

The Northern California DX Club, Inc.

The DXer

April 1982

Volume XXXVI

Number 4



1982 CALIFORNIA INTERNATIONAL DX CONVENTION

FRIDAY THRU SUNDAY
APRIL 16-18, 1982
HOLIDAY INN, VISALIA, CA

HEARD ON THE REPEATER

RAIN, RAIN, RAIN - During the recent heavy rains and floods:

- K6XN Maritime Mobile
- W6KH Hydroplaning on 237
- AC6V at 10 fathoms, SUB compact
- QRZ from AF6S, San Jose Isle

CHARCOAL ISLE - One morning a DX station was reported giving a QTH as Charcoal Island. Naturally several stations asked where in the world was Charcoal Isle. Only one ventured an answer - The Barbecues.

MY ANTENNA IS... - K6DC sez his new KT-34XA works so well he got replies before he called. Not to be outdone, N6QR insists his antenna was on the garage floor and he was gone during the entire contest, when he returned his log had 800 Q's and 300 multipliers!

LISTPERSONS - W6LQC asked, "If W7PHO is a lister, is a YL listmaster a listerine?" No one answered!

THE VISALIA BUS RUNS AGAIN

by Bus Chairperson W6KH

The bus will run on Saturday, April 17 (underwritten by club), \$25 per person includes refreshments -- all you can stand or if you can't stand more, you can sit down. Four pickup points:

- 7:30 AM San Francisco Greyhound Bus Terminal
- 8:00 AM Hillsdale Shopping Center, San Mateo
- 8:30 AM Rickeys, Palo Alto
- 9:00 AM Hyatt House, 1st Street, San Jose

Bus leaves Visalia Sunday at 11:00 AM. Make checks payable to NCDXC and send to the Bus Guru W6KH.



1951 DX CONVENTION - FRESNO

Bud Bane, W6WB, sent us the Publicity Release for the 1951 DX Convention. Here are some interesting extracts.

EIMAC sponsored the meeting speaker W6CEM, Leigh Norton, with a presentation on the W1FH final (with advanced anti-TVI).

W6TT and W6DUB of Electric Supply Company featured the open house with advice to bring your own siphon.

Special efforts were made to bring in "one of the very well known eastern DXers". (Anyone remember who that was?)

Rooms at the Hotel California were \$4 to \$6 for singles, \$6 to \$8.50 for doubles and \$12 for suites! A note explained "every room with bath."

Registration was to Ed Hawkins, W6CUQ, (SCDXC) and R. F. Czeikowitz, W6ATO, (NCDXC). W6WB was the Program Committee Chairman.

CONTEST CALENDAR

Apr. 7-8 DX YL to N.A. YL C.W.
Apr. 10-11 CARF Commonwealth Phone
Apr. 14-15 DX YL to N.A. YL Phone
Apr. 17-18 Polish Phone Contest
Apr. 17-18 ARRL Open CD C.W. Party
Apr. 17-18 EME Contest (Part 1)
Apr. 17-18 ARCI QRP SSB Contest
Apr. 24-25 Swiss "H-26" Contest
Apr. 24-25 King of Spain Contest
Apr. 24-25 YL ISSB Phone QSO Party
May 1-2 County Hunters SSB Contest
May 1-3 Georgia QSO Party
May 8-9 USSR "CQ M" Contest
May 8-9 World Telecomm. Phone



DXPEDITION TO WHERE?

"You came here to put Fantasy Island on the air during the CQ WW. What a coincidence! I'm W11YL -- could you use another op OM?"

DX NEWS

Listen For:

- ZD9BV list operation as follows: 14.225, 21.338, 28.620 or 28.940 MHz, Mon. 1630 1900Z, Tues 1800-2200, Thurs. 1800-2200, Sun. 1800-2200.
- Bangladesh S23JA or S23DX by JH2HDK, no dates.
- ZM7VU by DL1VU until April 13.
- Sable Isle by VE1AI, first of April.
- 3X (Guinea) by JA1BRK in Apr. or May.
- Mellish Reef by VK2BJL first of May.

VS9K Deleted effective March 11.

EM8T and UM8MBA QSL's for club members may be directed to W6BSY with SASE. Mac could use IRC's or whatever to help with the card expense. Buro is OK, but not direct of course. Mac also reports UAØNH is NOT a silent key as reported.

