

W6VIO

CALLING



APRIL

1988

MAIL STOP

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

PRESIDENT: Walt Mushagian K6DNS
VICE PRES: John Tallon N6OMB
SECRETARY: Sid Johnson WB6VWH
TREASURER: Joel Mosher KB6RXE
TRUSTEE: STAN SANDER, N6MP
EDITOR: Eileen McKinney KA6DGV

Club Meetings: Second Wednesday of the month at 12 Noon in 301-271. Everyone is welcome - Bring your lunch!

Board Meetings: Fourth Wednesday of the month at 12 Noon in 301-271. Everyone is welcome - You don't have to be a Board member. Bring your lunch!

Newsletter Article Deadline: The 7th. day of each month. If the 7th. falls on a weekend, the following Monday will be the deadline.

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

Permission is granted to copy enclosed articles providing credit is given to "W6VIO Calling".

PRESIDENT'S MESSAGE

JPL ARC members have had a busy month with various activities around the shack. Courtney Duncan N5BF advises us that the Club ICOM 211 has arrived at the ICOM Factory Repair Shop for some much needed service. Sam Weaver WB6EMO is in the process of preparing aluminum tubing to be used as inserts to reinforce the bent elements on our multiband XP-707 antenna.

Larry Ruple N6QZI and Dick Wetzel WA6JBZ have been busy keeping a schedule with Don Lawson WA6SQF who is travelling across the Lower 48.

A fine Field Day Committee has been formed with plenty of room for more participants. Committee members to date are as follows:

Mark Schaffer WB6CIA - Chairman
Bill Fesler KA6TCL - Co-Chairman
Jon Adams NW6H - Packet Radio
Carl de Silveira KG6LG - HF Antennas
Courtney Duncan N5BF - Amateur Satellites
Patti Heller KB6VPO - Food Committee
Sid Johnson WB6VWH - HF Antennas
Rick McKinney KA6DAN - Food Committee
Walt Mushagian K6DNS - HF Antennas
Jerry Nelson KB6VGT - Generator
Ted Pfeiffer K6OEF - Sanitary Facilities
Larry Ruple N6QZI - Food Committee
Stan Sander N6MP - Balloon Launch
Brian Stapleton KW6J - 160/80 Meter Ant
Mark Schaffer WB6CIA
John Tallon N6OMB - Transportation
Sam Weaver WB6EMO - Generator

Preparations are underway in anticipation of Fantastic Field Day. The dates this year are June 24, 25 & 26th. Please fill out the Field Day Information Sheet and mail it to Mark Schaffer 168-314. In response, you will receive an information sheet. 73's Walt K6DNS



DX NEWS

SOMETHING NEW ADDED

We must be crawling up the steep part of the sunspot cycle. Conditions have been significantly better, based on observations on the air from N6ET. The long path on 20 meters has been open in the mornings like I haven't seen in years. The LIDX Bulletin must agree with my words, since it is reporting exciting activities in the edition I've just received. Here is a sample.

AMSTERDAM ISLAND - FT5ZB participates occasionally in a list operation on 14243 kHz at about 0300Z. He also operates from 0100Z on 7020 kHz, which is probably a bit early for us on the West Coast.

ASCENSION ISLAND - Look for ZD8RP on 14185 kHz nightly from 0001Z.

CAMEROON - TJ1BP operates from 2200Z on 14180 kHz. He offers schedules for 15 and 10 meters to those interested.

JAN MAYEN ISLAND - JX8KY is active at 1500Z and again at 1800Z between 14176 and 14180 kHz.

KENYA - 5Z4JB and 5Z4PT keep the troops happy on 21345 kHz from 1900Z.

KINGMAN REEF - K9AJ/KH5K and a cast of many will work the multitudes from 23 to 29 April from this Pacific "Rock". Look for them at 25 kHz above the low band edge for cw. On ssb, the frequencies will be 3775, 7085, 14195, 21295, and 28595 kHz listening as directed.

