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Emergency Comm: MERV MacMEDAN N6NO  
Editor: EILEEN McKINNEY KA6DGV

Club Meetings: 2nd Wed of month  
12 Noon in 238-543. All welcome

Board Meetings: 4th Wed of month  
12 Noon in 238-543. All welcome

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# jpl → W6VIO CALLING



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## SAILORS TO HAM IT UP?

THE JPLARC WILL PRESENT A PROGRAM AT THE JPL SAILING CLUB SEPTEMBER MEETING. SAILING AND HAM RADIO SEEM TO HAVE A NATURAL AFFINITY FOR EACH OTHER SO WE WILL INTRODUCE THE JPL SAILORS TO HAM RADIO AND EXPLAIN HOW IT CAN ADD TO THEIR SAILING PLEASURE.

VHF AND HF GEAR WILL BE DEMONSTRATED TO THE SAILORS AND A RUNDOWN OF THE VARIOUS HAM MARINE NETS WILL BE GIVEN. THE LICENSE REQUIREMENTS WILL BE EXPLAINED AND THE SAILORS WILL BE INVITED TO ATTEND THE FALL NOVICE CLASS.

JPL HAMS WHO HAVE AN INTEREST IN SAILING, WOULD LIKE TO LEARN TO SAIL, OR ARE INTERESTED IN WORKING WITH THE MARITIME SERVICES NETS ARE INVITED TO ATTEND THE THURSDAY SEPTEMBER 2, 1982 MEETING IN THE BUILDING 180 FIRST FLOOR CONFERENCE ROOM.

(Paul Schou KB6ET)

## COME SEE ANGELES CREST IN THE SUMMER

THE BIKE CLUB IS HAVING THEIR ANNUAL CENTURY RIDE UP ANGELES CR. ON SUNDAY AUGUST 29TH. THEY HAVE REQUESTED OUR HELP IN KEEPING TRACK OF THE RIDERS, MANNING CHECKPOINTS AND RELAYING INFORMATION BY RADIO. IF YOU CAN HELP OUT, PLEASE CONTACT BRUCE BEAUDRY X7872 M.S. 264-119, 73'S AND THANKS.

## JPL ARC PICNIC

WHO: JPL ARC ON-LAB & OFF-LAB MEMBERS & FAMILIES

WHERE: OAK GROVE PARK (DOWN THE ROAD FROM JPL 1/2 MILE OR SO)

WHAT: A FUN-FILLED PICNIC (1ST ANNUAL)

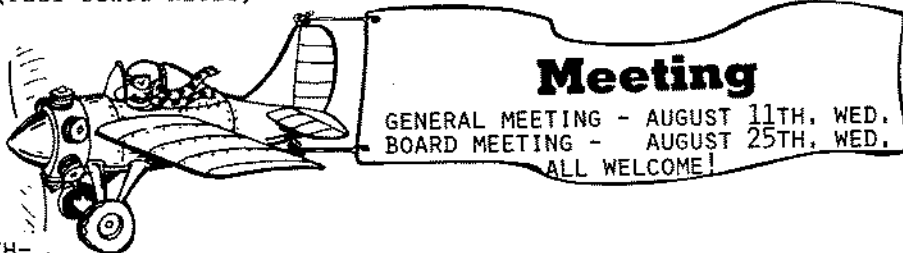
WHEN: SATURDAY AUGUST 28TH. AT 10 AM TILL ?

WHY: BECAUSE IT'S ABOUT TIME

BRING YOUR OWN FOOD - AND DRINKS - AND GAMES SUCH AS BADMITTON - HORSESHOES - FRISBEES - TABLE GAMES - OR WHATEVER YOU LIKE TO DO. IT'LL BE A CHANCE TO GET TOGETHER WITHOUT RADIOS AND HAVE A CHANCE TO TALK AND MEET.

GUEST  
SPEAKER  
WILL BE  
JAY HOLLADAY

W6EJJ OUR SOUTH-  
WESTERN ARRL DIRECTOR.



**Meeting**  
GENERAL MEETING - AUGUST 11TH, WED.  
BOARD MEETING - AUGUST 25TH, WED.  
ALL WELCOME!

DX NEWS BY BOB N6ET

A quick review of the HF bands on no less than four or five occasions in the last week have shown that the sun spot activity is already on the way down. DX signals, when heard at all, were very weak, at least on 20 & 15. (None at all were heard on 40 meters.)

A number of interesting items have been documented in the various bulletins, some of which I'll pass along for your reading pleasure.

Malagasy - 5R8AL is available on Friday, Saturday and Sunday at 21235 from 1730Z and 14290 from 2000Z.

