

# W6VIO CALLING

# APRIL



## PRESIDENT'S MESSAGE by Art Zygielbaum, WA6SAL

This is an exciting month for ham radio. STS-37 is flying (at least I'm listening to the launch as I type this). For those of you who haven't tried "working" a satellite, let me take a moment and mention how easy it is to do so. I worked STS-35 with my normal 2 meter packet set-up. The signals from the Shuttle were very strong, there was a lot of competition, but basically, 25 watts and a gain vertical antenna was sufficient. I'll do the same for -37. You can get descriptions on frequencies, etc., from QST, 73, or another magazine, so I won't repeat them here. (Call me if you can't find a reference!)

I was always a little scared of the OSCARS because you needed long VHF antennas with lots of elements and low-noise front-ends, and lots of power. Right? Wrong. The Soviet satellites, RS-10 and RS-12, are very easy to work. I got a copy of AMSAT's Instant Track Program on a Monday (September 3, 1991!). I found that RS-10 with a 10 meter downlink would be overhead in 3 minutes from when I first tried the program. So I listened. Low and behold (actually high and beheard) there it was. The beacon was on 28.358 just like advertised. And there were hams talking to each other in CW and SSB just above. Since I had no way to generate a 2 meter CW or SSB uplink, I cheated and just keyed my 2 meter FM rig. And there, modified by Doppler, was my signal back. Antennas? Just a Cushcraft R5 vertical for 10 meters and a Diamond 3-1/2 wave dual-band vertical for 2 meters. I was hooked.

Luckily for me and unluckily for my wallet, the following Saturday was the GD swap meet. And I found the "perfect" low-cost all mode 2 meter transceiver. It's an old Kenwood TS-700A. A whole \$225. Thus far my whole out-of-pocket was \$50 for Instant Track and \$225 for the transceiver. I spent the rest of the weekend hooking up the rig, adding an old unused Alinco 30 watt amplifier, and getting excited.

I was all ready for the first RS-10 pass on Monday, September 10. My first contact was N6UU in Montclair. DX! 4000 kilometers from La Canada to Montclair via satellite! My first SSB contact was on the following Wednesday with ND0M in Crosslake, Minnesota. Since then I've worked a lot of stations all over the US and Canada. Remember, there is really no fancy equipment involved: no steering or pointing antennas!

If you want to know more about working satellites, especially RS-10 and RS-12, contact me or call our resident expert and VP of AMSAT, Courtney Duncan. It really is a lot of fun.

Back to the real world. The JPL Amateur Radio Club is moving along. The good news is that we got some special grant requests approved for audio equipment to support Shuttle audio, for an improved packet station, and for some satellite equipment for the shack. We definitely will lose the "hot dog" subsidy and indications are that the ERC will not be able to fund us at levels that we had become used to. That means belt-tightening, the dues increase, and some fund-raising activities, if we want to keep the same level of club activities going. I'd like your thoughts. I've received many notes, letters, phone-calls, and even packet messages on the dues and on fund-raising suggestions. In general, people have not suggested decreasing club activities. The consensus seems to be support for the dues increase (as a necessary evil) and much support for alternative fund-raising. Some of the ideas are a mini-swap meet with the club picking up some percentage of the sale price, selling T-shirts, QSL cards, or emblems, and an idea from Mimi, WA6CWR, that we have participants pay for some part of the Field Day meals rather than fund the whole cost from club coffers. I appreciate all of the comments.

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### BOARD

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### 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.

