

# W6VIO CALLING

## NOVEMBER

### PRESIDENT'S MESSAGE by Art Zygielbaum, WA6SAL



NOVEMBER 1991 Volume 20 No. 11

Jet Propulsion Laboratory  
W6VIO CALLING M/S 264-419  
Attn: Eileen McKinney  
1700 Oak Grove Drive  
Pasadena, California 91109

#### BOARD

PRESIDENT: ART ZYGIELBAUM WA6SAL  
VICE PRES: CARL DE SILVEIRA KG6LG  
SECRETARY: WALT DIEM WA6PEA  
TREASURER: JIM KESTERSON KA6IBF  
CLUB TRUSTEE: STAN SANDER N6MP  
EMERGENCY COMM COORD: WALT MUSHAGIAN K6DNS  
DIRECTOR AT LARGE: MARK SCHAEFER WB6CIA

CLOSED REPEATER TRUSTEE: WALT DIEM WA6PEA

EDITOR: EILEEN MCKINNEY KA6DGV

#### Club Meetings:

Everyone is encouraged to attend - Bring your lunch.

12 Noon

Program - Second Wednesday of month in 238-543

Business - Fourth Wednesday of month in 180-703B

Newsletter Article Deadline: The 5th. day of each month. If the 5th. falls on a weekend, the following Monday will be the deadline.

Your articles, ads, photos, diagrams, Letters to the Editor, or technical instructions should be submitted to Editor at address above.

EXCHANGE CLUBS: PLEASE NOTE ADDRESS ABOVE

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It's finally November. Wasn't it February just last week? As I wind up my tenure as President, it is interesting to look back at the year and think about where next. There are some things that seem to be going well. The Club is growing; we have over 200 members. There is a good influx of new people into the Club, many of them are new hams. We've started the process of getting a new Ham Shack. The new By-Laws have been accepted. We have a 2 meter repeater. And the new .08 machine may be up in a couple of weeks from the time I write this.

In retrospect, and I'll leave it as a suggestion for the new administration, it would have been nice to develop a program to help new hams get acquainted with the hobby. It's the old "Now that I've got my license, what do I do?" problem. It would be nice to get an "Elmer" sub-club going.

One of the areas that I am pleased with is a new committee which is called the JPL Amateur Radio Club Strategic Planning Committee. Originally consisting of Jon Adams, NW6H, Courtney Duncan, N5BF, Steve Jenkins, N6UNI, Mark Schaefer, WB6CIA, Gerry Walsh, KB6OOC, Cliff Yamamoto, KA6JRG, and a few others, this group has been looking into improving our satellite and digital capabilities. In the past year, this group has obtained a whole bunch of PCs, four running, and the rest spares, developed and installed a DX-Packet cluster terminal, and configured a computer control for our SSTV operation. In addition, the group has installed and is operating the W6VIO packet bulletin board station (145.09 MHz) known as W6VIO-1 or JPLARC, and they have installed a PC to control the satellite antennas. Outstanding! It is nice to have this innovative group helping the Club.

By the time you read this, a proposed slate of officers will have been announced. They are good people with a lot to give for the Club. As directed by the Club's By-Laws, I appointed a Nominating Committee Chairman, Randy Hammock, KC6HUR, to nominate a slate of officers. If you have suggestions or other nominations, please make them known to me or to Randy.

We did great at field day. Number 9 in the country and number 3 in California. We even beat our rivals, the TRW club, by a healthy margin! Great job!

Finally, I received a flyer entitled "Toys for Tots Ham Radio Rally." On Sunday, December 1, 1991, from 11 AM to 4 PM, you are invited to bring an unwrapped toy with a value of at least \$5 to the Rose Bowl in Pasadena. Talk-in will be on 145.180 (-600). This event is organized by Bruce Nolte, N6TFS. Bruce will provide the talk-in and a special event station on 10, 20 and 40 meters. There will be contest to find the "best" mobile station. Best means: most originality, most rigs, most antennas, messiest installation, etc. The toys will be provided to the U.S. Marine Corps as part of their Toys for Tots campaign. Good cause. Should be fun. See you there!

73 for now. Art

## DX NEWS

By Bob Polansky, N6ET

Sunspot Cycle 22 is indeed past its peak; however, there's still a goodly amount of dx available for those interested. Only a few preamble words this time as I must catch a plane. Don't forget the CQ WW CW Contest on 23/24 November. Lots of people signing up to operate from exotic places, with more to come. So far, C5, A35, and 6W are planned. I bet there will be a ZA or two also. Enjoy! Now for a sampling from the "DX Bulletin".

AFGHANISTAN - YA2CW is active from this rare location. Due to rig limitations, his operations to date have been primarily on DX nets.

