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## ORANGE COUNTY AMATEUR RADIO CLUB

VOL. XXVII No. 3

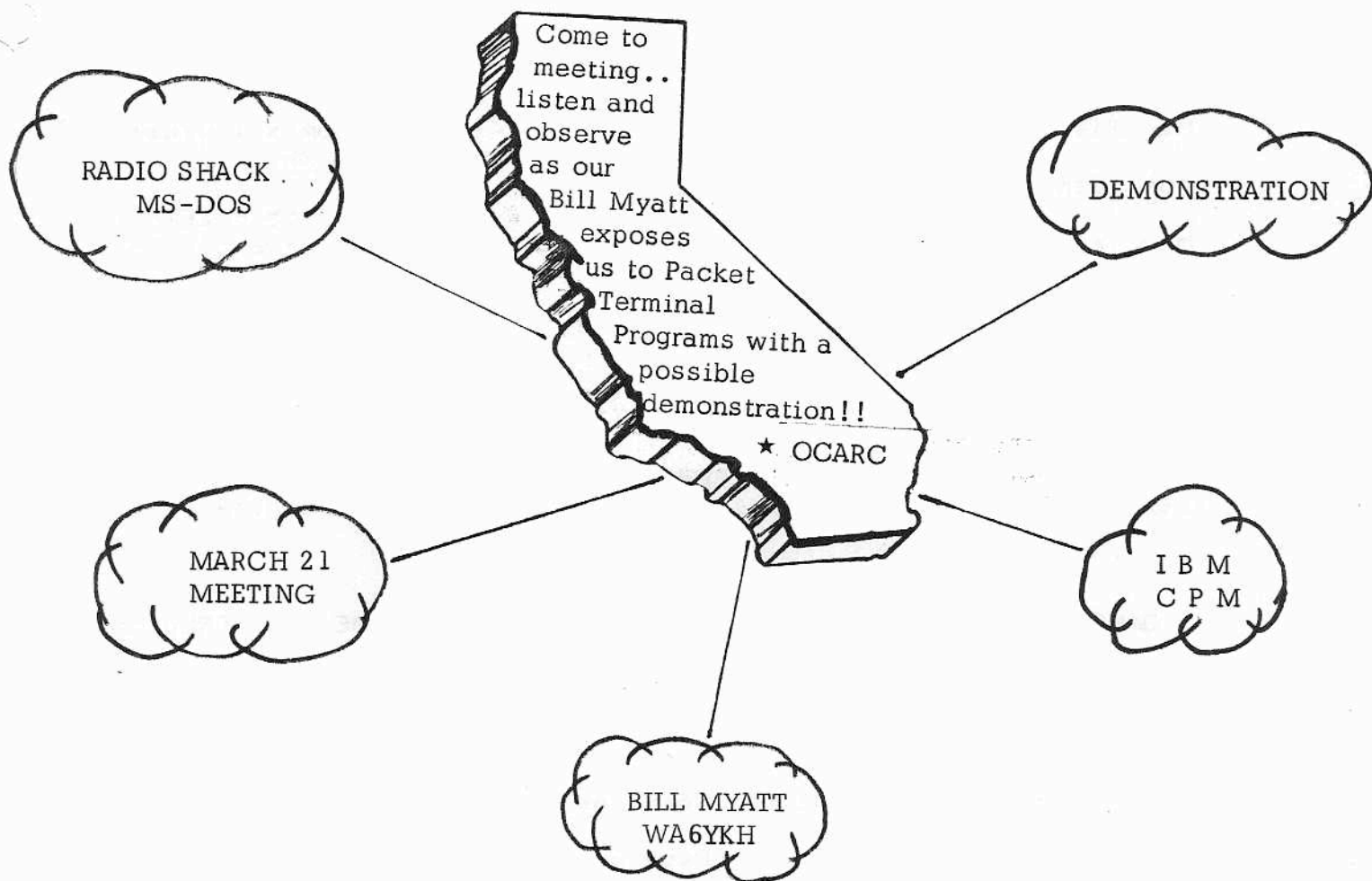
P. O. Box 1704, ORANGE, CA. 92668

MARCH 1986

# TERMINAL

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## 1986 CLUB BOARD of DIRECTORS

President	Frank Smith	WA6VKZ	492-7215
Vice President	Jim Talcott	N6JSV	838-5395
Secretary	Ken Konechy	W6HHC	541-6249
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Member At Large	Joe Partlow	KB6F2V	542-3122
Member At Large	Bob Eckweiler	AF6C	639-5074