BY1PK reported on the air. AA6AD sez a JA placed a LL to Peking and confirmed the operation was on the up and up.

BV2B making frequent appearances on the W7PHO net 14.225 in mornings.

Tnx to the DX Bulletin, Vernon, CT and NCDXC

MARCH PUZZLE SOLUTION

WORDS: A. Water B. Auto
C. Hedge D. Vend E. None
F. Albania G. Prefix
H. Houston I. Repeater
J. Neutralize K. Heard
L. Listmasters M. Whee
N. Heather O. Worst
P. Thought Q. Shannon
R. Be Prepared S. Wooden
T. Heavy



MESSAGE: Perhaps in the newer DXer we again see our youthful endeavors or, on the other hand, we start to realize that perhaps we have been around the bands a long time.

MARCH PUZZLE WINNER - W6JD

Despite Eric's best efforts, five club members successfully solved W6DU's brain buster. Submissions were received from W6ISQ, KB6HT, K6FO, AJ6V and winner W6JD, Doug Westover.

DX CONTEST CALENDAR

By Ken Ruddock, K6HMZ

1500Z Apr. 3 - 2400Z Apr. 4, Polish CW, Exchange RST + Serial No.

1500Z Apr. 17 - 2400Z Apr. 18, Polish Phone, Exchange RS + Serial No.

The Polish contests may or may not happen this year.

April 24-25 ARRL Morning Special - no details yet.

DX CONTEST NEWS

The preliminary scores for the ARRL DX Contest are reported below. There are still some not received. Entries for both CW and Phone must be post-marked by April 6. Please send me a copy of your summary sheets. The WR6ACZ spotting net was very successful thanks to the following net control stations:

AI6V	KD6ZL	W6BJH
K6SMH	N6AN	W6OWQ
W6HUA	N6AUV	N6RO
K6UD	K6HHD	KA6ING

1982 ARRL DX CONTEST - CLAIMED SCORES

<u>CW</u>			<u>PHONE</u>		
MULTI-MULTI	QSO x MULT	SCORE	MULTI-MULTI	QSO x MULT	SCORE
AI6V	2701 x 343	2,779,000	KN6M	5226 x 361	5,650,000
KN6M	2738 x 316	2,595,000	N6RO	4227 x 430	5,400,000
K6ZM	1293 x 234	908,000	AI6V	3757 x 412	4,640,000
			K6ZM	1528 x 297	1,361,000
MULTI-SINGLE			MULTI-SINGLE		
W6BIP	1000 x 223	669,000	W6OWQ	1146 x 188	650,000
K6DC	889 x 190	506,000	W6BIP	548 x 210	345,240
			K6DC	390 x 163	190,710
SINGLE OPERATOR			SINGLE OPERATOR		
N6RO	1677 x 305	1,535,000	W6XR	2150 x 294	1,900,000
W6TPH	873 x 225	589,000	K6RU		
N6GG	865 x 216	561,000	(N6BZA OP)	2030 x 246	1,500,000
W6GO	736 x 227	501,000	K6HNZ	1300 x 262	1,022,000
K6ANP	742 x 184	410,000	W6TPH	1273 x 249	950,000
N6AN	709 x 160	340,320	K6ANP	918 x 203	559,000
K6RU	648 x 156	303,000	K6ITL	300 x 137	120,000
W6NKR	424 x 161	205,000	WB6RFI	490 x 77	110,000
W6ISQ	262 x 123	97,000	N6HR	223 x 125	83,625
N6JM	240 x 93	66,960	N6AN	250 x 107	80,250
AF6S	118 x 100	35,000	N6JM	253 x 104	78,936
W6DU	100 x 100	30,000	AC6V	225 x 114	76,950
W6SZ	112 x 66	22,176	W6FQF	225 x 107	72,000
K6FO	109 x 56	18,312	W6YVK - QRP	304 x 70	63,840
W6ATO - 20M	114 x 40	13,680	KA6ING	190 x 70	40,000
W6JD	75 x 47	11,000	KD6XY	188 x 66	37,224
K6SMH	61 x 52	10,000	K6ZKM	138 x 72	29,808
K6OKK	42 x 23	2,898	W6DPD - 20M	133 x 61	24,339
			W6NKR	40 x 28	3,360
			K6FO	22 x 16	1,056

MINUTES OF NCDXC MEETING

March 12, 1982

Meeting was held at Harry's Hof Brau in Palo Alto, with cocktails commencing at 6 PM or EARLIER in some



cases. Dinner over, the business meeting started at 7:50 PM PDT. Prexy Merle Parten called for introduction of guests, and announced that there will be no meeting in April. This is due to the DX Convention in Visalia. The location of the May meeting is still in doubt. A vote between a barbeque at Tularcitos and Harry's Palo Alto facility drew a mixed reaction.

