



# R F



ORANGE COUNTY AMATEUR RADIO CLUB

VOL. XXVII No. 11 P. O. BOX 3454, TUSTIN, CA, 92681 November 1986



NOVEMBER

MEETING

# ELECTIONS!

Christmas Dinner



SURPRISE

PROGRAM!!??

COME

AND

SEE!!

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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
Treasurer	Jeanie Talcott	KB6EZS	838-5395
Activities Chairman	Kei Yamachika	W6NGO	538-8942
Membership Chairman	Jim Townsend	NS6W	551-5339
Public Relations O. T.V.I. Chairman	Mac MacInnes Al Watts	W6MIL W6IBR	594-0442 531-6245
Member At Large	Joe Partlow	KB6FZV	542-3122
Member At Large	Bob Eckweiler	AF6C	639-5074

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**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  
 Nov 21st (ELECTIONS) 1095 Irvine Blvd. (4th St becomes Irvine)  
 Tustin, Ca. Talk-in on 146.55 MHz  
 Dec (see inside)  
 Jan 16th 1987 (Take the 4th St. exit to the 55 FREEWAY  
 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  
 Dec 6th 17231 17th Street  
 Tustin, Ca. (714) 544-5522  
 Jan 3rd 1987 (55 FREEWAY at 17th Street east.)

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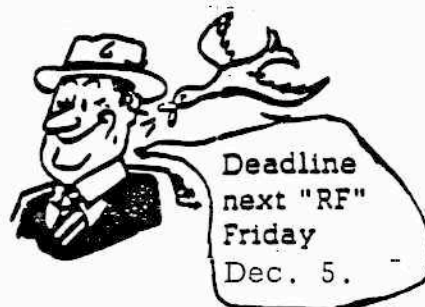
**CLUB NETS**

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)

MINUTES OF OQARC BOARD MEETING -11/02/86

- \* BOB/AF6C, TRUSTEE OF THE W6ZE LICENSE, IS LOOKING FOR A 2-MTR NET CONTROL STATION OF THE WEDNESDAY NIGHT NETS. AL/W6IBR WILL BE MOVING TO THE SUNNYMEADE AREA IN DECEMBER.
- \* KEN/W6HHC VOLUNTEERED TO PUBLISH THE CLUB NEWSPAPER FOR NOVEMBER.
- \* THE OQARC BOARD REMINDS MEMBERS THAT ARRL RENEWALS THAT ARE ROUTED THRU THE CLUB PUT AN EXTRA 5# IN OUR TREASURY. CONTACT THE OQARC TREASURER, JEANIE/KB6E2S, IF IT'S TIME FOR YOUR ARRL RENEWAL.
- \* THE PROFIT FROM THE OQARC AUCTION IN OCTOBER TOATALED \$50. THIS INCOME WILL BE ADDED TO THE GENERATOR FUND.
- \* THE OQARC BOARD DECIDED ON HAVING THIS YEAR'S CHRISTMAS PARTY AT A CHINESE RESTURANT. AN ADULT GIFT EXCHANGE (\$4 LIMIT) IS PLANNED. STOCKINGS FOR CHILDREN, 12 AND UNDER, WILL BE PROVIDED. KEI/W6NGO VOLUNTEERED TO SECURE THE RESTURANT. SEE THE ANNOUNCEMENT IN THIS PAPER FOR DETAILS ON THE CHRISTMAS PARTY.
- \* THE NEXT SOUTHWEST DIVISION CONVENTION IS PLANNED FOR AUG/SEP 1988. THE OQARC BOARD VOTED TO PROVIDE \$200 FOR SEED MONEY TOWARDS THIS CONVENTION. THE BOARD RECOMMENDED THAT THE CLUB PROVIDE SECURITY OR OFFER TO HANDLE THE DRAWINGS.
- \* THE OQARC BOARD NOMINATED THE FOLLOWING PEOPLE FOR THE 1987 BOARD:
  - PRESIDENT--JIM TALCOTT/N6JSV
  - V. PRES -- (OPEN)
  - TREAS --KEN KONECHY/W6HHC
  - SECRETARY--JEANIE TALCOTT/KB6E2S
  - ACTIVITIES--RON TOERING/KB6ELP
  - MEMBERSHIP--BOB ECKWEILER/AF6C
  - PUBLICITY --MAC MacINNIS/W6MIL
  - TVI CHRMAN--DAN PETERS/NY6U
  - MEMBER.A.L--FRANK SMITH/WA6VKZ
  - MEMBER.A.L--KEI YAMACHIKA/W6NBO
- \* THE BOARD REVIEWED THE MEMBERSHIP STATUS OF WILBUR GALUSHA/WB6GDZ. WILBUR BELIEVES THAT HE PAID HIS 1986 DUES IN CASH. HOWEVER, THE CLUB HAS NO RECORDS OR RECEIPTS TO THAT EFFECT AND CAN ACCOUNT FOR ALL CASH IN THE TREASURY.
- \* THE BOARD UNANIMOUSLY COMPLIMENTED THE EDITOR OF THE "RF", BOB EVANS WB6IXN, ON THE FINE QUALITY OF THE MONTHLY PAPER.
- \* A PROGRAM ON "LASER DISKS" IS PLANNED FOR THE NOVEMBER MEETING.



