

W6VIO

SEPTEMBER

CALLING



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Jet Propulsion Laboratory
W6VIO CALLING M/S 264-419
Attn: Eileen McKinney
4800 Oak Grove Drive
Pasadena, California 91109

BOARD

PRESIDENT: MARK SCHAEFER WB6CIA
VICE PRES: BILL MORRIS KB6VGW
SECRETARY: SID JOHNSON WB6VWH
TREASURER: JIM KESTERSON KA6IBF
CLUB TRUSTEE: STAN SANDER N6MP
EMERGENCY COMM COORD: WALT MUSHAGIAN K6DNS
DIRECTOR AT LARGE: JOHN TALLON N6OMB

CLOSED REPEATER TRUSTEE: WALT DIEM WA6PEA

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

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THE PRESIDENT'S MESSAGE by Mark M. Schaefer WB6CIA

SAREX

At the time of this writing, The STS35 Mission has been postponed for the second time this month. If they have another scheduled launch for this flight, at least the kids will be back in school. Scheduling W6VIO is made difficult by delays. The SAREX schedule is tied to Mission Elapsed Time which is subject to change depending how the flight goes. Even if they stay to the Flight Plan, just when these events occur depends on the exact launch time. Once the launch has occurred we will be FAXed by the Johnson Space Center as to the Keplerian elements of the shuttle orbit. We can then pass these elements and other information to the rest of the planet over the air. With the knowledge of the orbit, we can determine when the shuttle will be overhead to make a packet QSO with the SAREX ROBOT or a voice QSO with WA4SIR directly. Also, once the Shuttle is launched, we can schedule the Phone Patched Teleconference Bridge between the Shuttle Astronauts, Ham Stations in Australia and Brazil patching through local repeaters to school kids across the United States. Times and links will not be broadcast to reduce interference. However W6VIO will be retransmitting these conversations over the air on HF and VHF (see August Issue of VIO Calling). These "DEMO's" will occur approximately every 11 hours.

Therefore the club will need volunteers to man the Radloshack to bring these DEMO's and the latest mission updates to the public. There will be countless schools, TV and Radio Broadcast stations all over the world tuning in. If you would like to help out in this event, please contact Jan Tarsala at 818-354-4564 or myself at 818-354-6504. You can also write us at the address on the cover page using Mail Stop 168-314.

We will put you down as wanting to participate. When the launch actually occurs, get in touch with us or we will try to contact you to set up a schedule that's convenient to all with the maximum amount of coverage during the 8 to 10 day mission. Success of this mission will help determine how much future Amateur Radio involvement in the Shuttle Program will take place.

REPEATER COMMITTEE REPEATER

Control operators Walt Diem and Jim Marr have been in contact with the repeater manufacturer Kendecom. Kendecom will be shipping us updated versions of the EEPROM and Software Programs. It is hoped this new software will alleviate most if not all of the anomalous behavior which the repeater has been producing under test. Otherwise both the W6VIO and WB6IEA Repeaters are ON THE AIR at their full rated power. We are requesting an extension of the test sanction of the co-channel coordination with system in San Diego. We were not informed in advance, and the fact that it occasionally captures out the WB6IEA system took us somewhat by surprise. Now is a good time to check into a PL for your radio if you do not already have it. The Membership Questionnaire at the beginning of the year showed that most everyone was in favor with the present setup of the repeater systems. If we have continued problems with interference, 1/2 of the club, who have radios have PL's to reduce the QRM problem.

MINUTES OF THE BOARD MEETING FOR AUGUST

NONE - We did not have a quorum show up so all issues concerning By-laws, restructuring of membership, finances, or anything else were TABLED.

ALL ABOUT ELECTRICITY by Joe Strolin, K1REC (via Courtney, N5BF)

I have been fiddlin' with electricity for 50 years! While I'm still able, I'd like to pass along some of my vast knowledge about this stuff.

1. Electricity is manufactured in power plants where it is fed into wires and wrapped around large drums that hang on poles.
2. Some electricity does not need to go through wires, like that used for lightning, for example, or portable radios. This kind of electricity is not manufactured, but just hangs around in the air, loose.
3. Electricity makes a low humming noise. This noise may be pitched differently for use in telephones, doorbells, and electronic organs.
4. Electricity must be grounded before it can function -- except in airplanes, which have their own arrangements.
5. Although electricity does not leak out of an empty socket, if you put your finger in the socket you can tell it's there. So if it is not leaking out, what else is it doing?
6. Electricity is made of two ingredients, negative and positive. One ingredient travels along a wire covered with white plastic, the other ingredient along a wire covered with black plastic. These two wires connect to a device called a plug. There the two ingredients are mixed to form electricity.
7. Electricity may be stored in boxes, called batteries. Big batteries do not necessarily hold more electricity than small ones. In big batteries, the electricity is shoveled in while in small batteries it is packed in flat.
8. The electric switch contains a sort of vise grip that squeezes the wire very hard so the electricity can't get through. Opening (turning 'on') the switch releases the vise grip and the electricity can flow.
9. Electricity goes into a light bulb where for the first time we can see it! It is enlarged many times by the curvature of the bulb, which is made of magnifying glass.
10. Why does the light bulb blow out? 'Cause as any schoolboy knows, heat converts oxygen into moisture. When all the oxygen in the bulb becomes moisture, then the water quenches the spark.

