

PRESIDENT: KERRY ERICKSON N6DSG
VICE PRES: MIKE STEWART WA6VQI
SECRETARY: DICK MALM KF6FK
TREASURER: RICK McKINNEY KA6DAN

Director at Large: John Repar WA6LWD
Trustee: Jay Holladay W6EJJ
Emergency Comm.: Ralph West N6YM
Editor: Eileen McKinney
KA6DGV

MAIL STOP

Jet Propulsion Laboratory
W6VIO Calling M/S 233-208
Attn: Eileen McKinney-Editor
4800 Oak Grove Drive
Pasadena, California 91109

CLUB MEETINGS: 2nd. Wed. of month 12 Noon in
238-543. Everyone welcome!

BOARD MEETINGS: 4th. Wed. of month 12 Noon in
238-543. Everyone welcome!

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jpl → W6VIO CALLING



NOVEMBER 1984 VOL 14 NO. 11

PLEASE RETURN THE FORM ON
PAGE 9 FOR A SPECIAL
CHRISTMAS FEATURE ARTICLE.

MAIL IT BACK BY DEC. 8TH.
PLEASE TAKE A MINUTE AND DO IT.
IT'LL BE A FANTASTIC ISSUE IF
EVERYONE WILL JUST PARTICIPATE.

THANKS A MILLION!

EILEEN

President's Message

It's time to start thinking about club officers and budget for 1985. Per the club's By-Laws, a nominating committee appointed by the president will present a slate of officers at the December meeting. Elections will be held at the meeting or by ballot if there is more than one nominee per office. Additional nominations may be made at the meeting. If YOU are interested in being a member of the team which directs the club's future, contact myself or the nominating committee. The nominating committee will be announced at the November meeting.

Also at the December meeting the budget for 1985 will be presented for approval by the membership. Get your thoughts or voice into the board now.

Rick McKinney (KA6DAN) is chairing an ad-hoc committee to explore and implement packet radio, gateways (OSCAR-UHF/VHF) and computer utilization in the club station. Contact Rick with your ideas and support.



HAPPY THANKSGIVING!

WE WISH YOU A RAINBOW
WE WISH YOU A SONG
A HAPPY THANKSGIVING
WHEN NOTHING GOES WRONG

THE TURKEY SO PERFECT
THE PIE NICE AND DONE
YOUR FAMILY TOGETHER
ON A DAY FILLED WITH SUN

The annual fall NOVICE class will soon be starting; watch for separate flyer. Co-instructors Carl de Silveria (KG6LG) and Rick McKinney are looking for anyone with a good "fist" to lend a hand.

Becoming a novice is essentially the first step in the world of amateur radio. It is important that we present a solid training program and that we continue supporting the novices until they feel comfortable. A little guidance in equipment selection and assistance with that first on-the-air contact goes a long way in keeping the new hams active. Let us show support to our proud hobby of amateur radio; while we are at it let's bring back those hams we've seem to have lost along the way! Invite or bring inactive novices and others to the NOVICE CLASS; a refresher would be an excellent way to start becoming active and/or upgrading.

Kerry (N6DSG)



**JPL AMATEUR RADIO CLUB
MINUTES OF THE BOARD MEETING**

24 OCTOBER 1984

PRESENT: K. Erickson, J. Adams, C. de Silveria, J. Lumsden, R. McKinney, R. Malm, N. Chalfin, W. Mushagian, J. Repar, R. West, M. Stewart

Kerry Erickson started the meeting with an inquiry about the status of the Education Committee's selection of equipment for the upcoming code class session. Jon Adams responded that a code trainer had been selected and he would pick it up at a vendor near his home and forward the receipt to the treasurer for payment.

Kerry then asked when the next code training class would start. Carl de Silveria suggested that mid-November would be possible. Carl also said a formal announcement would be forthcoming.

Status reports were then requested of those in attendance;

Rick McKinney, presented a treasurers report which showed the detail of the Clubs budget and expenditures to date. It was noted that the JPL picnic concession resulted in over \$500 for the club treasury. The budget review showed that most expenditures were close to, or under the planned budget.

John Repar questioned the Autopatch status. It was noted that the Autodialer operation memo is still outstanding and that a dues notice had been sent out to some Autopatch members to renew their membership. Not all members were currently included in the request for dues, however, additional notices will be sent out as the member's renewal date approaches.

