



RF



ORANGE COUNTY AMATEUR RADIO CLUB

VOL. XVIII, NO. 1

P.O. BOX 95, ORANGE, CALIF. 92668

JANUARY 1977

FCC FREQUENCY ALLOCATIONS

The FCC frequency allocation proposal to be submitted to the 1979 World Administrative Radio Conference are as follows:

- 1600 Meters: 160-190 KHZ (new, exclusive)
- 160 Meters: 1750-1800 KHZ (new, shared)
1800-1900 KHZ (exclusive)
1900-2000 KHZ lost
- 80 Meters: 3500-3900 KHZ (exclusive)
2900-4000 KHZ (shared)
- 40 Meters: 6950-7000 KHZ (new, exclusive)
7000-7100 KHZ (exclusive)
7100-7300 KHZ (shared)
- 20 Meters: 13950-14000 KHZ (new, exclusive)
14000-14350 KHZ (exclusive)
14350-14400 KHZ (new, exclusive)
- 15 Meters: 20700-21000 KHZ (new, exclusive)
21000-21200 KHZ (exclusive)
21200-21450 KHZ lost
- 10 Meters: 28000-29700 KHZ (exclusive, no change)
- 6 Meters: No change
- 2 Meters: No change
- 1 $\frac{1}{4}$ Meters: 220-225 MHZ (shared with radio location and
land mobile--read that Class E CB!)
- 3/4 Meter: 420-450 MHZ (shared, with some change in priority)
- 3/8 Meter: 902-928 MHZ (new, shared)
935-938 MHZ (new, exclusive)

Above 1 GHZ - about the same as present. Comments may be filed with the FCC through January 31, 1977. And please note that the FCC has reduced the number of copies it requires to be filed in commission rulemaking procedures from 12 to 6 (an original and 5 copies) in an action announced November 9.

TNX to the Common Ground and
the So. Calif. DX Club.

-- 1977 CLUB OFFICERS --

PRESIDENT	FRIED HEYN	WA6WZO	549-8516
VICE PRESIDENT	JIM KINGSBURY	WA6LFF	531-8717
TREASURER	TED GLICK	K6LJA	542-1390
SECRETARY	KEN KONECHY	W6HHC	541-6249
ACTIVITIES	BOB ECKWEILER	WB6QNU	639-5074
PUBLICITY	BOB MILES	WA6LLW	839-9154
T.V.I.	FRANK GREGG	WB6KJS	968-1450
M.A.L.	KEI YAMACHIKA	W6NGO	538-8942
	MARTIN RAYMOND	WB6PEX	532-4090

TEENAGE REPRESENTATIVE	DREW MEEKS	WA6MMG	636-3670
INFORMATION ON HAM RADIO CLASSES	NATE HOOKER	WA6MPI	545-1298

EDITOR	BOB MALLER	WB6AJV	832-6170
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- Meeting: Third Friday of each month at Mercury Savings and Loan, 1095 Irvine Blvd., Tustin, CA at 7:30 pm.
- Nets: Wednesday, 7:00 pm. 21.175 MHz CW, and 8:00 pm. 21.375 MHz SSB. All stations are welcome to check in.
- Breakfast: First Saturday of each month, 8:30 am. at Barnabys Coffee Shop, 144 So. Tustin Ave., Orange, CA.

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CALLBOOK SERVICE

The club has copies of the latest U.S. and foreign callbooks which are available at the meeting. Also you can contact Bob Eckweiler - WB6QNU at home (639-5074) most any week night between 7:00 pm. and 9:00 pm. if you need addresses. If you have more than one call for Bob to check, he'll get them for you and call you back the same night. Also, you can usually catch Bob on the air during and after the Wednesday evening club net.

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THIS MONTH'S MEETING

Exciting communications possibilities are afforded through the use of amateur satellites. They function much in the same way as terrestrial repeaters, to relay signals over greater distances than normally feasible. With satellites, the area is usually international in scope. Thus, DX communication on frequencies unable to support ionospheric propagation is possible.

Our guest speaker is Bud Schultz - W6CG who is A.M.S.A.T. coordinator for the Western United States. He will present a program on how you can use the OSCAR 6 and OSCAR 7 satellites. This will not be an overly technical program but you will gain the knowledge you need to make use of this unique feature of Amateur Radio.

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THE PREZ SEZ:

I want to wish everyone a Happy New Year! I hope the club will continue in this year to grow in quantity and quality. With your support I know it can be done.

