

NEWSLETTER OF THE NORTHERN CALIFORNIA CONTEST CLUB 34456 COLEVILLE PLACE FREMONT CA 94546

FEBRUARY 1983

NUMBER 130

PRESIDENT: W6SZN

VP/CC: KN6M

SCTY/TREAS: K6ZM JUG EDITOR: KERU

DIRECTORS: AAGG, NGKB, NGXI, WGXX

COMMITTEES: PROGRAM-NEAUV MEMBERSHIP-WEOWQ FINANCE-NEAUV AWARDS-KAEING

# **CQWW SCORES**

#### COMING EVENTS

#### FEBRUARY MEETING PROGRAM

4T40 - ADVENTURES IN THE ANDES NARRATION AND SLIDES BY WAGVEF, NGBT, NGKT.

#### AND

FM OVERDEVIATION - THE CAUSES, EFFECTS AND CURES BY WORGG AND KAGFIY.

(THE MEETING WILL BE ADJOURNED BEFORE 10 PM)

FEB.19-20: ARRL DX CONTEST - CW

MAR.5-6: ARRL DX CONTEST - SSB

FEB.26-27: CQWW 160 METER CONTEST -SSB MAR.26-27: CQWW WPX CONTEST - SSB

FEB.28: NCCC MEETING. 7:30 PM CWA MAR.28: NCCC MEETING, HAYWARD.

HALL, HAYWARD

#### PRESIDENT KIP SAYS

IT FINALLY OCCURED TO ME THAT LEAVING THE UPCOMING MEETING PROGRAM STORY TO THE END OF THIS COLUMN EACH MONTH RUNS A BIG RISK THAT NO ONE WILL READ IT (HAVING NODDED OFF SOMEWHERE ALONG THE WAY). So ... THIS MONTH'S PROGRAM WILL BE BOTH ENTERTAINING AND EDUCATIONAL: WAGVEF, NGBT AND NGKT WILL PRESENT A NARRATED SLIDE SHOW OF THEIR 4T40 OPERATION DURING THE 1982 CQWW SSB WEEK-END, AND WORGG AND GENE ALGA, KAOFIY, WILL DEMONSTRATE AND DESCRIBE THE CAUSE, EFFECT AND CURE OF FM OVERDEVIATION. A RAFFLE OF HAM RADIO ITEMS YOU CAN'T LIVE WITHOUT WILL BE FEATURED DURING THE BREAK.

THE CW WEEKEND OF THE ARRL DX CONTEST IS ALMOST HERE. IF CONDITIONS LATELY ARE ANY INDICATION OF WHAT WE CAN EXPECT DURING THE NEXT SEVERAL YEARS, THIS MAY BE THE LAST TIME FOR A WHILE THAT ALL SIX BANDS WILL BE WORKING. GOOD LUCK TO ALL. FOR DUAL MEMBERS OF NCCC AND NCDXC, DON'T FORGET THAT YOUR SCORE SHOULD BE SUBMITTED ON BEHALF OF NCDXC (NOT NCCC), WITH A COPY OF YOUR SUMMARY SHEET TO STEVE THOMAS, NGST.

THE 10th SINGLE OP SPOT IN THE 1982 CQP WAS MAC, WEBSY, WITH 149 K. NAEM WAS MULTI-SINGLE - SORRY MAC.

Don't forget the Awards Banquet/Elections on April 15 at Miguels in Hayward. More details in coming issues of the JUG.

> 73 FOR NOW, KIP, W6SZN

Castro Valley, California 94546 MASWIE Foundation

Corniche - Muscat Sultanate of Oman 8 January 1983 Arabian Gulf

We have just completed operation here in Oman as is not authorized here yet. We were lucky to receive meters, half SSB and half CW. The new 30 meter band countries. We were active on 10, 15, 20, 40 and 80 our licences because visitors, tourism and transit #6KG/A4. We made 5000 QSOs with amateurs in 127 guests are in general not allowed. Dear Friends.

TV sets in the Hotel. We had no problem at all with TVI. We lived and operated here from the Sea View Hotel. This was primarily due to the fact that TV here operates Television Interference (TVI), because there were many This is a good thing to know, and we will We were very much concerned over the possibility of on UHF instead of VHF as in America and some other remember it when we visit other foreign countries. countries.

ø buildings, new roads, and general expansion everywhere. countries that we have visited. The whole country is but this fact is not mentioned or discussed much Fuch of the money for this comes from the new-found Oman is the first of the oil-rich Middle East booming frontier-land, with construction of new by the government or local newspapers, etc.