## CLUB APPOINTMENTS

Club Historian	Bob Evans	WB6IXN	543-9111
W6ZE Trustee	Bob Eckweiler	AF6C	639-5074
R.F. Editor	Bob Evans	WB6IXN	543-9111
Teen Representative	<open>		

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## CLUB FUNCTIONS

MONTHLY MEETING: 3rd Friday of each month, 7:30PM at:  
 MERCURY SAVINGS & LOAN  
 Mar 21st 1095 Irvine Blvd. (4th St becomes Irvine)  
 Tustin, Ca. Talk-in on 146.55 MHz  
 Apr 18th (Take the 4th St. exit to the 55 FREEWAY  
 May 16th and head east. Continue about two blocks  
 past Newport Blvd. on the left.)

CLUB BREAKFAST: 1st Saturday of each month, 8:00AM at:  
 MIMI's CAFE  
 Apr 5th 17231 17th Street  
 Tustin, Ca. (714) 544-5522  
 May 3rd (55 FREEWAY at 17th Street east.)

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## CLUB NETS

BAND	MODE	DAY OF WEEK	LOCAL TIME	FREQ MHz
2 Meters	FM	Wednesday	2100 hrs.	146.550
15 Meters	SSB	Wednesday	2000 hrs.	21.375
15 Meters	CW	Sunday	2000 hrs.	21.175

(Listen for W6ZE, net control)



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Six Meter Threat... PROPOSAL BY W6TNS. Continued from last month.

#### WHAT IS A PACKET RADIO NETWORK?

The reader may be familiar with the term "local area network" (LAN). In this system a limited number of computers are connected together by cable in a manner which permits intercommunication. A packet radio network is an infinite number of LAN's connected together by radio waves.

A packet radio network may be thought of as a digital equivalent of the U.S. Postal Service. The information to be sent to another computer is equivalent to a letter. The letter is placed in an envelope which includes a destination address. This is called the packet. This packet is sent along with those of other users into the network, which acts like a mailbag.

The packet address also includes something like a postal zip code. The postal analogy varies somewhat in the handling of messages. Each radio modem connected to the network is a destination mailbox. At the same time it can also act as a "post office" for others connected to the network.

Each user is considered to be a "node" in the PUBLIC DIGITAL RADIO SERVICE. These stations or nodes constantly monitor the transmissions (mailbags), looking for packets (envelopes) which are addressed to them. If a message addressed to the node is detected, it is held in memory (the recipients mailbox).

The message may be intended for a nearby node as indicated by the "zip code". In this case, the node "mailbox" does not activate. Rather, the node becomes a "post office" and passes the message to one or more other nodes. The reply from the destination computer is handled in the same manner but the direction is reversed.

Packet radio transmission (movement of the "mailbags") can occur at very high speed. In fact, the speed is only limited by the bandwidth of frequencies allotted to the network. This petition requests a band of frequencies 2 MHz in width. This is sufficient to handle data rates in excess of 1 million bits per second. When one considers that the typical rate of data transmission on a telephone network is 300 bits per second, it can be seen that the PUBLIC DIGITAL RADIO SERVICE can handle a large number of simultaneous users.

Unlimited Users- Actually, the number of simultaneous users is unlimited due to an advantage of FM radio transmission called the "capture effect". Each node will "hear" (or capture) only the strongest stations in the immediate area of the node. More distant stations will be inaudible and will not cause interference. Thus users in two adjacent cities (for example) can communicate within the cities without interference from users in the adjacent city. Of course, if it is desired to send a message to a user in the adjacent city, the appropriate nodes will repeat the message until it reaches the destination and triggers a delivery acknowledgement. Other messages, not addressed to the adjacent city, will be ignored.

#### WHAT IS A RADIO MODEM?

The device to control the node (see previous section) functions similar to a ham radio "digipeater" but at a much higher speed. Since the term "digipeater" has no significance to the general public, the node controller is referred to as a "radio modem".

What is it?- Technically speaking, the radio modem is a non-persistent, carrier sense, multiple access with collision avoidance device. In practice, the radio modem consists of a small box, whip antenna and coaxial cable. The unit contains a receiver and transmitter, in addition to an RS-232 computer interface.

In addition to acting as a transceiving device, the radio modem is also capable of repeating received packets on the basis of a stored algorithm. In other words, it will receive, store and retransmit messages along the addressees route. Note that it is capable of acting as a repeater even if it is not connected to a computing device.