Jim Lumsden reported that the repeater will carry next Space Shuttle flight although future flights may not be relayed.

Norm Chalfin indicated a desperate need for help for the weekly Net. Volunteers are asked contact Norm directly or call a member of the board.

Rick commented that next years budget is due to be presented to the membership next month. All suggestions will be considered by the Board.

Jim also noted that several work parties are planned in the next few weeks to install the solar panel atop the trailer and repair the antennas on the mesa. Please call Stan Sanders if you have the time to volunteer.

The meeting was adjourned at 12:55p.

R. Malm, KF6FK
Secretary

Mt. Wilson
Every Sunday 1530 hrs. This article thanks
146.400 input 147.435 output to TRW's ARC Newsletter

Crosstalk
Fullerton Amateur Radio Club Hunt
Second Saturday on the Month. 2000 hrs. to 2300 hrs.
Frequency 147.495 continuous signal. No beam bearing competition. Start at Skyline Drive and Acacia St. Fullerton and area is approx. a 10 mile radius from the start point. Mileage hunt with time penalty.

Nohl Ranch Hunt.
One Saturday per month opposite Signal Hill Hunt. 1930 hrs to ? Start at top of Nohl Ranch Rd above Hwy 91 and 55. Area approx. 12 mile radius from downtown Fullerton. No beam bearing competition. Frequency 145.565 continuous signal. Mileage hunt.

Signal Hill Hunt (Never Hunted)
Frequency 146.565 Continuous signal. One Saturday per month, opposite Nohl Ranch. 1930 hrs. to ? Start somewhere on Signal Hill Area - Unknown. Mileage hunt. No Beam-bearing competition.

The Granddaddy of All Hunts
"The All Day "T" Hunt"
Frequency 146.565
Start time 1000 hrs. to sometime Sunday; about every 3 months on a Saturday. Start at Palos Verdes at Crenshaw and Crest (the one on the top).
Boundaries - anywhere in continental U.S.A. signal must be detectable at P.V.
No beam-bearings.
Monitoring Repeater to be declared at the start of the hunt.

W6VIO WORK PARTIES SUCCESSFUL-----

Two recent work parties have helped to put the W6VIO Station back in running order. On Aug. 11, a crew successfully took down and refurbished the two antennas on the Mesa telephone pole tower which had suffered extensive damage during last year's winter storms. The Hy-Gain 402BA two-element 40 meter beam was refurbished, but the KLM KT-34XA was unfortunately a total loss. This antenna was replaced with a Telrex TB6EM which, like the KT-34, is a 6-element tri-bander. Our hope is that the Telrex antenna, which is a much more solid design, will do a better job surviving the high winds (±100 mph) encountered on the Mesa.

More recently, on Nov. 3, another antenna work party was organized. The purpose of this effort was to fix the TH6DXX tri-bander which had also suffered some wind damage, re-tune the Telrex beam on 20 meters and install a solar panel on the roof of the W6VIO trailer for charging the shack's 12 volt emergency battery supply. All three of these tasks were accomplished successfully. The solar panel, which was installed by Carl de Silveria, K6GLG, works beautifully, charging the batteries at a 2-4 amp rate during daylight hours. The two tri-banders are also working well with only some rotator work left to be completed.

Thanks and congratulations to the following Club members who helped out, many of whom were present at both work parties: Sid Johnson WB6VWH, Brian Stapleton KW6J, John Repar WA6LWD, Kerry Erickson N6DSG, John MacConnell WB6UAM, Walt Mushagian K6DNS, Bob Layne W6LTC, George Morris W6ABW, Chuck Sarture, Jim Lumsden WA6MYJ, Bruce Beaudry WD6HEZ, Carl de Silveria KG6LG and Rick McKinney KA6DAN.
(Stan Sander N6MP)



JOIN THE RANKS

JPL EXPLORER POST PROJECT

P. V. MASON, N6BBP
M/S 183-901
X2300

The JPL Explorer Post has made use of ham radio in a novel way for several years. As a Post project, the members have been conducting a high altitude exploration project using weather balloons carrying two-meter transmitters for telemetry and tracking.

