APRIL 1986

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MAIL STOP

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

PRESIDENT:	Steve Townes	WB4ILW
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SECRETARY:	Russell Dow	WAGJCK
TREASURER :	Richard McKinney	KA6DAN
DIR.AT LG:	Jon Adams	NW6H
TRUSTEE :	Jay Holladay	W6EJJ
EMER.COMM:	Ralph West	NGYM
EDITOR:	Eileen McKinney	KA6DGV

- Club Meetings: Second Wednesday of the month at 12 Noon in 238-543. Everyone is welcome - Bring your lunch!
- Board Meetings: Fourth Wednesday of the month at 12 Noon in 238-543. Everyone is welcome - Bring your lunch!
- Repeater Mtgs: First Thursday of the month at 12 Noon in 238-543. Everyone is welcome - Bring your lunch!
- Newsletter The 7th. day of each month. Articles If the 7th. falls on a weekend, Deadline: The following Monday will be the deadline. Your articles, ads, photos, diagrams, instructions, or articles you'd like to see reprinted from other sources (with the name of the publication, date, etc.) should be submitted to the above address.

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W6VIO

FIELD DAY 1986

The Annual JPL ARC Field Day will be held on SATURDAY JUNE 28th. and SUNFAY JUNE 29, 1986.

It will be held at Crystal Lake Campgrounds. The selected site is at an altitude of 6,300 ft. The facilities include water, picnic tables, and flush toilets. The travel time from the 210 Fwy. and Highway 39 to the site is approx. 50 minutes. The site fee and meals will be furnished by the JPL ARC. Ralph West N6YM has agreed to cook for us this year. If you missed Ralph's cooking at last years Field Day, don't miss this one! This is also an excellent time to meet JPL ARC members and friends. Field Day operations will be discussed at the May meeting, please try to attend.

If you have any questions or comments, please call Walt Mushagian K6DNS X3036 or Jerry Hawkes W6WXL X2542.

Please return the attached Field Day Form as soon as possible. (Walt K6DNS)



DX NEWS by Bob, NGET



DX NEWS

Very little has been heard on the ham bands from NGET this month, so I'm relying totally on the LIDX Bulletin for my inputs. What listening I have done has not shown the bands to be in very good shape, but I may have just been unlucky! And now, for the news.

BRUNEI-V85HG operates from 0001Z on either 14,227 kHz or 14,210-14,215 kHz. 40 and 80 meter operation is also planned.

CHINA-BY5RF is available around 14,180 kHz most days.

CYPRUS-5B4MF participates in the Family Hour on 14,227 kHz from 1630Z. He also shows up on 14,183 kHz on Sundays from 1900Z.

FALKLAND ISLAND-VP8BGO makes his presence known on 14,243 kHz from 2300Z.

KAMPUCHEA-XUISS is reported on 14,030-14,035 kHz from 1730Z, also on 14,220-14,230 kHz from 2030Z.

MOROCCO-CN8EA will be happy to work you on 14,185 kHz at 1800Z and on 14,227 kHz from 2000Z.

SAINT HELENA ISLAND-ZD7SE is active daily on 14,026-14,030 kHz from 1800Z.

SAINT MARTIN-NI5K/FS planned to be active from 5 April on 3795 kHz and 14,170 kHz.

SAINT VINCENT-J87CD attracts lots of takers on 14,205 or 14,227 kHz from 1800Z.

VATICAN CITY-HV3SJ operates every Sunday on 20 and 40 meters. He is reported to have been worked on 14,238 kHz at 1635Z.

Enough of my rambling about DX. Save some for me!



For the early risers and commuters, how about starting an Early Bird net on the 04 machine from 5:00 to 7:00 A.M.. If interested contact Rick McKinney or Dick Wetzel at M.S. 168-327, or listen in EARLY some morning soon. Rick-KA6DAN



PRESIDENT'S MESSAGE

One of the activities of our club that does not get as much notice as it should is the good public service work that our members perform. This is especially true with regard to the help that our members provide to activities like the LA Marathon and even our own Running Club's events. Sam Dolinar, the president of the Running Club, asked me to thank all of those who helped in their most recent Arroyo Seco Frico event. So, I would also like to add a note of thanks from all of us in the club to all of you who give your time to help out in these events.