Training- Upon activation, the radio modem executes a stored training sequence. When first installed, the radio announces its presence and digital address in the network. The radio modem transmits its position with respect to other units, determines the digital address of other nearby units and finally, adjusts its power output to the minimum required to maintain communications with the other nearby units. This power can vary from 1 milliwatt for densely populated areas to the 1 watt maximum in rural areas. It is essential that the radio modem transmit only sufficient energy to maintain contact with other nearby radio modems (nodes).



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Training the radio modem for power output insures that a minimum signal level is radiated by the antenna. The purpose is to minimize the possibility of television interference. Some readers may point out that one watt is simply not enough power for rural areas. However, it is not the purpose of the PUBLIC DIGITAL RADIO NETWORK to duplicate the elaborate trunks of the public telephone network. There are bound to be areas which cannot pass messages. Under no circumstances should consideration be given to increased power output in these instances. If a high power mode is available, it will be abused.

#### A COMPARISON WITH CB RADIO

Those reviewing this petition may have a tendency to make comparisons with the introduction, usage and the degeneration of the 27 MHz Citizens Radio band.

The following points are presented with this comparison in mind. No one, including the petitioner, would like to see the PUBLIC DIGITAL RADIO SERVICE meet the same fate as the 27 MHz Citizens Band.

There is a major reason for the chaos which developed on the 27 MHz Citizens Band. The licensees of this service did not feel it was in their interests to abide by the Rules and Regulations. We can learn from this experience by designing a service where Rule compliance is in the interests of the user.

MODULATION- There must be no provision for voice communications in the PUBLIC DIGITAL RADIO SERVICE. Users of radio modems wish to exchange digital data, not the spoken word.

IDENTIFICATION- Enactment of a PUBLIC DIGITAL RADIO SERVICE will not affect the licensing workload of the Commission. Services which are essentially self-regulating (such as the remote control of objects, garage door openers, etc.) do not require the use of call letters. Inherent in the addressability of the radio modem, is a built-in aid to compliance and enforcement. Each radio modem has its own unique identification code, that is, its packet address. This is both the serial number and digital address of the unit. This code also identifies the manufacturer and the physical location of the radio modem. Violations of technical requirements can be easily be correlated by manufacturer. In other words, if a significant number of units are observed to be defective, the manufacturer can be immediately determined by serial number correlation.

If a unit is found to be non-complying, a message can be addressed to that radio modem advising the user of the problem. The Commission personnel sending the message receives the customary delivery acknowledgement of the message. Thus there can be no question that the user received the Notice of Violation.

POWER OUTPUT- A major contributing factor to the "CB problem" was the addition of power amplifiers to CB radios in an effort to increase the talk range.

Adding a power amplifier to a radio modem will produce no increase in performance. The unit will "retrain" to reduce its power output to maintain the nominal signal level at nearby radio modems. Thus, the power delivered to the antenna might be 50 milliwatts (as an example), with or without the power amplifier.

ANTENNA- To further increase transmitting range, high gain, directional antennas were connected to CB radios. If the same type of antenna were connected to a radio modem, it would result in a "negative improvement". There would be no increase in range, since the radio modem would retrain to produce the nominal signal strength at nearby nodes. More important, the radio modem connected to a directive antenna could miss messages arriving from directions other than the antenna principal gain lobe. By the same token, raising the elevation of the antenna would cause no noticable increase in communication range.

OFF FREQUENCY OPERATION- Illegal out-of-band operation caused sizable headaches for the Commission enforcement personnel. This will never be the case with the PUBLIC DIGITAL RADIO SYSTEM however. There is only one "channel" or band. If, by some means, the frequency of a radio modem were lowered, the data would be destroyed by amateur radio transmissions. If it were raised, video information from TV channel 2 would do the same thing.

#### TECHNICAL SPECIFICATIONS

The "radio modem" (node controller) to be used in the PUBLIC DIGITAL RADIO SERVICE shall meet the following specifications:

FREQUENCY BAND- Equipment authorized to operate in the PUBLIC DIGITAL RADIO SERVICE shall be capable of receiving and transmitting data within the band from 52.0 to 53.999 MHz.



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MODULATION- The data shall frequency modulate the carrier in a frequency shift keyed scheme. Under no circumstances will equipment authorized for use in the PUBLIC DIGITAL RADIO SERVICE have provision for voice modulation or detection.

#### MODULATION AND SPURIOUS PRODUCTS-

The data rate (see Note 1), waveform and signal processing shall be such that all products which fall outside the authorized bandwidth be suppressed by 43 plus 10 log10 (mean output power, in watts) decibels.

POWER OUTPUT- The power delivered by the final amplifier stage into a 72 ohm load shall not exceed 1.0 watts. Further, the radio modem (node controller) shall have an initial powerup "training" mode. Upon powerup, the power output will be 1 milliwatt.

