

K6YQT

PAARA NEWSLETTER
VOLUME 49 NUMBER 5 May 2000

W6OTX

PAARAgraphs



Celebrating 63 years as an *active* ham radio club—*Since 1937*
Newsletter for the Palo Alto Amateur Radio Association, Inc.



CALENDAR



- May 5, **PAARA Meeting**, 7:30,
Menlo Park Recreation Center
700 Alma Street, Menlo Park
 - May 10, **PAARA Board Meeting**, 7:30
Red Cross Bld., 400 Mitchell Ln., Palo Alto
 - June 2, **PAARA Meeting**, 7:30
 - June 7, **PAARA Board Meeting**, 7:30
- 2 m CODE PRACTICE, 2000 to 2030 PST Tues
N6NFI 145.23 repeater
Also try 7.100 for 24 hr code practice

PROGRAM



May 5, 2000
7:30 P.M.

Speaker:

Bob Johnson, KF6KVG

"47-GHz North American distance record"

Join us for pre-meeting eyeball

6 pm— at Su Hong Restaurant , 1039 El Camino Real, Menlo Park

—PAARA Radio NET every Monday evening at 8:30 P.M., local time—
on the 145.230 -600 MHz repeater, PL tone off

Known upgrades as of April 15

General Class:

- Loren Archer KG6LRN (Was K7LRN--new call sign)
- Mike Gaynon W6TQH
- Rich Hyde KD6WYK
- Dennis Kennedy K6DSK
- Bob Korte KD6KYT
- Don Trask KF6JMQ
- John Tumminaro KG6AGX
- Joel Wilhite KA7TXV

Amateur Extra Class:

- Ron Carmichael KQ6RS
- Dan Curry K6DLC
- Pat Gormley WB6HZM (Passed test-needs to process application)
- Kit Kohlmoos W6ISO
- Andy Korsak KR6DD
- John Larribeau KR6MR
- Steve Stearns KF6OIK
- Stan Towle WA6ZGI
- Gerry Tucker WA6LNV

Sunnyvale VEC issued 300 upgrades on April 15.
® Vic AB6SO

Bob Johnson, KF6KVG

New 47-GHz North American distance record claimed: **KF6KVG** and **W0EOM** are claiming a new North American distance record on 47 GHz. On December 8, after some testing and waiting for the right day, **W0EOM** went to Mt Vaca, (CM88WJ) near Vacaville, California, and **KF6KVG** went to Loma Prieta Mountain (CM97BC), south of San Jose. They calculate the distance to be 137 km. At about 2:15 PM they acquired signals about 1 S-unit out of noise. Approximately 10 min later, **KF6KVG** found he was on a side lobe, and signals jumped up to S8 on both ends. Both used 23-inch dishes. Weather was 50 degrees, humidity about 60 percent, and high clouds.

® Jon Zweig, AD6FX

Miscellaneous Dates

Flea Market at Foothill (info at: <http://joslin.com/FleaMarket>)
 May 13th, SVECS

PAARA Palo Alto Amateur Radio Association
 meets 1st Friday 7:30 each month, Net 145.230 each Monday 8:30,
 contact: Andreas Junge N6NU.....(650) 233 0843

EMARC Electronics Museum Amateur Radio Club
 meets 4th Friday 7:30 each month,
 contact: Sheldon Edelman 650-858-2176, Edelman@richochet.net

NCDXC Northern California DX Club
 meets 2nd Friday 7:30 each month, repeater for member info 147.360, Thur 8:00PM,
 contact: Bob Mammarella KB6FEC 408 729 1544.

NorCalQRP Northern California QRP Club
 meets 1st Sunday each month,
 contact: Jim Cates 3241 Eastwood Rd., Sacramento, CA 95821.

Perham Foundation,
 contact: Jerry Tucker WA6LNV 650-961-3266

SPECS Southern Peninsula Emergency Communication System
 meets each Monday 8:00PM on Net 145.27, 440.80 MHz, www.specsnet.org
 contact: Tom Cascone, KF6LWZ, 650-688-0441. specs@svpal.org

SCARES South County Amateur Radio Emergency Service
 meets 3rd Thursday 7:30 each month, San Carlos City Hall.
 Net is on 144.45 & 444.50 (PL-100) 7:30 Monday evenings.
 contact:

SCCARA Santa Clara County Amateur Radio Association
 Operates W6UU repeater 146.385+ Nets: 2m, W6UU, 7:30 Mon; 10m,
 28.385, 8:00 Thur. meets 2nd Mon each month.
 contact: Jack Ruckman AC6FU

SVECS Silicon Valley Emergency Communications
 Operates WB6ADZ repeater (146.115 MHz+)
 contact: Lou Stierer WA6QYS 408 241 7999

WVARA West Valley Amateur Radio Association
 operates W6PIY repeater 147.39+, 223.96, 441.875, 1286.2
 meets 3rd Wed every month.
 contact: Glen Lokke Jr. KE6NBO at 408 971 8626, or glokke@pacbell.net

Disaster Services

PALO ALTO CHAPTER, American Red Cross
 Meets 3rd Wed. each month 7:30PM,
 HF, packet, BBS, ATV, OSCAR Gateway, NASA satellite,
 contact: Alan Ball 650-688-0423.