Maldives - 8Q7AL is active almost daily from 14215-14235 from 0200Z.

Togo - Look for 5V7HL at 21240 from 1800Z and 14290 from 2200Z.

China - BY1PK has been worked between 0600Z & 0800Z on 15 & 20 CW (14035 and 21035 were previously mentioned). No reports yet on USA QSO's.

Camenrins (TJ) and Central African Republic (TL) - Look for K4YT operating from these rare locations about now.

Market Reef - OJOMA is supposed to be active now through 12 August. No frequencies mentioned, but you might look at 14025 & 14195.

There are lots of rumors active of potential operations in the next half year from Albania (ZA), Heard Island (VKØ), more Mainland China stations (BY1, BY4, BY7) and even an Equatorial Guinea (3C1) between 20 & 27 August. If half of these come to pass, it'll be a great season!  
THINK SUNSPOTS! 73'S BOB N6ET

*Editor's Note: I've gotten a lot of positive response to Bob's column on DX News and now we've even had response from other clubs. Many local clubs in Southern California exchange newsletters and it's part of my job to read these other letters and pick up any items of interest for our club. In reading this past two months I've come across comments about Bob's column and one club even went so far as to say they wished they had someone to write the same column for them. Thank you Bob - you make my job lots easier.*

BOARD MEETING MINUTES (Unapproved to date)

Members present were J. Earnest\*, P. Goodwin, J. Lumsden, M. MacMedan\*, J. McKinney\*, J. Patzold, B. Beaudry, R. West. \* denotes board member. In the absence of a quorum no official business could be conducted. Paul Goodwin reported for the Education Committee. Rick McKinney is to teach this Fall's class and Ralph West will handle CW instruction - but some help is desired for Ralph to ease the burden. "Big Brother" Program has been discontinued due to lack of response from Big Brothers themselves. Bruce Beaudry gave a package of IRC's to Merv MacMedan to handle. Some of these date way back. Bruce said that 61 persons have been helping on the Voyager cards and all but 13 have completed their tasks. These are to be processed through the mail office who has an account for Radio Club mailings... Submitted by J. Earnest (Sec.)

FIELD DAY 1982

For the second year in a row, JPLARC participated in Field Day from Mt. Disappointment in the San Gabriel Mtns. All in all the June 27-27 activity was an outstanding success. A total of 28 members, friends and relatives made the trek to "Mt. D", to help with all phases of the operation including set-up, operating, cooking and tear-down.

This year the Club operated in the "2A" category meaning that two transmitters were in operation simultaneously. The two primary stations operated CW (using an ICOM IC-730 xcvr with a TA-33 triband beam) and SSB (using a Kenwood TS-830 xcvr and a Cushcraft 4-element tribander). The two stations shared sloping dipoles for 80 and 40 meters. At a prearranged point during the contest, the SSB station shut down and a 2 meter/220 Mhz FM/SSB solar-powered station was activated for a few hours. In addition a Novice Station was in operation full-time, operated exclusively by Novice and technician class operators.

Results surpassed all expectations. The final summary sheet shows the following: 668 CW QSO's, 1157 phone QSO's and 31 Novice QSO's for a total of 1856 QSO's. This beats last year's totals (1814 total QSO's) which were made using three simultaneous transmitters as opposed to this year's two. The Club also obtained bonus points in every available category except for the OSCAR satellite QSO bonus. The full claimed score was 5740 points, which should pace the Club among the top 15 competitors in the 2A class, which, in previous years has had about 300 entrants. Not Bad!!!!

We would both like to thank and praise everyone who came for their enthusiasm and hard work and for making Field Day a truly rewarding experience.

As much as we would like to - there isn't space to detail all the tasks and responsibilities that each participant carried out so the following summary will have to suffice. Rick Anglin, KA6SMQ (Novice Station Chief), Bruce Beaudry, WD6HEZ (antennas, Novice Station), Steve Bednarczyk, NJ6J (UHF station, SSB station), Norm Chalfin, K6PGX (publicity, video tape), John Earnest, N6CTT (set-up), Dick Farrow, WDBLUS (operating & cooking), Jerry Hawkes, W6WXL (operating, cooking), Vince Humphrey, W6RNO and son (operating, video tape), Jim Longthorne, WA6KPW (VHF station chief), Jim Lumsden, WA6MYJ and son Mike (operating), Merv MacMedan, N6NO (CW station chief), Daniel MacMedan and Rick Thomas (gate duty), George Morris, W6ABW (operating), Bob Polansky (N6ET) (operating), Rex Quinn, WD6EWN and his wife (set-up and tear-down), John Repar, WA6LWD (tear-down), John Watkins, KA6SMR and wife and son (operating), Sam Weaver, WB6EMO and wife (generators, operating and cooking), Dick Wetzel (operating).