I hope all of you will feel free to call me at any time. We hope to be of help to you as individuals as well as a group, and as well as promoting Ham Radio in general. All ideas and offers of help are greatly appreciated.

The dues this year are again \$8.00 - envelopes have been enclosed to past members for their convenience. Additional family members and those younger than 20 years of age pay only \$3.00. This money is used to help publish and mail our monthly newsletter, buy donuts, coffee and raffle prizes for our meetings and support field day and the Christmas party. We are looking forward to your companionship and support in the coming year.

Very "73's"

Fried, WA6WZO

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OCARC SUMMARY OF 1976 FINANCES

Receipts

Dues	\$ 505.00
Donuts	4.40
Raffle	505.00
Badges	23.50
Insignia	4.00
Auction: Registration fees	21.00
Sales	675.75
Christmas Dinner	47.48
Return of Field Day advance	21.12
Sale of donated tube tester	10.00
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	1817.25

Expenditures

Coffee and donuts	\$ 113.43
Henry Radio, door prizes	395.62
Postage and Post Office Box (\$8.00)	120.51
Field Day	124.68
Liability Insurance	55.00
Proceeds of auction to sellers	560.59
Badges	10.60
Novice code class	30.00
Flowers	22.26
Christmas Dinner	179.36
Miscellaneous	7.26
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	1619.31

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STRANGE NEW CALLS

Two letter N prefix calls are now being issued by the FCC. Calls like N6AA and N6MM are being issued. Also W6X- and K6X- calls are being assigned by the FCC. About 20 W6 and K6 calls are still available.

SANDI'S CORNER

I would like to thank Martin - WB6PEX for the great job he has done as president this past year. I would like to thank everyone that helped make the annual Christmas party a high success. We had a suprise visit from "Santa" (W6POR) and the children were just delighted. I would like to also thank Irene Gregg for playing the piano and Gracie Raymond for collecting the money.

Ozzie - WB6PEW and Tom - WA6VNE have both been in the hospital for a short time and are home recovering. Hope you both are feeling better and will be looking for you both on the club nets.

Terry - WB6IHZ got his antenna up and has a fantastic signal; Terry wants to thank Kei - W6NGO, Frank - WB6KJS, Fried - WA6WZO, Jay - WA6MOK, and Ernie - WA6FOW for all their help. Anyone else need help?????

Congratulations to Melanie - WB6SVN, who just got her novice call. Her OM is Richard - WB6SDH.

Wayne - K6RQD has a new theory for DX: "Go outside and look at the stars; if they are bright, then the DX will be good."

Thanks go to Lloyd - WB6ULU and Don - W6OOH for substituting for Ken - W6HHC as net control.

Congratulations to Jay - WA6MOK; the first contest (VE/W) he entered he took first place. Nice going Jay! (Details are in the December issue of "QST"; '76)

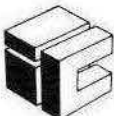
I would like to welcome Eric - WB6MGV, Mike - WA6JAH, Frank - W6LPU, and Monte - WB6ADF to the club net for the first time and hope they check in often. Hope to meet you all at the January meeting.

We have a new source for badges--Bob Miles - WA6LLW will be taking orders. There will be a special BONUS for the person who shakes Mr. RF's hand and is also wearing their club badge.

If I miss seeing you in Las Vegas, I will see you all at the January meeting (same time and place as last year) and learn all about "OSCAR 7" by Bud Schultz - W6CG.

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Some or all of the prizes at the meetings are provided through the courtesy of the stores listed below. Your patronage is encouraged to maintain their generosity.



(714) 997-5343

GREG ELMASSIAN

J.C. ELECTRONIC SUPPLY

STATE OF THE ART FOR: R&D - INDUSTRY - EXPERIMENTER
619 W. KATELLA AVE., ORANGE, CALIFORNIA 92667

931 North Euclid Avenue, Anaheim, California 92801

Walt Henry, Sr. W6ZN
931 N. Euclid Ave.
Anaheim, California 92801
(714) 772-9200 / (213) 430-7997

Henry Radio

714/772-9200 - 213/430-7997

AMATEUR RADIO - THE MOST THRILLING HOBBY IN THE WORLD

IMAGINE yourself tuning in mysterious-sounding signals coming over the North Pole from India or from Soviet Central Asia, on Amateur shortwave frequencies, and then TALKING to those stations with your own transmitter! Or talking with stations in South Africa or Singapore or Germany or Peru or Samoa--or anywhere in the world!

IMAGINE yourself providing emergency communications for Civil Defense or other public-safety agencies, with total reliability on very high frequencies, using your own equipment!