Thanks was given to NCCC for their grand effort to assist NCDXC in ARRL DX test. Total points over 40M.

First readings for membership given to W6NA, KJ6V, KA6GJW, and second readings for W6QEU, KB6MD, N6BZA. Congrats to the three new ones, and a warm welcome.

The guest speaker Bob Lindsey of Hewlett Packard gave a very amusing and informative slide show and talk on WWV in Boulder. We now see that government spending does not extend to our bulwark of standards.

Bill Vette tendered a brief report on the DXer of Year award. And Bill Zachman, our 1983 DX Convention Chairman, briefed us on the heads of committees. All volunteers for assistants to the committees call Bill W6TPH. Looks good so far, and Bill is off to an early start for 1983. The bus is running to Visalia this year, call Dick W6KH for reservations and times.

A report from K6RK our Treasurer revealed that we are solvent but there have been unexpected bills. (Mr. Murphy) We will have to tap the savings account.

The raffle was just about sold out and a huge success. Depending on whether you won or not. The Secretary W6VG held two winning tickets and won the first prize of an Ameco pre-amp. The second winning ticket of W6VG was declined as a lynch mob was forming. 2nd winner was Larry KD6XY. How about that? Two life member winners. 3rd was KN6K, 4th WD6CMT and K6HXY. Meeting was adjourned at 20:57 PDT.

Respectfully submitted,
Ron Panton, W6VG, Secretary

YASME NEWS

Montjoly, French Guiana
2 March 1982

Dear Friends,

We have just finished 24 days of operation as FYØFOL. We operated all bands, phone and CW, and made 11,000 QSOs. This is the largest number of QSOs made at any of our recent stops. Participation in the ARRL CW DX Competition helped increase our number of QSOs.

We lived at the Beach House of FY7YE, Mario, whom we had visited 25 years ago. We installed our complete station a few feet from that of FY7YE. With the proper choice of frequencies, we were both able to operate simultaneously. We put our antennas up on the beach, and, at high tide, the base of our antenna mast would be in the Atlantic Ocean.

Once again we enjoyed the superb food and marvelous cooking that only the French seem to know how to prepare at its very best.

We were occasionally helped in the operation of FYØFOL by both Mario, FY7YE, and Marcel, FY7BW, who is a Captain in the French Army.

French Guiana was the first country that we have visited in South America without posting some kind of a money-bond before our radio equipment could be taken into the country involved. The French countries require only that an Amateur Radio License to operate in such country be obtained in advance from France.

We go next to Curacao in the Netherlands Antilles (South America) where our call will be W6QL/PJ2. We plan to operate there in the ARRL phone DX Competition.

73 es 88

Lloyd Colvin Iris Colvin
W6KG W6QL



DEADLINE FOR THE DXer

Articles for the May newsletter should be sent to the editor by April 30th.

PART 2 OF A TWO-PART SERIES ON DX PATHS AND THE SUN

Given the importance to a DXer of knowing where the twilight boundary is at any time of year and hour, how does one locate it anyhow? Well, like many things, its easy if you have the tools. In this case, the best tool is a globe, with some special markings near its north pole, nesting in a plastic cradle.

The cradle is a small construction project, the details of which I'll leave to the reader, and only describe it's essential features. It consists of a strip of clear material, probably acrylic, formed into a circular "hoop". This circular strip, slightly larger in inside diameter than the outside diameter of the globe, should be held horizontal by the rest of the cradle. This might be done by using another strip of acrylic formed into a semicircle to connect the hoop to the base, which could also be made of acrylic. The important thing is to support the bottom of the globe so that it sits in the cradle exactly half way down. This depth of the cradle equal to the radius of the globe so that the upper edge of the hoop forms a "great circle" on the globe, no matter how the globe is positioned in the cradle.