SAN JOSE CHAPTER, American Red Cross
 contact: Scott Hensley KB6UOQ, 408 249 7093, sh@richochet.net

VE Exams, 3rd Saturday each month, 11AM, 145.23- PL=100Hz
 American Legion Hall, 651 El Camino Real, R.C.
 contact: Al Montoya at WB6IMX@worldnet.att.net

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 Gerry Tucker, WA6LNV (650) 326 4908 '01
 (see "Calendar" for Board meeting times, visitors welcome)

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 PAARA Website <http://www.qsl.net/paara/>

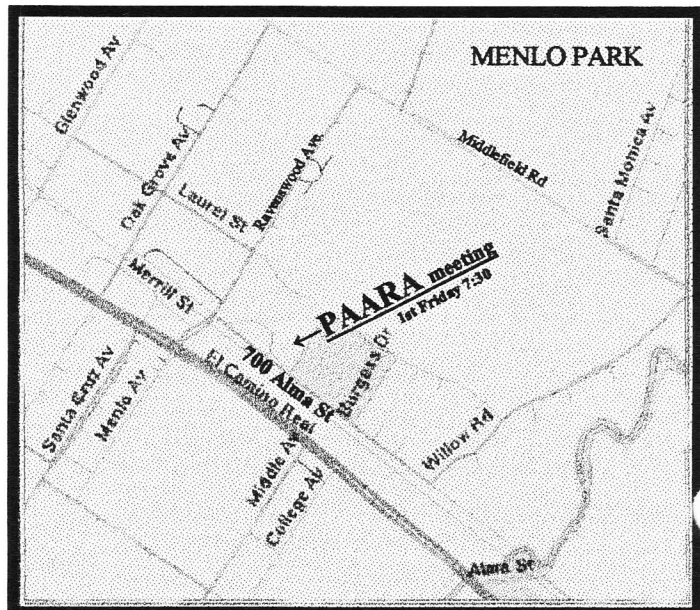
Contest Calendar

~Vic Black, AB6SO~

(for rules and exchanges, see www.contesting.com)

May, 2000

- 6,7 10-10 Int. Spring Contest, CW 0001Z, May 6 - 2400Z, May 7
- 6 902/1296/2304 MHz Spring Sprint 0600 local - 1300 local, May 6
- 6,7 Indiana QSO Party 1400Z, May 6 - 2300Z, May 7
- 6,7 Massachusetts QSO Party 1800Z, May 6 - 0400Z, May 7 and
 1100Z - 2100Z, May 7
- 6,7 ARI International DX Contest 2000Z, May 6 - 2000Z, May 7
- 6,7 Conn QSO Party 2000Z, May 6-0400Z, May 7 & 1200Z-2000Z, May 7
- 13,14 VOLTA WW RTTY Contest 1200Z, May 13 - 1200Z, May 14
- 13 FISTS Spring Sprint 1700Z - 2100Z, May 13
- 13,14 CQ-M International DX Contest 2100Z, May 13 - 2100Z, May 14
- 13,14 50 MHz Spring Sprint 2300Z, May 13 - 0300Z, May 14
- 19-21 CQ VHF Specialty Mode Activity Weekend 1800 local, May 19 - 2400
 local, May 21
- 19-22 Major Six Club Contest 2300Z, May 19 - 0300Z, May 22
- 20 EU Spring Sprint, CW 1500Z - 1859Z, May 20
- 20,21 Baltic Contest 2100Z, May 20 - 0200Z, May 21
- 23 2000 6m Activity Contest 1800Z - 2200Z, May 23
- 27,28 CQ WW WPX Contest, CW 0000Z, May 27 - 2400Z, May 28
- 28 QRP ARCI Hootowl Sprint 2000 - 2400 local, May 28
- 29,30 MI QRP Club Mem. Day CW Sprint 2300Z, May 29-0300Z, May 30





Beginner's Bulletin

edited by Vic Black, AB6SO
(PAARA has member education responsibilities. This is a new column to help new hams and "I knew but can't remember so well now days". If you have a question, others probably just haven't got around to asking the same. Send questions to Vic or PAARAgaphs. We will try to find an answer. Please remember this is for beginning ham level.)

Q. In a magazine article about satellites, the author used letters to describe various types of operating "modes". What do those letters mean?

A. "Mode" is used not only to describe modulation types, such as AM, FM, SSB and CW, but also to describe operating frequency bands on satellites. Some amateur satellites are single channel FM repeaters only, but many use transponders, which receive an entire band of frequencies and repeat them back on another part of the spectrum. To simplify describing transponders, a series of letters has been assigned to indicate the frequency bands in use.

Dual-Band Modes

Mode A: Uplink 2m, Downlink 10m
Mode B: Uplink 70cm, Downlink 2m
Mode J: Uplink 2m, Downlink 70cm
Mode K: Uplink 15m, Downlink 10m
Mode L: Uplink 23cm, Downlink 70cm
Mode S: Uplink 70cm, Downlink 13cm
Mode T: Uplink 15m, Downlink 2m

Single-Band Modes

Mode V: 2m (145 MHz)
Mode U: 70cm (435 MHz)
Mode L: 23cm (1.2 GHz)
Mode S: 13cm (2.4GHz)
Mode C: 6cm (5.6 GHz)
Mode X: 3cm (10 GHz)
Mode K: 1.5cm (24 GHz)

Example: If you're using a Dual-Band Mode A satellite, you must talk on 2 meters and listen on 10 meters.