The power will increase during "training" in 3 db. steps until contact is established with nearby radio modems (node controllers). This value is stored in memory and becomes the nominal power output for the radio modem.

ANTENNA- The antenna shall consist of a vertical radiator which does not exceed one-quarter wavelength. The antenna shall exhibit no gain or directional characteristics. The antenna shall be supplied with a nominal length of coaxial cable.

TRANSMITTER IDENTIFICATION- Each radio modem shall have an imbedded identification which is transmitted as part of its packet address. The address will be used to identify the manufacturer, the serial number and the routing code of the equipment.

PACKET CONSTRUCTION- The packet and destination address will be contained in the header. The header will be constructed to limit the number of destination addresses. This is done to specifically preclude the transmission of "junk mail".

REMUNERATION- Users of the PUBLIC DIGITAL RADIO SERVICE shall be specifically prohibited from receiving any form of remuneration or compensation, either in the form of funds, goods or services, for handling data on the PUBLIC DIGITAL RADIO SERVICE

(see Note 2).

TYPE ACCEPTANCE- Type acceptance procedures, similar to those for Citizens Band equipment, will be required. This insures that commercially manufactured equipment used in the PUBLIC DIGITAL RADIO SERVICE meets the specified technical requirements for this service.

NOTE 1- No data rate is given in these proposed specifications. It should be left to industry to determine the data rate. Schemes, unknown to the writer or Commission, may permit higher rates within the authorized bandwidth than conventional theory would dictate.

NOTE 2- The purpose of this provision is to prevent the use of the PUBLIC DIGITAL RADIO SERVICE for the benefit of common carriers.

The restriction should not be construed to preclude the use of the PUBLIC DIGITAL RADIO SERVICE for business applications. For example, the radio modem would be extremely useful within buildings to avoid the need for local area network cabling. It is likely the signals of an office radio LAN would not connect to the external PUBLIC DIGITAL RADIO SERVICE.

The reader might envision that the service would be usurped by the business community. This is not likely, however, due to the self-regulating nature of the PUBLIC DIGITAL RADIO SERVICE. Businesses are used to the near instantaneous response of telephone data communications.

In comparison, the message response of a packet radio network is relatively slow. Only small businesses would find these delays tolerable. These are the same business which can least afford the increase in telephone rates.

There is an analogy in the use of the Citizens Band. Numerous channels are available and the equipment is quite inexpensive. Even so, this band is seldom used for business purposes. There are simply too many disadvantages for the business community.



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## CONCLUSION

In response to this petition, the Commission may point out that there has been no popular "groundswell" to create a computer radio service. Likewise, there was no public interest in the creation of a television service in the 30's. However, in 1932, the Commission recognized the significance of television and allocated two bands for development of this new technology.

By the same token, the Commission recognized the impact that FM radio broadcasting would have on sound reproduction. In 1941 they allocated an eight MHz band to bring high fidelity sounds to the public.

In either case, there was very little awareness that such technologies were possible when the allocations were made.

The creation of a PUBLIC DIGITAL RADIO SERVICE is another instance where the Commission could take the initiative and create a new service in keeping with current technology.

International Regulations- Since the allocation is above 50 MHz, it appears that no international treaties would be involved in making the proposed allocation. Rather, it is likely that other countries would develop a similar service for their citizens.

Amateur Radio Opposition- It is safe to assume there will be sizable opposition to this petition by amateurs. The writer has been a radio amateur for 30 years. During this period, no permanent allocation has been "taken away" from the amateur radio fraternity.

However, there can be no defense by amateurs of the inactivity on 6 meters. A reallocation of the frequencies requested would benefit the majority at virtually no expense to the minority.

Amateur Radio Collaboration- The principal purpose of this petition is to obtain an allocation for a public computer communication band. The writer would not object if this goal could be achieved as part of the Radio Amateur Service. The computer public would accept an administrative fee in return for access to the radio spectrum. However, they would never accept any sort of "testing" to achieve this goal.

The writer would like to thank the Commission for the opportunity to submit this petition. Further, the writer appreciates the consideration this petition will receive by the members of the Commission.

Signed 20 October, 1985

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Donald L. Stoner, W6TNS  
6814 E. Mercer Way  
Mercer Island, Wa. 98040  
(206) 232-6968

The preceding was downloaded via Amateur Packet Radio from the WB6AIE (145.05 MHz) Bulletin Board in Fresno via two 'digipeats'.

de AF6C (TNX, Bob)

\*\*\* LAST



MEETING \*\*\*

Last meeting featured Ken, HHC, of the 'Ken & Bob' show with an excellent presentation on Packet radio. (Tnx, Ken!) Bob, AF6C, was down with the flu!