The telemetry system is an FM-FM system similar to the Corporal and Sergeant systems. The signal is received at a ground station on a twin-Yagi antenna which can be set up as an interferometer with a very sharp null in the forward direction. This allows us to track the balloon while it is in the air to about 5 deg. accuracy. Once it has returned to the ground, we locate and recover it with cars equipped with two-meter receivers using a single Yagi for rough direction indication.

The payload transmitter is on 143.975 MHz, a NASA/-military frequency authorized through JPL. Regular two-meter crystal-controlled ham receivers are used at that frequency. Communications to the base station and between chase cars are done in the two meter band using ham transceivers. Since the balloon typically travels 30 miles in the hour it is in the air, and the range of the transmitter on the ground is under five miles, careful coordination and a well planned search are necessary.

The telemetry system currently has four channels; internal and external temperatures, altitude, and a fixed reference channel. The data are displayed in real time at the base station and are taped for later analysis.

In the early flights the lift time was limited only by the burst altitude of the balloon, which was about 60,000 feet. Travel distances were as much as 60 miles, making recovery difficult. We added a timed cut-down system to cut the payload loose from the balloon after 30 minutes. The payload now rises to about 30,000 feet and travel distances are up to 30 miles.

The Post has flown 17 payloads. Eight have been recovered, four by direct tracking and four by response to an attached note offering a ten dollar reward. Since the addition of the cut-down system and move of operations to the San Joaquin Valley to get away from blockage of the signal by mountains, all of the payloads have been recovered.

Plans for the future include change-over to a modern digitally-encoded telemetry system, and addition of a science experiment, perhaps a cosmic ray detector or a camera.

Post members are also building a computer to control a materials processing experiment being built for flight on the Shuttle on a volunteer basis by a group of JPL engineers. The Post has also proposed a Getaway Special experiment on the Shuttle to measure the column density of the ionosphere, but we have yet to obtain permission from NASA to radiate at 140 and 420 MHz.

The Post members are between 14 and 21, and are usually interested in space and are pursuing or planning to pursue a scientific or engineering career. We welcome new members, particularly sons and daughters of JPL employees, and also advisors who would be interested in this project or in others in ham radio, astronomy, computing, robotics or other technical areas. Participating JPL hams are Peter Mason, W6BBP, x2300, Chuck Sarture, N6LBY, x7246, and Bob Bunker, W6MWP, x3912.

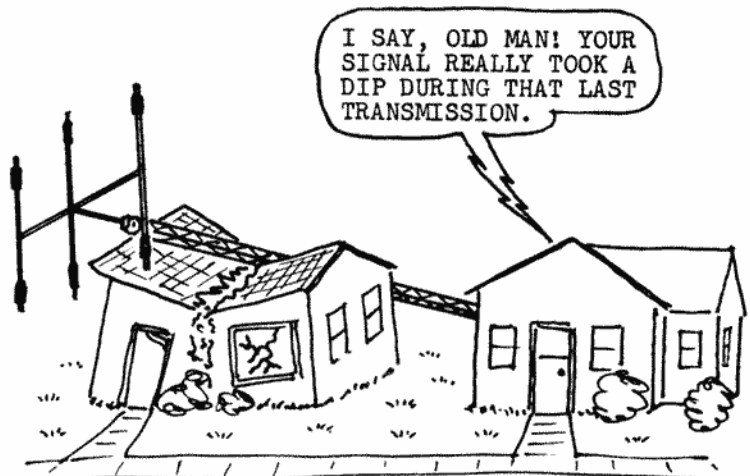
Via WARA Feedback Oct Edition

HOW TO RAISE YOUR PARENTS

1. Don't be afraid to speak their language. Try to use strange sounding phrases like, "I'll help with the dishes," and "Yes."
2. Try to understand their music. Play Andy William's "Moon River" on the stereo until you're accustomed to the sound.
3. Be patient with underachievers. When you catch your dieting mother sneaking salted peanuts, do not show your disapproval; tell her that you like fat mothers.
4. Encourage your parents to talk about their problems. Try to keep in mind that to them earning a living and paying off the mortgage seem important.
5. Be tolerant of their appearance. When your Dad gets a haircut, don't feel personally humiliated. Remember, it is important to him to look like his peers.