Some of the modes are duplicated in the two lists. The words "Single-Band" or "Dual-Band" will generally prefix those modes, such as Single-Band Mode S, for instance. In addition, some satellites operate in more than one mode, such as Dual-Band Mode KA indicating Uplink 15m, Downlink 10m, as well as Uplink 2m, Downlink 10m. Modes are being worked out now for the launch of Phase 3D satellite. This ambitious project will accommodate uplinks on 15 m, 12 m, 2 m, 70 cm, 23 cm, 13 cm and 6 cm. Downlinks will be on 2 m, 70 cm, 13 cm, 3 cm and 1.5 cm. In addition, both analog and digital sub-bands are planned for all bands except 15 m and 12 m, which will be analog only.

Q. I'm really confused after reviewing the charts for satellite modes. I thought letters like X, K and Ka had something to do with police radar detectors.

A. In the early days of microwave electronics, some bands were issued letter designators. These are somewhat standardized, but by no means are they fully standardized. It's unfortunate that satellite modes using microwave bands could end up using the same letter combinations to indicate different things. A good source of information regarding frequency designators is at <http://www.advanix.com/~neuhaus/fccindex/letter.html>. There you'll find three different, but similar, charts. Still others exist as well. Amateur Radio operators would normally use the RSGB standards, which include some overlaps. To avoid confusion, it's best to refer to the amateur bands by frequency, such as 1.2 Ghz or by wavelength, such as 13 cm.

Band Designation	Frequency (MHz)
L	1,000 - 2,000
S	2,000 - 4,000
C	4,000 - 8,000
X	8,000 - 12,000
Ku	12,000 - 18,000
K	18,000 - 26,500
Ka	26,500 - 40,000
Q	33,000 - 50,000
U	40,000 - 60,000

Q. I just received my new call sign and bought a two meter HT. I can't figure out how to use the HT for Single Side Band.

A. Most handi-talkies are FM only. The weak signal modes (SSB and CW) require radios designed specifically for those modes. There are a few HTs, such as those made by Tokyo Hy-Power, which are used in Japan for High Frequency (HF) SSB and CW. However, those are made in small quantities and are not imported into the United States.

Upcoming California Visit

Date: 4/18/2000 12:03:01 AM Pacific Daylight Time
From: ws6w@hotmail.com (David Bailey)
Hi, Gang.

I plan to be in California around the Memorial Day time frame. I hope to be in the Bay Area May 24 through May 27. Since I cannot make any club meetings, It would be great to talk to you on the air or, better yet, set up an eyeball QSO. Let me know what will work best for you.

Things are going well here in the Washington area. I have not been on the air nearly as much as I would like, but life is pretty busy these days.

73, Dave (WS6W)
ws6w@hotmail.com

PAARA Radio NET
every Monday evening
8:30 P.M., local time
on the 145.230 -600 MHz repeater, PL tone off



PAARA PONDERINGS

de VIC BLACK, AB6SO

The late **Doug DeMaw W1FB** created a sensation in 1976 with his Tuna Tin 2 design, a 2-transistor QRP transmitter built into a tuna can. PAARA member **Dave Meacham W6EMD** redesigned the rig to use more readily available modern components and, because of its links to the past, a cult has developed around the little transmitter. QRP Hall of Fame member **Doug Hendricks KI6DS** praised **Dave's** work in the following glowing testimonial:

"I have built most of the kits and rigs in the past 8 years, and without a doubt, the most fun was the 'modern' Tuna Tin 2 (TT2) that was redesigned for modern parts by **Dave Meacham, W6EMD**. **Dave Meacham** did the work to make it possible to have a board available and later a kit done by the NJ QRP Club using parts readily available today. The thrill of recreating my very first QRP construction project just cannot be described. I loved it, and want to publicly thank **Dave** for his work. To give you an idea of how many others have built Tuna Tin 2's based on **Dave's** work, FAR Circuits has sold well over a thousand boards. NorCal QRP Club gave away 100, we gave away 50 TT2 plus MRX receiver kits for a Pacificon building contest, and the NJ QRP Club is fast approaching 1000 kits sold, ALL based on the work of **Dave Meacham**. That is a lot of transmitters that have been built, which would not have been possible without **Dave's** work. It was published in QRPP in 1997, as well as QRP Quarterly. The recent article in QST failed to give any mention or credit to **Dave**, even though it was brought to their attention.

Others have done much to popularize this rig, including **Ed Hare W1RFI** who has done a great job of setting up Tuna Tin 2 operating events. I applaud him for his efforts. Others have been given credit, or taken credit, for **Dave's** work due to some misinformation. But rest assured, if you built a FAR Circuits board, or a NorCal Pacificon TT2/MRX kit, or a NJ QRP Club kit, you were walking on **Dave Meacham's** shoulders. He was the first to convert the design from older no-longer-available Radio Shack parts to the modern ones that we now have. Others have copied his work, but **Dave** was the first.