We go next to the country of Qatar (A71). Please pass this information to all who might be interested.

Iris Colvin

ALAND ISLANDS - OHØW IS NOW HISTORY

MARTTI LAINE, OH2BH NUOTTANIEMENTIE 10 D 20 02230 ESPOO 23, FINLAND

How's DX?

Phone: 0-885011 office 0-885119 home

13-66454 radio

relative terms, since the OSO tally almost equaled the phone score, totaling some 10.200 contacts. The final score is 15 MEG, which improves the European record by 65 percent and gives multi/multi operation is now history. The group experienced declining propagation conditions, dropping further from last year's, but still managed to make 30.000 OSOs during the 130 including effective promotional efforts of which this is the hours of operating. The station used many advanced concepts, story and both slide and video presentations are available. last pitch. One of the U.S. magazines will carry the whole The CQ WW CW portion worked out even better than phone, in The OHØW license expired November 30, 1982 and the mammoth OHØW worldwide top honors

pressive:	ZONE	13	24	3.4	6 E	80	36
again im	COUNTRY	53	87	103	131	126	118
Was	_						
kdown	OSO	613	1256	<del>-</del>	2708	2096	
nultiplier brea	BAND	160	80	40	20	13	10

accounted for a loss of 300K. It turned out that local newspaper had announced the commencement of some repair work at Aland and it took 40 minutes to convince the technicians to go home and On the Murphy side, the group only counts an unsuccessful helicopter landing at Market Reef, lost of 6 multipliers and let the heavy supply of electricity run to the contest site. a 40-minute power outage at sunrise on Sunday morning which

The overall crew involved 60 OH types and the guys were not there for fun. It was the most serious effort of all time from the worst contest operating area in the world and the operation will not be repeated. Distinctive QSL cards will be sent out for each QSO five- and six-banders will be specially awarded.

Vilho Flink, OH2BAZ, Patolantie 10A10, 00640 Helsinki 64, FINLAND Please get your QSLs in for early processing:

express their thanks for many QSOs. They will just remind you that "W" stand for winning and this year it came all the way from the From their RF-battered icy rock, the OHØW crew wish to pass the

#### 1982 CQ WW RESULTS

Listed below are the results of the NCCC's effort in the 1982 CQWW. Some scores are still missing, so if you're not listed please send me a copy of your summary sheet(s).

Did we capture the club competition trophy again this year? I don't know. My best estimate of YCCC's score, based largely on the claimed scores in the January 1983 YCCC Scuttlebutt, is at least 105 megapoints. The total of the scores below is not that high. Whether or not we won again, I think the NCCC did itself proud this year in the CQWW. Congratulations to all who participated!

--W6SZN

#### SSB

Single Op	S	i	n	a	1	e	αO
-----------	---	---	---	---	---	---	----

<u>Call</u>	Score	<u>Call</u>	Score	
VP5KP (W6SZN)	3,930,480	W6ZKM	185,459	
8P6KX (K6KLY)	3,543,630	KS6H	138,112	
FOØJO (W6GO)	3,175,536	W6 XX	134,801	
N6BV	2,263,408	W6OKK	109,222	
K6HNZ	2,212,384	N6NF	107,214	
G5CFJ (K6PU)	2,063,880	WA6BOB	83,000	(est.)
N6 QR	1,176,441	N6QC	72,930	
N6 HR	483,060	W6ISQ	61,308	
W6BSY	441,048	W6MFZ	43,152	
W6UA	414,540	WA6AUE (10 meters)	42,240	
AJ6V	347,635	K6CSL	32,580	
WA6HAE	304,648	WA6AHF	27,168	
W6YKM	226,250	N6FJS	23,290	•
WB6FCR (10 meters)	197,780	AE6U (160 meters)	5,005	
AG6D	187,000	•	2,482	
W6RJ	186,000			

#### Multi/Single

4T40 (N6KT,	13,494,118	K6SG (+ KV6H)	717,111
N6BT, WA6VEF)		W6BIP (+ WA6DJI)	396,517
J2ØDU (W6KG +	1,807,596	WB6GFJ (+ W6OAT)	174,549
W6QL)	•	W6OAT (+WB6GFJ)	91,908
W6BH (+ WA6IQM)	1,316,000	(est.)	
5W5DM (KB6JK +	2,269,500	N6ESV (+ WD6EIW)	77 <b>,</b> 945
5W1DQ)	(1/2 to	NCCC = 1,134,750	
K6HIH (+ K6AUC)	800,000		

#### 2 Xmtr. Multi/Multi

N6VV (+K6XV, K6PJY)