\*\*\* WORLD WIDE BEACON NET \*\*\*

This article contains an update on an article published in "QST" magazine, June 1983 issue, page 27. ARRL Bulletin #81, dtd 21 Oct. 86 adds beacon station LU4AA, in Buenos Aires, to the list in Table 1. Table 2 remains the same. Part of the "QST" article and the revised table 1 plus table 2 are listed for your convenience: (tnx, Alex)

"Monitor 14.100 MHz any time, day or night, for 10 minutes and see how many of the nine worldwide power-attenuating beacon net stations you can hear as they transmit automatically one after the other. In that short time, you can get a quick general appraisal of the various 14-MHz paths that you may (or may not) use for DXing around the world, and the direction and the quality of the openings:

TABLE 1 - NCDXF BEACONS TRANSMITTING SEQUENCE

Time (min)	Station	Location
0000	4U1UN/B	United Nations, New York
0001	W6WX/B	Stanford University, California
0002	KH6Q/B	Honolulu Community College, Hawaii
0003	JA2IGY/B	JARL, Mt. Asama, Japan
0004	4X6TU/B	Tel Aviv University, Israel
0005	OH2B	Helsinki Technical University, Finland
0006	CT3B	ARRM, Madeira Island (Atlantic Ocean)
0007	ZS6DN/B	Transvaal, South Africa
0008	LU4AA	Buenos Aires, Argentina

Same sequence of stations repeat every 10 minutes. Beacons are crystal-controlled and are on 14.100MHz. The first "Q" of each beacon's "QST" begins within a fraction of a second of the assigned time, plus or minus human starting error. The sequence may vary as more beacons are added to the net.

TABLE 2 - TEXT TRANSMITTED BY EACH BEACON

Power Level	CW Message
100 W	QST de (W6WX/B) beacon
100 W	. _____ 9-second dash
10 W	.. _____ 9-second dash
1 W	... _____ 9-second dash
0.1 W	.... _____ 9-second dash
100 W	SK (W6WX/B)

Transmission time: ± 58 seconds      Speed: 20+ wpm      Power attenuated in 10-dB steps "

Remember, you will be interrupted now and then by 'packet' stations. Good DXing!!!

# AMATEUR RADIO CALLSIGN HISTORY

by WB4FDT

(Reprinted from April 1985 Virginia Ham)  
via AUTOCALL

When I worked for the FCC in the Amateur Radio Division, our biggest headache was amateur radio callsigns. There was an "in-house" joke to the effect that no amateur was satisfied with his or her callsign. Hams with "non-preferred" (WA and WB callsigns) all wanted "preferred" one by three callsigns. The hams with preferred one by three callsigns (like W4ABC) wanted two-letter suffixes (like W4AB). Various amateurs wanted the callsign of a deceased friend or relative. And so on ...

The following is a short chronicle of the history of amateur radio callsigns, with an eye toward Virginia's callsign area, which, as you are about to find out, was not always the fourth call area.