MALDIVE ISLAND - DA2ER sporting an 8Q7 call will be on the air from 19 April to 11 May, both ssb and cw on as many bands as antennas permit. Look on the usual DX frequencies.

RODRIGUEZ ISLAND - A rare country indeed! 3B9FR attracts lots of attention alternately between 21335 and 14183 kHz daily from 1830Z.

SOUTH ORKNEY - VP8BNC has arrived and plans operation through June. Look for him at 14205 kHz from 2345Z.

Enough for now. See you in the pileups.

73's,
Bob, N6ET

FOR SALE BY W6LTC

Yaesu FT-208 (2M HT)	\$200.00
Yaesu FT-708 (440 HT)	\$160.00
speaker mike for above	\$ 40.00
Desk charger for above	\$ 50.00
Metz 1/2 wave 440 HT antenna	\$ 15.00
5\8 wave telescoping ant (2M)	\$ 5.00
Mobile cigar lighter power supply	\$ 26.00
Battery adapter	\$ 2.00
HT mounting brackets	\$ 6.00 ea.

You can negotiate a package price or individual items. Bob, W6LTC can often be found on the 224.08 repeater or call (818) 248-6911

FOR SALE: MFJ-1274 TNC 2 Packet Radio Terminal NODE Controller - Works VHF/HF W/Built-in Tuning Indicator for HF w/software. \$120.00. Contact: Bill (William) C. Fesler - KA6TCL
HOME: (818) 352-3664
WORK: (818) 393-5853 OR TRADE FOR?

Membership services now has two morse code training programs available for loan or copying. These are both public domain programs that run on IBM PC, XT, AT or compatibles.

The first program is "Morse Tutor" by Jay Duthler, NO1AI. It was written in "C" programming language and then compiled into an executable file (MORSE.EXE). There is also a companion document file (MORSE.DOC) that prints up into a 10 page instruction manual. Instructional lessons arrange code in easy to learn groups. You can progress to the next group when you feel comfortable with the current group. There is also random practice available.

The second program is "MORSE" by John Slonski, W6LSH. It is written in the "BASIC" programming language. It also runs in BASIC. There is no documentation file, but the directions are easy to figure out. There is a tutor mode for learning and reviewing code as well as random code practice mode. The program also has the ability to generate code from any ASCII (TXT) file.

There is also a Morse Code Trainer plug-in module available for the Commodore C-64 computer. There is an instruction booklet that comes with the module.

There must be morse training programs available in the Public Domain for other computers. Do you know of any?

For more information on loan or copying of these code training programs, please contact Membership Services Chairman, Rick McKinney at Ext. 4-3968 or M/S 168-327.

ALTADENA GUILD FUND RAISER

On May 1, 1988 between the hours of 10 AM and 5 PM, the Altadena Guild will sponsor a fund raiser to benefit the Huntington Medical Research Institutes.

The Residents of Boulder Road, Altadena will open their homes for public viewing. Craft items will be available for sale with proceeds going to H.M.R.I.

Dick Mathison KG6Y, is looking for a few hams to provide radio communications to help with shuttle bus arrival and departure during the open house.

Parking will be available for viewers at Republic Federal Savings with a scheduled shuttle bus service to Boulder Road.

The shuttle service will deliver viewers to the North end of Boulder Rd and later pick-up viewers at the South end for transport back to their vehicles. Dick will also be on hand as Net Control and will formalize a plan prior to the open house.

For more information contact Dick Mathison KG6Y at Extension 4-3924. "73" N6QZI

COMMUNICATING by COURTNEY DUNCAN N5BF

AMATEUR SATELLITES

A lot is happening this month in the world of amateur satellites. The Soviet - Canadian Skitrek mission to cross the North Pole between the two countries continues, the RS-10/11 orbit precesses to a point where passes occur during convenient morning and evening hours, and the European Space Agency V-23 launch which will carry the next amateur satellite is just weeks away. W6VIO is committed to providing amateur bulletin coverage of the launch to the western United States and the Pacific Rim.