CHANGE CLUBS: PLEASE NOTE ADDRESS ABOVE

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In closing, let me note that you get out of the club what you put into it. There are many people who are spending time to assure that repeaters are working, that the shack is in operating condition, that antennas work, etc. These are unpaid volunteers who gain personal satisfaction and a sense of accomplishment from helping others out. We need some more of these folks! The club is looking for a Field Day Chairman. We are also looking for people to head possible commemoratives: Magellan end-of-prime mission, Galileo second earth encounter, and the Caltech Centennial celebration. Frankly, I could use your help. If you have the time and inclination, if you want to earn no money, many headaches, and the undying gratitude of the JPL ham community, this is your chance! (Here's where the clouds part, the sun's rays come through, the rain ends, and trumpets come up in the background.) Think about it. Thanks. 73. Art, WA6SAL

### SATELLITE NEWS by Courtney Duncan, N5BF

At the invitation of Rick McKinney, I was able to obtain a \$930 1990 year end grant from the ERC to pay for equipment to automate the W6VIO satellite operating position. This in conjunction with the surplus XT computers recently installed will make tracking of amateur radio satellites and space shuttles much simpler for users.

Ordinarily, grants of this type (capital expenditures) are funded only 50% by the ERC, requiring the club to provide the other half of the money, but for the year 1990 (which for the ERC ends at the end of March), there was money left and the Strategic Planning and Repeater Committees were able to get some of it for much needed improvements. Thank You ERC! Unofficial information has it that the 1991 grant situation is not as bright. Developments in this department will probably be paced by whatever funds are made available to us.

Our concentration now turns to acquiring and installing the new equipment and putting the first components of a packet BBS system (using the W6VIO callsign) on the air. Watch this space for further developments.  
Courtney Duncan, N5BF 238-600

### TREASURER'S REPORT by Jim Kesterson, KA6IBF

Time for another report on the Club's financial health already?!?! Well here is the condition as of the end of March 1991.

Account balances stood as follows:

In the regular account	\$2211.78
In the autopatch account	\$ 620.13
Regular account expenses	\$1218.19
Autopatch expenses	\$ 17.50

Last month there were some comments from members about not knowing what is going on as regards the Club's finances and why it was necessary to raise the dues. I thought I would make some additional comments about what is going on in general and what went on in March.

As stated in the Repeater News last month a grant for \$1450.00 was received for the audio compressor/limiter for W6VIO. Also, a request for a special grant for antenna rotor, tracker/tuner, and a TNC for automating the satellite station in the Club Shack was presented to the ERC Board and was granted. This grant is for \$930.00.

Everyone interested in the Club's finances at this point would say, see I told you there was no need for an increase in the Club dues. Well yes, they could say that but then they wouldn't understand what went on. You see, both of these grants were from ERC's end of year money from the ERC fiscal '90 year not FY '91 money which would be associated with our new dues amount.

In the Club's FY '91 budget submittal to ERC, requests for grants totaling \$2500.00 were included. These were requests for outright grants and not matching funds grants as ERC normally likes to receive and is more likely to grant. The budget was submitted that way because there were enough planned expenditures for this year that dues would not cover the amounts necessary for matching funds type requests.

Although the Board has not received "official" word as of this writing we have it on good authority that our requests for FY '91 grants met with less than enthusiastic response from ERC. None of the outright grant monies will be forthcoming but ERC will match \$1000.00 if the Club can come up with the \$1000.00 for matching. This will require some adjustment in the planned expenditures.

So, I for one would like to thank those Committee Chairs who took the time to go to the ERC Board meetings to request those special grants which were granted from the FY '90 funds because those monies will cover part of this year's planned expenditures. If not for their taking time for Club activities we would not be able to do most of those things planned for this year. THANKS GUYS!

I also noted in last month's 'Letters to the Editor' that there seems to be some confusion about autopatch membership and funding. Autopatch membership is a club option and as such is funded separately from the remaining club activities. A totally separate account is maintained for the autopatch expenses. The annual due for autopatch members to cover autopatch expenses, which is \$4.00, was waived for the past year and was waived again for this year because the autopatch account has sufficient funds to cover expenses for the year and then some. The \$10.00 new dues amount DOES NOT include autopatch annual dues. If collected, autopatch members dues for the year would have been \$14.00.

As for other comments in last month's "Letters to the Editor" well I guess I will do my part to try to keep members informed about financial matters as best I can. This is my third year as Treasurer and I have enjoyed serving in this capacity and still do.

I would like to close with a Thank You to all who took the time to send letters to the Editor. And just a reminder. If you can't make any of the club meetings a call or note to any of the Board members with your ideas, suggestions, concerns, or proposals is something we would welcome.