EXPAND YOUR ICOM'S FREQUENCY RANGE Thanks to Lionel KC4CL and Randy KC6HUR (Via Mark, WB6CIA)

Several of ICOM's new hand held equipment have the capability of wide frequency coverage by executing only simple keypad commands.

IC-2SA With the power off, hold the following keys down and turn it on. CALL, FUNC, LIGHT then release the keys.

IC-2SAT With the power off hold the following keys down and turn it on: LIGHT, B.# and then release the keys.

The IC-24AT dual band handheld had three additional features that are not described in the owners manual. These have been left out of the owners manual because some countries restrict the use of the radio in these modes.

AM AIRCRAFT RECEIVE PLUS 740 to 960 MHz RECEIVE remove D13 from the main logic board (this diode may already be removed by ICOM in some units). D13 is on the main logic board and is a discreet diode (one of the two in the radio) near the center of the board. It is the left discreet diode of the two on the board when the radio is open and held with controls away from you.

Simultaneously hold "Light", "B", and "#" keys depressed and turn power on.

>>> Note that after you power on, you will see everything on the LCD screen "turn on." You must continue to hold "Light", "B", and "#" until a normal display appears.

DIRECT KEYBOARD ENTRY of 100 MHz FREQUENCY

Simultaneously hold "Light" and "3" keys depressed and turn power on.

With the power off hold the following keys down, then turn it on: LIGHT, 2. This enables the 10 Mhz digit

This mode is handy since it enables you to directly enter the frequency to be received directly from the keyboard.

CROSS BAND REPEAT (simplex)

Remove D14 from the main logic board (this diode may already be removed by ICOM in some units). The diode is a discreet diode to the right of D13 (from above) and directly beside it.

Simultaneously hold "Func" depressed then push "5" then push "D". Hold "Func" depressed then push "5" and then push "D". To turn off cross band repeat simultaneously hold "Func" then push "D".

ICOM handles have an incredible wide frequency coverage and...with only a few keystrokes.....you already modified the handles.

It is important to note that the radio will not meet specification on the out of band receive frequencies that are enabled with this modification. Enter codes at your own risk.

TREASURER'S REPORT by Jim Kesterson, KA6IBF

Well, it seems to be that time again for what has become (by default) a quarterly report of the Club's financial status. We are in rather good condition for this time of year this year thanks to our planetary video tape sales.

As of the end of August the account balances are as follows:

General Club Account: \$2550.34 Autopatch Account: \$605.26

Total Balance: \$3155.60

These totals do not include our grant from ERC for NOT selling hot dogs at this year's JPL picnic. That will add another \$1000.00 to the coffers.

We have some commitments for expenditures yet to come out of these funds such as our matching funds purchase and station rep items but I believe we are in good shape financially.

DX NEWS

By Bob Polansky, N6ET

Conditions this last month took a dramatic turn for the better with solar flux going over 300 again for the first time in almost a year. Perhaps the sunspot peak hasn't yet occurred! Anyway, time is short this month so I will get right to the news. As usual, my thanks go to "The DX Bulletin" for their timely DX information.

CAMBODIA - XU8DX is available from 11st operations on 14184 kHz from 0130 to 1200Z. JA1NUT takes the 11st.

MALAWI - LA7XB will be active from here, perhaps using the call 7Q7XB, from 14 to 22 September. Look for him on 28025, 21025, 14025, 7005, and 3505 kHz.

MALPELO - HK0TU plans an all band ssb and cw operation from 3 to 7 November. Don't miss this one. They don't get there very often.

MALTA - Need Malta? Look for 9H1XX from 23 September to 21 October. No frequencies or mode information available at this time.

SAO TOME - If you need this one, look for S92LB at about 2100Z on 21220 kHz.

THAILAND - Fred Laun, K3ZO, who has operated at many exotic dx locations may be active from Thailand using HS0AC or HS0AIT from 4 to 20 October. He's a great operator and should be easy to work.

TRISTAN DA CUNHA - Look for ZD9BV on 28466 kHz from 1700 to 1830Z, also on 3795 kHz from 0630 to 0730Z.

UNITED ARAB EMIRATES - A61AD beams over the North Pole looking for US stations from 1300 to 1800Z on 15m ssb in addition to previous 20 meter appearances. I've heard him quite loud from W6VIO between 21200 and 21310 kHz around local noon.

WESTERN SAHARA - S01A frequents 21200 kHz around 2000Z.

ZAIRE - 9Q5TE makes frequent appearances on 14190 kHz from 0430Z.