IMAGINE yourself experimenting with new transmitter circuits, building frequency converters or electronic keyers or radio-teletype terminal units or hundreds of other projects, or trying out various antenna configurations! You don't have to be an electronics engineer to do all this. It's easy, simply by following the instructions in articles appearing each month in Amateur Radio publications, or with help from other Amateurs!

ALL THIS IS YOURS, simply by obtaining an Amateur Radio license! But don't confuse Amateur Radio with citizens band radio (CB). The Federal Communications Commission (FCC) did not establish CB for hobby purposes, but rather intends it to be used for short-distance, short-duration personal or business communications. The FCC defines the Amateur Radio Service as "a radio communication service of self-training, intercommunication, and technical investigation carried on by Amateur Radio Operators." The FCC recognizes the value of the Amateur Service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications. Amateurs have proven their ability to contribute to the advancement of the radio art, and have developed skills in both the communication and technical phases of the art. The Amateur Radio Service has always provided a reservoir of trained operators, technicians, and electronics experts. (For example, thousands of elementary and high-school students have acquired Amateur Radio licenses, and hence became so fascinated with the knowledge of radio-technology which their hobby gave them that they decided to pursue further education and eventually a career in radio electronics.)

AMATEUR RADIO OPPORTUNITIES

versus CB LIMITATIONS

- * 1000 watts
- * 21 frequency bands (no channel restrictions)
- * No distance limitations (talk world wide)
- * 12 modes of transmission (such as AM, FM, CW, TV, radioteletype, pulse, facsimile, etc.)
- * No age limit
- * No transmitting time limit
- * Build, buy, or modify your equipment

- * 5 watts
- * One band (channelized)
- * Limited to local communications
- * One mode
- * Must be 18 years old to hold license
- * Talk for only 5 minutes
- * Buy only (must be FCC type-accepted)

AMATEUR RADIO - THE MOST THRILLING HOBBY IN THE WORLD (cont'd)

AMATEUR RADIO OPPORTUNITIES versus CB LIMITATIONS

- * No FCC antenna limitations
- * Awards (such as Worked All States, DXCC--worked 100 countries, Worked All Continents, and hundreds of others)
- * Contests (Field Day, DX, Sweepstakes, and many more)
- * Much room to operate, on 21 frequency bands, without channel limitations
- * Good selection of many types of equipment, at moderate cost
- * Thrilling contacts worldwide or locally with your friends with no interference from noise or other stations--all with the same interests in the exciting radio-electronics hobby that you have
- * Maximum of 20 feet (directional) or 60 feet (omni-directional)
- * No awards to work for
- * No contests allowed
- * Crowded channels on only one band
- * Low-power/single-band primitive transceivers for rip-off prices
- * Boring, noisy, unreliable contacts with people who have little or no interest in radio-electronics

AS AN AMATEUR RADIO OPERATOR you can operate anywhere (no channel restrictions) on any of 21 frequency bands, choosing the band that propagates your signal to the area you desire--locally or far away--and you can run as much as 1000 watts input! The most popular Amateur bands are:

- 1.8-2.0 MHz (160 meters)
- 3.5-4.0 MHz (80/75 meters)
- 7.0-7.3 MHz (40 meters)
- 14.0-14.35 MHz (20 meters)
- 21.0-21.45 MHz (15 meters)
- 28.0-29.7 MHz (10 meters)
- 50.0-54.0 MHz (6 meters)
- 144.0-148.0 MHz (2 meters)
- 220.0-225.0 MHz (1 1/2 meters)
- 420.0-450.0 MHz (3/4 meter)

and eleven more bands, up into microwave and millimeter-wave frequencies, mostly for experimental activities.

AMATEURS CAN TRANSMIT 12 MODES OF EMISSION, whereas CBers can only use one mode--AM (amplitude modulation) telephony, including "single sideband". In addition to AM telephony (and SSB), Amateurs can transmit CW (International Morse code), radio-teletype, FM (frequency modulation), facsimile, television, pulse, and several other modes.

FOR APPROXIMATELY the same cost as the average CB transceiver, which operates on only one small channelized frequency band (26.965-27.255 MHz on 11 meters) with a maximum input power of only 5 watts, you can be communication with your friends locally, across the nation, or around the world, with an Amateur Radio transmitter/receiver covering at least five shortwave bands, running several times more power!