The edge of the hoop is used to simulate the twilight boundary. It can also simulate a DX path. To do the latter, merely position the globe so that both ends of the path are at the upper edge of the hoop. You will find that this is always possible, no matter what two points on the surface of the earth are chosen. This done, both the long and short paths are easily seen, since they simply follow the edge of the hoop.

To make it easy to position the globe to simulate various dates and times of day, you should mark up the north polar region of your globe like fig. 1 (aw go ahead, DX is more important than having a pretty globe). Note that two sets of "time numbers" are marked around the arctic circle. Also, some dates marked along a radial line across the pole.

As almost everyone knows, the earth's rotational axis, through the poles, is inclined about 23 degrees from the axis of its solar orbit and it is this tilt which causes the seasons. What we need to know in order to correctly position our model relative to its 'terminator' or twilight boundary hoop is where that boundary crosses the north polar region.

At both spring and autumn "equinox" (March 21 and September 21) the earths axis makes a right angle with the direction to the sun. Thus, at these unique times of year, there is effectively no tilt! The terminator (twilight boundary) is due north-south at all points on the globe, and exactly crosses both poles. Notice that, in the figure, the equinox dates are marked next to the north pole.

At (our) winter "solstice" (December 21), daylight reaches north only to the arctic circle, making the region north of the circle dark 24 hours per day. On the same date, the south polar region is entirely in daylight out to the antarctic circle. At (our) summer solstice, daylight extends over the entire north polar region out to the arctic circle.

Continued on Page 6

A LITTLE ASTRONOMY FOR DXERS (Cont'd from Page 5)

Between the solstices and the equinoxes (that could be a song title, if anyone could say it), the northern edge of night (or day, if you like) can be found using trigonometry, since its distance from the pole is just a sine function with days per year close enough to 360 to use them as degrees. Doubtless most will agree that it's much easier to make some markings on a globe one time than to get out a calculator (anyone still use a slide rule?) each time you use the globe. The scale has some interesting aspects. Note that every point on the scale except the extremes and the pole has four dates marked. This is because there are actually four dates each year when the terminator is at each of these points (By this time you have probably already figured out how the thing works, but I'll continue just in case). Note that, in addition to the scales, there are some shaded symbols. These symbols indicate whether the dates apply with the sunny side up or down. The fuzzy side of the symbol is the night side.

The first thing to do, when using the globe, is to get the axis-tilt right. To do this, simply line up the upper edge of the hoop with the mark corresponding to the current date. As might be expected, given the dual date scales, there are always two possible correct tilts; the user has the choice of putting the daylight side either up or down. This is nice because it eliminates the need to see the bottom of the globe. Whether "sunny side up" or not, the shaded symbols will show which date scale to use. For dates other than those marked, just put the edge more or less proportionally between; it'll be close enough for our purposes.

Now let's look at the "hour-angle" scales around the arctic circle. Their purpose, of course is to allow rotation of the globe to account for the time of day. The way the scales are used is very straightforward. You just put the UTC time straight up (it couldn't be much easier than that, right?). And wouldn't you know it, one of the time scales is for daylight upward, and the other is for night side up. The same shaded symbols are used to indicate which is which, but this one's hard to get wrong. If you use the wrong one, your own QTH will be shown in darkness when it's daylight and vice versa. So look out the window to check it! Remember though, as you're rotating the globe to keep it in sync with the clock, that the globe must always be rotated on its own axis. The distance from terminator to the arctic circle must always be the same as that shown by the date scale. If this is difficult, it may be helpful to make a few more scale points and concentric circles in between those shown in figure 1.

With the globe correctly oriented, you can sight along a possible DX path (or stretch a string between the end-points to find it). You can easily judge how far into the daylight region a path goes and the highest solar zenith angle reached. It's equally clear how far into darkness the path extends. As one listens to and works DX while observing the relationships between observed paths and the sun using this tool, one tends to become pretty good at predicting when openings may occur.

An important astronomical fact is that the earth turns on its axis 15 degrees per hour. By no coincidence, most globes have 15 degree longitude lines marked on them. Thus, these lines also show solar time differences of one hour per line. You can

Continued on Page 9

THE HAM MART

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Kenny,
I'm going into town,
how long does the
contest last?

All weekend,
Ruby.
UR 59 Cal etc.,
55 etc.
QRZ contest...