Prior to 1912 there were no required callsigns, simply because there was no licensing of radio stations in the United States. Pioneer amateurs used their initials. Since the range of the average spark station was only a few miles, no further identification was needed.

With the passage of the Radio Act of 1912, amateurs had to be licensed to operate and were assigned their first government issued callsigns. The United States was divided into 9 callsign areas. All amateur calls began with a number, followed by 2 letters, such as 4FD. The number of these "two-letter" suffixes quickly ran out, and a third letter was added, e.g., 4FDT. Since there were many "two letter" callsigns in use, it was generally not considered prestigious to have a two letter callsign until the mid-1930's. In some call areas, two letter callsigns were available upon request. Virginia was a part of the third call area until 1946.

The third call area reissued many two letter callsigns as they became available. The last two letter callsigns to be issued, as far as I can determine, were in 1927 in the third call area. It is also interesting to note that after the first World War, many amateurs considered the longer three letter callsigns to be more preferable to a shorter callsign and specifically requested a longer callsign.

As the state of the art moved forward, amateurs began experimenting with short-wave frequencies, and international QSO's became more commonplace. European amateurs were using the same system of callsigns that the United States was using, and it was impossible to tell if the station was in the States or in Europe. Thus, to avoid confusion, many amateurs began to use a callsign issued in 1965 in the fourth call area and continued to be issued until 1970.

Between 1970-1976 in the fourth, second and sixth callsign areas, the Commission reissued all vacant "WA" and "WB" prefixed callsigns. (At the Commission we received many complaints to

the effect that "I've been licensed 10 years, have a "WB" prefix, and this new kid down the block gets a "WA" prefix!") Between 1976-1981 new licensees in the fourth and sixth call area received WD prefixes.

As a footnote, I might also add that between 1960-61, in the fourth call area, if one by-passed the Novice license, and went straight for the general class instead of being assigned a "WA" prefix, you were assigned a preferred "W" prefix.

## EXTRA-CLASS CALLSIGNS

In 1969 the Commission allowed any Extra class amateur who had been licensed 25 years to request a one letter prefix, two letter suffixed callsign (e.g., W4AA). This rule was later modified, so the beginning in July 1977 through 1980, any extra class licensee could request a two letter suffixed callsign of their choice.

## SPECIAL EVENT CALLS

These callsigns were formerly available to organizations and individuals to help publicize an event or happening. N6V, WW500U, KK6BSA are examples of special event callsigns. These calls were usually temporary, only for the duration of the event. The most popular event calls were those issued to any amateur requesting them during the International Telecommunications Union Week in mid-May. Between 1976-78 over 100 of the special calls, with the suffix "ITU" were issued each year. (In 1977 I requested and received the callsign NQ4ITU.)

## TEMPORARY CALLSIGNS

Between 1976-1978 about 100 of these temporary callsigns were issued. Their prefix was always a "WT" (temporary) (e.g., WT4AAA). They were only issued when the licensee had a priority need to have a license immediately. (In those days there were no interim permits - you had to wait until you received your license to use your privileges.) The callsign expired upon receipt of the regular license.

## REPEATER CALLSIGNS

Beginning in 1973, repeater stations were assigned the prefix "WR". The Commission in 1978 eliminated repeater callsigns and did not renew those outstanding.

By the mid-1950's, many call areas experienced a shortage of 3-letter suffixed calls beginning with "W", so the Commission began issuing 3 letter suffixed calls beginning with "K" (e.g., K4AAA). In the fourth call area, "K" prefixed calls were issued between 1955-1959.

The addition of the Novice Class license in 1952 brought the first 2-letter prefixed, 3 letter suffixed callsigns (also called "two by three" callsigns) into the amateur radio service. All Novice

licensees were assigned WN prefixes, unless they were issued in U.S. possession or territory, where their callsign began with a "W" instead of a "K" (e.g., WL7AAA was a Novice in Alaska). In the late 1950's the Commission also issued a few "WV" prefixes to Novice class licensees in the second and sixth call areas.