AMATEUR RADIO - THE MOST THRILLING HOBBY IN THE WORLD (cont'd)

CB IS TOO RESTRICTIVE to be very much fun as a hobby. The FCC says you can only talk to local stations (within 150 miles). Also, the FCC limits communications to a maxium of five consecutive minutes between CB stations. Amateur stations can communicate as far as they want to, as long as they desire, and talk about anything (except business). With their greater number of frequency bands, more power, and more modes of transmission, they have more fun.

ANYBODY, man, woman, boy, or girl, of ANY AGE, can be an Amateur Radio Operator. Almost 300,000 Amateurs in the United States are presently licensed, and are involved in one or more of the following activities:

DX CHASING--trying to "work" as many different countries as possible.

FOX HUNTS--locating hidden transmitters with direction-finding equipment.

TRAFFIC HANDLING--providing phone patches and other non-commercial messages for the public.

EMERGENCY COMMUNICATIONS--using mobile, portable, and base equipment during Civil Defense drills and actual emergency conditions, as a public service.

CONTESTS--earning awards for working as many stations in as many areas as possible, within a given time; awards are also available for working all states, working all continents; working 100 countries, and other achievements.

EXPERIMENTING AND BUILDING--construction of "home-brew" equipment and antennas.

SATELLITE COMMUNICATIONS--working through Amateur communications satellites, and two are presently in orbit.

REPEATERS--operating through VHF and UHF FM repeaters, which automatically relay signals for greater coverage area.

"EXOTIC" MODES OF TRANSMISSION--transmitting radioteletype, slow-scan TV, fast-scan TV, pulse, facsimile, etc.

RADIO CLUBS AND HAMFESTS--getting together with other Amateurs and sharing information, trading equipment, and other activities.

These are just a few of the many exciting activities provided in Amateur Radio. So don't waste another minute! Start working on acquiring your ham license as soon as possible. You will soon agree that Amateur Radio is certainly the most thrilling hobby in the world.

SURE, there's a code theory test to pass in order to get a ham license. But if a five-year-old kid (there is no age limitation to hold an Amateur Radio license) can pass a Novice Class code exam (5 words per minute), so can you. It's easier than learning how to type (just practice with a code record or cassette tape for a couple of weeks, and you have it made). The written exam is a snap. All you need is a desire to understand a little bit about your hobby of radio communications--which makes it more

AMATEUR RADIO - THE MOST THRILLING HOBBY IN THE WORLD (cont'd)

enjoyable. If you don't have that desire, you aren't accomplishing anything with your hobby and are wasting your time, as well as wasting valuable frequency spectrum. That's why the FCC provides much more frequency spectrum to the Amateur Radio Service than to CB--because Amateurs enjoy the use of that spectrum for very important experimentation, self-education, emergency communications, and overall advancement in radio technology--which benefits everyone. Wouldn't you like to be involved in such an exciting and important hobby and service?

THE FIRST STEP toward becoming a ham should be to acquire a receiver (you can save money with used equipment available at hamfests and Amateur equipment dealers). We suggest looking for frequency stability, a BFO and "product detector" (for clear SSB reception), coverage of the 80, 40, 20, 15, and 10-meter Amateur bands, and an easy-to-read dial. Then listen to the Amateurs and you will learn how they operate--and be thrilled by what you hear! Also, listen to some Amateur code transmissions (while looking at a code chart), and build up your code speed.

GET THE GATEWAY TO AMATEUR RADIO, which consists of four books--How to Become a Radio Amateur, Operating an Amateur Radio Station, The Radio Amateur's License Manual, and Learning the Radiotelegraph Code. The "Gateway" is available for \$4.00 from the American Radio Relay League, Newington, Connecticut 06111. They also sell The Radio Amateur's Handbook (\$6.00), Understanding Amateur Radio (\$4.00), A Course in Radio Fundamentals (\$3.00), and QST--a monthly publication covering all aspects of Amateur Radio, for \$9.00 per year, including ARRL membership. Other Amateur publications include Ham Radio (\$10 per year from Communications Technology, Inc., Greenville, New Hampshire 03048), CQ (\$7.50 per year from Cowan Publishing Corp., 14 Vanderverter Avenue, Port Washington, L.I., New York 11050), 73 (\$10 per year from 73, Inc., Peterborough, New Hampshire 03458), and World-radio News (\$5.50 per year from Worldradio Associates, 2120 28th Street, Sacramento, California 95818). Many other excellent books on Amateur Radio are also available, such as From 5 watts to 1,000 watts, a programmed course available from Radio Shack. Howard Sams and Tab Books also provide a good assortment of books on obtaining an Amateur Radio license. A code course (record or cassette tape) should also be purchased, and it only takes a couple of weeks to become proficient with the code. After you have acquired the necessary books and code records or tapes, set a date for taking the exam--and take it whether you are ready or not. If you fail the exam, you can take it again as often as you want (with 30-day intervals), and there is no fee for a Novice Class application.