Common Packet frequencies for our area follows:

145.01 - Common freq. for long haul, lots of bulletin boards; 145.03 - Local & local Bulletin Boards; 145.05 - Secondary freq. for long haul; 145.07 - Local; 145.09 - Overflow for local; 145.36 - L.A. Basin bulletin Boards; 146.745(D 600) - Duplex Packet Repeater, San Fernando Valley; 435.172 - 145.832 - OSCAR 10 AMICON Channel; 441.5 - NBFM Simplex; 10.147 - 30 Mtrs freq, 300 BPS; 14.103 - 20 Mtrs freq, 300 BPS.

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We also enjoyed having Fried Heyn, S.W. Division Director, and XYL, Sandi wid us! And ULU was busy elsewhere. (Elvira, no doubt!) COJ left a call, KB6IEH, Karl Harder, for me to contact abt astronomy interests. It turned out that Karl & I share common RFI problems, & that Karl is a very interesting ragchewer! Hope we can get Karl to attend meetings. And OMs! Karl enjoys CW!! (IBR)...

(Pix of coffee cup compliments of NARC NEWSette)

\*\*\* MINUTES OF OCARC CLUB MEETING - 1/17/86 \*\*\*

- \* THE NEXT NOVICE/TECHNICIAN CLASS IS SCHEDULED TO BEGIN ON 1/25/86 IN THE CITY SHOPPING MALL. THE CLUB NEEDS ADDITIONAL INSTRUCTORS. CONTACT AL WATTS/W6IBR OR FRANK SMITH/WA6VKZ FOR FURTHER INFO.
- \* THE JANUARY PROGRAM WAS PRESENTED BY JIM TALCOTT/N6JSV AND CHRIS BRELLER/KA6IMP ON THE MORSE CODE AND RTTY EQUIPMENT MADE BY MICROLOG. THE AIR-1 SELLS FOR \$189 AND OPERATES WITH THE VIC-64 COMPUTER (WHICH SELLS FOR \$99). A VERSION OF THE AIR-1 WHICH PROVIDES AMATOR CAPABILITIES SELLS FOR AN ADDITIONAL \$100.
- \* THE NEW EDITOR FOR THE CLUB PAPER, BOB EVANS/WB6IXN, ASKED THAT ALL COPIES OF NEWSLETTERS FROM VARIOUS CLUBS BE TURNED OVER TO HIM.
- \* OCARC PRESIDENT, FRANK/WA6VKZ, ANNOUNCED THAT THE NEXT BOARD MEETING WOULD BE HELD AT JANE WATTS QTH ON FEB 2.
- \* ALEX/W6RE READ RECENT ARRL BULLETINS.
- \* THE ATTENDANCE AT THE MEETING WAS 27.

SUBMITTED BY  
KEN/W6HHC  
SECRETARY OCARC

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VISITORS LOG - 1/17/86

* JOHN ROBERTS	WA6LAB,	SANTA ANA
* KEVIN KENT	KB6IND,	GARDEN GROVE
* DAVE HOLLANDER	W6COJ,	SANTA ANA
* WILL GALUSHA	WB6GDZ,	WESTMINSTER



Welcome to the hams from all over the world who will be joining us in San Diego. We are making this "Early Bird" offer to get you to mark your calendar now for a great vacation in Southern California this fall!  
Walt Hicks, W6UZL, General Chairman

# 1986 ARRL NATIONAL CONVENTION!



## HIGHLIGHTS

- ARRL, MARS, FCC Forums
- Technical Sessions
- Special Youth Activity
- Public Service Sessions
- VEC License Exams
- Banquet - W0ORE & K6DUE
- Ladies Luncheon - W6NAZ
- Alternative Activities
- Old Town & Tijuana Tours
- New Products & Exhibits
- Freq & Deviation Clinic
- Antenna Gain Contest
- World Class "T" Hunt
- Spark Gap Radio Demo
- Hospitality Suites
- Hourly Prizes

## YOUTH FORUM

Lead by W0ORE, Astronaut Tony England. Experts will expose teenagers to the latest in ham radio "high tech" with hands-on demos.

## DINNER DANCE CRUISE

Friday Evening - Romantic boat tour of San Diego bay, open bar, dinner, dancing.

