

W6VIO

CALLING



SEPTEMBER 1989 Volume 18 No. 9

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

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SECRETARY: COURTNEY DUNCAN N5BF
TREASURER: JIM KESTERSON KA6IBF
TRUSTEE: STAN SANDER N6MP
EDITOR: EILEEN MCKINNEY KA6DGV

Club Meetings:
Everyone is welcome - Bring your lunch.
12 Noon in 238-543
Second Wednesday of month (Program)
Fourth Wednesday of month (Business)

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 IS CORRECT ADDRESS FOR EXCHANGING NEWSLETTERS.

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EDITOR'S NOTE: This September Newsletter was submitted for publication and distribution on 17 August 1989 - Just for the record.

ENJOY THE LITTLE THINGS!



W6VIO VOYAGER NEPTUNE ENCOUNTER George Morris, W6ABW

This is really the last issue of W6VIO Calling you will receive before the Voyager Neptune Encounter. I am still looking for members and family members to operate W6VIO between August 19 and September 3.

You can operate all the high frequency bands with a General Class license. The frequencies were carefully chosen for this reason. Novices and Technicians can operate 10, 15, and 40 meter CW and 10 meter SSB as well as 2 meters and 220 MHz FM and OSCAR.

Contact me by telephone at extension 4-0035 if you want to schedule some operating time or just come down to the trailer by the East Gate and find a place to operate.

I am looking forward to the Club making thousands of contacts during the Voyager Encounter and I hope most of you will participate.

Satellite News

Great news guys! The club's new IC-275H, two meter, all mode, 100 watt radio has been received, checked out, and installed at the satellite position in the shack. Also, the antennas, preamps, switches, and other cables have been reinstalled so the station is ready for the Neptune Encounter Commemorative and other general operation.

The sensitivity, selectivity (with and without the CW filter), tuning, power output, and other features of the IC-275H are a vast improvement over the IC-211 that we were using at the position. The IC-211 is being retired to FM only and packet use.

To get checked out on the upgraded satellite station or for information on satellite schedules or about amateur satellites in general, contact Peter McClosky, N6TGZ, at 354-6916, M/S CS/530 or Courtney Duncan, N5BF, at 354-8336, M/S 238-600.

The JPL ARC Membership and Board Meeting was held on 26 July 89 at 12:11 p.m. in 238-544.

The following club members and board members (*) were present:

Sid Johnson, WB6VWH
 Stan Sander, N6MP, Trustee, W6VIO (*)
 Walt Mushagian, K6DNS, Past President (*)
 Don Ritchie, K6PGT, Field Day
 Steve Jenkins, N6UNI
 Courtney Duncan, N5BF, Secretary (*)
 Jim Kesterson, KA6IBF, Treasurer (*)
 Jan Tarsala, WB6VRN, Repeater Committee
 Rick McKinney, KA6DAN, Membership Services
 Ted Pfeiffer, K6OEF
 Scott Nolte, N6CUV
 Alan DeVault, KC6BHY
 Bob Deen, N5DPU
 George Morris, W6ABW
 David Goldsburg, from the Bicycling Club
 Jeff Skaletsky, N6TJO, Vice President (*)

Secretary Courtney Duncan conducted the meeting.

1) Jim Kesterson reported that the club had an account balance of about \$1500. There was a discrepancy between the balance that he shows and the one shown for our account by the ERC, probably resulting from a check not cashed on the account. He will work to resolve this when he can get the complete records.

2) David Goldsburg from the Bicycling Club solicited support for the Angeles Crest Century to be held September 16, 1989. This year there will be a record 250 riders. Bruce Beaudry, N6IRZ, will be contacted about coordinating this. Several members present volunteered to help out (Steve Jenkins, Rick McKinney, Jim Kesterson, and Bob Deen).

3) Don Ritchie submitted a copy of the W6VIO Field Day entry for inclusion in club records.

4) George Morris reported on preparations for the Neptune Encounter Commemorative. The old TV system is no longer working. Cables will be checked out and a route for video re-established. The shack needs to be cleaned up and re-assembled. This has not been completed since the return from Field Day. Bob Deen has had work parties and will have more to make sure the antennas and cables on the mesa and other equipment are ready.