I would like to publicly thank **Dave Meacham** and **Doug DeMaw** for giving me the greatest kit building experience that I have ever had. If you want to build a fun kit, and don't want to break the bank, go to the NJ QRP Club web site and get the details to order your own Tuna Tin 2 kit, using the original round tuna tin sized board. The kit is only \$10, plus \$2 shipping and handling. I'm proud to say that I'm a NJ QRP Club member and that I have attended their fantastic meetings. On April 2, QRP Hall of Fame member **Jim Cates WA6GER** presented **Dave Meacham** with the beautiful plaque that the New Jersey QRP Club awarded **Dave** for the 'Most Significant Contribution to QRP'. **Jim** had accepted it on **Dave's** behalf at Atlanticon. The award will be an annual one awarded by the NJ Club at Atlanticon, and I can think of no one better to receive the first one than **Dave Meacham, W6EMD**. 72/73, **Doug**

KI6DS."

From ARRL headquarters comes this message from **Ed Hare**: "Let me echo **Doug's** sentiments! In fact, without the TT2 revival, and **Dave's** redesign, the original TT2 would never have been, well, revived. It's my belief that once the Back to the Future project was underway, the original TT2 could no longer stay hidden in a box of junk somewhere, so it managed to be found and is once again working the magic **Doug DeMaw** started in 1976. There have been of a number of people in a chain of events that made it all happen. It's funny how life often works that way. How fitting that all the TT2 mania has come to a head just as Amateur Radio restructuring is underway.

Maybe this is all happening to remind us that there are a lot more important things in Amateur Radio than what is asked of hams when they are tested. It keeps alive the concept that it's what we do WITHIN Amateur Radio, not what we do to enter it, that defines us as amateurs. Everything about that little tuna fish can that was good and useful to hams in 1976 is still good and useful today. Nothing about the restructuring of ham radio has changed, or will change, that a bit. And like some of us, some of the hams of the future, no matter what questions may or may not be asked on their exams, will be drawn to the beautiful simplicity of that little rig, and other similar rigs.

I've always believed that everything in life has a purpose. I'm always so pleased when I catch even a glimpse of what the purpose of some of it might be. I think that each of us has a different view on that purpose, but there is something underneath it all that helps bind all those different viewpoints together. Are we not seeing a glimpse of that now, in the things we do together and the things we mutually care about? I am honored to have been given a small role in this beautiful unfolding of fellowship. Others, like **Dave** and so many more, have been equally honored. It kind of makes all the talk about the doom of Amateur Radio look a bit out of place, doesn't it? Speaking for myself, and those I have seen experiencing such joy in Amateur Radio of late, I don't feel very doomed at all. 73, **Ed Hare, W1RFI**."

After **Doug DeMaw's** death, call sign **W1FB** was re-assigned to the Central Connecticut QRP Club, with the same address as the ARRL, where the original Tuna Tin 2 is regularly heard on the air using call signs **W1FB** and **W1AW**.

Honorary PAARA member **Dave Joseph WA6BOY** (new vanity call **W7AMX**) redesigned the original Russian designed Pixie transceiver. The newer version, Pixie II, is now sold in kit form by PAARA advertiser Halted in Santa Clara for approximately \$10. This little milliwatt rig also has gained near-cult status. Some have been equipped with internal Memory Keyers and other refinements. It's basically a sensitive, selective crystal radio set with a built-in transmitter. By the way, some high tech engineers have recently been touting their one-chip wireless telephone receivers as "zero IF" designs. Amateurs have been designing radios like that for over 70 years. We call them direct conversion, or crystal, radios!

New Amateur Propagation Mode Announced. The **Little LEO's** wanted some amateur VHF bands reallocated for their exclusive use. Now it appears that the costs were too high for consumers to support at least one company, Iridium World

(Continued on page 44) Ponderings



WEB WANDERINGS

de Vic Black, AB6SO

To find out how your signal sounds on the East Coast, go to <http://chilton.com/scripts/radio/R8-receiver> for Jeff Chilton's "Original Web-controlled Shortwave Radio". You can remotely tune the Drake R8 communications receiver in Reston, Virginia and listen to yourself over the Internet. Some other remote receiver sites to explore include <http://www.ralabs.com/sw144/index>, <http://www.pejla.nu> and <http://www.javaradio.com>. If you speak German, you can listen to 2 meters conversations in Stuttgart on DB0WR's Science and Technology Amateur Radio remote receiver at <http://www.steiner.org/db0wr/index.html>.

Listen to live police calls from The Hague (Haaglanden) and Amsterdam in the Netherlands at <http://www.ziezotec.nl/scanner.html>. These sites are analogous to the live video camera web sites, which have become popular on the Internet. You can capture them and control them for a few seconds or a minute or two and then someone else gets a go at it. WWV and the HF beacons frequencies would be good stations to listen for. Just as with the video cams, sometimes the scanners are turned off.