ALBANIA - ZA1A QSLs are already being put into the mail, as fast as the computer prints them out.

BANGLADESH - The S21 operation expected by VK9NS hasn't materialized yet. Have hope.

GAMBIA - C56/G4ODV will be active from 14 to 21 November on the following frequencies: 3502, 3508, 7003, 14015, 14025, 21015, 21025, 28015, and 28025 listening up 2 to 3 kHz.

ISLE OF MAN - GD4UOL will be active from 15 to 29 November on cw including the CQ WW Contest. He's been pretty easy to work in the past. Try 12 kHz from the low band edges.

JAN MAYEN - JX9EHA and JX3EX are active through December. No frequencies given.

MACQUARIE IS. - Look for VK0WW around 14012 kHz between 1100 and 1400Z.

SEYCHELLES - S79MX will continue his activity through the end of November. He operates around 14045 kHz at about 0200Z. Look for him over the north pole if you have a beam. There's usually not much of a pile.

Good luck. More next month.  
Good DX,  
Bob, N6ET

## REPEATER COMMITTEE NEWS AND RUMORS by Jan Tarsala, WB6VRN

Fifteen questions and answers about the new club two meter repeater:

### *Why another repeater?*

Like it or not, 220 MHz is a ghetto. With the loss of the lower 2 MHz, the Japanese radio manufacturers are slowly but surely abandoning this band from their product line. Never was this more apparent than at the huge Dayton HAMVENTION held this last spring. In travelling from booth to booth, not a single 220 MHz radio was on display! Manufacturers told me that their old catalog product for 220 MHz would continue to be available, but it would be insane for them to commit serious money into new products for a frequency band whose user base is part of California and not much else. Two meters, 450 MHz, and 1200 MHz provide viable markets worldwide; 220 MHz does not. It is time that everyone face the inevitable. The future is not 220

MHz. The Repeater Committee understands this and does not want the JPL Amateur Radio Club to be relegated to a radio backwater.

### *Why two meters?*

Most club members already own a two meter radio. Transitioning to two meters gives our club members the greatest benefits with the least demands.

### *Why now?*

The Repeater Committee has had its eye open for a two meter repeater pair for a long time now and it is our good fortune that an opening has now appeared on the band that we can wedge into.

### *Who made the decision to do this?*

The Repeater Committee takes full responsibility for setting the club on this course of action, but, in an effort to spread the blame as widely as possible, it must be noted that Jim Kesterson, KB6IBF, really was the genesis of all this when he asked quite innocently about two years ago, "Hey, how come every other club has a two meter machine and we don't?"

### *How do I use it?*

The club two meter repeater is part of the repeater package housed up on the Mesa with the W6VIO 224.04 MHz box. Therefore, it has a similar coverage area. The output is 147.15 MHz, and the input is +600 kHz. You must encode a 1A PL (103.5 Hz) to access the machine. The output also carries the same PL tone frequency, so you can use PL decode on receive if your radio provides this feature. The format of this repeater is OPEN.

### *Why PL?*

There are two reasons. First, PL squelch is technically superior to carrier squelch. Second, PL squelch allows us to discriminate against weak signals appearing on our input from users of the co-channelled Mount Laguna repeater in eastern San Diego county.

### *Is this a done deal?*

No. We are currently operating under a test coordination from TASMA. If we can demonstrate technical competence and compatibility with co-channelled and adjacent-channelled systems, then we will receive our formal coordination. This should occur around Christmas.

### *How much has this cost the club so far?*

Because we can never be sure of receiving coordination when we embark on a project like this, we have scrupulously avoided buying as much as we possibly could. To date, we have bought the initial repeater antenna - a Yagi - and the pair of rocks for the repeater itself.

### *Where then did the equipment come from?*

The club owes its gratitude to the generosity of Robert Dengler, NO6B, who has literally loaned the club everything we needed and single-handedly did all of the tune up and installation chores himself. This is no mean feat! Remember, Bob not only loaned us his General Electric MASTR II, he ordered the rocks, installed them, aligned the receiver, aligned the transmitter, installed the PL encoder and decoder, installed the basic repeater control circuitry, modified the audio system to loop the repeat audio through the radio, provided the duplexer, aligned the duplexer, and installed everything up on the hill. This was service to the club above and beyond the call of duty.

*But won't we eventually have to buy the equipment for a two meter repeater?*

Of course, but not until we get a permanent coordination from TAsMA. This is the beauty of what NO6B has afforded us: we get in on the cheap and at no risk. Remember, coordination is not a sure thing. The club must anticipate significant expenditures next year to supplant the loaned repeater equipment. That includes a duplexor, isolator panel, high power amplifier, and repeater radio itself. This could amount to \$1500 to \$2000.