1,612,806

K6ZM (+ AK6T, 1,376,553 KC6D, NB6L)

### Unlimited Multi/Multi

N6RO (+ N6AUV, N6IG, N6NE, N6QW, N16D, N4ID, K6TMB, K9LBQ, KT7W,	5,713,852	K6RU (+ AA6AD, W6OWQ, WB6DSV, N6XI, K6XO)	3,468,168
KN6K, WA6DIL, AA6G)			
KN6M (+ KB6XN, NJ6D, AA6DX, W6RJ, NA6T, N6BP KD6T, NJ6P)	5.7m (est.)	N6RZ (+WA6OCV, WB6CBJ, NI6G)	1,950,864 (3/4 to NCCC = 1,468,980)
AI6V (+ WB6EXW, N6KB, AA4KB	3,478,548		

#### CW

Single Op				
G5CFJ (K6PU)	1,778,480	W6XX (40 meters)	172,000	(est.)
N6BV	1,367,100	K6OMB (15 meters LP)	160,297	
N6QR	1,225,312	W6OAT	151,548	
N6GG	732,888	N6NF	98,298	
W6GO	712,236	K6OZL	92,760	
AJ6V	490,230	KS6H	.86 <b>,</b> 762	
N6HR/KH6	419,679	W6BSY (15 meters)	82,002	
AH <b>∮</b> C (N6BT)	404,457	WB6EXW	54,825	
(40 meters)		K6TMB	52,635	
KR6Q	397,919	N6MG	40,508	
W6UA	387,192	(10 meters)		
W6ISQ	297,688	W6OKK	33,330	
W6YKM	293,322	K6CSL	21,866	
KC6D	242,000	W6MFZ	6,240	
	(est.)	AE6U (160 meters)	5,004	
AG6D	240,366			
KF6R	235,375			
Multi/Single				
T32AL (AA6DX,	1,858,428	W6BIP (+ WA6DJI)	556,444	
KN6Q)	_,000,120	K6HIH (+ K6AUC)	500,000	(est.)
N6RZ (+ WA6OCV)	725,000	· · · · · · · · · · · · · · · · · · ·	300,000	(000.)
W6BH (+ WA6IQM)	600,000	· ·		
· · · · · · · · · · · · · · · · · · ·				

#### 2 Xmtr. Multi/Multi

KB6XN, NJ6P, KD6T, N6BPL)

ZK2RU (K6RU + ZK2BGD)	2,463,291 (1/2 to NCCC)	P42E (N6TU, WB6SHD and a	23,580,000 (2/13 to NCCC)
Unlimited Multi/Mult	i	multitude)	(2/13 to NCCC)
	<del>_</del>	K6XO (+ AA4KB,	2,542,826
N6RO (+ WA6DIL,	4,049,674	WB6DSV, N6AUV,	
N6XI, KT7W,	• •	AA6G)	•
NI6D, N6DA,		N6TV (+ K6HNZ,	2,479,080
K6KM, N6NE)		N6QW, KC6D)	•
KN6M (+ NJ6D,	4 meg. (est.)	AI6V (+ W6SZN,	2,447,704
KB6XN, NJ6P,		NB6G, K6KLY)	

K6ZM (+ AK6T,

N6OP, NB6L)

1,424,256

### Phillystran

### A Non-Metallic Guy

#### Fred Hopengarten, K1VR

TNX TO YCCC SCUTTLEBUTT

Several members of the Yankee Clipper Contest Club have looked closely into the question of using a non-metallic guy wire. There are several advantages:

- It avoids the effort, and reduction in mechanical integrity, of inserting egg insulators into guy wires.
- With no egg insulator, another collection point for ice and snow is removed.
- It eliminates the worry about breaking up guy wires into non-resonant lengths. One club member is currently suffering from a 15 meter beam, mounted down the tower, which won't work properly. He suspects resonance with a close-by guy wire.
- It permits slopers to be mounted in virtually the same plane and direction as a guy wire.
- Guy wires will no longer have the potential to act as a reflector. This was relevant at K1VR, where a microwave path crosses overhead, and a satellite TV disk sits nearby the tower.

Purchasing entirely from the factory, however, can almost triple the cost of a guying system when compared to steel. So we set about to discover the best way to order Philipstran, a product of Philadelphia Resins, of Montgomeryville, PA. The product can be ordered through several amateur distributors, as well as Channel One (the author's company).