## CONVENTION SCHEDULE

### Friday September 5

1500 Exhibits Open  
1830 Dinner Dance Cruise  
2100 Exhibits Close

### Saturday September 6

0800 Special Interest Group Breakfasts  
0900 Exhibits Open  
0900 Tech Sessions & Forums Start  
1130 Ladies Luncheon  
1300 Old Town & Tijuana Shopping Tours  
1300 W0ORE Youth Forum  
1600 ARRL FORUM  
1700 Exhibits Close  
1830 Social Hour  
1930 Banquet  
Midnight Wouff Hong

### Sunday September 7

0800 Special Interest Group Breakfasts  
0900 Exhibits Open  
0900 Tech Sessions & Forums Start  
1300 "T" Hunt Starts  
1300 Convention Closes

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TR-2600A

## EARLY BIRD PRIZES

**YAESU AND KENWOOD**  
ARE DONATING TOP-OF-THE-LINE RADIOS

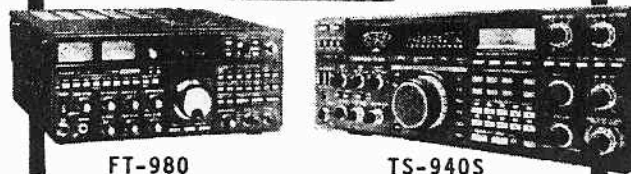
## ADVANCE REGISTRATION PRIZES



FT-2700

TR-2570

## GRAND PRIZES



FT-980

TS-940S

## ARRL 1986 NATIONAL CONVENTION September 5, 6, & 7, 1986 REGISTRATION DATA FORM (Print or Type)

Name \_\_\_\_\_ Call \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Make Badges As Follows:

Call \_\_\_\_\_ Name \_\_\_\_\_ City \_\_\_\_\_  
Call \_\_\_\_\_ Name \_\_\_\_\_ City \_\_\_\_\_

Pick up Tickets and Badges at the Door.

To Reserve a Room at the Convention Site, Call T & C Hotel and ask for ARRL rates. Toll Free: California (800) 542-6082, USA (800) 854-2608  
CONVENTION INFO: (619) 292-7918

## MEETING SITE TOWN & COUNTRY CONVENTION CENTER SAN DIEGO, CALIFORNIA

How Many	Cost	Amount
_____ Advance Registrations	@ 7.00	_____
_____ Registration After 8/15/86	@ 10.00	_____
_____ Banquet (Prime Rib)	@ 25.00	_____
_____ Ladies Lunch (1st 100)	@ 10.00	_____
_____ Dinner Cruise (1st 100)	@ 33.00	_____
Total Enclosed		\$ _____

18 Years & Under No Charge For Admission At Door

Postmark Before April 15, 1986 is Eligible For ALL PRIZES!!!!!! Mail With Check Payable To: SANDARC, P.O. Box 82642, San Diego, CA 92138