We also thank the U.S. Forest Service and the Air National Guard for the use of the site, and Doc, WB6MOQ for coordinating his repeaters during the operation.

(Stan Sander N6MP & Brian Stapleton W6LZP)  
Field Day - Co-Chairmen

CONGRATULATIONS!

OUR BEST WISHES GO TO GLEN CUNNINGHAM  
WA6TPT FOR HIS PROMOTION TO SECTION MANAGER.

*Remember: There are two sides to every question and if you want to be popular, you take both.*

HAM PLATE?

AS YOU KNOW ONLY ONE HAM PLATE IS ALLOWED. WANTING ANOTHER (AS I AM PROUD OF MY HAM STATUS) FOR A SECOND CAR I THOUGHT OF ANOTHER WAY. (Dick Piety - K6SVP)

OUR APOLOGIES

In the last issue an article entitled "Quasar Identified" was published. Unfortunately some misinformation got into the article somehow and our thanks to Pete Lyman WB6WXX for spotting it. Pete then got in touch with Art WA6SAL and so here is the article again - only this time with perfect information, hopefully. Our apologies to our good friends in Tidbinbilla for crediting Goldstone with their hard work. (Eileen KA6DGV)

QUASAR IDENTIFIED

*Development of a method of configuring the 34m and 64m antennas at Tidbinbilla near Canberra, Australia, as an S-band interferometer provides a synthesized aperture of 200 meters. This technique was used by a team of JPL and Australian radio scientists in 1980 and 1981 to refine the position of between 250 and 500 radio sources in the southern hemisphere that were included in the Parkes Radio Observatory survey at 2.7 GHz. As a result of this accurate positioning, the Anglo-Australian Observatory, at Siding Springs, Australia, was able to optically identify a dim quasar as the counterpart of a Parkes radio survey object. Calculations based on the redshift of the wavelength of the quasar light indicate that the quasar is some 18 billion light years from Earth. This is the most remote known object in the Universe, by a wide margin.... Again our apology.*

WEST "WESTLINK"

A REGIONAL VERSION OF THE "WESTLINK" SERVICE IS BEING STARTED FOR THE WEST-COAST. INFORMATION FOR THE LOCAL VERSION SHOULD BE SENT TO: WESTLINK WEST  
P.O. BOX 73  
SUMMERLAND, CA 93067

(Jim WA6MYJ)

SPEEDY FCC

Last month we reported that seven JPL-ARC members went down to Long Beach and upgraded their licenses. Exactly 4 weeks later, all but one had their new licenses. Of the seven, only two requested new call signs. They are:

Dick Malm Gen. N6HAU (KA6HVQ)  
Kay Goodwin Tech. N6HBA (KA6SMT)

The others either preferred their old call-signs, or in the elation of passing the test forgot to go back and check the "request new call-sign" box on their 610 Form. The latter is unfortunate because only Extra Class licensees can upgrade their calls between exams or renewals. The FCC Examiner should have asked their preference, but didn't. Lesson: Don't overlook Box "2F" on the 610 Form when upgrading!

(Paul K06D & Ralph N6YM)

CLASSIFIED SECTION

FOR SALE: ROBOT 70 SSTV MONITOR. CALL STEVE AT X-2977 OR 792-2475.

WANTED: YOUR QSL CARD FOR THE SEPTEMBER ISSUE OF W6VIO CALLING. WE'VE RECEIVED SOME THE PAST COUPLE OF WEEKS BUT WE WANT EVERYONE'S. PLEASE TAKE A MINUTE AND MAIL IT RIGHT NOW SO THAT I'LL HAVE IT FOR THE NEXT ISSUE. THANKS EILEEN. (SEE ADDRESS ON FRONT PAGE)

LETTERS!

To The JPL Amateur Radio Club:

The La Canada Flintridge Memorial Day parade was a great success this year. For the year the communications provided by the JPL Amateur Radio Club was a key element in that success and I want to express our thanks. I also want to thank you for spotting and assembling the parade. George Morris deserves a special thanks for his coordination efforts.

I hope that you had as much fun as I did in putting on this parade.

Thanks,  
Roy Chafin - Parade Chairman  
La Canada Flintridge  
Chamber of Commerce &  
Community Association

REMEMBER

NOTHING SO NEEDS IMPROVING AS OTHER PEOPLE'S BAD HABITS.