ALINS

Members of the JPL Amateur Radio Club are preparing the club station for AMSAT Launch Information Service participation. The following is excerpted from a communication from AMSAT Vice President for Operations, Ralph Wallio, W0RPK concerning the network and our participation in it. Note carefully the activities relevant to W6VIO. Currently we have about half a dozen operators signed up for station operations and could use about that many more to cover our ALINS commitment smoothly.

AMSAT-NA stands for AMSAT - North America.

RADIO AMATEUR SATELLITE CORPORATION (AMSAT-NA)
Ralph Wallio, W0RPK V-P OPNS

PHASE-3C AMSAT LAUNCH INFORMATION
NETWORK SERVICE (ALINS)
Operations Plan V1.0 05Apr88
(excerpted)

AMSAT-NA will support a multi-function ALINS operation associated with the launch of PHASE-3C. During the period just before, during and just after the launch, special information nets, bulletins and broadcasts will distribute last minute information.

The ARIANESPACE launch schedule will control when specific nets and bulletins will be broadcast. This plan is based on a launch date of 01Jun88 and a launch window of (unknown). Should a change in launch day or time occur, this plan will be updated accordingly.

SPECIAL AMSAT-NA NETS AND NET FORMATS

North American AMSAT nets will operate on their normal schedules on Sunday, May 29th, Tuesday, May 31st, Sunday, June 5th and Tuesday, June 7th. These nets will emphasize discussion of the PHASE-3C spacecraft and ground station operating requirements.

Special AMSAT-NA nets will be held on Wednesday, Thursday and Friday, June 1-3, at the usual times on 3840kHz. Last minute information will be available including orbital elements and plans for the first motor burn.

The bulletin broadcast schedule, based on a 01Jun88 launch, includes operations Tuesday, May 31st through Friday, June 3rd on the following schedule:

W1AW Published W1AW bulletin schedule and frequencies (all modes)

WA3NAN 7,185 kHz - 14,295 kHz - 21,395 kHz
1600z beaming Europe
1610z beaming Africa

W6VIO 14,282 kHz - 21,280 kHz
2015z 20m beaming SW
2020z 20m beaming NW
2030z 15m beaming NW
2035z 15m beaming SW

Bulletin content will be supplied by Vern Riportella, WA2LQQ, AMSAT President, via TELEMAIL to ARRL, CDUNCAN and TCLARK (for WA3NAN).

LAUNCH TELECONFERENCE BROADCAST

A teleconference of launch information sources and broadcast stations will be held from 30-minutes before the primary launch window opens till shutdown of the ARIANE-4 third stage (approximately 20-minutes after liftoff). Please note the broadcasted teleconference will NOT stay on-the-air for the one-hour delay before OSCAR-xx actually starts beacon transmission. (AMSAT-NA leadership will be in touch with AMSAT-SA operations intended to receive initial beacon transmissions. Results will be described in North America during the special evening 75m net cycle outlined above.) [AMSAT-SA is AMSAT - South Africa, ideally located to view the rocket payloads for the first hours after geosynchronous transfer injection from a Korou launch. CD]

PRE- and POST-LAUNCH BULLETINS

Stations on the east and west coasts and W1AW will broadcast last minute PHASE-3C information launch week. Involved stations and leadership include:

WA3NAN Goddard Space Flight Center
Greenbelt, MD
Frank Bauer, KA3HDO, Group Leader
Home 301-577-0271
Office 301-286-6392

W6VIO Jet Propulsion Laboratory
Pasadena, CA
Courtney Duncan, N5BF, Group Leader
Home 818-957-8455
Office 818-354-8336

W1AW American Radio Relay League
Newington, CT
Chuck Bender, W1WPR, Chief Operator
W1AW 203-666-1547
ARRL 203-666-1541

The list of teleconference participants is growing as launch approaches. As of this date, this list includes:

CALL	LOCATION	REMARKS
WA2LQQ	Warwick	Moderator
W3GEY	Boulder	Info source
W0RPK	Indianola	Net Control/HF+Local
W1AW	Newington	HF+Local Broadcast
WA3NAN	Greenbelt	Tracking/HF+Local
W6VIO	Pasadena	HF+Local Broadcast
G3RWL	Britain	Broadcast
ZS6AKV	South Africa	Broadcast
KA7GZH	Salt Lake City	Receive only
N7RH	Reno	Receive only
KD9QB	Indianapolis	Receive only
N9GHZ	North Central WI	Receive only

All teleconference arrangements are being handled by W0RPK. We will be using the services of TELECONNECT located in Cedar Rapids, Iowa. All calls will be made and billed from the bridge. Keep me advised of any changes in location and I need telephone numbers.

Broadcast stations are encouraged to start their nets one-hour before the launch window opens (30-minutes before the teleconference starts) to clear their frequencies and to provide preliminary information.

North American HF broadcast frequencies will be as follows:

W1AW	Published voice bulletin frequencies for North American coverage
WA3NAN	3860 - 7185 - 14295 - 21395 - 147.45
W6VIO	Beaming east on 20m and 15m 14282 - 21280 - 3840 or 7165 - repeater network uplink [224.04 CD]
W0RPK	Beaming west on 20m and 15m 3840 and/or 7165 - repeater network uplink

SKITREK

At this writing the Ski Trekkers are above 88 degrees north latitude, less than 150 miles from the North Pole. They have been able to maintain a pretty steady northward route although there have been days when detours to the east or west around open water have been necessary. The weather is warmer (-20 to -40) and spirits are high. During a two day stop for an air drop, a 2 - 3 Km movement was detected by the satellite tracking system. It is believed that this is due to drifting of the polar ice itself.

When the team arrives at the Pole, they will be joined in celebration by dignitaries flown in from both Canada and the Soviet Union, weather permitting.

Over 30 position reports have now been relayed to the "moving team" via UoSAT 11 while educators and interested amateurs eavesdrop all over the world. The last "W6VIO Calling" contained a list of the best passes over the L. A. area for this satellite through April. A similar list for May follows. Take your handheld two meter radio to a clear

location and hold it at different angles for best reception. At the beginning of a pass, listen on 145.825 Mhz. Toward the end you may want to move to 145.820 for clearer audio, compensating for doppler shift.

Remember to convert acquisition, loss, and maximum elevation times to PDT by subtracting 7 hours, adjusting the date if necessary.

03MAY88	0533	0550	0541	4318
03MAY88	1635	1652	1644	4325
05MAY88	0448	0505	0457	4345
06MAY88	0519	0536	0527	4359
06MAY88	1621	1638	1630	4366
08MAY88	0434	0452	0443	4386
09MAY88	1607	1624	1616	4407
11MAY88	0420	0438	0429	4427
12MAY88	1553	1611	1602	4448
14MAY88	0406	0424	0415	4468
14MAY88	1508	1526	1517	4475
17MAY88	0352	0410	0401	4509
17MAY88	1454	1512	1503	4516
20MAY88	0338	0356	0347	4550
20MAY88	1440	1458	1449	4557
22MAY88	0253	0311	0302	4577
23MAY88	0324	0342	0333	4591
23MAY88	1426	1444	1435	4598
25MAY88	0239	0257	0248	4618
26MAY88	1412	1430	1421	4639
28MAY88	0225	0243	0234	4659
28MAY88	1328	1345	1337	4666
29MAY88	1358	1416	1407	4680
31MAY88	0211	0229	0220	4700
31MAY88	1314	1331	1322	4707

W6VIO

Rejuvenation of the W6VIO satellite operating position is progressing. At this writing, Larry Smith, N6PBS; Larry Ruple, N6QZI; and I, N5BF, have taken down the satellite antennas, checked the rotators, made repairs, and prepared them for remounting at the shack. They should be back up, calibrated, loaded, tested, and ready for use shortly.

One of the club's Commodore computers is set up with AMSAT satellite tracking software at the satellite operating position in the shack. Currently, the tracking program is running 24 hours a day as a demonstration to shack visitors and in order to determine the accuracy of the software clock in the program.

Our two meter all mode transceiver was returned by ICOM, unrepared. Their service representative stated that they would not repair radios that did not have the factory serial number plate on them. The intent of this policy is probably to avoid servicing stolen gear. Alternative repair or replacement options are being considered. Does anyone know what happened to the factory serial number plate for the IC-211?

Larry Ruple has been building a phone patch for the shack with Jerry Hawkes. When the cabling is completed, we hope to be able to drive all three HF transmitters for live Phase III C launch coverage from our shack phone line. As a byproduct, W6VIO will have the equipment to run phone patches from the club station on any of the station radios.

Get in touch with me if you want to help prepare the station or help operate it for the AMSAT Launch Information Network event discussed above.

Courtney Duncan, N5BF
238-600
354-8336

April 1988

IF YOU CAN FILL OUT THIS FORM
YOU CAN PASS AN FCC EXAM
Please mail to Mark Schaefer 168-314

In order to form a license upgrade class, I would like to know what is most needed by our club members. This way we can all get the most out of the course.

NAME	CALL
M/S	EXT
HOME	TEL

1. What Class of License do you now hold?
(a) Extra (b) Advanced (c) General
(d) Conditional (e) Technician
(f) Novice (g) None
2. What is your code speed?
0 5 10 15 20 25 ...
3. What Class do you wish to upgrade to?
(a) Extra (b) Advanced (c) General
(d) Technician (e) Novice
4. How much Theory do you know about Ham Radio?
(a) You mean Farmer John commercials
(b) I had a CB in my car.
(c) I had a license a long time ago.
(d) I know some theory.
(e) I think I know.
(f) Sure, what would you like to know.
5. I would like to upgrade by next
(a) week (b) month (c) season (d) year
(e) millenium
6. I am available for a class (numerate by preference)

	<u> M </u>	<u> Tu </u>	<u> W </u>	<u> Th </u>	<u> F </u>	<u> Sa </u>	<u> Su </u>
Noon	I						
Evenings	I						
7. I would like to know more about the following:
Why upgrade?
When is the next class?
Code programs for _____ computer
Code cassette tapes for _____ wpm
When and Where Voluteer Examinations are held?
When can I take the Novice Exam on Lab?
How can I join the Club?
What do I need to know?
How can I help others Upgrade?
What are those sqwiggly lines on my TV screen?
Have Salesperson call me

-----?

JPL Amateur Radio Club W6VIO
 FIELD DAY 1988
 24-25-26 JUNE 1988

Please fill out this form and return to W. MUSHAAGIAN M/S 238-420

NAME _____ CALL _____ CLASS N T G A E

DAY PHONE _____ NIGHT PHONE _____

Number of people attending _____

Callsigns of all other Amateurs attending _____

When do you expect to attend?

Friday	morning	SETUP
	afternoon	SETUP
	evening	SETUP
Saturday	morning	SETUP
	afternoon	OPERATE
	evening	OPERATE
Sunday	morning	OPERATE
	afternoon	TAKEDOWN

Meals will be provided: Friday Dinner, Saturday Breakfast, Lunch and Dinner; Sunday Breakfast and Lunch!!! Be sure to plan your attendance around a meal (we hope you'll stick around a bit to help with Field Day, too.)

WHAT EQUIPMENT CAN YOU BRING?

CAN YOU HELP TRANSPORT EQUIPMENT?