*Why does this repeater ID with WB6IEA and not W6VIO?*

That is a good question. The two meter and 224.04 MHz repeaters are literally in the same rack up on the Mesa. Both are OPEN. So why separate call signs? The story goes like this: When the Repeater Committee first became aware that the two meter machine might actually come to fruition, we naturally turned first to the trustee for W6VIO, Stan Sander, N6MP, to see if he would sponsor it under that call sign. Stan declined, as is his prerogative, because he feared he could not carry out his duties as trustee since he did not own a two meter radio. Furthermore, Stan was afraid of the two meter Bozo factor, and didn't want to risk his license in case some malcontents decided to storm our frequency. The Repeater Committee then approached our other club trustee, Walt Diem, WA6PEA. To our delight, Walt agreed without hesitation or reservation to take on the two meter machine. The bottom line is this: It is still the JPLARC club repeater - it just happens to ID with our other club call sign.

*Can our two meter repeater and the 224.04 MHz repeater be linked?*

Right now. We are in the process of integrating our new and very nice Palomar Telecom controller to both repeaters and when we are finished the answer will be, "Yes!" Until that time, please be patient. By the way, we have great plans for this controller, including remote control of our OSCAR station down in the shack so that users will be able to access AO-13 and ARSENE from the privacy of their handheld radio. Think of that: talking to Europe, full duplex, while you are stuck in traffic on the way home. And of course, this satellite gateway has immense capabilities when needed for emergency communications.

*What about an autopatch?*

We will have an autopatch with the Palomar controller, but it will be restricted for use in emergencies, for calling up Newsline, and as a backup to 224.08. The reasons for this really boil down to not having enough control operators to babysit two autopatch systems simultaneously.

*What about Shuttle audio on two meters?*

We appreciate the disgust everyone feels about the poor quality of Shuttle audio currently available on two meters. The initial position of the Repeater Committee, however, is not to carry Shuttle audio on 147.15 MHz. We are nonetheless open to change, and if the users of the two meter repeater want it tied up carrying Shuttle audio, we will reconsider. Before you ring us up to demand Shuttle audio, just consider all the implications of tying up the channel this way and be prepared to justify your request.

*I have some additional questions not covered here. How do I contact?*

The easiest way to have your questions answered is to join us at our weekly Repeater Committee meeting held each Tuesday just after noon near the west doors of the Main Cafeteria. Falling that, come up on frequency and ask for WB6VRN or NO6B. If we can handle it over

the air, we will; otherwise, we will resort to the twisted pair. And as a last resort, call me during work at extension 4-4564. I have to be careful about doing club work during business hours, but if I can help, I will.

Talk to you on two meters!

For the Repeater Committee, 73. Jan Tarsala WB6VRN

**ARRL NOTES**  
by Jay Holladay, W6EJJ

The following information has just been received from FCC via ARRL Headquarters. I thought JPL ARC members would be interested in recent licensing statistics, now that the codeless license has been in place for several months.

FCC FISCAL YEAR ENDS, LICENSE FIGURES RELEASED. FCC amateur licensing figures for the end of September have been released. Because this is the end of the federal fiscal year, the figures are of particular interest.

In the twelve months beginning October 1990, there were 38,363 new amateur licenses issued and 30,825 upgrades. Both figures represent increases over the previous year as well as earlier years. For comparison, in the twelve months beginning October 1989 there were 26,134 new licenses issued and 29,699 upgrades.

The pendulum has swung strongly toward the Technician license being the gateway of choice into Amateur Radio. During September, the number of first-time Novice licenses issued was only 679 compared with 1,680 Technicians. In all, 2,407 new amateurs joined our ranks during the month -- the lowest number since February. However, the backlog of unprocessed applications in Gettysburg grew by more than 1,200 during the month, suggesting that the dip is more the result of that than of flagging interest.

Here are the numbers of licensees by license class attained for September 1991 and, for comparison, 1990:

	1991	1990	% change
Extra	56,487	52,847	6.9
Advanced	107,127	104,365	2.6
General	121,971	119,158	2.4
Technician	150,069	125,217	19.8
Novice	96,418	91,705	5.1
Total operators	532,072	493,292	7.9

The 7.9% overall increase is partially attributable to the lack of license expirations during the year, since we're still between the time the last five-year license expired and when the first ten-year license will expire. Previously, expirations generally ran around 15,000 per year.

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**CLASSIFIED AD**

*For sale: SS-32 PL encoder, with data sheet. This used to be in a Clegg FM-76 until I sold the radio and removed it. \$25.00 (and no sales tax). Herb Younger, W6OJA, M/S 525-3660, JPL extension 6-6187 (306-6187), home phone (714) 980-0191.*

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