### DX NEWS By Bob Polansky, N6ET

Conditions during the recent WPX Phone Contest were fantastic, the dates cleverly avoiding the adverse affects caused by the significant number of major solar flares that were experienced last month. Oh well, I guess we have to take the good with the bad! "The DX Bulletin" advises that in the absence of more disruptive solar flare activity, the period between now and 18 April should provide some fine HF band conditions as far as dx is concerned. Now for the news:

BANGLADESH - The Bangladesh operation is on hold waiting for the last signature needed from the new Bangladesh government. At present, prospects seem poor that the operation will take place in the near term, even though the operators and equipment are there.

CAMBODIA - XU8DX has been showing up often from 28003 to 28040 kHz after 0000Z. I haven't heard him yet, but I'll catch him one of these days. A QSO with this station will be a nice catch on both cw and 10 meters.

ETHIOPIA - Another operation from this now rare country is planned during the next several weeks by PA3CXC. This operation is somewhat dependent on the political situation in that country and may be delayed as a result thereof. If the operation takes place, it will be a great opportunity to work ET-land on cw.

MADAGASCAR - DL7FT will try to operate from here from 15 to 25 April, after his operation the week before from D6-land. Operating frequencies are 14030, 21030, and 28030 on cw, and 14190-195, 21290-295, and 28490-495 on ssb.

SAINT MARTIN - FS/many JA calls will be active on 80 through 6 meters from 27 April to 4 May. No information is available as to if this is a ssb, cw, or both operation.

SOUTHERN SUDAN - ST0DX has been quite active on the HF bands, especially on the ssb nets. Look for him primarily on the 14160, and 21335 kHz nets.

UGANDA - After PA3CXC's try at Ethiopia, he plans a two week operation in Uganda. We wish him luck, since Uganda hasn't been heard from, especially on cw, for a number of years now.

VATICAN - HV3SJ will be active the weekend of 13/14 April, again operated by N6AR. His last operation there resulted in some high speed cw, which gave all comers a pretty easy cw QSO with this country.

METERS - The 10 meter long path has been opening frequently from about 0500 to 0730Z making available some pretty exotic countries on this band. Point your beam roughly southwest and make some noise. You might be pleasantly surprised at who comes back!

Enough for now. Listen a bit, avoid disruptive solar flares, if you can, and enjoy the conditions while they favor dx. Until next month, 73.

### ARRL PERFORMS POWER AUDITS by Mark M. Schaefer WB6CIA

Power Audits to determine how much power Ham Radio Operators need to run in order to maintain communications has been a recent practice of the Federal Communications Commission. In the spirit of Amateur Radio being a self regulating service, the American Radio Relay League has taken it upon themselves to make their own assessment of the use of power by the typical ham station. The Arrl has determined that many hams out there are probably running over the legal limit for power output. This statement comes primarily from two observations. The first observation comes from the clubs WA1W stations inability to contact rare DX stations on the first call through large pileups. The station has a large yagi arrays and runs the legal limit. If other local stations are able to work the DX before WA1W the answer must be that they are running over the legal limit. The second observation comes from power company figures on total power consumption which seems to indicate a marked increase during weekend DX contest which would not be accounted for by the number of hams operating the contest and running the legal limit. Therefore the Arrl will be making random power audits on all stations which achieved a higher score than WA1W during last years Dx Operators Field Expeditions Competitions better known as the Dog Xray Contest.

### H. F. ANTENNA PARTY By Jerry Hawkes, W6WXL

The Antenna Party on March 23 was very successful in that we were able to raise the new tower into position. Only the bottom section is guyed at this time. The tower was left nestled in the down position with the hand crank and rotator installed.

The helping hands at this party were Walt Mushaglan, K6DNS; Randy Hammoc, KC6HUR; Sam Weaver, KB6EMO; Bob Polansky, N6ET; Bob Deen, N5DPU and the tower climber Larry Ruple, AA6TV.