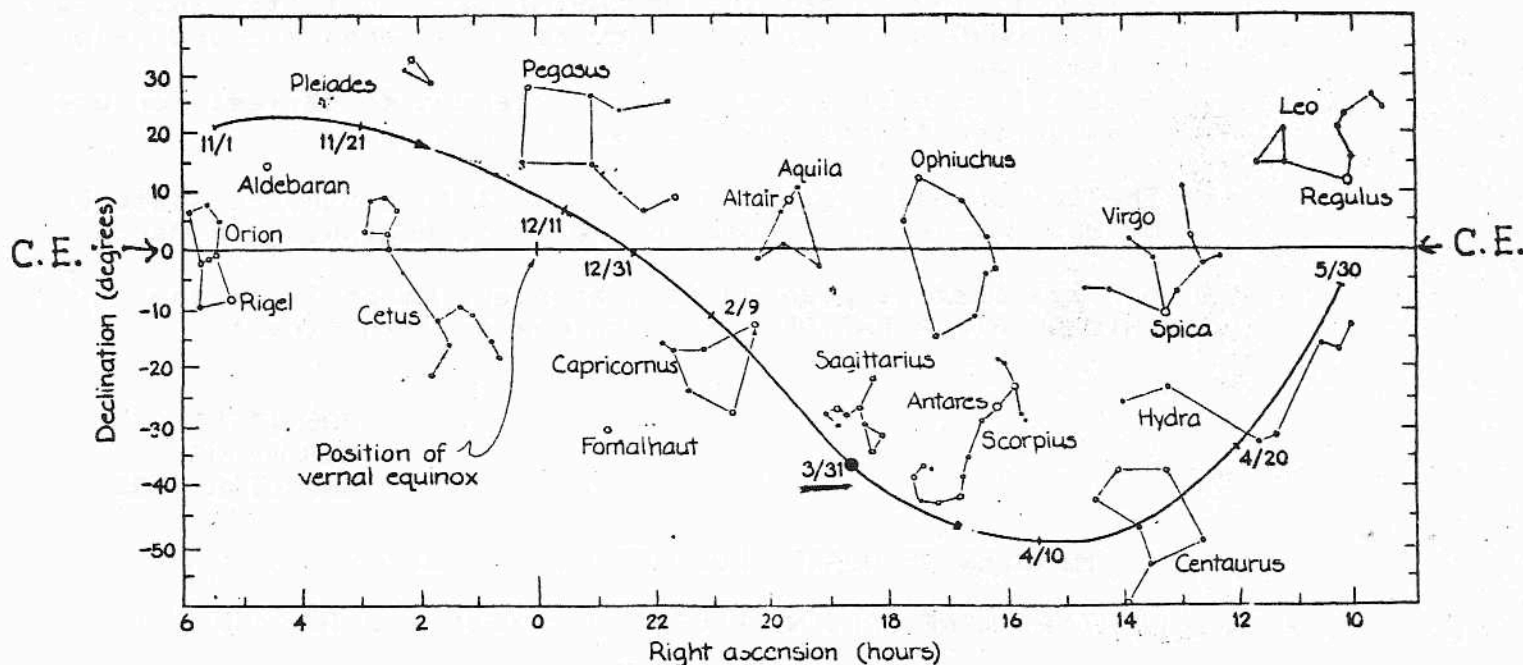


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\*\*\* COMETS.....COMETS.....COMETS \*\*\*

This month, Halley's comet moves from Capricorn, the Sea Goat, into Sagittarius, the Archer (or teapot, if you prefer a star picture that you can see!). The Comet will lie just south of the 'spout' of the teapot on Mar. 31, at about  $-37^{\circ}$  below the Celestial Equator (see map). The tail rises followed by the head of the Comet. Remember! All comet tails ALWAYS point AWAY from the sun!! Binoculars are recommended.

In the L.A. Basin, the last week in March, Sagittarius will be above the southeastern horizon by 3:30 AM, and just East of South by 5:00 AM, giving an 'early bird' just a little over 2 hours for viewing. In our area, the Celestial Equator is approximately  $57^{\circ}$  above the southern horizon, therefore, the Comet will be  $57^{\circ} - 37^{\circ}$ , or  $20^{\circ}$  approximately, above the southern horizon as it passes over the South point. Remember! An unobstructed view of the southeast and southern horizons is essential for success....then say a little prayer for no low clouds or fog....and good luck!!



*The comet among the constellations*

\*\*\* ON THE NETS \*\*\*

On 2/9 and 2/12, there were no check-ins respectively for either the 21.175 CW net or the 21.375 phone net; likewise for the CW net on 2/16. On 2/19, AF6C, net control, W6NGO, and IXN, spent time on 21.375 discussing Bob's trip to merry old England. WA6FFV, Al, from the San Francisco Bay area, reported into net. On 2/23, IBR "flu-ed" into net along with Karl, KB6IEH, and IND, Kevin. And 21.175 was unlucky for IXN, acting net control. His neighbor called to report and RFI problem on his audio equipment! IBR said that Novice/Tech classes should start in mid-March. VKZ, LJA, & IBR will be instructors...more abt this after next Board meeting! On 2/26, Net Control, AF6C, reported no check-ins on the 21.375 net.

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## MINUTES OF OCARC BOARD MEETING - 2/2/86

- \* The NOVICE Class needs a committee.  
The NOVICE class needs a chalk board. The OCARC board set a \$50 limit on the cost of a Chalk Board.  
The NOVICE Class needs three copies of ARRL class material for the instructors. Finally, the NOVICE is looking for donations of "straight keys" for use by the new class.
- \* The OCARC board authorized the payment of \$3 to re-new our membership in the Orange County Council Of Amateur Radio Organizations (OCCARO).
- \* The Mercury Savings & Loan advised us that OCARC will owe \$150 for re-keying of the building if we don't return the key that was borrowed for the October meeting.  
( Editor's note: the key was found!!)
- \* Frank/WA6VKZ reviewed the following plans for FIELD DAY:
  - we will operate 3 bands plus novice this year.
  - we will try to get the USMCAS(H) base in Tustin this year.
  - the BOARD will appoint a novice-interference-coordinator this year.
  - we will see if a mast can be extended to 60-feet for use as a directional 40-meter array this year.
- \* The editor has suggested including auto-biography sketches of Board members for use in the "RF", beginning in March.
- \* A Pizza bust is planned for Saturday, March 22 at the CHICAGO PIZZA FACTORY in Santa Ana on 17th Street.