PAARA Secretary Jay Melvin WA6SBO recommends <http://www.lamonica.com> and <http://www.ralabs.com/webradio/about.html> for their remote receivers. It's possible that in the future we will be able to use Internet controlled remote receivers such as these to listen while transmitting from our home locations. Why would you want to do that? Because you may live in an area with high background noise, or the propagation may be such that a DX station can hear you, but you can't hear that station very well. By having a choice of receivers and antennas located around the world you would be able to hear things that would be inaudible from your own location. This is already being done with some local Bay Area linked VHF repeaters. There may be one transmitter, but several receivers. A "voter" decides which received signal is the highest quality and that's the one that is transmitted by the repeater.

Try the "Fuzzy Modes Web Site" at <http://www.qsl.net/z11bpu/site.html> for some modes you may never have heard of before. Although most are sent digitally coded, some can be human readable and are considered modified analog modes. Generally, CW is that way. It can be sent by hand or keyboard, but is almost always copied by ear since the human brain is better at recognizing the coded characters than a machine is unless the code is perfect and the propagation is excellent without QRM.

Hellschreiber is another example of an analog signal that sounds digital when sent. Hell, for short, was originally copied in the 1920's with a mechanical contraption similar to a manual typewriter and read by the receiving operator as plain text from a paper tape ("ticker tape"). It's making a comeback since it can now be read off a computer monitor. A very robust fuzzy mode is called MT-63. Brian Fargus VK4BCF uses MT-63 to send color photos. He says, "Pictures received using MT-63 are perfect even when noise (to the human ear) seems to obliterate the signal."

A comparison of modes shows that SSB occupies about 2400 Hz of spectrum in order to sustain communication at 250 words per minute under excellent conditions but drops to only 5 - 10 wpm under poor conditions. RTTY occupies 1200 Hz for 100 wpm under good condx, but drops to 0 wpm under poor condx. Factor uses 300 Hz and HF Packet uses 500 Hz for about 200 wpm each under good condx, but only 0-10 wpm when the going gets tough.

At 1000 Hz bandwidth, MT-63, with its forward error correction, takes up almost half the spectrum of SSB and it sounds somewhat reminiscent of the "woodpecker" (over the horizon radar) that used to annoy 40 meter operators. Because it's such an aggressive mode, it's best used with caution on the digital sub-bands. However, it has a place in amateur communications because it can sustain 100 wpm under either excellent or poor conditions. PSK-31 is the real winner since it uses less than 60 Hz of spectrum and can sustain 50 wpm under all conditions. Likewise, CW fares well, but is difficult to compare since it depends heavily on operator skill.

While operating on HF we usually try to achieve the lowest signal take off angle possible in order to work DX. Sometimes it's important to work in a local area only. A good example was during the 1989 Loma Prieta earthquake. Stations in Santa Cruz couldn't work into San Jose because their HF signals skipped over the surrounding area and ended up in the mid west. Likewise, San Jose stations couldn't get into Sacramento reliably. A very high take off angle would solve that problem. It's analogous to spraying a fire hose straight up and allowing the water to fall back down in a local area only.

This interesting mode is called Near Vertical Incident Skywave, or NVIS. It was first used extensively in the 1960's and 70's during the Viet Nam War. Mobile operators found that they could more reliably work in close if they bent their vertical whips over to a horizontal position. The mode allows more reliable operation up to about 100 miles radius or so. On receive, it cuts down on unwanted QRM from distant stations. Also, it's more difficult to locate the transmitters using radio direction finding equipment since the signals bounce off the ionosphere and appear to be arriving from straight up.

This is an excellent propagation mode for getting out of deep valleys. It works best on 80 through 30 meters. NVIS can be generated using very low dipoles, or maybe even better yet, full wave loops mounted 3 - 5 feet above the ground. They can just be draped over low shrubs. For more information, try <http://www.ci.san-jose.ca.us/oes/races/hfradio.htm> or <http://www.qsl.net/wb5ude/nvis>.

Ron Carmichael KQ6RS recommends <http://www.qsl.net/w7wk> the site of Steven Victor W7WK. There are links for DXpeditions with log searches, DX Callbooks, QSL Databases and Packet Cluster Links. The Northern Rockies DX Association is featured along with several links devoted to Great Falls and the State of Montana. The callbooks and databases are handy if you work a lot of DX. The background music is nice, too.

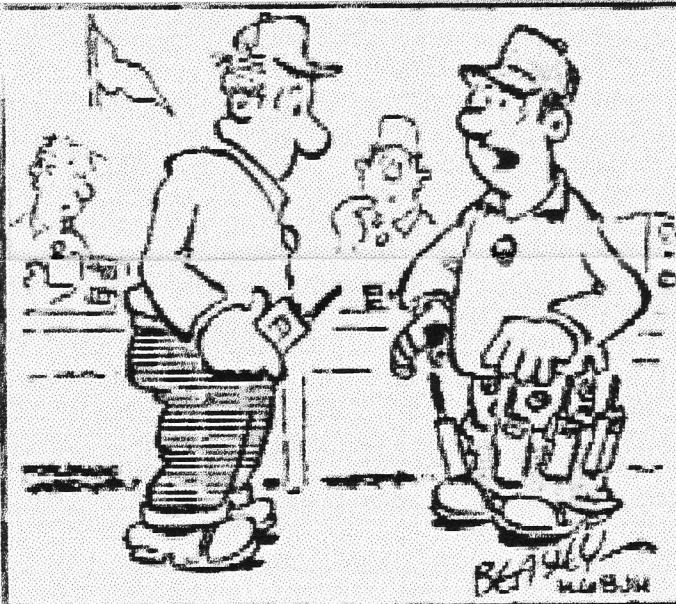
Thanks to PAARA database manager Don Trask KF6JMQ for the web site of Jim Mackey K3FN at <http://www.net1plus.com/users/ryoung/index.html>. Jim supplies foreign airmail