At the board meeting on March 27, it was decided to try to install the antenna ASAP because of the upcoming SAREX Mission. Our President, Art Zyglerbaum-WA6SAL obtained a cherry-picker and two transportation personnel for the following day after 4 P.M. With Larry Ruple riding in the basket and others riding herd on the elements, the TH-6 was installed on top of the tower.

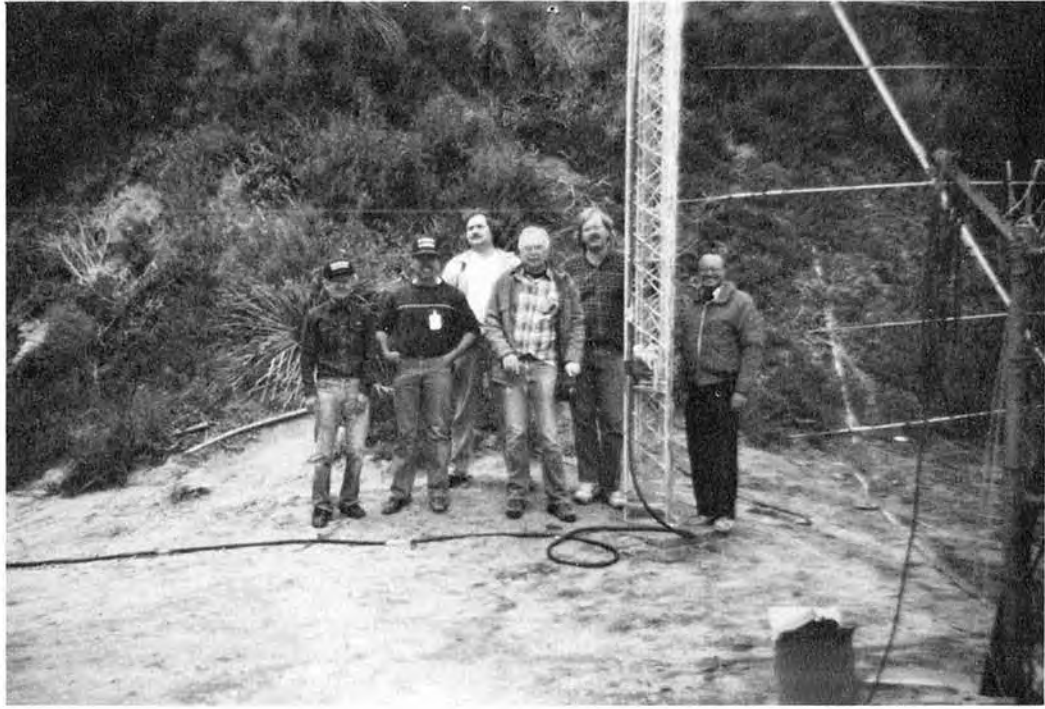
Helping hams after work for that party were Larry Ruple, AA6TV; Walt Mushaglan, K6DNS; Chuck Archer, KG6NF; Sid Johnson, WB6VWH; and Lis Schwitters, N6NDC. Thanks also to Dave Howell and Lanny Plulmer of transportation and Bick Pickett of Section 336 who works on the Mesa.

I have run a check on the 20M band only and it was very good. The tower is in a partially raised position that puts the antenna about 30 to 40 feet above ground. It will be left in that position until we have a "guy line" party. The safety of the tower, TH-6 and the Eastern water tank is dependent on the Western guy line.

Things yet to do are the guy lines, restringing of the 40M-80M wire antennas and the repositioning and repair of the summer antenna. At your convenience!! Thanks to all. 73's, Jerry W6WXL



IMPROMPTU ANTENNA PARTY  
Jerry, W6WXL, Lanny Plulmer, Larry, AA6TV



**SECOND ANTENNA PARTY**

**The Helping Hands Crew**

**Sam, KB6EMO; Larry, AA6TV; Randy, KC6HUR; WALT, K6DNS; Bob, N5PDU; Bob, N6ET**

**W6VIO CALLING, M/S 264-419**

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