and perceived loopholes. So just place a reasonable "roofing bandwidth" on amateur radio emissions below 30 MHz - 3 kHz? 6 kHz? 10 kHz? - and let us sort it out as we do every day! I think there ought to be a bandwidth limit in recognition of the ham bands being a shared resource, but that's a behavioral issue, not a technical one.

[If the maximum bandwidths of phone and data signals are to be linked in one rule, a simple administrative fix could be made by the very simple change of applying 97.307(f)(2) to all of the HF bands - renumber it from 97.307(f)(2) to 97.307(g) or add (2) to all of the HF bands in 97.305. Digital voice would remain confined to the phone bands because even though it is transmitted as bits, the overall package is still classified as a phone emission, just as digitized images are still considered image emissions (facsimile). (See 97.3(c) and 2.201)]

Let's get a grip, though...the sky is not going to fall:

PACTOR 4 is already permitted everywhere else in the world and has not ruined ham radio yet. Its maximum symbol rate is 1800 baud which is higher than the 300-baud maximum but PACTOR 4 has a bandwidth of 2.4 kHz, so it is not any wider than PACTOR 3. Using faster modems actually reduces band occupancy in terms of Hz-sec for any particular message - although better performance *might* increase the number of messages. But at <10 kbps and with the horrible things that HF does to a channel...I just don't see a stampede materializing. PACTOR 3 and PACTOR 4 modems are expensive - the rush to use >\$1000 modems to exchange non-commercial traffic at <10 kbps (at best less than 1/5th of dial-up rates) over HF is not a very strong business case.

Any mode that uses AFSK modulation of an SSB radio will be no wider than 3 kHz. If the radio could be modified with wider filters, the signals could get wider, too, but the phase/amplitude characteristics of the transmit chain needs to have much cleaner characteristics than for voice. (Direct FSK has different limiting issues.) It would take a whole new modulation/transmission scheme to do wider-band data and that would demand an SDR with very low IMD in the amplifier chain. The SDR part is straightforward since that's mostly math and FPGA programming. The RF amplifier part is not so easy and will require advanced techniques from the wireless data industry such as adaptive pre-distortion. (One benefit to SSB/CW operation from such an adaptation would be cleaner transmitters.)

We should take some comfort in the fact that there aren't many wideband data signals on shortwave commercial or military channels. If wideband data was easy, they would be doing it now. They are not. Here is an extensive table of characteristics for many known HF data modes, including military and commercial signals:
<http://www.sigidwiki.com/wiki/Category:HF>

The widest pure data signal (not a radar or jammer) in the table has a 6 kHz bandwidth. (Digital Radio Mondiale's 20 kHz mode is a phone signal for hifi audio.) We might be concerned about the authorization of spread spectrum and wideband OFDM techniques but neither of those are authorized emissions below 30 MHz. So...even if the FCC declines to put a bandwidth limit of 6 or even 10 kHz on amateur signals, we're not going to see a big influx of roaring, high-speed data anywhere on HF. The physics of propagation just doesn't work and it takes a lot of engineering and equipment to make even these relatively narrow modes perform.

There is a valid concern about session-based protocols (including AX.25) being hard to monitor. PACTOR modes do support the ability to monitor the packets (with another PACTOR modem) for station ID. The data is usually compressed, so unless you capture everything perfectly, you won't be able to tell what is being sent. (I can't decipher cyrillic or katakana morse, either...) Here's a possible solution - create a network of PACTOR modems that listen to the various signals in monitor mode and post the station IDs and any other

associated data online like the RBN system. A "mode deciphering monitor" program that runs on one's personal SDR would be a worthy project, too. Simple matter of programming!

===

The "hidden transmitter" problem is always a concern, too, even on CW/RTTY where a station who can't hear me tries to communicate with a station I can hear. Yes, the channel-busy detectors could be better, but the operators have to engage. This is why I lobbied (successfully) for a set of new questions in the General Class pool that directly address the requirements of a control operator to listen before initiating contact with a remote-control station. Will they do it? Some will and some won't, but at least they've had to learn about the requirement.

I've been clobbered by phone, RTTY, SSTV, and even CW signals from stations who could clearly hear my signal and just didn't care. What did a famous WWDXC member phone contester once say, "A clear frequency is where the needle comes off the right-hand peg a little bit." Data stations aren't the only offenders in this regard.

A real problem that has been identified by many, and which is something we really *do* need to address for *all* modes, is transmitter linearity and noise. We have fantastic receivers that can hear a skeeter fart but the bands are full of our own trash from non-linear and noisy transmitters. The linearity issues with complex I/Q data signals are the same as for speech modulation. Let us solve noise and transmitter IMD and it will be a lot easier for everybody to get along. Digital modes can be a lot more noise-tolerant, too, and that might help a lot with the new reality of all spectrum, just as FM was invented by Armstrong in response to AM static.

===

While it is popular to complain about "boaters" using the digital modes the primary use of the Winlink system is rapidly shifting toward emcomm/public service, which is prominent in our Basis and Purpose of 97.1(a). What kind of a need is there for regional HF digital in emcomm? Well, earthquakes and hurricanes, for starters. I don't have to educate the WWDXC about the possible effects of a big earthquake across the western OR/WA/VE7 areas. VHF/UHF ain't gonna get 'er done. We have enjoyed a ten-year hiatus in big hurricanes hitting the southeast U.S. but HF is a prime resource for recovery from really big storms. Here in Missouri, we have localized disasters (mostly) but there is no state-wide VHF+ system to support communications with the state Office of Emergency Services. So the need is real.

===

More importantly, ham radio needs to get with the program. We want new technical blood to replenish our ranks and fulfill 97.1(d), right? Try explaining to anyone under 40 that our primary HF digital modes run at 31 baud or use the 80-year-old 5-bit Baudot code developed for electromechanical printers and which can't even handle the full alphanumeric character set. Inform them of our 300-baud symbol rate limit below 30 MHz and, after their initial

disbelief, you will get a look of pity followed by complete disinterest. In most student papers at engineering conferences everything under 1 GHz is considered BASEBAND AUDIO!

Nor is it a good idea to further splinter the ham bands - it just creates unreasonable expectations of ownership or occupation. Many operators discovered during the W1AW/portable year how channelized 40/75 meters had effectively become, simply due to squatter's rights. Contesters and DXers are always pooh-poohing band plans during contest weekends and DXpeditions - rightfully - and any kind of reserved-for-narrowband allocation will simultaneously create the expectation that narrowband signals stay within it. There is lots of room on the bands for all kinds of signals if we could only get over the notion of reserved sub-bands, calling frequencies, net lists, and been-here-for-years. We have these Big Knob thingies we can use. We're not rockbound any more. Frankly, I think the whole notion of band plans needs to be greatly de-emphasized. We are the most flexible telecommunication service of all - why are we so intent on throwing that away?

Consider that we might develop "smart spectrum" SDR-based displays showing where all the signals of various types are and aren't. (The RBN almost does that now...) With so many different modes and more on the way, it seems to me that approach is a better way of going forward in line with the "cognitive radio" approach to spectrum management and our mandate in 97.1(b) and (c). Alternatively, if the bands are going to be segregated, then do it according to behavior (see my Contest Update editorials of Sep/Oct 2005) which is the root cause of most inter-mode conflicts, anyway.

Also...this CW...I turn on my radio most weekdays and wonder where is this precious commodity we are trying to preserve? Sure - contest weekends sure load up the bands - but the other 90%+ of the time the CW areas are pretty empty. I love CW but I am not of the opinion that we have to hobble the service and keep it increasingly technically irrelevant in order to preserve a century-old mode that isn't the backbone of the service it once was.

There is some historical precedent as to the benefits of loosening restrictions on amateur data experimentation. The FCC NPRMs in the late 1970s and early 1990s liberalizing amateur data modes resulted in a huge explosion of amateur innovation such as packet radio, various TOR modes, and other interesting developments. This is generally viewed as a good thing. Your cell phone, by the way, probably includes at a deep level some data protocols developed for amateur radio that were adapted for commercial use. (This is described in "A History of QST, Volume 1 - Technology," published in 2014.) We have mostly forgotten what "data" was like (non-existent) in the days before hams could use ASCII.

= = =

Opening up data signal bandwidths is just not going to be the calamity some of us are concerned about. Ham radio needs to accommodate useful data modes if it is going to survive to celebrate its second century. There will be some irritation (including mine) as we

adjust to new patterns of band use (and the kids will play on our lawns) but I am willing to accept the risk, support innovation that responds to new needs, use my big knob, and move on.”

N6AA: “DISCLAIMER

The following are my personal views on the matter, and do not represent views of any group or organization with which I may have a connection.

I am primarily active on-the-air in contests. Most of my activity is on CW. I have no interest in having CW overridden by interference of any kind. I do not operate digital modes and do not operate Winlink. However, I do believe the Winlink community provides a valuable contribution to society, and I am pleased to share the bands with them.

With particular respect to 160-meters, I am active in most 160-meter contests, and have made thousands of contacts on 160, including hundreds after-the-contest from ZD8AA last year.

INTRODUCTION

I don't subscribe to the need for detailed government regulation of how amateurs use the ham bands, something essentially only present in the USA. In almost all other countries, the hams dynamically allocate the bands, which results in better use of the frequencies. In the USA, we do just that on 160 meters between CW and phone, and it works fine.

In summary, not having government dictating what happens on particular parts of our bands will result in better use of those bands. It works that way in all other countries, and would work fine here. I don't think amateurs should go to the FCC for law changes, every time they would like 50 kHz more or less of phone or CW privileges, or want a change in bandwidth. We don't need detailed government regulation.

OVERALL THESIS

All of mankind's problems are not best solved by government regulation. In the absence of government intervention, the imagined potential-interference issues that some appear to be concerned about will be solved by the realities of radio communication and the marketplace. We do not need the government to protect us.

PACTOR IV vs PACTOR III

Realistically, the only current impact of eliminating the USA's symbol-rate limitation would be to allow US amateurs to use Pactor IV protocol data-transmission. Pactor IV permits

transmission of data at 2 to 3 times the rate of the presently allowed Pactor III, using the same, or even slightly less bandwidth. Pactor III does satisfy the present symbol rate limitation, where Pactor IV does not.

There is no benefit to continuing the forcing of USA digital-mode amateurs to use the inefficient Pactor III mode. It takes more time to send data. Using a mode that uses less bandwidth and takes significantly less time will result in less interference, not more.

It was strange to see that a primary threat in the minds of some, who are suggesting contacting the FCC with adverse comments, is Pactor IV, something that is already widely used around the world. If the use of Pactor IV would signal the end of CW, CW would have already died.

Pactor IV is currently used by amateurs in essentially all other countries. Amateur Radio survives.

IMAGINED WIDE-BANDWIDTH INTERFERENCE

Doomsday-scenario wide-bandwidth modes that will destroy CW communication will not be used because they simply won't work effectively. Interference from CW signals will render such systems useless. For an example of this, note that Winlink systems are currently effectively shut down on active bands during weekends with big CW contests.

FCC DOESN'T LIMIT VOICE BANDWIDTH

The FCC places no bandwidth restriction on HF voice communication, other than the general requirement of 97.303a. Ninety-nine plus percent of amateur SSB communication uses a minimum of bandwidth. A handful of hi-fi hams use more, and life goes on. Another handful use AM, with a similar impact on ham radio's survival. We do fine without a government-imposed phone bandwidth restriction, and will do fine without a government-imposed digital bandwidth restriction.

With this history, it seems quite unlikely that the FCC will limit digital bandwidth.

BPL HISTORY

US government regulation did not prevent Broadband over Power Lines from destroying shortwave radio. BPL died because it was an inferior solution to the task of connecting people to the web. The realities of radio communication and the marketplace killed it. Large-bandwidth HF digital systems that interfere with CW communication will not thrive either,

because they are an inferior solution. They won't work. There is no need for government to ban them.

LEAVE THE FCC PROPOSAL ALONE

Both components of the League's petition were not necessary. The bandwidth-restriction part is unnecessary. There are better solutions to this issue than those proposed by the detailed-government-regulation-will-save-us advocates.

The FCC's proposal to eliminate the symbol-rate restriction is a good one. It allows immediate use of the efficient Factor IV protocol, and it even permits wider-band experimentation, which might be practicable in regions where interference is not a problem, such as in Alaska during the day on 80-meters.

The rest of the world has used Factor IV for years. Let's not overreact to predictions of doom.”

September Contest Activity Report

Mike “Dink” Dinkelman, N7WA

Gee whiz, where does the time fly? It just seems summer started, Field Day flew by, then the NW DX Convention in August, and now we are staring at Fall. I still have an antenna to get up on the tower. Fortunately, we usually have good Fall weather for another month or two.

If you didn't make the convention, you may have wondered who picked up the trophy. Again, it was Orca. I am not quite sure how to blunt the force of that juggernaut to the north. I know that some people blame the disparity of scoring in the ARRL DX tests but I feel that's minor and too easy an excuse. (The WVDXC handily beat Orca in each of those two tests.) I would say it's more consistency on getting on, a couple of really good stations, and maybe a willingness to stay in the chair when conditions aren't so much fun. Many of our members are getting up in age and may not find contesting to be so much fun these days. Myself, I haven't been providing the scores I used too. If you have some suggestions for increasing the WVDXC score, I am open to suggestions. [Editor's note: put together teams for each contest as there's nothing like peer pressure to keep you in the chair]. The WVDXC did give Orca a run for its money this year. Delving into the results, I find they have a new member, KA6BIM in southern Oregon, who provided 15 million points alone. Check out his QRZ page and you'll see why. Combined with NK7U and K2PO, they have a chance next year.

There is also another takeaway beyond that of a single winning club. Look at the total of scores. Back when I took this over from Ward NØAX, there were really only two clubs vying for the trophy and the score totals weren't even to the level of what a single club can put out these days. We brought BCDXC back into the fold and they won against the greater odds. Our friends in Eastern Washington and Idaho wanted to join in and, while challenged in the membership department, they do a respectable job. Finally, our friends in BC decided it was time to have a real DX and Contesting Club open to all. Contesting has grown in the Pacific NW, to the tune of 255 million points being submitted. That's an accomplishment!

Personally, I think we need a regional club in the area to compete with the likes of the other regionals (NCCC, SCCC, Outlaws, etc). Carefully centered somewhere in Washington, we could encompass northern Oregon and southern BC. (Yeah, that's a lot of work, but I can still dream.)

I've included the results below, in two tables, as it's hard to get it all on one page.

ALL CLUBS	CQ WW RTTY	CQ WW SSB	CQ WW CW	ARRL RTTY RU	CQ WPX RTTY	ARRL CW	ARRL SSB	CQ WPX SSB	CQ WPX CW	IARU
BCDXC	3201711	3561956	4296889	192328	4315904	2168970	0	0	3937517	0
Orca	5489157	12470235	24837888	543707	5801178	5032438	4370802	15753194	17625035	606745
SDXA	1055980	1554107	2317949	262822	1170004	791801	909909	789522	957358	57693
WVDXC	6171797	13106445	10921288	397415	6436248	8093934	8454271	19394369	12422739	3318178
WWDXC	5736119	10754749	11820988	316354	2582319	2670349	3514147	435808	1898716	1909389
IDXA	344444	233259	205752	52862	11906	6960	67260	0	152442	16234
Totals	21999208	41680751	54400754	1765488	20317559	18764452	17316389	36372893	36993807	5908239

ALL CLUBS	TOTAL
BCDXC	21,675,275
Orca	92,530,379
SDXA	9,867,145
WVDXC	88,716,684
WWDXC	41,638,938
IDXA	1,091,119
Totals	255,519,540

The 2016-2017 run begins with CQWW RTTY at the end of September. We have some true blue RTTY guys in the group so let's concentrate on winning this one test! Which leads me to a question for the Club: The full year-long slog of the Trophy competition is tough for a club to win. Would it be useful to have winners for each of the tests and recognize them at the convention (and a chance to cheer)? Certainly, we don't need a reconstituted bowling trophy for each contest but recognition is fun and maybe we could

come up with something interesting? (Of course, even by that measure we would have lost all 10 chances last year but the goal would be reachable.) If there is interest, I can bring the idea up before the Clubs for consideration.

Also, don't forget the upcoming Salmon Run. The Club runs one of the most popular State QSO parties. (Giving away smoked salmon doesn't hurt either.) Make your plans to get on, maybe mentor a new contender, or go out on the road. I'll see you on from (hopefully) all Eastern Washington counties.

Membership Update

Jim Hadlock, K7WA

The Western Washington DX Club welcomes two new members this month:

Tim Smith, W7EEE (formerly K7MAQ) of Seattle, WA

Jim Pace, K7CEX of Centralia, WA

If you received a Membership Renewal notice in July and have not renewed yet, please consider doing so. Our membership dues support Club events such as the July Picnic and the upcoming Washington Salmon Run and enable us to support major DXpeditions throughout the year.

Thanks to everyone for supporting the WWDXC!

WWDXC DXCC Ladder

Jim Rockey, WA7SRZ

The WWDXC DXCC Ladder is on the website. You can find it by clicking on "DXCC Ladder" on the homepage or by going to <http://www.wwdxc.org/dxcc-ladder-2/> and clicking on "click for dxcc ladder" The Ladder is published in the Totem Tabloid once a year in the January issue. Please send your updates to me at wa7srz@frontier.com.

DX Info Sources

John Owens, N7TK (jcowens1@comcast.net)

Discovering what countries (sorry, "entities") are currently operating on the bands and getting a confirmation (QSL or LOTW) once you work them has become easier in one sense

with the flood of electronic information and more difficult in another sense, as the amount of available information is almost overwhelming. Below are some very useful websites that will help solve these problems. If you have other sites that you have found helpful and think should be on this list, please send the info to me at jcowens1@comcast.net and I'll include it in future issues.