SUBMITTED BY  
KEN/W6HHC  
SECRETARY, OCARC

## MINUTES OF OCARC CLUB MEETING - 2/21/86

- \* ALL OFFICERS WERE PRESENT EXCEPT: Bob/AF6C and John/KB6EZU.
- \* The Treasurer reported that the club had \$812 in the checking account and \$653 in the Savings account.
- \* Joe Partlow/KB6FZU agreed to be chairman of the NOVICE/TECHNICIAN CLASS and act as chief co-ordinator. The following members offered to be part-time instructors for the classes:
  - JIM TOWNSEND - NS6W                      - FRANK SMITH - WA6VKZ
  - TED GLICK - K6LJA                        - AL WATTS - W6IBR
- \* Jim Townsend/NS6W was elected as the new MEMBERSHIP CHAIRMAN for the club to replace John/KB6EZU who has been transferred out of the area.
- \* Ken Konechy/W6HHC presented this months program on PACKET RADIO. Ken's talk compared the capabilities of PACKET with morse code and RTTY and explained the many uses of BULLETIN BOARD SERVICE STATIONS.



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- \* The president, Frank/WA6VKZ, commented on the fine job that our new editor of "RF", BOB EVANS/WB6IXN, was doing.
- \* The ARRL Director, Fried Heyn/WA6WZ0, announced that he can obtain lists of new license-holders from the ARRL, and that the next ARRL convention will be held in San Diego on Sept 5-7. (Call 619-292-7918 for more info.)
- \* Attendance at the meeting was 23.

SUBMITTED BY  
KEN/W6HHC  
SECRETARY, OCARC

## *Ten Commandments*

### *for Technicians*

- |   |  |
|---|--|
| I. Beware the lightning that lurketh in the undischarged capacitor, lest it cause thee to bounce upon thy buttocks in a most un-technician-like manner.   | VI. Take care that thou tampereth not with safety devices and interlocks, for this incurreth the wrath of thy supervisor and bringeth the fury of thy safety inspector upon thy head and shoulders.  |
| II. Cause thou the switch that supplieth large quantities of juice to be opened and thusly tagged, that thy days in this veil of tears may be long.   | VII. Service thou not equipment for electrical cooking. It is a slothful process and thou might sizzle in thine own fat for hours upon a hot circuit before thy Maker sees fit to end thy misery.  |
| III. Prove to thyself that all circuits that radiateth and upon which thou worketh are grounded and thusly tagged lest they lift thee to radio frequency potential and causeth thee also to make like a radiator.   | VIII. Work thou not on energized equipment, for if thou dost, thy fellow workers will surely buy beers for thy widow and console her in other ways.  |
| IV. Tarry not amongst those fools who engageth in intentional shocks for they are surely nonbelievers and are not long for this world.  | IX. Trifle thou not with radioactive tubes and substances lest thou commence to glow in the dark like a lightning bug and thy wife have no further use for thee except thy wages.  |
| V. Take care that thou useth the proper method when thou takest the measure of a high-voltage circuit lest thou incinerate both thyself and thy meter, for verily, though thou hast no account number and can easily be surveyed, the test meter doth have one, and as a consequence, bringeth much woe unto the supply department. | X. Thou shalt not make unauthorized modifications to equipment, but causeth thou to be recorded all field changes and authorized modifications made by thee, lest thy successor tear his hair and go slowly mad in his attempt to decide what manner of creature hath made a nest in the wiring of such equipment. |

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\*\*\* THE PREZ SEZ \*\*\*

No doubt you have heard about the Southern California Six Meter Club! The Club was formed last summer in response to a 'CB' petition to the FCC for CB use of six meters! Thus far, the FCC has not made a decision on this proposal. And in December, 1985, Don Stoner, W6TNS, petitioned the FCC for the creation of a Computer Hobbyist's Radio Service...guess where?!...52 - 54 MCS. Rest assured that the Southern California Six Meter Club will be monitoring all developments, and your help would be greatly appreciated!

The Southern California Six Meter Club meets quarterly in Long Beach and weekly on Tuesdays at 8:00 pm on 50.150Mcs, SSB (horizontal polarization) and on Thursdays at 8:00 pm on 52.28/88 FM (vertical polarization) on the Castro Peak machine.

If anyone wishes to help, please call me at 492-7215 after 6:00 pm.

PS: Or see me at meeting, too!

TNX...Frank, VKZ



Ontime Charley says  
Deadline next "RF": Apr. 4!

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ORANGE COUNTY AMATEUR RADIO CLUB

P. O. BOX 1704

ORANGE, CA. 92668

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