I've received no calls on interest in erecting a monster antenna for 75/80 meters on the mesa for this coming winter. Anyone interested? Anyone still reading this article? 73, Bob, N6ET

WB6IEA REPEATER by Walt, WA6PEA

CO-CHANNEL TEST SANCTION

The 220 SMA issued a Test Sanction to WA6BGS on 224.08 MHz at Rattlesnake Peak just North of El Cajon. Previously we were sharing the channel with KB6VV located in the Fletcher Hills near El Cajon. The Fletcher Hills location was shielded from our coverage area by the terrain. The El Cajon ARC convinced KB6VV to vacate the frequency if they put a repeater at 1100 feet on Rattlesnake Peak just North of El Cajon. The 220 Spectrum Management Association of Southern California (220 SMA) issued a temporary coordination on the 224.08 MHz repeater pair to WA6BGS at Rattlesnake Peak for evaluation of compatibility with WB6IEA.

The Rattlesnake Peak location does not have the natural shielding of the Fletcher Hills location. It also has a greater coverage area, including overlapping coverage with WB6IEA. We need to realistically and fairly evaluate compatibility recognizing that frequency spectrum is scarce and needs to be shared as much as possible.

If a user of a co-channel repeater is getting into WB6IEA, you need not hesitate in using WB6IEA provided you are not in the San Diego area. If the co-channel is compatible, you will capture WB6IEA and you will not interfere with the co-channel repeater. You may however have a problem with WB6IEA timing out. A co-channel user getting into WB6IEA can be a particularly confusing situation when using the patch. If the co-channel user's signal captures or beats with your signal, call Sid (354-2298) or me (354-0081) by telephone to report the occurrence. The purpose of the test sanction is to determine if we can share the frequency.

WA6BGS/R is an open repeater with a PL frequency of 107.2 Hz. Feel free to use it when in San Diego. We need signal reports regarding its coverage area. Preliminary tests indicate that it transmits over a much larger area than it receives. Treat WA6BGS and its users the way you would like to be treated.

PL FOR WB6IEA/R ?

It appears that the time has come when we should use a CTCSS sub-audible tone, commonly referred to as Private Line (PL), for access to the closed repeater?

PL facilitates the sharing of a repeater channel by being selective in which signals a repeater will accept. It eliminates repeating the signal of a user of a co-channel repeater. This prevents the user of the co-channel repeater from timing out your repeater. It eliminates confusion as to which repeater a station is using. However, it does not prevent the user of a co-channel repeater from capturing your repeater if the co-channel user has a stronger signal than you into your repeater. The difference is that neither the co-channel user nor you will get through your repeater. Use of PL should also eliminate the grunge presently heard on the repeater.

The Repeater Committee wants to evaluate the impact, on you, if we were to implement PL on WB6IEA. If you do not presently have PL in your 220 radio(s), please fill out the form on the last page of the newsletter (or a 3 x 5 card with the same information) and return to Walt Diem, m/s 198-326.

OPERATING POINTERS

The Control Operators request that you ID whenever you awaken (bring-up) WB6IEA. Give your ID right after the repeater ID. This is important to the Control Operators in assessing the condition of the repeater and is a courtesy to other users. This is even more important now that the repeater hears co-channel users. Likewise, it is requested that you ID on W6VIO whenever you key the repeater just to check signal strength. Set an example of good operating practices for other users of the repeater.

If the repeater is repeatedly being keyed up by grunge or by a co-channel user in San Diego and is not in use, please put the repeater to sleep (i.e., shut it down) by entering the Sleep code. The Sleep code is the same as the code given in Item 5 (circle 5) of the instruction sheet except the last digit is "1". Please ID immediately after entering the last digit; then say "Sleep Mode" to let the other users know what is happening.

Walt Diem, WA6PEA, Trustee of WB6IEA

THOUGHT FOR THE DAY - "It is better to have a hen tomorrow than an egg today".

RHYTHM LIST for LEARNING CODE
via Mark, WB6CIA

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This rhythm system was developed for the Air Force by George
Baker, W5YR, in 1936. Source: TexIns Amateur Radio Club
Newsletter, Nov. 1980
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- A: a WAY N: NOTHing
B: BOY but Its hot O: OH OH OH
C: CHAR lie CHAR lie P: you POOR POOR guy
D: DOG did It Q: HIP HIP hoo RAY
E: eat R: oh REAL ly
F: feel Ing FOOL Ish S: sll ly sld
G: GO GO glrl T: TAW
H: hit It a bit U: un der NEATH
I: It ty V: ver y good DAY
J: we JUMP JUMP JUMP W: we WANT TO
K: KEEP a WAY X: X ray Is HOT
L: lets LOVE a bit Y: YES and YOU TOO
M: MA MA Z: ZE BRAS do It

Don't ask me why they "dl DAH DAH dld" It?

***** ATTENTION USERS OF THE WB6IEA REPEATER *****
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following form (or a 3 x 5 card with the same information) and return to Walt Diem, m/s
198-326.

RETURN TO: WALT DIEM M/S 198-326

List the make and model of your 220 radios that need PL.

Would you be willing to spend \$30 for each PL?

Would you install the PL yourself if instructions were available?

NAME CALL M/S PHONE EXT.