(Continued on page 44) Web Wanderings

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Communications, Ltd. Their clunky telephones cost about \$3000 each and service was about \$7 per minute for calls. The phones didn't work inside of buildings so you had to "step out" to make a call. With more than \$4.4 billion in debt, the bankrupt Iridium consortium announced March 17 that it would cease operating its satellite-based telephone service and "de-orbit" its fleet of at least 66 Low Earth Orbiting (LEO) satellites. De-orbit is a euphemism meaning that they will allow the satellites' orbits to decay so they will re-enter the earth's atmosphere and burn up.

This \$7 billion marketing blunder will cost every man, woman, child, dog and cat on the planet about \$1 each in lost infrastructure. The satellites are well known by astronomers for the visible flashes of light (Iridium Flares) that they make while traversing the night sky. The final re-entry flares should leave ionized trails behind them. Get ready for some VHF/UHF "Satellite Shower Scatter" propagation. This should be a once-in-a-lifetime opportunity, but somehow, I doubt it will happen only once. ù ù ù AB6SO



MAISE I SHOULD LEAVE SOME OF THE UHF HANDHELDS AT HOME

(Continued from page 43) Web Wanderings

postage stamps for use on self addressed stamped envelopes when requesting DX QSL cards. Other services available from this site include QSL management for DXpeditions, envelope systems and rubber stamps for use in requesting QSLs.

From time to time we stumble across a super Amateur Radio web page. One that should be bookmarked by everyone involved in DXing is <http://www.qsl.net/wd4nbg>, the site of Bruce Richards from Clarksville, TN. This very useful site has links to just about every conceivable DX related subject.

To find the address of a rare DX contact or the station's QSL manager, go to <http://www.algonet.se/~sm5arl/qsladr.html>. This Swedish list has call signs listed in alphabetical order along with dates of operation for expeditions. ù ù ù

® AB6SO

DX & VE

Ron Panton, W6VG



DX and VE were very much in evidence at the DX convention in Visalia the week-end of April 14, 15, 16. Over 700 squeezed into the dining room for the Saturday night dinner. Many more than usual exhibitors, sellers, etc, filled the three exhibit rooms. 74 eager hams upgraded to extra class. Thanks to the fine organization of John Kelly, KG6XF more than 73 hams upgraded to extra class. Handling the paper work, getting the signatures etc, handled by Ken Anderson K6TA, his Xyl Kay K6KAY, John Kellys Xyl Julie, Ron Panton W6VG, and the final signature & upgraders interview, John Kelly KG6XF. How many more can the Holiday Inn handle? Very interesting movies, talks, travelogs on exciting DXpeditions. DX certainly "IS" to quote the many signs and tee shirts in evidence. We saw wheel chairs, canes, walkers, etc, and many attendees who were not hams. Our warmest congratulations to the Southern California DX Club for a fine convention. In the year 2001 the Northern California DX Club will be the host, and we may expect as fine or better convention. Our chair person will be W6YD George Allan, and as he was at Convention 2000, we know what he has to shoot for. These days the bands are in fine condition, DX is good, so be sure to listen and call.

73 & good dx to all, and the new extras class hams.

Ron, W6VG

ARRL Bulletin 22 ARLB022
From ARRL Headquarters

Newington CT April 19, 2000

ARRLB022 FCC says

Generals not allowed in Advanced subbands

The FCC says newly upgraded General class licensees may not operate in the current Advanced class subbands under the new amateur rules. Bill Cross, W3TN, of the FCC's Public Safety and Private Wireless Division notes that no privileges changed for any license class.

The Advanced class license continues to exist under restructuring, which became effective April 15, although the FCC no longer accepts applications for Novice or Advanced class licenses. Current Generals do not earn Advanced class privileges until they upgrade to Amateur Extra class, when they earn both Advanced and Extra privileges.

The FCC also says General class operators may hold only Group C (1x3) or Group D (2x3) call signs, as it was under the old rules. Generals remain ineligible to apply for or hold Group B (2x2) call signs.

Newly upgraded licensees were cautioned to check the revised Part 97 rules carefully to make sure they're not operating beyond their privileges. FCC Part 97 rules are available on the ARRL Web site at <http://www.arrl.org/field/regulations/news/part97/>.

ATTENTION ALL AMATEUR RADIO OPERATORS I NEED ADDITIONAL SUPPORT FOR THIS EVENT

Event: Human Race 2000
Date: Saturday May 13th, 2000
Time: 0500-1200 Approx.
Location: Coyote Point, San Mateo
Logistics Chief: George Berry (KC6ULT)
Comm Boss: Richard Tidd (KE6HNY)

The 2000 Human Race is looking for communications personnel.