#### The Cable

It is not necessary to order a whole roll, as is true with steel. It is possible to simply add up the cable lengths which will be necessary, and order that total length. It is a good idea to order 2-3 percent extra to deal with the potential of mismeasuring, or the need to recut if the hacksaw slips. Phillystran can be cut with a sturdy scissors or a hacksaw. If cut-to-length pieces are desired, the factory charges a fixed fee "per cut," not so much for the cost of cutting, but rather to cover the cost of measuring and rolling up separate lengths. Since cutting is easy, the best idea is to order the total length as one piece.

#### **End Fittings**

Ends are made by Reliable Electric, and available through the cable manufacturer. Essentially, they have a cone, a collar, and a bail. By moving the collar away from the large end of the cone, toward the small end of the cone, it is possible to simply squeeze the bail and it will come out. This means that attachment to the tower, or to torque bars, is quick and easy.

Typical Costs For An Amateur Radio Installation.

1000' Phillystran HPTG 4000 (equiv. 3/16 EHS) \$460.00 18 End Fittings \$112.68 2 Potting Kits \$18.00 Shipping \$30.00 TOTAL \$620.68 Factory labor for installing the end fittings is expensive, and can easily add 30 percent to the cost of the guying system. It is, instead, possible to do the end fittings yourself. For the typical radio ham, this is recommended and will save a considerable amount of money.

Philadelphia Resins provides good instructions for end fitting assembly, complete with photographs. Ask for Technical Bulletin No. 356. Assuming 12 minutes per fitting, the typical system of three sets of guys — 18 end fittings — can be installed in an evening, a savings in the neighborhood of \$280.00.

The price for factory installation of an end fitting is \$15.60, for a single fitting. By contrast, a potting kit, at 15 pours per kit, costs only \$9.00. Two kits allow for the 18 fittings our typical harn requires, and a lot of spillage too.

For a sense of total costs, see Table 1.

#### Abrasion and Vandalism

The Kevlar center strands, which provide for the strength of the guy, are covered with 30 mils of polyethylene, effectively reducing concern about tree branches wearing away the outer cover. In addition, the Kevlar (a trademark of Du-Pont) has good abrasion resistance itself.

Nonetheless, standard guy wire of Extra Heavy Strength (EHS) steel is recommended up to a height of 12-15 feet above ground to avoid a situation in which a local prankster attacks the cable with his Bowie knife. At such low heights however, the presence of steel will not negate the advantages of non-metallic guy wire as discussed above. In addition, since the steel line is cheap, the cost of a total Phillystran installation is reduced.

#### **Partial Use**

Nowhere is it written that just because one needs non-metallic guying at the top of a tower, or at its middle, that it is necessary to use the material throughout the installation. It is eminently reasonable to use Phillystran for the top, or top two, guy sets, and to do the rest in steel. This may be appropriate where four sets of guys are required, and the lower two sets are sufficiently far away from antennas that the cheaper steel guying can be used.

#### Distribution

A few ham dealers carry Phillystran. Most, however, simply take your order and then special order it from the factory for drop shipment to your home. Deliveries are typically 7-21 days, depending on whether the factory has run the size required lately. Terms are usually (as is true with most of the ham world today) cash in advance. No one does much volume in Phillystran, so few discounts are available. The whole company is only in the range of \$5 million in sales.

#### **Conclusions for Contesters**

Phillystran is not cheap, but it is worth it. Do the end fittings yourself. If using four sets of guys, consider using steel for the bottom set.

KLM HAS IT LOCALLY-ED.

6

# NORTHERN CALIFORNIA DX CLUB, INC.

### PROUDLY ANNOUNCES

THE PATH INTERNALITINAL IN CONVENTION	THE	<b>34TH</b>	INTERNATIONAL	ΠX	CONVENTIO	N
---------------------------------------	-----	-------------	---------------	----	-----------	---