RUSSIAN CALL LETTER PREFIXES

UA1	1,2	UA2	3	UA3	1	UA4	1	UA5	1	UA6	1	UK7	13	UH8	10	UA9	4	UA0	4
UA1P	2	UC2	6	UK3	1	UK4	1	UB5	5	UD6	7	UL7	13	UI8	11	UK9	4	UKO	4
UK1	1,2	UK2A	6	UV3	1	UV4	1	UK5	5	UF6	8			UJ8	12	UV9	4	UVO	4
UN1	1	UK2B	16	UW3	1	UW4	1	UK50	15	UG6	9			UK8A	11	UW9	4	UWO	4
UV1	1	UK2C	6	UX3	1	UX4	1	UO5	15	UK6A	1			UK8G	11	UX9	4	UXO	4
UW1	1	UK2E	6	UZ3	1	UZ4	1	UT5	5	UK6B	1			UK8H	10	UZ9	4	UZO	4
UX1	1	UK2F	3					UW5	1	UK6C	7			UK8I	10				
UZ1	1	UK2G	17					UY5	5	UK6D	7			UK8J	12				
		UK2H	17							UK6E	1			UK8K	11				
		UK2I	6							UK6F	8			UK8L	11				
		UK2L	6			1.	European Russia			UK6G	9			UK8M	14				
		UK2O	6			2.	Franz Josef Land			UK6H	1			UK8N	14				
		UK2P	16			3.	Kaliningradsk			UK6J	1			UK8O	11				
		UK2Q	17			4.	Asiatic Russia			UK6K	7			UK8Q	11				
		UK2R	18			5.	Ukraine			UK6L	1			UK8R	12				
		UK2S	6			6.	White Russia			UK6N	1			UK8S	11				
		UK2T	18			7.	Azerbaijan			UK6O	8			UK8Z	11				
		UK2V	18			8.	Georgia			UK6P	1			UM8	14				
		UK2W	6			9.	Armenia			UK6Q	8								
		UK2Z	6			10.	Turkoman			UK6R	1								
		UP2	16			11.	Uzbek			UK6U	1								
		UQ2	17			12.	Tadzhik			UK6V	8								
		UR2	18			13.	Kazakh			UK6W	1								
		UW2	1			14.	Kirghiz			UK6Z	1								
						15.	Moldavia			UV6	1								
						16.	Lithuania			UW6	1								
						17.	Latvia			UX6	1								
						18.	Estonia			UZ6	1								

SPECIAL PREFIX STATIONS: Olympic stations: an R in place of a U in regular callsigns.

SPECIAL CALLS: Use logic: UOY was UAOY, U2Q was UQ2. The R contest calls: add a U and read backwards: R6F plus U equals R6FU which equals UF6. 4K1 calls are used in Russian Antarctica.

- Tnx to Dick, WA6SLO

A LITTLE ASTRONOMY FOR DXERS (Cont'd from Page 6)

use the longitude lines to estimate the time that any point on the earth has been in darkness, for example, or how long 'till dawn in Darwin. Just estimate the distance, going parallel to the equator (or any latitude line) in units of the longitude line spacing at that latitude. The result is the time in hours.

A related use for the "globe-in-a-cradle" is in showing approximate sunrise and sunset times for any place on the earth and at any time of year. How do you do it? Just rotate the globe, keeping the correct tilt for the time of year, until the desired terminator (sunrise or sunset) is over the location of interest. The UTC time of that event will be shown by the straight-up point on one of the two time scales. As in the other cases, its pretty obvious which scale is correct because the other one puts the answer in error by 12 hours!

What we need now is a follow-up article on a good design for the cradle, showing construction details and drawings of the parts. Some clever and crafty DXer can not only bask in the admiration of fellow members of the NCDXC, but also enjoy the addition of a useful and presumably beautiful new object to his shack.