-from CHARRO via ARNS

Via Hughes ARC Newsletter



BY W6GUYB 9-84

LETTERS

October 3, 1984

To: Eileen McKinney

From: Herb Younger *HY*

Since you reprinted the item from the Hughes ARC newsletter about the current attack on the 220 band, I thought you might be interested in the enclosed items.

I wrote to Senators Wilson and Cranston, expressing my concern and asking them to investigate. Having received no replies to date, I am assuming they passed the letter on to the FCC and will eventually send me whatever they get.

I also sent copies to Senator Goldwater and the ARRL. The enclosed papers are their responses. There is obviously too much stuff here for W6VIO Calling, but you may want to extract some of it. The ARRL appears to be on top of the situation, and their letter seems to be a good summary.



THE AMERICAN RADIO RELAY LEAGUE, INC.

HEADQUARTERS SOCIETY OF THE INTERNATIONAL AMATEUR RADIO UNION

ADMINISTRATIVE HEADQUARTERS NEWINGTON, CONNECTICUT, U. S. A. 06111

September 11, 1984

Mr. Herbert C. Younger
5782 Turquoise Avenue
Alta Loma, CA 91701

Dear Herbert:

Thanks for the copy of your letter to your Senator concerning 220 MHz.

For the record, I would like to clarify that the documents before the Commission, RM-4829 filed by the Land Mobile Communications Council and RM-4831 filed by Sideband Technologies Inc., are "Requests for Rulemaking," rather than "Notices of Proposed Rulemaking, (NPRMs)." With respect to RM-4829, comments could have been filed by any interested party in this preliminary stage for 30 days after public notice, i.e., through August 29, 1984. Reply comments were permitted for fifteen days thereafter, until September 13.

With respect to RM-4831, however, there is litigation over the lawyer chosen by STI; this matter, therefore, is on hold until 14 days after a ruling by an Administrative Law Judge. What this means is that you, and anyone else, may still file comments with FCC, telling them why you think they should not proceed as proposed by STI. A single copy is enough for private individuals, but if you want to be "official" send an original and five copies.

LARRY E. PRICE
W5RA PRESIDENT
LEONARD M. NATHANSON
W5RC FIRST VICE PRES
GARFIELD A. ANDERSON
K0GA VICE PRES
JAY A. HOLLADAY
W6EJL VICE PRES
RICHARD L. BALDWIN
W1RU VICE PRES
INTERNATIONAL AFFAIRS
JAMES E. McCOBB
K1LLI TREASURER
DAVID SUMNER
K1ZZ SECRETARY AND
GENERAL MANAGER
203-666-1541
QST
OFFICIAL JOURNAL

NOTE: when one comments on an RM, it is required that he send a copy to the originator of the request and that he attach a "Certificate of Service" to his filing. The Certificate can read something like, "I certify that a copy of these comments has been sent this date to . . ." An address for LMCC: 1150 17th Street NW, Suite 1000, Washington, DC 20036. For STI: 2000 M Street, NW Suite 600, Washington, DC 20036.

When the time finally comes, the Commission staff, most likely in the Office of Chief Scientist, will decide whether to ask the Commissioners to issue a Notice of Inquiry or a Notice of Proposed Rulemaking. Next a draft of the Notice would have to be prepared, and sent to the National Telecommunications and Information Administration for coordination by the Interdepartment Radio Advisory Committee (IRAC) since these frequencies are assigned for Government use on a primary basis. (As you are aware, amateur use of 220-225 MHz is secondary to Government radiolocation (e.g., radar) activities.) It is by no means a foregone conclusion that IRAC would consent to new civil uses of the band, especially since the Government enjoys primary status through 1989. In any event, the process will stretch out for months or years. Amateurs should make full use of the band while it is possible, for a variety of amateur services including weak signal DX, remote control, repeaters and wideband data transmission. They should also, of course, as a first step, file comments opposing reassignment of 220-225 MHz RM-4831. (At this stage of the game, it would be counterproductive for amateurs to feel that letters to Congress were more important than comments to FCC. Congress is busy getting itself reelected; the early stages of an administrative matter like the 220 MHz allocation won't rate a high priority with many Congressmen right now.) If and when there is a Notice of Proposed Rulemaking in the matter, amateurs should file comments again. The address is simply, FCC, Washington, DC 20554.