WE DIDN'T ALL COME OVER ON THE SAME SHIP BUT WE'RE ALL IN THE SAME BOAT.

EXPERIENCE IS ONE THING THAT YOU CAN'T GET FOR NOTHING.

IT'S WHAT YOU LEARN AFTER YOU KNOW IT ALL THAT COUNTS.  
(Eileen KA6DGV)

COLUMBIA - STS - 4 - June 29, 1982...another perfect launch by the "Columbia" the world's first reusable spacecraft, beginning it's fourth mission above the "wild blue yonder". The launch was perfect, and on time, but not without some prelaunch drama.

The STS-4 mission came very close to being delayed when a very severe hailstorm swept through the Kennedy Space Center in Florida and actually damaged some of the vital thermal control tiles which literally cover the Columbia. The tiles are fragile enough that a curious "tile thumper" could easily puncture the tile surface with a tapping fingernail.

The magnitude of the water trapped in the crevices between the tiles became evident as the Columbia passed through "MAX Q" during ascent, the point of maximum aerodynamic pressure on the launch vehicle. At that point, where the wind forces and heating were greatest, a huge water vapor cloud erupted from the orbiter, hiding it from camera view for a few seconds.

Through the tireless efforts of Walt Diem, the W6VIO repeater was again on the air with the STS-4 Mission Control audio. Each mission adds to the knowledge and expertise required to properly conduct a net of the magnitude of the Shuttle Information Network. Preparations for the STS-4 network were no exception.

Desire for Shuttle Audio priority over routine repeater traffic demanded additional modifications to the repeater. While many of the repeater systems linked to W6VIO during the 7-Day mission employed user priority over the mission audio, it was made very clear during preparation for the 4th. flight that linked systems wanted "clean" shuttle audio with no interruptions from the users of the W6VIO repeater. Selfish, but understandable.

This Mod, among others, had Walt working until past 1AM on the morning of the launch, without success. Finally, with about 2 hours remaining before the launch, Walt decided to "Patch" the back-up repeater into Service. Close-up views by several of the TV news cameras documented the "Patch Cords" tying the System together.

When the STS-3 Mission landed, it became known that the STS-4 launch would be targeted for late June 1982. The exact date, June 29, did not become public until about three weeks prior to launch. It was then that we realized that unfortunately, June 29th. was the Sunday of Field Day weekend. The impact, however, turned out to be minimal. Also, a benefit that became evident was that Field Day stations were listening in. KTTV in Los Angeles documented that fact while doing a news piece on a fellow club doing their Field Day from Knott's Berry Farm in Buena Park, California. Ultimately, during the week of the Mission, KNXT (CBS), KABC (ABC), KNBC (NBC), KTLA, and KTTV all filmed news stories about the unique aspect of having the Shuttle audio on amateur radio. The KNXT sequence was actually done "live", which was a new and unique experience in itself. All of the television crews are to be commended on the accurate coverage they provided. (Editor's Note: See photo below that John N6AVW took while watching live coverage of Walt being interviewed).

John Russell, WB9RNW and Burt Weiner, K6OQK, were the persons who worked the closest with the JPL Amateur Radio Club during the STS-4 Mission. Their efforts were vital in keeping the high quality mission audio available on two meters for ready linking to repeater systems who could not access 220.04 MHz directly. While John and Burt, are mentioned here, the thanks of the JPL Amateur Radio Club goes to all those who helped in a myriad of ways to make the Shuttle Network a Success.

Our thanks goes to the repeater system on an adjacent 2-meter frequency to one of the primary 2-meter outputs. That system had to essentially curtail use of it's repeater for the week due to unexpected interference which made their systems unusable.

Our thanks also goes to the repeater system co-channelled on one of the major 2-meter output frequencies. That system also suffered unexpected interference which made their System difficult to use. See September Issue for Part II - the final chapter of Columbia STS-4 and our JPLARC. (Jim WA6MYJ)

EDITOR'S NOTE: Due to the length of Jim's article Part II will be published next month. Space limitations make this a necessity.