- Tnx to Dave Barton, AF6S

CALL	DXCC			WAZ								WPX				
	MIX	PH	CW	MIX	PH	CW	10M	15M	20M	40M	80M	MIX	PH	MIX	PH	
AA6AD				271	181	252	109	176	258	54	-	40				
W6AED/7					304			100	100			40				
W6AHP		311			328			100	100	100	100	40				
W6AM	319	319			363	160	160	180	363	144	131	40	40			
N6AN					326	268	160	160	247	269	111	52	40	40		
K6ANP					289	159	154	104	101	149	50	57				
K6AO	314				336	295		67	78	176	90	79	40			
W6ATO					260											
N6AUS					258											
N6BFM					6											
W6BH					293	285		191	236	290	181	63				
W6BJH					322	192	200	129	128	201	111	72	40			
W6BSY	316				354	342							40			
KB6BW						167	2	65	40	90	10	3		37		
W6CF	317				338	294	185	204	239	306	178	138	40	40	893	
K6CLV					220											
K6CN					240	196										
WB6CUA					304	258	216	70	89	205	36	3	40			
AD6D						72	221	74	132	125	65	26	39(CW)			
K6DC	319				356											
W6DD						126										
K6DT	312				336	310	266	229	251	328	153	121	40	40	1201	
W6DU					300											
W6ERS					335								40			
W6ETR					211			50	92	146	42	-	40			
WB6EXW					303			100	100	100	50	11				
AF6F					211	203										
WB6FBN					257											
WB6FCR					254	250										
K6FD					226											
K6FO					250	163	190	104	131	203	102	55	40			
W6FQF					268	266	65	100	100	100	38	33	40			
W6FSJ	317				354			100	100	100	100	100				
AG6G					247											
KB6G					243								40			
WB6GFJ						300		138	181	231	103	49	40	40		
N6GG					301								40			
W6GO					309	306	263	221	223	284	160	143	40	40		
K5GOE					222	211		95	100	100	70	12	40	40		
KB6HP						161										
K6HHD					284	275	10	163	117	152	14	4	40			
N6HR					319	315		100	100	100	100	59	40		863	
W1ICU		314			330											
W6ISQ	319	311			346	331	207	157	189	219	122	110	40	40	869	
W6JD					289	160	253						40	40		
W6JHN						146										
KB6JK					274								40			
N6JM					264	240	174	139	179	217	68	42	40	40	1063	
N6JV					318	167	280	100	100	100	100	40			1579 1539(CW)	
W6JZU					320			75	115	255	22	12	40	40		
N7KA					252								40	40		
K6KCM					215	205	10									
W6KG	318				352	290	108	161	193	210	169	105	40	40	911	
W6KH	316				350											
W6KNH	318				335	334							40	40		
W6KOE		313			327								40	40		
W6KQK					303	281	266	235	263	292	62	40	40	40		
K6KQN					265	260							40	40		
K6LQA	311				327								40			
W6LQC		312				326		100	100	100	46	83	40	40	653	
K6MA					340	305	167	110	100	100	102	108	40	40		
W6MUR	315				351								40			
N6MQ	318				296	289	264						40			
W6MZ					324											
KM6N					229	179	165	100	100	100	12	7	40			
W7NCO					326			137	161	294	181	114	40			
W6NKR					289								40			
W6NLG					261	260	16	66	75	100	10	4	40	40		
W6NPFY					308	200	250	200	200	200	164	131	40			
KR6O					277											
KS6O					259	175	237						40(CW)			
N6OC					303	300							40			

CALL	DXCC			WAZ								WPX				
	MIX	PH	CW	MIX	PH	CW	10M	15M	20M	40M	80M	MIX	PH	MIX	PH	
W6O6EY					227						71	60	170	20	8	40
WB6OIP					289						200	152	160	248	85	20
N6OJ					279											40
K6OJO	311	310			324	323				137	231	295	12	12	40	40
W6OMR					292	246										
K5OS	313	311			328	326				88	76	285	146	216	40	40
WB6OTC					284											
W6OWM					348											
N6OZ					280					202						40(CW)
AK6P					250	250										
K6PU	316				340	321				100	100	100	100	100	40	40
AG6Q					257											
KB6Q					220											
W6QDE					281					138	243					
W6QL	315				337	263	69			114	161	201	111	103	40	40
N6QR					313					100	100	100	100	100	40	40
N6RC					213											
W6RFX					309	306										40 40
W6RGG	319	317			340	336										40 40
WB6RIU					310	302				122	141	260	100	105	40	40
W6RJ	317				343					100	100	100	100	100	40	40
K6RK					315	291	166			100	100	100	100	100	40	40
N6RR					289					116	201	176	129	88	40	
WB6RSU					235											
K6RU					300	250				100	100	100	100	97	40	38
K6RUW						242	1									
WA6RVY					223											
DJ6RX					301					100	100	100	100	100	40	
AF6S					297					288	242	255	286	169	118	39
W6SC	311				333					100	100	100	100	48		
W6SJC					231	101	101								40	40
K6SMH					250	197	161	126	146	205	81	39	40	40		
N6ST					295	275	180	135	166	245	73	22	40	40		
W6SYL					103	103										
W6TC	309				322	293				100	100	100	100	100	40	
W6TER					269											
WA6TKT					219	150	100	100	100	100	100	100				
WA6TPO					251					58	84	167	6	6	20	
W6TGH					237	209	134	125	156	145	60	51				
W6TSQ					343					257	300	300	276	225	40	-5 Band
K6TXR			309			333									40	
AE6U					301	269	200	200	200	176	127	40				
K6UD					312	303	220	230	285	146	133	40				
WB6UOM						300										40
W6UR					264	159	158									
AC6V					288	285	124	216	196	202	29	4	40	40	653	
AJ6V					257	157	191	107	107	200	32	10	40			
KF6V						135										
N6VF																