	THE SATH INTERNATIONAL BY CONVENTION
WHERE:	Visalia Airport Holiday Inn, 9000 Airport Drive, Visalia, CA 93277 Telephone (209) 651-5000. For reservations, 800-238-8000. We have a block of 225 rooms. Get your reservations early.
WHEN:	Friday, Saturday and Sunday - 22, 23, and 24 April, 1983.
PROGRAM:	Big names in DX, with a one track program, so you can attend ALL sessions of interest to you.  DX and Contesting seminars. Technical presentations.  Code proficiency test. Bring your 147.54 MHz HT and headphones.  An interesting, free, program for registered spouses and guests.
WHO:	Kan, JAIBK, will show slides of BYIPK and his visit to Beijing, China. We expect Al Fischer, K8CW/VKØCW to tell of Heard Island DXpedition. Ellen White, WIYL, QST "How's DX" Editor will be Sunday Breakfast speaker. Don Search, W3AZD, ARRL DXCC Manager, has been invited so he can check your DXCC cards on the spot. Other big names in DX are being contacted and will be there. Be prepared for a surprise.
PRIZES:	MAJOR - consistent with past International DX Conventions.
PRE- REGISTRA- TION:	With preregistration you will get a chance at the extraordinary activity that "late comers" will not get a chance at.  Preregistration deadline is 15 March, 1983.
\$\$\$	<ul> <li>\$40. Full Convention - Includes all program sessions, Saturday Banquet, Sunday Breakfast and Prizes.</li> <li>\$25. "Meals Only" tickets, for your spouse and non-amateur guests, sold only with Full Convention registration.</li> <li>\$20. "Convention Only" tickets, to attend program sessions without meals or prizes.</li> </ul>
PLEASE PRE	REGISTER ME FOR THE 1983 INTERNATIONAL DX CONVENTION
CALL_	NAME(s)
ADDRESS	
Full Conve	Street City State Postal Code Country ention (Program, Meals, Prizes)@ \$40. each =
"Meals Onl	y" tickets (only with purchase of above)@ \$25. each =
"Convention	on Only" tickets (no Meals or Prizes)@ \$20. each =
your jacke	past, we plan to prepare a cloth patch for Total enclosed =

Mail to: International DX Convention, Steve Thomas, N6ST, 7598 Shadowhill Lane, Cupertino, CA 95014. You will receive a "registration received" postcard.

#### **NEW MEMBERS**

N41D - JIM H:415)969-5819 JAMES A. LAUGHTER W:415)966-2773 870 E. EL CAMINO #31, MOUNTAIN VIEW, CA 94040

JIM IS 29 YEARS OLD AND HAS BEEN A HAM FOR 12 YEARS. HE HOLDS AND EXTRA CLASS LICENSE. HIS FORMER CALLS WERE WB14POB AND HS2AIW. HE DOES NOW HAVE A HOME STN AT PRESENT. HE HAS HAD EXPERIENCE IN CQWW, SS AND FD. HE IS AN ARRL MEMBER.

SP6DXG/NJ6P - LEO W:415)689-6362 LEON MADZIARSKI 217 EDDY ST, APT.#10, SAN FRANCISCO, CA 94102

LEO IS 29 YEARS OLD AND HOLDS AN EXTRA CLASS LICENSE. HE HAS NO STATION IN THE USA. HE PREFERS CW AND SSB EQUALLY AND HAS HAD CONTEST EXPERIENCE IN POLAND. HE HOLDS DXCC WITH 250 COUNTRIES.

W6ZKM - FRANK FRANK H. HOLST 212 CARBONERA AVE., SUNNYVALE, CA 94086 H: 408) 736-4268 W: 415) 854-3300 X2881

Frank is 61 years old, has been a ham for 35 years and holds an Extra Class ticket. His station includes an IC701, IC720A and SB220. His antennas are a TA-36 and wires. He works 98% phone and has won the SCV and SF Section awards in ARRL DX Contests. Frank is a member of NCDXC and ARRL. He is on the DXCC Honor Roll and holds WAZ.

WA6AUE - JIM JIM C. DUFFY W:415)464-1924 1866 26TH AVE., SAN FRANCISCO, CA 94122

JIM IS 39 YEARS OLD AND HAS BEEN LICENSED FOR 24 YEARS. HE HOLDS AN EXTRA CLASS LICENSE. HIS STATION INCLUDES A TS830-S, 10 M QUAD, AND VERTICALS. HE OPERATES 90% CW AND HAS WON HIS SECTION IN THE SS TWICE IN THE LP CATEGORY.

KF6AJ - STEVE STEVEN M. SIMONS 1201 RIDGELY CAMPBELL, CA 95008 H:408)559-8255 W:408)945-9000

Steve is 25 years old and has been a ham for 9 years. He holds an Advanced Class License. His station includes a TS820, 3 el tri-bander and several 1 KW VHF and UHF setups. He ops 80% phone.

#### NEW MEMBERS

NIGD - JOHN JOHN KOEHLER 3455GOYAK DRIVE, LAFAYETTE, CA 94549

н:415)933-9051

JOHN IS 17 YEARS OLD AND HAS BEEN LICENSED FOR 2 YEARS. HE HOLDS AN EXTRA CLASS LICENSE. HIS FORMER CALL WAS KA6NAY. HIS STATION INCLUDES AN SB102. HE WORKS 75% CW AND HAS HAD EXPERIENCE IN ARRL DX, SS AND FD.