Those of us who were there enjoyed the Amateur Space Telescope presentation organized by Jon Adams for the last meeting. I would like to thank him for setting up that presentation and the fine slate for the rest of the year. Please try to make an effort to attend the meetings.

Merv MacMeaden and the rest of the Repeater Committee are doing a fine job getting everything on track. I would encourage all of you who use the repeaters to help the committee in any way that you can.

I'm still looking for an Emergency Communications Manager and a Facilities Manager. What we need is not necessarily someone to do all of the work, but someone who will take the organizational responsibilities. We have lots of club members who are willing to volunteer their time for work parties, etc., so all we need is someone willing to take the lead and point out what needs to be done.

Don't forget Field Day coming up in June. Walt Mushagian K6DNS and Jerry Hawkes W6WXL have found us a good place to set up at Crystal lake and it looks like it will be a lot of fun. Watch your mail and this publication for more details. Steve, Townes, WB4ILW

CLASSIFIEDS

FOR SALE

- HF TRANSCEIVER Yaesu FT DX-401B

 5 to 30 MHz + 2 Spare XTAL Locations
 AM SSB CW
 560 Watts Input Max. 250-300 W out RMS.
 With Desk Mic + 2 Manuals + Spare Finals
 Excellent Cond. (Finals carried by Radio
 Shack!). \$350.00. N6MTI X4870.(R. Blakely)
- Signal Generator Hewlett Packard -HP 608.D 10 MHz to 420 Calib. 1982 Excellent Condition. \$425.00. N6MTI X4870 (R. Blakely)



BOARD MEETING MINUTES - MARCH

Present: Steve Townes, Rick McKinney, Russ Dow, Jon Adams, Merv MacMedan, Walt Mushagian, Sid Johnson, Jerry Hawkes, and several others.

1. We need an Emergency Communications Coordinator. Any volunteers should step forward.

2. Discussion of ways to advise non-member JPL Hams of Club activities, such as Field Day. Walt Mushagian will see if we can put a notice in "JPL Universe".

3. Walt Mushagian gave a brief report on preparations for Field Day.

WHERE - Crystal Lake/Deer Flats Campground. Camping space is available there and nearby.

WHEN - June 27/28 (Sat/Sun)

Walt requested \$450.00 from Club for site fees, food, misc. Motion for approval by Rick McKinney seconded by Steve Townes, approved unanimously.

4. Merv MacMedan presented to the Board a proposed letter to ERC requesting a grant of \$3,250 for repeater upgrades. Motion for approval of letter by Russ Dow, second by Jon Adams. Motion carried.

> Respectfully submitted, Russell C. Dow WA6JCK Secretary

Congratulations!

CONGRATULATIONS....

to Jason Kovatch for upgrading from Technician to Advanced class in one sitting at the monthly exams held at the Lockheed Radio Club on April 5. Jason has great plans for DXing with his new TS-430S on some choice new frequencies! Merv, N6NO, was administering other exams at Lockheed and asked him if he was sure he didn't want to exchange his call for one appropriate to his new class. (It's an option on the application.) Jason replied no thanks, you don't get a call like mine that really says something often enough to throw it away! He'll keep N6BCI. (N6NO) Report

REPEATER REPEATER REPEATER REPEATER

REPEATER NEWS

By Merv MacMedan, N6NO

A repeater Committee meeting was held as scheduled on the first Thursday of April and I reported on the progress the Steering Group had made. A plan for improving the spotty coverage of WB6IEA into the San Fernando Valley was progressing. It includes raising the transmitter power (our 6.5 watts does remarkably well, but we need somewhat more to reliably cover non-line-of-sight areas) and more power requires us to add cavities in the duplexer. We also need to add a remote receiver in the Valley and link it back to the repeater site with a voting system. Of course, each new transmitter we add must have a control system to make it FCC-legal.