April 1982

AMATEUR RADIO CROSS-REFERENCE PUZZLE

by Rod AC6V

As you fill in the answers to the definitions, place the letters in the corresponding blanks below. Send completed puzzle to the Editor, 455 Jacaranda Way, Sunnyvale, CA 94086. The puzzle winner receives a prize of 5 IRCs.

DEFINITION OR SYNONYM

YOUR WORD

A. Bottom end of the 20 meter phone band during a contest

30 21 33

B. Inauspicious number

37 14

C. Used during a 1 by 1 contact

7 39 15

D. DX by appointment

36 5 20 12

E. Transceiver supports

22 17 23 9

F. Uncontrolled pileup

34 19 2 35

G. Likely to occur during warmup

4 29 11 31 27

H. Busy?

28 6 3

I. Emotion after working a new one

26 16 25 13

J. Not used on a repeater

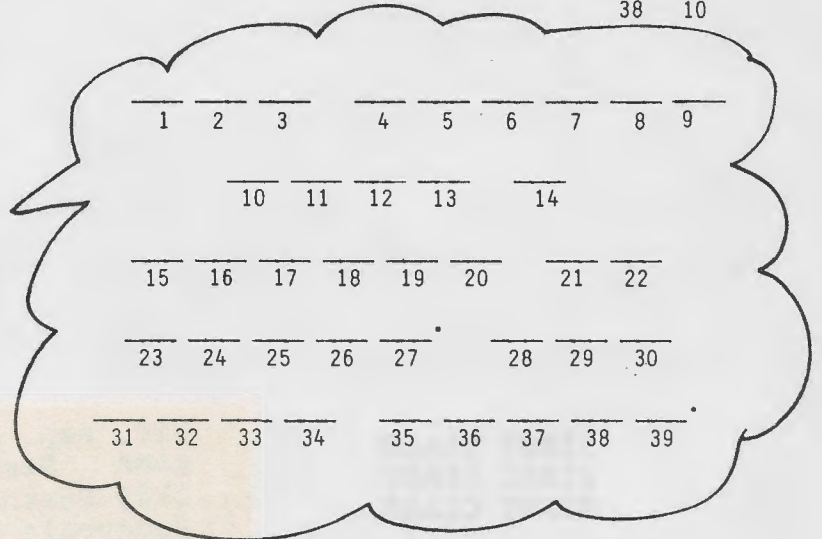
8 1

K. Russians can't use this

24 32 18

L. Ten to the minus 3

38 10



1 2 3 4 5 6 7 8 9

10 11 12 13 14

15 16 17 18 19 20 21 22

23 24 25 26 27 28 29 30

31 32 33 34 35 36 37 38 39

NORTHERN CALIFORNIA DX CLUB INC., P.O. Box 608, Menlo Park, CA 94025

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NCDXC REPEATER: WR6ACZ

TRUSTEE:	Charlie Kump	W6ZYC
Input Frequency:	147.96	MHz
Output Frequency:	147.36	MHz
Suggested Simplex:	147.54	MHz

NCDXC THURSDAY NIGHT NET

On WR6ACZ Thursdays at 8:00 P.M.

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WEST LINK:	Jay O'Brien	W6GO
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W6TI TRUSTEE: Bob Vallio W6RGG

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