ELECTIONS!

Christmas Dinner

SURPRISE PROGRAM!!

COME AND SEE!!
1986 CLUB BOARD of DIRECTORS

President  Frank Smith     W46UKZ   492-7215
Vice President  Jim Talcott    N6JSV   838-5395
Secretary  Ken Konechy     W6HHC   541-6249
Treasurer  Jeannie Talcott  KB6E3S   838-5395
Activities Chairman  Kei Yamachika W6NG0   538-8942
Membership Chairman  Jim Townsend NS6W   551-5339
Public Relations O.  Mac MacInnes  W6MIL   594-0442
T.V.I. Chairman  Al Watts        W6IBR   531-6245
Member At Large  Joe Partlow    KB6F5V   542-3122
Member At Large  Bob Eckweiler  AF6C    639-5874

CLUB APPOINTMENTS

Club Historian  Bob Evans      WB6IXN   543-9111
W62E Trustee  Bob Eckweiler  AF6C    639-5874
R.F. Editor  Bob Evans      WB6IXN   543-9111
Teen Representative  (open)

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.)

CLUB NETS

<table>
<thead>
<tr>
<th>BAND</th>
<th>MODE</th>
<th>DAY OF WEEK</th>
<th>LOCAL TIME</th>
<th>FREQ MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Meters</td>
<td>FM</td>
<td>Wednesday</td>
<td>2100 hrs.</td>
<td>146.550</td>
</tr>
<tr>
<td>15 Meters</td>
<td>SSB</td>
<td>Wednesday</td>
<td>2000 hrs.</td>
<td>21.375</td>
</tr>
<tr>
<td>15 Meters</td>
<td>CW</td>
<td>Sunday</td>
<td>2000 hrs.</td>
<td>21.175</td>
</tr>
</tbody>
</table>

(Listen for W62E, net control)
MINUTES OF OCARC 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 SUNNYLEAF AREA IN DECEMBER.

• KEN/W6HHC VOLUNTEERED TO PUBLISH THE CLUB NEWSPAPER FOR NOVEMBER.

• THE OCARC BOARD REMINDS MEMBERS THAT ARRL RENEWALS THAT ARE ROUTED THRU THE CLUB PUT AN EXTRA 5¢ IN OUR TREASURY. CONTACT THE OCARC TREASURER, JEANIE/KB6E2S, IF IT’S TIME FOR YOUR ARRL RENEWAL.

• THE PROFIT FROM THE OCARC AUCTION IN OCTOBER TOALED $50. THIS INCOME WILL BE ADDED TO THE GENERATOR FUND.

• THE OCARC BOARD DECIDED ON HAVING THIS YEAR’S CHRISTMAS PARTY AT A CHINESE RESTAURANT. AN ADULT GIFT EXCHANGE ($4 LIMIT) IS PLANNED. STOCKINGS FOR CHILDREN, 12 AND UNDER, WILL BE PROVIDED. KEI/W6NKO VOLUNTEERED TO SECURE THE RESTAURANT. SEE THE ANNOUNCEMENT IN THIS PAPER FOR DETAILS ON THE CHRISTMAS PARTY.

• THE NEXT SOUTHWEST DIVISION CONVENTION IS PLANNED FOR AUG/SEP 1988. THE OCARC BOARD WILL VOTE TO PROVIDE $200 FOR SEED MONEY TOWARDS THIS CONVENTION. THE BOARD RECOMMENDED THAT THE CLUB PROVIDE SECURITY OR OFFER TO HANDLE THE DRAWINGS.

• THE OCARC BOARD NOMINATED THE FOLLOWING PEOPLE FOR THE 1987 BOARD:
  - PRESIDENT—JIM TALCOTT/N6JSU
  - V. PRES — (OPEN)
  - TREAS — KEN KONECHY/W6HHC
  - SECRETARY—JEANIE TALCOTT/KB6E2S
  - ACTIVITIES—RON TOERING/KB6ELP
  - MEMBERSHIP—BOB ECKNEILER/AF6C
  - PUBLICITY—MAC MacINNES/W6MIL
  - TVI CHRMAN—DAN PETERS/NY6U
  - MEMBER A.L.—FRANK SMITH/W6XVZ
  - MEMBER A.L.—KEI YAMACHIKA/W6NKO

• THE BOARD REVIEWED THE MEMBERSHIP STATUS OF WILBUR GALUSHA/W6C6DZ. WILBUR BELIEVES THAT HE PAID HIS 1987 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 WB6XN, 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

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

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.