An equipment list to do this was drawn up and sent to Rick McKinney (whom you know as our club treasurer,) but in this case he was wearing his OTHER hat as ERC sub-club chairman. Rick and I took advantage of the opportunity for free steak dinners and presented a request (at the ERC council meeting on March 26) for a grant of \$3250. I am happy to report it was approved. We are now well on our way to getting the repeater properly upgraded.

By the way, when they discussed the grant, ERC asked me what an amateur radio club like ours does. I told them briefly about how we communicate using personal radios (but that we are not CBers,) then went into the excellent support some 30 or more members provided to the first LA Marathon a couple of months ago. Then I described the excellent publicity W6VIO gave JPL and NASA with our Special Event Operation for the Voyager Uranus encounter in which we sent slo-scan pictures around the world and will be following up each contact with special collectible QSL cards. That was enough to convince the council our club is on the ball and doing good things! I also thank those of you involved in doing these good things ... it helped the club's image immensely!

Special thanks at this time also go to Kerry Erickson, George Morris, Brian Stapleton and Stan Sander for their site survey work; Stan Sander and Sid Johnson for their inspection of the present site (we have to exterminate termites in a telephone pole, would you believe?); Gary Stevens and Jim Parkyn for their help with the link margin analysis; Walt Diem for his recommendations on how to add the extra cavities to what we already have; Russ Dow for locating a possible alternative contract site for our remote receiver; and Sid Johnson for researching the isolator market to combat our intermod ("grunge") problem and the thousands of other little jobs that he somehow does to keep the system working.

We'll keep you posted next month as we progress.



JPL AMATEUR RADIO CLUB MEMBERS SUPPORT FIRST LA MARATHON

Twelve members of the JPL Amateur Radio Club provided communications support for the first Los Angeles Marathon on Sunday, March 9. A total of 267 amateur radio operators provided support to over 11,000 runners. The 26.2 mile course started and finished near the Coliseum. Several nets operated simultaneously on the 144 and 220 MHz bands. Runner timing information was handled by volunteers on the 470 MHz business band.

Jay Holladay (W6EJJ) provided communications on the shadow net for one of the race officials. All the other JPL Club members worked on the medical net. Participating were: Stan Brokl (N2YQ), Walt Diem (WA6PEA), Kerry Erickson (N6DSG), Sid Johnson (WB6VWH), Jim Lumsden (WA6MYJ), George Morris (W6ABW), Ron Ploszaj (WA6TPW), Stan Sander (N6MP), Brian Stapleton (KW6J), Ralph West (N6YM), and Art Zygielbaum (WA6SAL). George, W6ABW, was captain and responsible for organizing the medical net. Jim, WA6MYJ, and Stan, N6MP, were keep very busy during the marathon as they shared net control responsibility.

The amateur radio operators performed in an outstanding fashion and this performance has been recognized by race and city officials. It was another good day for amateur radio!



JPL Radio club member Mark Schaefer WB6CIA will be operating when possible and listening for W6VIO on 3530

7030

14030

21030 and KA6QWR on 21125 at noon and 5:00 PM Pst at these locations on the dates given:

/ZL New Zealand	$\sim -$	April 8 thru May 6
/VK Australia	-	May 8 thru May 11
/302 Fiji Is.	\overline{a}	May 13 thru May 24

- May Field Day 1986 Presentation and Field Day 1985 Recap Jon Adams, NW6H Chairman, Field Day 1985 Walt Mushagian, K6DNS Co-Chairman, Field Day 1986
- June ARRL Presentation Jay Holladay, W6EJJ Vice President, ARRL
- July Cellular Telephone Technology
- August *Motorola Semiconductor Presentation Power Amplifiers Roy Hejhall, K7QWR Member of Technical Staff RF Advanced Products Motorola, Inc., Phoenix
- September The PACSAT Project Harold E. Price, NK6K PACSAT Project Manager
- October *DSN Receiver Technology Receiving Spacecraft Signals from Deep Space
- November *Amateur Radio Equipment Manufacturer Presentation
- December General Election
- January 87- *Packet Radio Gateways to the World