KD6T - JIM
JAMES SPIVA
750 TOBIN DRIVE,
VALLEJO, CA 94590

JIM IS 36 YEARS OLD AND HOLDS AN EXTRA CLASS LICENSE. HIS STATION INCLUDES A TR-7, KW AND TRI-BANDER AND WIRES. HE WORKS 92% CW AND HAS OPERATED CQWW AND ARRL FROM KN6M. HE HOLDS DXCC.

NA6T - BOB BOB SMITH 320 PARK ST., FORT BRAGG, CA 95437

BOB IS 38 YEARS OLD, BEEN LICENSED 7 YEARS AND HOLDS AN EXTRA CLASS TICKET. HE HAS A TS830-S AND A KW. HE OPS 80% PHONE AND ALMOST HAS 5 BAND DXCC.

KN6Q - Ted Theodore E. Collins 4420 Chaffin Ave., McKinleyville, CA 95521

TED HAS BEEN ON THE AIR FOR 9 YEARS AND HOLDS AN EXTRA CLASS LICENSE. HE WAS WAGGSR. STATION LAYOUT? HE HAS BEEN ACTIVE IN MOST BIG CONTESTS AND WAS 1ST IN VA. IN CQP

KH6J - WAYNE H:415)828-2429 WAYNE C. NUTSCH W:415)273-7306 101 MADORA PLACE, SAN RAMON, CA 94583

WAYNE IS 39 YEARS OLD AND HAS BEEN LICENSED FOR 23 YEARS. HE HAS AN EXTRA CLASS TICKET. HIS FORMER CALLS ARE K7ARE, KH6JBU. HIS STATION INCLUDES FT-901DM, 2K2, 51S-1, ANTS?. HE PREFERS 90% CW. HE HAS WON ARRL DX TEST AWARDS IN KH6 ON CW. HE HAS DXCC AND BI-CENT. WAS.

#### MINUTES OF

### NORTHERN CALIFORNIA CONTEST CLUB BOARD OF DIRECTORS MEETING

January 6, 1983

The BoD meeting was held on January 6th at the home of N6AUV. Those attending were; N6AUV, N6KB, N6KT, K6RU, W6SZN, WA6VEF, N6XI, and K6ZM.

The meeting began at 8 pm with President Kip announcing that January 24th meeting would have W6BIP, BIP Bachman, as guest speaker giving his slide-talk on TVI and some ideas on curing or reducing it. All of us will find some helpful suggestions in BIP's talk.

There were ten items listed on the agenda, so some of them were touched very lightly.

The awards for the 1982 CQP will be given out at the AWARDS BANQUET in the Spring. The out-of-state winner will be announced by Kip elsewhere.

The NCCC will hav a hospitality suite at the International DX Convention on April 22,23, and 24 at the Holiday Inn in Visalia. Call 209-651-5000 as soon as possible for room reservations. This event will be sponsored by the NCDXC this year.

Everyone agreed that the Velvet Turtle in Burlingame was a great place for the Christmas banquet and it will be probably be the location for the 1983 banquet also.

Several names are being considered as possible officers of NCCC for 1983-84 and any one interested in helping your club in this way please tell Kip as he needs help!

The February BoD meeting will be at K6X0. The meeting adjourned at 11:00 pm.

Respectfully submitted, Phil Frazier, K6ZM Secretary/Treasurer

#### MINUTES OF JANUARY MEETING

The January meeting of the NCCC was held at the CWA Hall in Hayward on the 24th. 43 members and guests attended the meeting.

President Kip started the meeting by having everyone introduce himself. He then announced that the NCCC was well represented in the CQ WW contest by three of our members being in the TOP TEN in the single-op category! KA6ING urged that all contesting members send in their WW summary sheets so that she could finish her list of Award winners and have the Awards prepared. W6OAT reminded us that the N.A. Sprint contest would be on Saturday night, Feb. 5 for four hours.

Kip then read two new membership applications, and after the applicants had left the room, both were voted unanimously into membership. The new members are Wayne Nutsch, KH6J, anf Dan Leffert, KS6C. Welcome into the NCCC, Wayne and Dan!

Our first guest speaker, Bip Bachman, W6BIP, presented his latest version of his talk on "The Reduction and Elimination of TVI". This newest version is mostly slides with appropriate side comments and showed many common types of interference and what could be done about it in most cases. We all got some good ideas on what to do to reduce TVI problems. Many thanks, Bip, for your educational talk.