Useful DX Sites

The Daily DX (www.dailydx.com) (subscription service but can't be beat for timely info)

The DX Zone (www.dxzone.com/catalog/)

Internet Ham Atlas (www.hamatlas.eu)

Announced DX Operations

DX World (<http://dx-world.net>) (look for the "DXW Weekly Bulletin")

NG3K Amateur Radio Contest/DX Page (www.ng3k.com/Misc.adxo.html)

DXing Info (www.dxing.info/dxpeditions)

Ohio/Penn DX Bulletin (www.payays.com/opdx1044.html)

QSL and Manager Info

Pathfinder (Pathfinder.exe) (<http://www.dxlabsuite.com>) (Click on QSL Info)

QSL Manager Lookup (www.IK3QAR.it/manager)

K3WWP QSL Routes (http://home.windstream.net/johnshan/dx_ss_qsling.html)

HamQTH Callbook (www.hamqth.com/)_

ORCA DX and Contest Club (www.orcadxcc.org/index.html) (Good access to QRZ.com)

Global QSL (Card design and bureau QSL service-print and mail) (www.globalqsl.com/)

Announced DXpeditions

Here are the DXpeditions and dates I have in my calendar as of September 6, 2016 (with no representations that the information is accurate, complete and/or won't change):

Wake Island (K6W)

Postponed

North Korea (P5)	Now scheduled for September 2016 and now two operators
Mongolia (JT)	September 6-24, 2016
Albania (ZA)	OH2BH and team—September 7-12, 2016
Bhutan (A5A)	September 8-17, 2016
Comoros (D66D)	September 18-30, 2016

Here are the sites and bulletins I look at to find out what's happening on the bands:

The Daily DX	dailydx.com (subscription and free trial available)
DX World	dx-world.net (free)
NG3K Page	www.ng3k.com and then click on ADXO at the top (free)
DX Summit	www.dxsummit.fi (free)
DXScape	www.dxscape.com (free)
DX Heat	https://dxheat.com (free)

September 2016 Contest Calendar

In case anyone reading this is not aware of it, Bruce Horn, WA7BNM, has a website that is truly a one-stop place for all things related to contesting. The link is <http://www.hornucopia.com/contestcal/> or just Google "WA7BNM" and the first hit is Bruce's site. With just a few clicks, you'll find everything you need to know about every contest, large or small. I find it very useful when I hear a station that I want to work that is obviously exchanging contest reports and I don't know the exchange.

DX Alert Nodes

Bob Nielsen, N7XY (n7xy@n7xy.net)

Current DX Node telnet addresses:

W7PKT- w7pkt.net, PORT 7300

VE7CC-1 145.71 MHz or telnet to dxc.ve7cc.net, port 23

Totem Trader

FOR SALE: Henry 2K 4A amplifier; floor model; 80-10m (no WARC); 1500 W PEP output; clean & working; uses two 3-500ZG tubes (Russian); w/two spare Russian 3-500ZG tubes; w/spare relay; stand-by switch modification.

Asking \$500 and must be picked-up in Omak, WA.

Contact Don KS7C, email: ks7c@ncidata.com; phone: 509-826-0362

TOTEM TABLOID
Western Washington DX Club, Inc.
P.O. Box 395
Mercer Island, WA 98040

The Totem Tabloid

The *Totem Tabloid* is published 11 times per year (no August issue) by the Western Washington DX Club, Inc, P.O. Box 395, Mercer Island, WA 98040.

Advertising

The *Totem Tabloid* accepts commercial advertising. For rates and specifications, please direct inquiries to the WWDXC at the address listed above. Totem Trader non-commercial ads are free to WWDXC members.

Articles and News Items

The *Tabloid* depends on submissions of articles and news items from its readers. Send all items of interest to the *Tabloid* editor:

Kip Edwards, W6SZN
PO Box 178
Indianola, WA 98342
Email: kedwards@ltol.com

Deadline for each issue is the last Friday of the preceding month.

Material from the *Totem Tabloid* may be reproduced in whole or in part, in any form, provided credit is given to the *Totem Tabloid*, the author or source (if noted) and the WWDXC (except for author copyrighted works bearing the author's copyright notice).

Joining the Western Washington DX Club

To join the WWDXC or sponsor a new member, please send an SASE for a membership application form to the WWDXC, P.O. Box 395, Mercer Island, WA 98040. Annual dues, including a subscription to the *Totem Tabloid*, are \$25.00.

Internet Access

Information on the Western Washington DX Club is also available on the internet at www.wwdxc.org