73,

Sincerely yours,

Perry Williams, W1UED
Washington Area Coordinator

PW
Enc.

10-9-84

THE FOLLOWING MEMBERS ARE BEING DROPPED FROM THE CLUB ROSTER
FOR NONPAYMENT OF 1984 DUES.

If you have paid, please notify Rick McKinney at MS 168-327
or call EXT 3968. (We are human and make mistakes.)

If you have not paid, and wish to continue as a member of the
JPL Radio Club; then please send your \$ 3.00 to Rick McKinney
at MS 168-327. You'll be reinstated as an active member and
your 1985 dues will be paid.

If you have any information on these persons that would be
helpful, please notify Rick McKinney at MS 168-327.

CALL	CLASS	NAME	ADDR	EXT
K6CYY	GEN	Akers, Robert	125-161	2892
WB6GYD	GEN	Archer, Eric D.	238-737	4584
K6BLG	GEN	Bahtker, Dan A.	NO CURRENT LAB ADDR	
KA6DGP	NOV	Burdick, Gary	198-112	5086
KA6BXX	TECH	Burke, Gene	180-404	6577
WB6GXS	TECH	Canzano, Gene	238-528	6009
		Carman, Gary	125-B29	6560
		Carman, Sharon	FAMILY	
WA6EPY	GEN	Cutting, Elliot	156-217	4988
WA6IGS		Davies, Leland	NO CURRENT LAB ADDR	
KA6DBO	NOV	Douglas, Lin	NO CURRENT LAB ADDR	
K6ELH	GEN	Edmonds, Robert W.	82 106	2959
KA6MHF	NOV	Erickson, Jim	233-208	4443
KA6HLW	NOV	Franck, Carl R.	238-420	2755
		Gainsborough, John	514-218	167-6741
AJ3A	EXT	Griffin, Michael D.	OFF-LAB	
WA3NFK	ADV	Holmes, Dwight P.	264-803	4471
KA6TUT	TECH	Howard, Earle A.	171-301	3592
W6MEE	CON	Hultberg, John	233-307	7502
WB6MBI	TECH	Humphrey, Jerry	238-601	3094
W6RNO	ADV	Humphrey, Vince	OFF-LAB	
N6KH	EXT	Kellog, Kent H.	161-213	5386
KA6SRR	NOV	Lee, Thomson J.	130-117	8199
WA6WDX	GEN	Lynch, George D.	170-104	7183
WB6LKS	TECH	Martinez, John	281-123	4160
WB6MOQ	ADV	Norland, Doc	OFF-LAB	
WB6TXG	TECH	Patzold, Jack D.	233-103	7736
WB2EUZ	ADV	Phillipson, Steven H.	510-113	167-9681
K6SVP	ADV	Piety, Richard R.	OFF-LAB	
N6ET	EXT	Polansky, Robert G.	180-404	4940
WB6RUP	GEN	Rafferty, James H.	FAMILY	
WA6RUQ	ADV	Rafferty, Michael	238-601	3348
		Regusters, Herman	82-106	3103
WB6TEB	ADV	Santana, Michael	OFF-LAB	

MEMBERS BEING DROPPED

KA6YWR	NOV	Schneiderman, Dan	180-701	2992
		Selcuk, M. Kudret	507-228	167-9300
WB6DPE	TECH	Simmons, Clinton	T-1180	6175
		Smith, Joel G.	264-801	6584
WA6VSE	TECH	Stevenson, Carl R.	238-420	5587
KA6MJG	NOV	Stewart, Evelyn M.	FAMILY	
KA6HIF	TECH	Stewart, Glenn E.	238-737	7560
WA6VQI	NOV	Stewart, James M. (Mike)	179-203	3036
W6LEI	ADV	Tucker, Tom	238-420	2164
N6DSP	GEN	Volkmer, Kent	506-418	167-9170
KA6SRS	TECH	Wackley, Joseph	264-803	7641
WA4CEW	GEN	Walker, Christopher	NO CURRENT LAB ADDR	
		Walker, William M.	161-213	2275
N6CI	EXT	Weber, William J.	238-420	3845
W6PVR	ADV	Weems, Weston	DSCC/25	166-402
KA6YPJ	NOV	Whalen, Dennis	126-200	4812
W6HCD	EXT	Williams, A. Nash	RETIRE	
KA6SMV	NOV	Wilson, James N.	180-604	3270
K6TOS	ADV	Yanow, Gil	180-205	6916
WA6SAL	GEN	Zygielbaum, Art	171-209	3494