Sponsored by the city of San Mateo Volunteer Center, this event consists of a 5K and 10K walk as well as a 5K and 10K run, to raise funds for various Non-Profit organizations. The Volunteer Center takes all funds raised from the 5K and 10K run, while the walks allow an opportunity for any and all Non-Profit organizations to raise funds by obtaining sponsors for the walkers. These Non-Profit organizations then return a small percentage to the Volunteer Center as a promotional charge for sponsoring the entire event.

Working for the Human Race Logistics Chief-George Berry, we will be providing the sole source of communications for the Human Race event staff. There are no rented radios here!!! This is a prime example of how we would need to handle communications for our served agencies.

Communications support will be in the form of shadows for various event staff, fixed posts around the course and bike mobiles. This will be a dual net event as in the past. One net will be the SHADOW NET and the second net will be the RACE NET, each with a separate net control. Assignments will take into account your preference and event staff requests/needs.

If you are interested in working this event, please reply with the info requested below.

I will need the following info:

Name/Call:

Address:

Home Phone #:

Work Phone#:

Fax #:

E-Mail Address:

T-Shirt Size: S M L XI XXL XXXL

Duty Preferred: Shadow, Bike Mobile, Fixed Post,
Net Control, Any (I'm a working fool)

Preferred Duty Time:

What Equipment you have:

Any Physical Limitations:

Any other Info You Think I Need:

Thank You

Richard Tidd, KE6HNY, KAF4732

Membership Card?????????

The PAARA Board is considering printing a membership card. Below is a sample (the tree would be in color). Give an officer or Board Member know your opinion.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

“IMD”

INTERNATIONAL MARCONI DAY

APRIL 29, 2000 - 0000Z-2400Z

Over 40 International Marconi Day Special Event stations will be participating world wide. These Marconi Day Stations will represent Historic Guglielmo Marconi transmitting and receiving stations and will commemorate milestones in the development of worldwide wireless communications.

Certificate available see...

<http://www.users.globalnet.co.uk/~straff/>

The Marconi Radio Club, W1AA/IMD of Massachusetts will represent the Marconi Transatlantic Station where Marconi completed his first spark gap radio transmission between the United States and Europe on January 18, 1903. The Marconi Radio Club will have several stations on the bands for the event.

Marconi Radio Club W1AA

<http://personal.tmlp.com/k1vv/w1aa/>

Additional International Marconi Day links:

Cornish Amateur Radio Club

<http://www.users.globalnet.co.uk/~straff/>

Newfoundland Radio Club

<http://webhost.avint.net/sonra/marc100.htm>

Glace Bay Nova Scotia

<http://www.users.globalnet.co.uk/~straff/glacabay.htm>

Twin Lights, Highlands, N.J.

<http://www.users.globalnet.co.uk/~straff/twinlights.htm>

Rochester, Kent

<http://www.users.globalnet.co.uk/~straff/rocheste.htm>

Dorchester Wireless Station

<http://www.users.globalnet.co.uk/~straff/dorchester.htm>

Wall, N.J.

<http://www.users.globalnet.co.uk/~straff/wall.htm>

Coltano, Pisa

<http://www.users.globalnet.co.uk/~straff/coltano.htm>

73 Bob “Whitey” Doherty K1VV

President - Marconi Radio Club W1AA



UPDATE: HAMS HELP GET WOUNDED BOY FROM HIGH SEAS TO HOSPITAL

(The following is a late update on the situation in Honduras involving young Willem van Tuijl, the son of Jacco and Jannie van Tuijl, KH2TD and KH2TE. As reported in this week's edition of The ARRL Letter, Willem was seriously injured after he was shot by pirates who had boarded the family's sailboat off Honduras.)

NEWINGTON, CT, Mar 31, 2000—Through the office of ARRL President Jim Haynie, W5JBP, arrangements have been made for Willem van Tuijl to be transported to Children's Medical Center of Dallas. The hospital has graciously agreed to accept Willem as a patient and treat him without a guaranteed payment. The hospital also will provide transportation for the boy from Vicente de Antonio Hospital in La Saba, Honduras, to the US.

The arrangement with Children's followed contacts by Haynie's office with US Rep Pete Sessions. Willem's parents, Jacco and Jannie van Tuijl, KH2TD and KH2TE, will accompany him to the US.

The transfer from Honduras to Dallas is set to occur this evening, and a plane took off from Dallas at around 5:45 PM Central Time, headed for Central America. Haynie's office also was able to make arrangements for the airport in Honduras to remain open past its usual 9 PM closing time to accommodate the flight from the US. The flight is expected to arrive shortly before 9 PM.

Another last-minute wrinkle also apparently has been overcome—thanks to the generosity of the local Amateur Radio community in La Saba. The hospital in Honduras reportedly would not release the youngster until it had been paid. Willem's father has signed a payment voucher, and local amateurs there have said they will cover the bill.

No CONTACT (yet).