Photo by John McKinney N6AVW

#### FROM THE EDITOR'S DESK

DAYS FULL OF SUNSHINE  
SKIES THAT ARE BLUE  
DREAMS THAT ARE GRANTED  
ARE MY WISHES FOR EACH OF YOU,  
HEARTS THAT ARE HAPPY  
MINDS THAT ARE CLEAR  
PEACE AND UNDERSTANDING  
EACH DAY THROUGHOUT THIS YEAR,

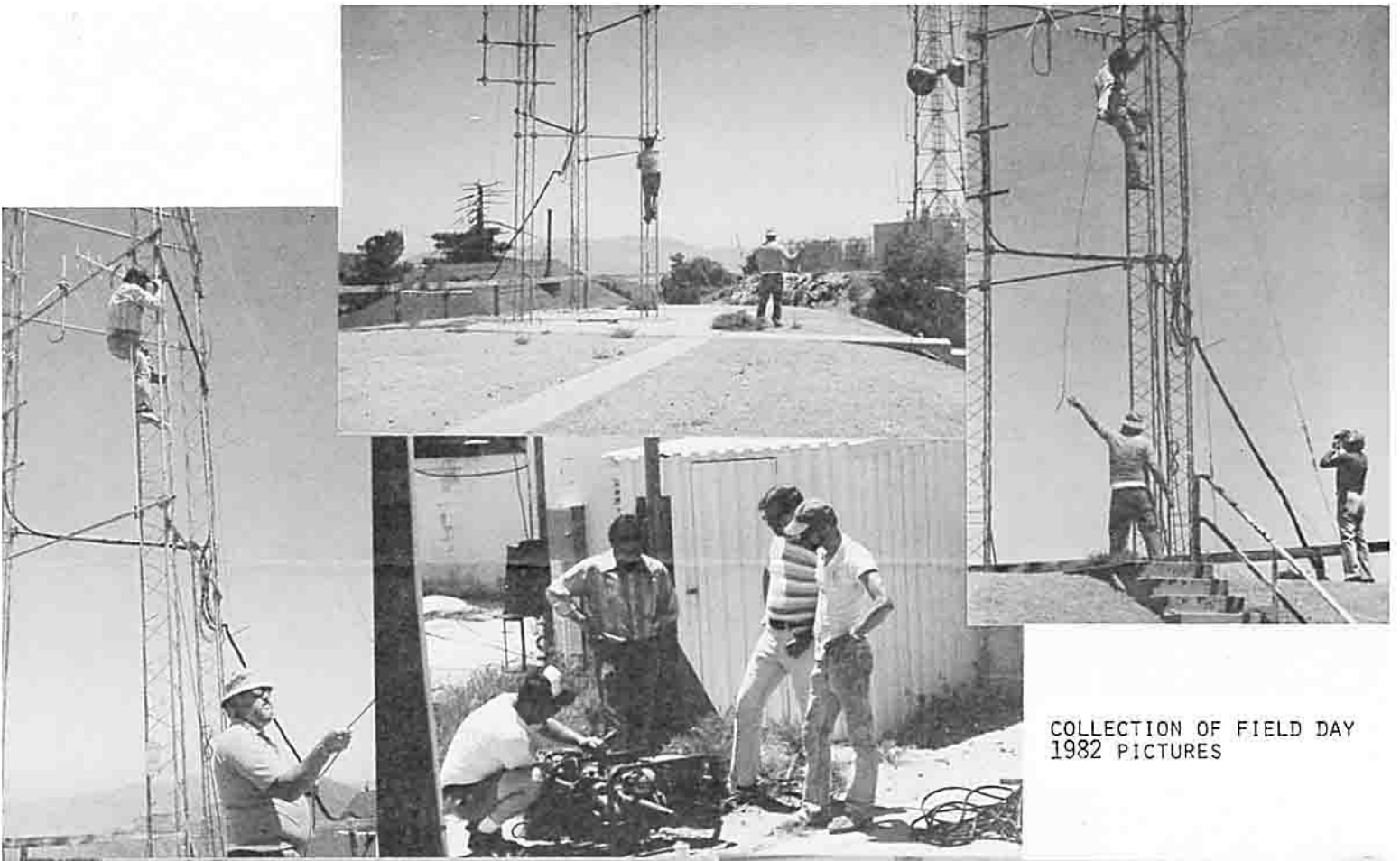
I WISH YOU A RAINBOW  
I WISH YOU GOOD CHEER  
SUCCESS AND GOOD FORTUNE  
FOR THINGS YOU HOLD DEAR,

FOR YOU'RE LIKE MY FAMILY  
MY FRIENDS TRIED AND TRUE  
AND EVERYTHING I WISH FOR ME  
I WISH EVEN MORE FOR YOU,

EILEEN (KA6DGV)

SEE YOU NEXT MONTH! SEND IN YOUR ARTICLES!





COLLECTION OF FIELD DAY  
1982 PICTURES





PHOTOS COURTESY OF  
NORM CHALFIN K6PGX  
STAN SANDER N6MP  
JIM LUMSDEN WA6MYJ