Recently I ordered some replacement parts for an older Hy-Gain Antenna that I will put up shortly (TH3-JR). I was referred to a toll free number for technical advice: (1) (800) 328-3771 and spoke to Mr. Al Kaplan who was very helpful and who made the following recommendation: When assembling aluminum tubing sections first brush mating surfaces with 000 steel wool and then coat lightly with an anti-oxidant preparation. He specified "Pennetrax-A", a Greenlee Product, the "A" designating the aluminum formula. Failure to prepare joints thusly eventually results in corrosion and resistive joints. (Which will alter and probably degrade antenna performance) He also said the common practice of spraying "Krylon" or a similar urethane coating over a tubing joint will protect for a while, but eventually moisture will produce corrosion. I was unable to logate any "Pennetrax-A" locally, but found the following substitutes at a local electric wholesale supply: "NO-LOX" by Ideal Corp. 8 ozs. for \$4.15 and "DE-OX" by ILSCO Corp - 8 ozs. for \$4.15. Both available from Union Wholesale Electric Co. 1509 W. Valley Blvd. Alhambra (818) 289-6142. They stock the products for applications such as joining aluminum sections of highcurrent buss-bars, and will sell over-the-counter. (Jason N6BCI)



VHF/UHF CONFERENCE GRISWOLD'S HOTEL FULLERTON CA. MAY 2,3,4

SCHEDULE: FRIDAY - Travel and check-in, registration, noise figure meas. SATURDAY - Registration 8 AM Lectures begin 9 AM Dinner, prize drawings 6:30 PM SUNDAY - Antenna gain measurement, flea market

PLACE: Griswold's Hotel in Fullerton Californía. Only minutes away from Disneyland, Knott's Berry Farm, Ham Radio Outlet. Courtesy transportation is available to and from many attractions. Although there are 260 rooms available, try and make your reservation early to insure a room. For reservations call 800-854-7231, In CA (800-367-5500, or 714-635-9000.

FEES: PREREGISTRATION UNTIL APRIL 25 - S10 (includes proceedings) REGISTRATION AT THE DOOR 513 DINNER S14

ROOM RESERVATION \$45 SINGLE OR DOUBLE PER NIGHT, BE, SURE TO MENTION THE VHF CONFERENCE WHEN MAKING RESERVATIONS.

e have a full slate of speakers and two conference rooms already lined up for your enjoyment. Bring the family, come and see old friends, make new ones and enjoy your West Coast Conference.

preregister now! MAIL TO: VHF/UHF CONFERENCE,c/o KEITH THOMPSON K6PVS, 15130 FIR, HESPERIA, CALIFORNIA 92345

NAME :	CALL :
ADDRESS:	
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PREREGISTRATION (\$13 after Apri	1 25) \$10 × = \$
	n Ter- \$14 x = \$ Top \$14 x = \$ of TOTAL ENCLOSED: \$
TO KNOTT'S BERRY FARM, LONG BEACH AIRPORT TO DISNEYLAND, ANAHEIM CONVENTION CENTER	GRISWOLD'S HOTEL

W6VIO CALLING

FIELD DAY SATURDAY JUNE 28th. AND SUNDAY JUNE 29, 1986

CRYSTAL LAKE CAMPGROUND

NAME _____ CALL ____ JPL PHONE X _____

HOME PHONE ()

I AM INTERESTED IN THE JPL ARC FIELD DAY, I AM WILLING TO HELP IN THE FOLLOWING AREAS:

FIELD DAY PREPARATION PARTY

EQUIPMENT TRANSPORTATION

SET UP EQUIPMENT & ANTENNAS 8:00 AM JUNE 28, 1986

OPERATIONS:

HF SSB	DAY	NIGHT
VHF PHONE	DAY	NIGHT
HF CW	DAY	NIGHT
OSCAR	DAY	NIGHT
PACKET	DAY	NIGHT

TEAR DOWN 12:00 NOON SUNDAY, JUNE 29th.

ALL OF THE ABOVE

YOUR COMMENTS AND SUGGESTIONS ARE APPRECIATED.

PLEASE RETURN THE COMPLETED FORM AS SOON AS POSSIBLE TO WALT MUSHAGIAN K6DNS. 238-420 X3036.