George needed a club roster. Sid Johnson said he would provide one. Rick McKinney agreed to update the general roster for membership distribution. This will include alphabetizing callsigns in Callbook fashion.

5) Stan Sander reported that the Purchase Order for the new repeater would go in next week. The new IC-275H for the satellite station has been received and will be checked out in Jan Tarsala's lab. The external 30 amp power supply works and the internal CW filter has been installed.

6) Rick McKinney reported that the hot dog sale at the ERC picnic had not gone exactly as planned. He would be attending an ERC meeting tonight at which this would be discussed.

7) Jan Tarsala reported on the repeater (244.08) work party that had been held last week. He wants to order two more passband filters ('pass cans') and an antenna in preparation for the new machine. He then presented various ways in which the club might be able to obtain additional resources for use with the repeater and remote links system for board information and direction. No specific actions were taken.

The meeting was adjourned at 1:05 p.m.

Respectfully Submitted, Courtney Duncan, Secretary

EDUCATION REPORT

by Mark M Schaefer WB6CIA

Communicator Class License, is it time for a no-code license? For the past few years I have been diligently trying to swell the ranks of the amateur community so I'm sure you are all waiting with baited breath for what I have to say about no-code Ham Radio.

WHY! I am of course all for increasing our Ham numbers, as long as they don't call CQ over my QSO. I know there are a large number of people out there who are not hams simply because of 40 or so audio characters they can't memorize. It's true that there are many hams who never go below 30 MHz and never have used code after passing the 5 wpm test. I just think there is a difference between somebody who knows Ohm's Law and a Ham Radio Operator. There are plenty of technological diversions for these folks that we will still be competing against. After all Packet Radio is a wireless version of Telephone Computer bulletin board Services (BBS). FM Repeaters and Autopatches are just like using Cellular Telephones to call 976 chat lines. If you just want to talk on the radio there is always the Childrens' Band (CB). If you have an important message that needs to be sent or relayed, there is nothing simpler than CW.

Many a packet brap has gone unnoded or undeciphered due to software incompatibility. More and more Television standards are coming out, each more incompatible than the last. Even Single Side Band (SSB) or Frequency Modulation (FM) is just garbled noise if you don't speak the language. CW has become unique to the Amateur Community. On it's own, CW, because it is assimilated by the brain instead of electronics, is capable of being copied at much lower signal to noise levels and in the presence of higher amounts of interfering signals (QRM) than any other mode. CW also takes up less spectrum than any other mode (extremely important if you intend to increase the ham population). It is the one mode of communication we all have in common the world over.

VOYAGER VIDEO IN THE VICINITY !

As has been the case for its last two encounters, amateur television will support Voyager at Neptune by carrying its images to the public over as much of Southern California as possible.

Transmitting from atop a multistory building in downtown Pasadena, a completely portable ATV repeater operating under the call WB6BAP (Ernie was instrumental in previous encounters also) is receiving video from JPL over a 10 GHz link and retransmitting it on 1265 MHz. Power output is 18 watts into a 9 dB omni antenna, which should result in good signals over the entirety of the San Gabriel Valley and many adjacent areas.

Public viewing will be available at the Griffith Park Observatory and the Planetary Society meeting, while interested individuals possessing a more technical bent may receive the signals with an appropriate antenna (yagi or small dish) and downconverter (available commercially or may be built from the Handbook).

Additionally, a 426.25 MHz transmitter will also be in operation from on-lab, with an antenna pattern aimed toward Orange County. There, it will be repeated through the Amateur Television Network, a group of interlinked video repeaters with outputs of: 1253 MHz from Santiago Peak, 923.25 MHz from Oat Mountain, 923.25 MHz from Crestline, and 1277 MHz from Santa Barbara. The 426.25 signal may be received on an ordinary ATV downconverter and antenna (such as mentioned for the 1200 band), or a cable-ready TV or VCR (tuned to CABLE channel 57) may be pressed into service along with a standard UHF TV antenna turned sideways for vertical polarization.