As a break between talks, a raffle for a "DX EDGE" was held, and the last ticket buyer, N6RO, was the lucky guy. Does that give the gamblers in the crowd any ideas?

Herb Deacon, W6TDK, and Ken Keeler, N6RO, combined to give an extremely interesting and informative talk on TVI from the standpoint of RF shielding and filtering of several current types of transceivers. Herb discussed ways of probing around a unit to find points of RF leakage and demonstrated his RF "sniffing" techniques. Several different transceivers were checked and with the help of Ken's Tektronix spectrum analyzer and sweep generator, the shielding and harmonic output of these units was observed.

Of the units checked, the Drake TR-7 seemed to have the lowest harmonic output and the Kenwood TS-820 had the most unwanted harmonic content. A "modified" TS-820 showed a marked improvement in reducing undesired harmonics. So it showed that nearly all transmitters, particularly the foreign made ones, do not observe the requirements of our FCC people. This meeting was just going well when we ran out of time, so it looked as if we tried to do too much in one evening!

The meeting was reluctantly adjourned at 11:45 p.m.

Respectfully submitted,

Phil Frazier, Secty/Treas.

#### MINUTES OF FEBRUARY MEETING OF THE BOARD OF DIRECTORS

Those attending the February meeting of the BoD at the home of K6XO were; W6RGG, K6RU, W6SZN, WA6VEF, N6XI, K8XO, and K6ZM. The first subject was the DX Convention to be held in Visalia on April 22,23,and 24. It was hoped that the time consumed in handing out awards would be kept to a minimum as it becomes very boring very quickly to all. The format of the convention will be in series so that only one thing will happen at a time. NCCC will have its usual hospitality suite on Saturday night and an invitational cocktail party on Friday night according to WA6VEF.

400 copies of the January Jug were printed so that everyone who sent in a CQP log would receive a copy of the contest results. Kip needs more certificates to send to those who logged 100 or more QSOs. Rule changes were discussed, but because the CQP is becoming a tradition, to change the rules very much would violate present records, so no more changes were made other than the new starting time that was begun this year.

The search for new officers continued and a list of possible candidates was made up and several of the Board will make phone calls to find those who are willing and able to help the Club in this way. The hope is to have a good list of candidates available for the April meeting.

The new mailing list has been completed so that those who have not paid their dues by the end of January will be removed from it and will not receive any more Jugs. The new list will be used for the February mailing of the Jug.

It was decided to discontinue the WØAW Memorial fund and the award because of lack of interest. Kip was going to call CQ Magazine to complete the arrangements.

The meeting was adjourned at 9:45 p.m.

RESPECTFULLY SUBMITTED, PHIL FRAZIER SECTY/TREAS.

#### THANKS TO REPEATER SUPPORTERS

The club's repeaters continue to provide reliable and wide area coverage and, as a result, they get frequent use. But, like everything else, mainten-ance of and improvements to the repeaters cost money. The club owes a sincere "thanks" to the following folks for their recent contributions to the repeater fund:

K6AVC K6CSL WB6DSV N6GG W61SQ K6KWN N6MG K6RU NG6T K6CCL WA6DGX N6FJS K6HNZ KN6K K6LRN W6MTF AA6T

How about it? Heed the call and help keep the repeaters on the air by sending a contribution, large or small, to K6ZM.

KIP, W6SZN

#### NCCC QNI

## W6RGG/R - WEDS.0400Z 147.84/24

DEC.8,15; JAN.5,12,19,26; FEB.2

W6RGG(NCS)(6), KA6ING(7), K6ZM(6), KN6K(6), K6KLY(5), K6CSL(5), W6SZN(4), N6AUV(4), WA6VEF(4), KT7W(3), N6TU(3), WA6IEN(3), KB6XN(3), A16V(3), W6BSY(3), WB6FCR(2), KF6R(2), W6BIP(2), K6XO(2) K6RU(2), NR61(2), WB6DSV(2), N6QW, K6BWX, N6GG, WB6EXW, W6DHN, KC6D, N6BPL, WB6QFQ, N6JL, N8UM, N6NE, NGRO, NGRZ, WGKCV, WAGKXN.

#### LIKE CONTESTS?

#### HATE PAPERWORK?

THE NOTY DUPING SERVICE IS NOW ON LINE. FROM YOUR LOG ! LL GIVE YOU:

1). A LIST PF DUPE QSO'S.

2). Dupe sheet, ALL CALLS BY BAND.

3). RATE SHEET.
4). LABLES FOR

4). Lables for QSL cards (add 1¢ per QSO). 5). Price: 4¢/QSO. Accuracy guarenteed!