By 1960 the "K" and "W" prefixes nearly filled in some callsign areas the Commission began issuing its first "WA" prefixed callsigns. (The last callsign area to begin issuing "WA" prefixes was the third call area in 1963.) In the fourth call area, "WA" prefixed calls were issued between 1960-1964. The first "WB" prefixed calls were unofficial two letter prefix. In the US, amateurs used "NU". The first letter stood for the Continent "N" for North America, the second letter stood for the country "U" for USA. Canadian amateur used "NC" for North America-Canada. Australian amateurs used the prefix "OA", "O" for the continent Oceania, and "A" for Australia.

In the late 1920's it was apparent that some sort of international system of callsign prefixes was needed. The International Radio Conference of 1928 assigned world-wide prefixes to all radio services. The Department of Commerce decided that radio amateurs within the continental United States should use the prefix "W". Amateurs in US territories or possessions would use the prefix "K".

In 1946 a tenth callsign area was added. This was the zero, 0 call area. At this time, the boundaries of several callsign areas were changed, Virginia was moved into the fourth callsign area. I do not know the reason for this. In some instances, amateurs were able to receive the same suffix, or a similar one, but most received new callsigns.

The new 0 callsign area was assigned to the mid-western states, which formerly had been part of the ninth call area. Also, various U.S. possessions and territories were assigned their own special prefix (KL7, KH6) for the first time. This prefix still began with a "K".

(Courtesy RARA Rag.) via

Nittany Amateur Radio Club  
"NEWSETTE".

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

10/5 15m CW Net- IXN checks in IEH, Karl...no IBR tonite! Karl just bought himself a new toy...a 3K Henry linear!! He has hooked it up but plans to use it late at night to keep the 'Tennessee Valley Indians' under control! IXN has sorted and catalogued all of his astronomy slides. 10/8 15m Phone Net- AF6C checks in IXN and NG7D. We discuss earthquakes, seismographs, alluvium of the Santa Ana River bed, local faults (Whittier, Newport-Englewood, Norwalk & Cristianitos), tiltmeters as predictors of earthquakes, etc. AF6C will give IXN info. on a new electronic transducer for detection of changes in attitude...John solves a 'key-board problem, and is looking for someone to translate a Portugese QSL!..RE calls, after net, by landline and informs us that the Electronic Communications Privacy Act has passed both houses of Congress! Although amateur radio is not affected directly, cellular radio (radio-telephone between 800-900 mHz) is affected, and one will be subject to prosecution for using monitored info. adversely! TV Channels 80 - 83 can often hear radio-telephone messages!.. Alex also informed us that three new Russian 'birds' (Cosmos series) have been orbited. Telemetry has been monitored at 2304 mHz. Their purpose is unknown...10/8 2m Net - No check-ins...10/12 CW net- No check-ins..(IXN working at Church festival)...10/15 15m Phone Net - AF6C checks in KD6XO, WT6A & IXN. XO asks AF6C abt 8" drives. AF6C comments that they are OK for CPM stuff. AF6C informs us of the upcoming North Orange County Computer Swap Meet...XO has a blood pressure of 110/70! Congrats, Bob! How old did you say you were?!..Two light earthquakes in the LA. area (one in La Mirada), the loss of the 'Angels' in the playoffs, and the upcoming Club auction were other topics for discussion... 10/15 2m Phone Net- IBR checked in AF6C & BPX...OH, oh!..Just found the 10/1 net report..so here goes!...10/1 15m Phone Net- IXN checks in RE and WT6A. AF6C & HHC are working on Ken's 15m rig. (Phone call before end of net: Success! HHC's receiver now working!...Now, for the xmitter!) RE informs us that former Club member, Capt. Read, N6KRY, former USMC Chaplain at El Toro, has moved out of the area. He is now Chaplain at a CB base in Gulfport, Miss. His new adr. is: 705 Parkwood Dr., Long Beach, Miss., 39560. KRY's son is now going to school in Oregon...WT6A asks IXN and RE to give him a report on his new Kenwood TS 440. His new rig, wid speech processor & voice synthesizer, arrived two weeks ago. Bob's now getting used to all the buttons!...RE reports intermittent openings on 15m, as verified by contact wid WA4KCY, N5JPT, Ø1SM, & K4JAG - all on low power!... Alex reports info. from ARRL Bulletin #67 dtd 23 Sept: Japan & Canada now have a Reciprocal Operating Aggrement effective Nov. 16, 1986. Japan's previous ROAs are wid the U.S. and the Federal Republic of Germany. If a U.S. amateur is working from Tokyo, he will have a 7J1??? call, or from Osaka, a 7J3??? call. Other parts of Japan will have different suffixes. ...RE asks for help wid Diabetes Bikeathon - IXN will publish request in Oct. 'RF'...Alex reports that solar flux info. will not be broadcast from WWV for a few days...ARRL Bulletin #68 dtd 23 Sept 86: FCC dismisses Robert Stoner's request to allocate a portion of the 6m band for digital use. ITU regulations, further, allocates the 50 - 54 mHz band only to the Amateur Radio Service. Denial of the petition should not discourage alternative proposals; ie: consideration of the 902 - 908 mHz band!...10/1 2m Phone Net- MIL monitors for 15 min. but nobody on the net!...10/19 15 m CW net - IXN checked in Karl, IEH. One of Karl's friends cured his TVI by disconnecting the two meter antenna from the 2m rig during low band operation! (New trick for the grab-bag!) Karl bought a Kenwood 3M-220 station monitor scope for his rig, but he is disappointed wid its performance...So you missed the auction this year, Karl! Well, there's always next year...10/22 15m Phone Net- AF6C checked in HHC, COJ, IXN, NG7D & RE. The next Board meeting was discussed and will be held at Jim & Jeannie Talcott's residence. Any OMs know anything about Radio Shack's old antenna (CB) called the 'Metropole'? If so, pse give John, NG7D, a ring. He is trying to service one