ATTEND AMATEUR RADIO CLUB MEETINGS, such as the Orange County Amateur Radio Club. We meet at 7:30 p.m. every third Friday of each month. We will help you get a ham license (and we teach free code and theory classes). For more information on meetings, classes, and how to become an Amateur Radio Operator, attend our January 21st meeting at Mercury Savings and Loan, 1095 Irving Blvd., Tustin, CA., or write the Orange County Amateur Radio Club, P.O. Box 95, Orange, CA 92668.

TNX to the Wheaton Community Radio
Amateurs, Wheaton, Illinois

NOTES ON THE DECEMBER CHRISTMAS PARTY

The 1976 Christmas party was held on December 19 at the Cross-roads Resturant in Fountain Valley. The turnout was the best ever. A total of 53 adults and 25 children were there to enjoy the fine food. Henry Borman - W6POR did a fine job as Santa Claus to distribute gifts to all of the children. There was an adult gift exchange as well as door prizes. Special thanks to Henry Radio, CBCS Electronics in Westminster, and IC electronics for their generous donations for the door prizes. Fried Heyn - WA6WZO received the president's gavel from Martin. Martin Raymond - WB6PEX received a plaque from Ken - W6HHC for his fine service as president in 1976.

Special thanks to Fried - WA6WZO and Sandy - WA6WZN for their outstanding efforts to organize and run the Christmas party. They certainly did a fine job.

Ken - W6HHC
Secretary

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MINUTES OF JANUARY 2, 1977 BOARD MEETING

A board of directors meeting was held on Jan. 2, 1977 at 7:00 pm. at the QTH of Fried - WA6WZO. The following people were in attendance:

- * W6NGO, WB6KJS, WA6MOK, WA6WZO, WA6WZN, WA6LLW, WA6LFF, W6HHC, WB6IHZ, WA6MME, WA6PEX, WA6MPI, and K6LJA.
- * The 1976 treasurers book was turned over by Frank - WB6KJS to Jay - WA6MOK and Sandi - WA6WZN for inspection. The book was inspected and found to be in order and accurate and turned over to Ted - K6LJA, the treasurer for 1977.
- * Fried - WA6WZO reported that he had applied for club membership in the L.A. Area Council of Amateur Radio Clubs (LAACARC).
- * Fried - WA6WZO reported that he had contacted Rick - WA6OBM concerning re-vitalization of the Orange County Council of Amateur Radio Clubs (OCCARC). Fried and Ken - W6HHC would both attend the first meeting on January 26, 1977.
- * Fried - WA6WZO reported that he had received 1000 names of ARRL members who live in the OCARC area. The board decided to mail complimentary copies of the RF to 100 names in January and 100 more in February.
- * Ken - W6HHC outlined the following publishing requirements for the January issue of RF: Members - 80, November visitors - 20, ARRL names - 100, Novice class - 25, Henry Radio - 30, IC Electronics - 25, CBCS Electronics - 25, Meeting handouts - 20, for a grand total of 325 copies.
- * Bob - WA6LLW reported that he had confirmed a new source for club badges. The new manufacturer is ROCHAR ENTERPRISES (213-866-0773) located in Bellflower, CA. The new cost (and selling price) of club badges will be \$2.50. Bob made a motion, which was approved, to give an extra dollars worth of raffle tickets to a "Mr. RF winner" if he was wearing an OCARC badge.

Secretary, Ken - W6HHC

FOR SALE CORNER . . .

MAKE A BID FOR AN ELEVEN METER GROUND PLANE

Through the generosity of Pat - W6PKZ, the OCARC is currently accepting bids on an eleven meter full size ground plane antenna. This antenna is in good shape and can easily be modified for 10 - meter or 2- meter operation. The minimum bid is \$15 and all bids must be received by February 20, 1977. Please phone Kei - W6NGO (538-8942) with your bid.

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Heathkit tunnel dipper grid dip meter. Model HM-10A \$25.00. Contact Bob Eckweiler - WB6QNU (714-639-5074)

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Wanted: A VFO, Heath HG-10, Heath VF-1, Johnson 122 or Eico. Contact Don Klos - W600H (714-832-9682)

ORANGE COUNTY AMATEUR RADIO CLUB, INC.
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FIRST CLASS MAIL !!!
DATED MATERIAL !!!