BOB WILSON, NGTV. 408)264-6688. CALL ME.

#### CLASSIFIED

FOR SALE: ALPHA 77 WITH 28 MHz. \$2700 MORI, KN6M, 415)254-5507.

FOR SALE: TS180-S WITH PS-30 POWER SUPPLY, CW FILTER, N6BV MODS. MINT CONDX. \$525 OR B/O. KEN, K6HNZ CALL EVES. 415)948-2818.

FOR SALE: VERY LATE MODEL DRAKE C-LINE, ALL FILTERS, NB, PS, SPKR.
CONTEST PROVEN. RICK, N6XI, 408)867-5797(H) OR 408)737-2500(W).

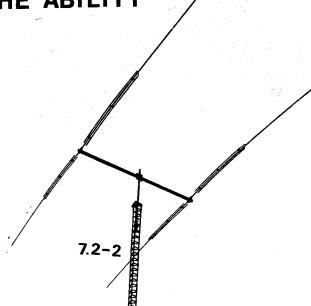
FOR SALE: KENWOOD R-820 WITH CW FILTERS. MINT CONDX. HARDLY USED. \$550. CAM, 415)854-3055 (ALL THE TIME).

FOR SALE: COLLINS 7583-C, MEATBALL. EXC. CONDX WITH CW FILTERS AND ALL SPARE TUBES. \$475 OR B/O. CAM, K6RU, 415)854-3055.

BOD MEETING: MARCH 3 AT KORU

JUG DEADLINE: MARCH 14

# YOU PROVIDE THE ABILITY



#### SPECIFICATIONS :

7.2 - 2

Frequency of operation: 7.0-7.3 MHz

(x 125 KHz)

Gain: 4.9 dBd F/B: 12 dB

Feed Impedance: 50 ohms unbalanced.

Max element length: 46' Boom length/Dia: 16'/3"

Weight: 45 lbs Windload: 6 sq ft For Mast: 2" O.D.

The 7.2-2, on a 16 foot boom, is ideal for hams seeking well-rounded coverage of the amateur bands, as well as good DX capabilities. The linear-loaded elements virtually eliminate interaction with 20 meter beams and permit stacking as close as 4 feet.

WE DELIVER THE PERFORMANCE! KLM P. O. Box 816, Morgan Hill, CA 95037

# MARK THIS DATE! FEBRUARY 26, '83



SPECIAL ONE-DAY-ONLY PRICES

HAM RADIO OUTLET

AT ALL 5 STORES Take advantage of low prices. See and examine the latest ICOM gear. And... there'll be drawings...free gifts!

Visit any of our five stores on February 26 where the large and complete ICOM inventory will be on display.

Special, one-time prices will prevail



EX-235 INTERNAL POWER SUPPLY NOW AVAILABLE FOR IC-740

# BUY IC-740 NOW AND GET YOUR \$50 REBATE!

DIRECT FROM THE FACTORY

This offer good only to March 31, subject to availability.

# SAVE! IC-720A SAVE!

**ALL-BAND TRANSCEIVER** 



CHECK YOUR SPECIAL PRICE

#### **BURLINGAME, CA 94010**

999 Howard Ave., (415) 342-5757 5 miles south on 101 from S.F. Airport.

#### **OAKLAND, CA 94609**

2811 Telegraph Ave., (415) 451-5757 Hwy 24 Downtown. Left 27th off-ramp.



IC-2AT, 2 METER FM. IC-3AT, 220MHz FM. IC-4AT 70CM, FM.

# SALE CALL FOR PRICES

#### AND A COMPLETE LINE OF HAND-HELD ACCESSORIES

BC-30, drop-in charger . \$69.00 BP-2, 425 ma, 7.2V batt. \$39.50

BP-3, 250 ma, 8.4V batt \$29.50

**BP-4**, alkaline batt. case \$12.50 **BP-5**, 425 ma, 10.8V batt \$49.50

HM-9, speaker/mic. . \$34.50

CP-1, cig' lighter cord . . \$9.50 DC-1, DC op pack . . . \$17.50 Leather case N . . . \$34.95

THE CONTEST JUG-PUBLISHED MONTHLY BY THE NORTHERN CALIFORNIA CONTEST CLUB 34456 COLEVILLE PLACE FREMONT, CA 94536

FIRST CLASS FIRST CLASS FIRST CLASS



W60AT

EXPIRES:0682

EPPS, CHARLES K 948—H KIELY BLUD

SANTA CLARA

CA 95051