for a disabled CB friend! COJ checked in quickly and then 73'd to the Boston/Mets World Series game! RE had to get a new battery for the family auto, & Alex reported that 15m was wide open all day, wid a solar flux of up to 89! (15m opens when solar flux is above 80). RE also mentioned FCC Docket #86-337 which concerns itself wid an Automatic Transmitter Identification System for all commercial transmitters and possibly amateur transmitters, too! Comment period has been extended to Jan. 19, 1987 by FCC. ARRL will file comments opposing ATIS in the amateur service! Alex also updated the Beacon Net on 14.100 MHz wid ARRL Bulletin #81 dtd Oct. 21. (see article this 'RF')...10/22 2m Net- IBR busy selling his QTH..Anyone have a ragchew?...10/26 15m CW Net- IXN checks in a tired IEH after a hard day's work. Bob & Karl discussed leaking oil pipelines at oil refineries, removal of hazardous waste, etc...10/29 15m Phone Net- NG7D & IXN ragchew. AF6C was absent. The 4.7 mag. earthquake 5 mi. SE of San Diego (possibly on the La Nacion fault or one of its environs), was discussed. RE & ULU joined the ragchew later. IBR has sold his home & we will need a new net control for 2m. NG7D & IXN have been monitoring the 14.100 MHz Beacons wid great success! (see article this 'RF') Board Meeting will be held Sun., Nov. 2, at JSV's QTH at 3:00 pm. NG7D reports 12m open last weekend. He copied ILL, FLA. & NY. RE reports improving solar flux, and wid it, openings on 10m. (Those who wish to contact John, NG7D, abt the 'Metropole' antenna, call John at 557-6399). Frm RE for your info: Senate Report #541 deals wid the Electronic Commercial Piracy Act; amateur radio not involved. ULU, Lloyd, will be retiring by the first of the year! You're going to love it, Lloyd!!

\*\*\* SILENT KEY \*\*\*

We regret the loss of former Club member, Don Klos, W6OOH. Don suffered a fatal heart attack on Friday, Oct. 10. Don was an avid Field Day participant and he was a familiar check-in on the 15 and 2m nets.