Expect the pictures to get hot and heavy as the month of August progresses, with full coverage beginning around the 20th or before. Further details will be announced as available, or shout on 146.43 simplex, the ATV calling frequency. Video will also be on display at the ATN booth (#36) at Hamcon later this month. Happy viewing!

Probably the best way for kids to be hams is through the Schools. If just one teacher (well maybe two to give a Novice exam) in a school had a Ham license, you could multiply the number of kids that will be hams many times over. The biggest hurdle is you got to have Principal's and School Board Members to be hams to get the School a decent Ham Station.

JPL is doing it's part in this effort. The Labs Education Office has a summer program for teachers where they work at some position here on Lab during the summer as well as take short courses in electronics. Not only can they become knowledgeable about a very important facet of the Twentieth Century, but they get a needed summer paycheck too. Peter McClosky N6TGZ and Gil Yanow K6TOS work for the education department and Ted Pfeiffer K6OEF, one of the teachers, will be administering the Novice test to the teachers. There should be lots of hams from this group because they purchased over a case of "Tune in the World" books from me. Some will head back to the Navaho reservation with there license. Most of the hams out there may not be buying \$6000 Ham rigs real soon but in case of accidents or disasters, when your a hundred miles from anywhere, nothing works faster than Ham Radio to the rescue.

CONGRATULATIONS to Alan DeVault KC6BHY for passing his Technician test and to Jim Marr WB6LOA for passing his Extra.

QUESTIONS ? - If you have a particular ham related technical question, we have a growing library in the radio shack to help you. Thanks to Fried Heyn WA6WZO and Phineas Icenbice W6BF for their donations to our library. Also the ARRL will be happy to answer your questions by mail or their 24 hour FAX 203-665-7531. For the latest on propagation there is WWV, check any handbook for the info. The Space Environment Laboratory Public Bulletin Board Service can give you reports by calling 303 497 5000 on your computer. For more information see the August 1989 issue of QST.

Well the bottom line is will the FCC go for it? In the last year we have lost sections of bands above 30 MHz and gained one band below it. Why? The courts may decide but what was 220 used for that commercial interests could not make more money on by themselves? How much Meteor Scatter or Moonbounce or ATV or SSTV or FAX or "CW" was used on 220? At least JPL tried to populate the band with our repeater but most of the rest of the country and the world was pretty quiet. I'm not saying that archaic CW will save our spectrum, but when we find ourselves competing with commercial interests for the same frequencies using the same mode, hams will get the short end of the rubber duckie. Ham Radio exists not because of our numbers but because of the unique services we provide to our country.

Alternate Solutions: if the ARRL really wants to increase it's ranks, why not combine there subscription and 610B forms so you automatically become a Ham by subscribing to QST.

If your looking for experimenters let's have an Experimenters Class. Gee that does sound a lot like Technicians Class. I know, the VE can hand the prospective licensee a broken radio and say, "OK if you can fix this radio in 3 hours, you pass!" There, a no-code license that has nothing to do with any mode. Sounds great Huh? But if he builds something it has to work perfectly! After all if he puts out a carrier over the air how's he going to identify (ID) without on-off keying of a continuous wave (also know as CW)?

If you want more kids to be Hams, allow transmission of music. This maybe considered broadcasting but so are a good number of QSO's I've heard. Also a good portion of the music would automatically be regarded as QRM! We could compromise and only send music in the form of digital packets ie. what's recorded on a CD or digital synthesizer. Just watch for copyrights, but I'm sure every Amateur Television (ATV), Slow Scan Television (SSTV), or Facsimile (FAX) operator has transmitted something that was copyrighted but didn't make any money off it.



The
**Children's
Center At
Caltech**
293 South
Chester Avenue
Pasadena,
California
91106

July 24, 1989

Dear JPL Amateur Radio Club;

The Children's Center at Caltech would like to thank the JPL Amateur Radio Club for the generous donation of hot dogs, buns, and "all the fixin's". We have planned the first of many "Hot Dog Days" for Tuesday, July 25. I am sure that a good time will be had by all.

We appreciate your continued support of our program.

Yours Truly,

Virginia Bellemeur

Virginia Bellemeur, Director