As of 2000March28, PAARA Secretary Jay, WA6SBO@AMSAT.ORG, has searched for some 8000 hours for extraterrestrial intelligence. He uses two Intel / Microsoft machines at home. One is a Pentium running at 266 MHz and the other is a Pentium II running at 233. They run most of the time and statistics from Berkeley show the WA6SBO boxes to be in the top ten percent along with some 150 thousand other volunteers. All since last May. Units of data consist of some 107 seconds long by nearly 10 KHz wide of Arecibo Radio Observatory acquired 1.4 GHz RF which gets crunched with very pretty graphics displayed as a screen saver. Setup is either full time or only during screen saver time. Each searcher receives raw data over the Web and returns the crunched stuff for further analysis by astronomer programmers. This project, seti@home, is said to constitute the largest computer. Isn't the telephone bigger? See <http://setiathome.berkeley.edu> for how to do it yourself. ù ù ù

© Andreas, N6NU

PIRATE ATTACK

This message about the pirate attack was forwarded by Dan Curry K6DLC. Since this message was sent, there is additional news that amateurs were able to arrange free jet med evac transportation from Honduras to Dallas and to get the air cleared through the FAA to cut 2 hours off the life saving evacuation. Amateur operators coordinated efforts with the governments of the Netherlands, Honduras and the US as well as the US Coast Guard and the Honduran Navy. Spanish speaking hams interpreted communications and acted as net control for the Maritime Mobile Net which was joined on amateur frequencies by the Honduran Navy. Honduran hams agreed to cover the cost of hospital treatment in Honduras.

® Vic, AB6SO.

We are told that 20/20 (ABC network) will air their coverage of the boating incident with a large focus on amateur radio involvement, next Wednesday 10pm Eastern Daylight time, April 12th.

In case you have not been in tune with the events of the past week involving a Dutch sailor, his wife and 13 year old son who were attacked by pirates while at anchorage off of the east coast of Honduras, here is an update and notice of national TV coverage to look for.

The 13 year old was shot in the stomach, necessitating rescue by the Honduran Navy, air evac by US Army Black Hawk chopper to a hospital in LaCeiba, followed by negotiations and coordination to air lift to Childrens Medical Center in Dalias where he remains stabilized in fair condition with serious spinal injuries. The rapid movement from LaCeiba to Dallas is felt to be a life-saving move due to the fact that the young man's kidneys were failing.

All of the action above was fully made possible by amateur radio operators who were the only link of communication throughout.

Good Morning America this morning, April 7, featured the mother and son in a bedside interview in which Amateur radio was given credit and thanks. There will also a later interview on Good Morning America with Dr Jim Hirschman, K4TCV who is credited for his all night vigil on the air with Willem's father, Jacco, KH2TD for emergency support during the dozen or so hours prior to the rendezvous with the Honduran Navy ship.

K1LNC, Ed Petzolt is being interviewed by Good Morning America and Dateline for possible airings in the immediate future. Ed was instrumental in efforts through state officials to locate a medical facility available and willing to step in with vital services. It was through those efforts and actions through amateur radio that Willem was air lifted to Dallas where he will remain for an indefinite period of time.

"What is the five-letter pronounceable word used for specifying International Morse code speed in words per minute?"

{I know of three: PARIS, PRODE, and PRIDE; there might be more. It will be fun to see who comes up with what!!}

73 -Steve K6FS

Decoding WWV Propagation Forecasts

Propagation reports can be heard at 18 minutes after the hour at 2.5, 5, 10 and 15 MHz. Here's a typical propagation report as sent by radio station WWV at the National Institute of Standards and Technology (formerly the Bureau of Standards):

"Geophysical Alert Message. Solar-terrestrial indices for 4 February follow. Solar flux 109 and Boulder A-index 3. The Boulder K-index at 0900 UTC on 4 February was 1. Solar-terrestrial conditions for the last 24 hours follow. Solar activity was low. The geomagnetic field was quiet. The forecast for the next 24 hours follows. Solar activity will be very low to low. The geomagnetic field will be quiet to unsettled."

What do these numbers mean? Paul Harden, a technician at the Very Large Array and Very Large Baseline Array Radio Astronomy Observatory in Socorro, NM, told me that most Hams understand propagation forecasts better than many scientists do because we keep up with propagation reports on a daily basis. Paul was kind enough to provide the following explanation of the reports. Notice that a high A or K index could kill lower HF propagation, but could make for excellent VHF auroral propagation.

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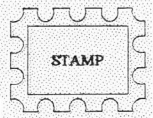
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PAARA • Palo Alto Amateur Radio Association • P.O. Box 911, Menlo Park, California 94026-0911

- Club meetings are on the first Friday of each month, 7:30pm at the Menlo Park Recreation Center, 700 Alma Street, Menlo Park, CA. •
- Radio NET every Monday evening, at 8:30pm, on the 145.230-600 MHz repeater, PL tone off. •

Membership in PAARA is \$12.00 per calendar year which includes a subscription to PAARAgaphs, \$6 for additional family members (no newsletter).
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 1st Friday 7:30 PM

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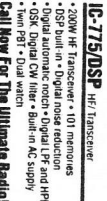


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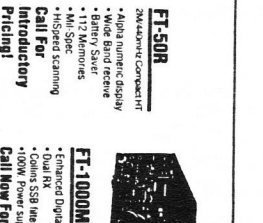


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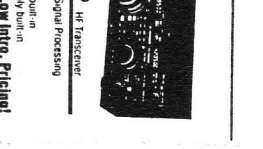
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