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### TABLE 2 - TEXT TRANSMITTED BY EACH BEACON

<table>
<thead>
<tr>
<th>Power Level</th>
<th>CW Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 W</td>
<td>QST de (W6WX/B) beacon</td>
</tr>
<tr>
<td>100 W</td>
<td>.......................... 9-second dash</td>
</tr>
<tr>
<td>10 W</td>
<td>.......................... 9-second dash</td>
</tr>
<tr>
<td>1 W</td>
<td>.......................... 9-second dash</td>
</tr>
<tr>
<td>0.1 W</td>
<td>.......................... 9-second dash</td>
</tr>
<tr>
<td>100 W</td>
<td>SK (W6WX/B)</td>
</tr>
</tbody>
</table>

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 ama-
tee radio call signs. There was an “in-house”
epidemic joke to the effect that no amateur was satisfied
with his or her call sign. Hams with “non-
preferred” (WA and WB call signs) all wanted
“preferred” one by three call signs. The
hams with preferred one by three call signs (like
W4ABC) wanted two-letter suffixes (like
W4AB). Various amateurs wanted the call sign of
da deceased friend or relative. And so on...

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

Prior to 1912 there were no required call signs,
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 call signs.
The United States was divided into 9 call sign
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” call signs in use, it was
generally not considered prestigious to have a two
letter call sign until the mid-1930s. In some call
areas, two letter call signs were available upon
request. Virginia was a part of the third call area
until 1946.

The third call area reissued many two letter
call signs as they became available. The last two
letter call signs to be issued, as far as I can deter-
dine, 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
call signs to be more preferable to a shorter call
sign and specifically requested a longer call sign.

As the state of the art moved forward, ama-
tees began experimenting with short-wave fre-
quencies, and international QSO’s became more
commonplace. European amateurs were using
the same system of call signs 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
issued in 1965 in the fourth call area and continued
to be issued until 1970.

Between 1970-1976, in the fourth, second and
sixth call sign areas, the Commission reissued all
vacant “WA” and “WB” prefixed call signs. (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 suffix call
sign (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 call sign of their choice.

SPECIAL EVENT CALLS
These call signs were formerly available to
organizations and individuals to help publicize an
event or happening. N6Y, WWS500, K6BSA
are examples of special event callsigns. These
calls were usually temporary, only for the dura-
tion 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 call sign NQ4ITU).

TEMPORARY CALLSIGNS
Between 1976-1978 about 100 of these temporary
call signs 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 call sign 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 call signs and did not
renew those outstanding.

By the mid-1950’s, many call areas experi-
enced a shortage of 3-letter suffixed calls begin-
ning 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 call signs (also called “two by three”
calls) into the amateur radio service. All Novice
licensees were assigned WN prefixes, unless they
were issued in US, possession or territory, where
their call sign began with a “W” instead of a “K”
(e.g., W7AAA 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 call sign areas the Commission be-
gan issuing its first “WA” prefixed call signs. (The
last call sign 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
not officially two letter prefix. In the US, amateurs
used “NU”. The first letter stood for the Conti-
nent “N” for North America, the second letter
stood for the country “U” for USA. Canadian
amateur used “NC” for North America. Australian
amateur used the prefix “OA”, “O” for the continen-
tial Oceania, and “A” for Australia.

In the late 1920’s it was apparent that some sort
of international system of call sign prefixes was
needed. The International 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 call area was added. This
was the zero, 1A call area. At this time, the bound-
aries of several call sign areas were changed.
Virginia was moved into the fourth call 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
call signs.

The new call sign area was assigned to the mid-
western states, which formerly had been part of
the ninth call area. Also, various U.S. possess-
sions and territories were assigned their own
special prefix (KL7, KI6) for the first time. This
prefix still began with a “K”.

(Courtesy KARA Reg.) 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 cataloged 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 & Christianitos), 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 'keyboard problem, and is looking for someone to translate a Portuguese 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 K66XO, 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 & BFX...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., 39650. 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, NJP5T, O1SM, & K4JAG - all on low power!...Alex reports info. from ARRL Bulletin #67 dtd 23 Sept: Japan & Canada now have a Reciprocal Operating Agreement 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!...10/12 2m Phone Net- MIL monitors for 15 min. but nobody on the net!...10/19 15m 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 SM-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 891 (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 IEB after a hard days work. Bob & Karl discussed leaking oil pipelines at oil refineries, removal of hazardous waste, etc...10/29 15m Phone Net- NG7D & IXN ragchew. AP6C 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.
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!!