\*\*\* ARRL BULLETIN #75 dtd 9 OCT 86 \*\*\*

FCC HAS PERMANENTLY AUTHORIZED AUTOMATIC CONTROL FOR PACKET STATIONS TRANSMITTING THIRD PARTY TRAFFIC ON VHF USING AX.25 PROTOCOL. THIS AMENDMENT TO THE AMATEUR RULES CAME IN RESPONSE TO AN ARRL PETITION FOR PARTIAL RECONSIDERATION FILED LAST FEBRUARY. ALTHOUGH FCC ACKNOWLEDGED ASSURANCE OF SAFEGUARDS BY THE ARRL FOR THE AX.25 PROTOCOL, THEY NOTED THAT CONTROL OPERATORS CAPABLE OF MONITORING SUCH TRANSMISSIONS MUST ALERT THE CONTROL OPERATOR OF ANY INTERMEDIATE RETRANSMITTING STATION UNDER AUTOMATIC CONTROL OF ANY STATION MISUSE SO THAT CORRECTIVE ACTION CAN BE TAKEN. FCC DEFERRED ACTION ON REQUESTS FOR AUTOMATIC CONTROL FOR DIGITAL COMMUNICATIONS ON HF UNTIL ITS FEASIBILITY CAN BE DETERMINED.

\*\*\* QUICKIES FROM NOV. 'QST' \*\*\*

- P. 78 - Field Day Results: 951 contacts, Class B (under 150W), 18 participants, for a total of 3,132 points!
- P. 47 - You may soon be able to buy a new Call Sign in the private sector! Read all abt it! See p. 47.
- P. 47 - Permanent amateur facility on the 'Space Station', slated to fly in 1995!! It is a possibility! Be sure to read abt it now.

# Orange County Amateur Radio Club

## Christmas Banquet



CHRISTMAS PARTY, 1986, will be held at the CHINA GATE RESTAURANT at 10200 S. Beach Blvd. (hwy 39), in Stanton. At \$12.50 per person (children under 12 half price), the dinner will feature Chinese cuisine!

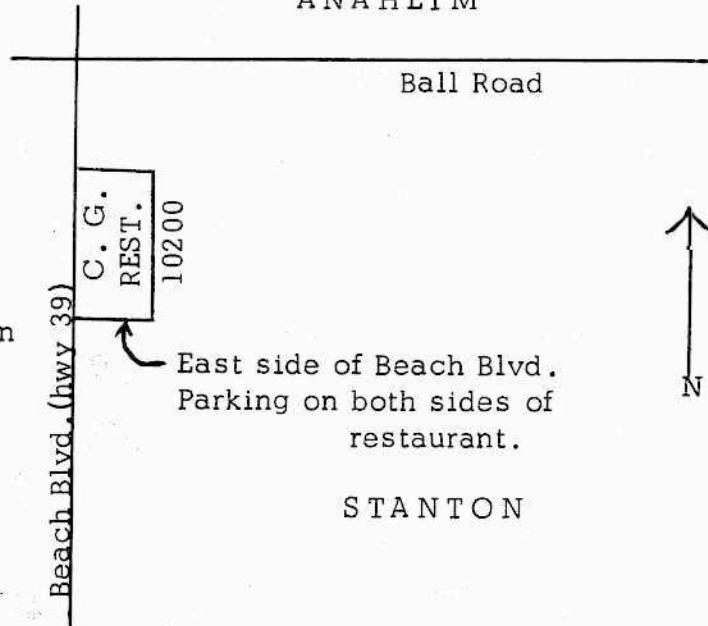
DATE: Dec. 7 TIME: 4:30 pm.

### \*\*\* THE MENU \*\*\*

Chicken Wor Wonton (soup)	Almond Duck
China Gate Filet Steak	Cha Siu (BBQ Pork)
China Pea/Chicken/Abalone	Chicken Chow Mein
Shrimp Chop Suey	Sweet & Sour Pork
Steamed Rice	

THERE WILL BE NO REGULAR DEC. MEETING!!

ANAHEIM



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ORANGE COUNTY AMATEUR RADIO CLUB

P. O. Box 3454

TUSTIN, CA. 92681



FIRST CLASS!