10-9-84

JPL AMATEUR RADIO CLUB
1984 MEMBERSHIP UPDATE

PLEASE ADD THE FOLLOWING TO THE 1984 MEMBERSHIP LIST:

CALL	CLASS	NAME	LAB ADDR.	EXT.
K6GPK	ADV	Apel, Warren	510-202	167-9299
WA6TBH	GEN	Brodkin, Bob	503-201	167-6051
N2YQ	EXT	Brokl, Stan	238-420	7403
KD6TU	ADV	Charnbroda, Ismael	82-111A	3056
KG6LG	ADV	de Silveira, Carl	198-112A	3605
K6KID	ADV	Fessinger, Herb	IFC	4829
		Jmaev, Jack	198-112A	5520
W6POP	GEN	Pattison, Jack	83-210	5457
WA6TPW	ADV	Floszaj, Ron	169-519	7447

PLEASE CORRECT THE FOLLOWING ITEMS (Corrections underlined>)

CALL	CLASS	NAME	LAB ADDR.	EXT.
N6KUB	TECH	Anglin, Richard	Academic Leave	
-----			-----	
N6OE	EXT	Brown, Stephen	801-100	167-9101

WB6DRH	ADV	Crawford, Gordon A.	Retired	

K6KZQ	GEN	Harris, William	186-118A	3059

N6BH	EXT	Hartley, R. Booth	230-209	0506

KA6IBF	TECH	Kesterson, Jim	514-209	167-6890

N6CUV	TECH	Nolte, Scott	183-401	7657

N6LBV	GEN	Sarture, Charles M.	198-112A	7246

WA6CWR	GEN	Stapleton, Mary E. (Mimi)		

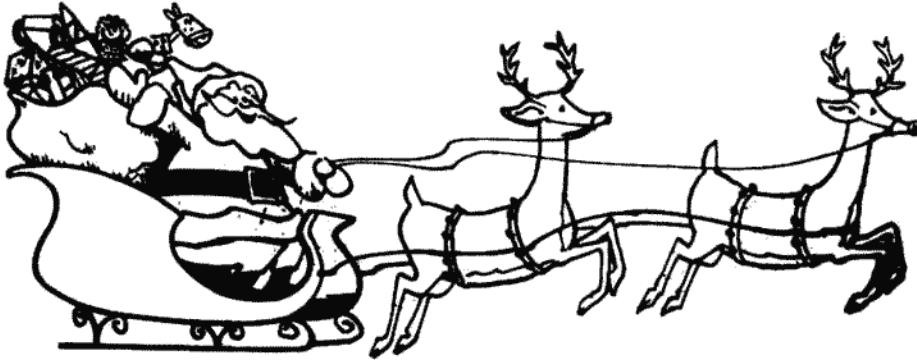
WB6CUB	ADV	Tucci, Michael	169-327	6025

N6YM	EXT	West, Ralph	230-201	7817

COOKIE RECIPE OR LEAVING CARROTS FOR SANTA'S REINDEER OR
WALKS TO CHURCH AT MIDNIGHT OR GOING UP TO THE SNOW EACH YEAR

HOLIDAY TRADITIONS

WHAT DO YOU AND YOUR FAMILY DO FOR THE HOLIDAYS?



I NEED IT BACK BY DEC. 8TH.

PLEASE WOULD YOU JUST TAKE A MINUTE AND FILL THIS OUT NOW,
THEN JUST DROP IT INTO THE MAIL - ADDRESS ON FRONT,
THIS IS FOR THE DECEMBER ISSUE AND IT WILL BE SUCH A NICE
ARTICLE IF WE CAN GET BACK EVERYONE'S FORM. 88'S EILEEN

NAME: _____ CALL SIGN: _____

FOR THE HOLIDAYS MY FAMILY HAS THE FOLLOWING TRADITION AND/OR
RECIPE THAT WE CHERISH: