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# Northern California DX Club DXer



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Volume XLIV - Number 1

January, 1991

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## RON'S COMMENTS

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In the first month of this palendromic year, Ron, citing pressures from Christmas, New Years and Visa has chosen to not comment. So, to fill a few column inches, this Editor offers the following.

From the SCDXC Newsletter:

The SCDXC was the largest major contributor (\$1500) to the Northern California DX Foundation as per a letter of recognition printed elsewhere in this (SCDXC - Ed.) newsletter, with acknowledgement in the NCDXF Newsletter, Summer 1990. so . . .

We offer a friendly challenge to the NCDXC to match or beat our donation!! Hey, guys, your treasury is triple what ours is, how about it?

and from Tony, K6DR:

The final count down for reservations for the Sacramento NCDXC meeting 8-9 February is here. Some unavoidable changes have developed. The Santa Fe Inn Management has decided to return to their previous name, "Sierra Inn". The location remains the same and they promise to advise all who have sent dinner reservations. The closing date for early registration has changed to 18 January. The Sierra Inn will honor their reduced special \$38 Sgl over-night rate plus a free breakfast Saturday morning. Committee chairperson Tony, K6DR reports that 60 prepaid reservations have been received. At the present rate, the meeting will qualify for the large banquet room.

The "Tournament of DXers" golf tournament entries have reached 16. This promises to be an event to remember.

There is a two meter talk in frequency available. Use the 146.91 d600 W6AK repeater.

That about covers it. 1991 is well launched. I am celebrating with a cold. All wrapped up in front of the computer. Someone is muttering about a "Big Brass Bed" on the stereo. The cats are curled up on the heat vent. The YA is rumored to be nearing on the air status. Have a good year, folks.

73 de K6ZX

## CONTENTS

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Ron's Comments . . .	Page 1
Club Information . . .	Page 2
Meeting Minutes . . .	Page 2
YASME Letter . . .	Page 3
3 Easy Pieces . . .	Page 4
Propagation Summary . . .	Page 5
Codelessness . . .	Page 6
The Morning Show . . .	Page 7
Classified . . .	Page 7

## NEXT MEETING

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Our next gathering will be at Harrys Hoffbrau in Palo Alto on January 11, 1991. Attitude adjustment at 6 P.M., Dinner at 7:15 and Club business at 8:00. Program to announced later.

## CLUB INFORMATION

THE NORTHERN CALIFORNIA DX CLUB, INC., PO BOX 608, MENLO PARK, CA 94026

The DXer is the bulletin of the NCDXC and is published monthly for the benefit of its members. Unless otherwise noted, permission to use any portion of this publication is hereby granted, provided credit is given to the DXer.

### NCDXC OFFICERS

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Vice President: Bill Fontes, W6TEX  
Secretary: Stan Kuhl, K6MA  
Treasurer: Bob Wilson, NQ6X  
Director: Morris Brown, N6DJM  
Director: Chuck Vaughn, AA6G  
Director: Larry Souza, KG6GF

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2520 Heather Lane  
San Bruno, CA 94066

### NCDXC REPEATER W6TI/R

Output 147.36 Mhz, Input 147.96 MHz  
Trustee: Bob Vallio, W6RGG  
Repeater Committee Chairman:  
Ralph Hunt, AG6Q  
Suggested simplex freq.: 147.54 MHz

### NCDXC THURSDAY NIGHT NET

On W6TI/R Thursday at 8:00 PM local time.  
Operations Manager: Ralph Hunt, AG6Q  
DX News: Bob Artigo, KN6J  
Propagation: Al Lotze, W6RQ  
Contest News: Rich Hudgins, WX6M  
Westlink: Craig Smith, N6ITW  
Swap Shop: Ben Deovlet, W6FDU  
933 Robin Lane  
Campbell, CA, 95008  
408/374-0372  
QSL Information: Mac McHenry, W6BSY

### NCDXC DX BULLETIN BROADCASTS

Trustee: Bob Vallio, W6RGG. General interest broadcasts at 1800Z Sunday and 0200Z Monday on 14.002 MHz and 7.016 Mhz

## MEETING MINUTES

NCDXC Board of Directors Meeting Dec. 5, 1990  
Harrys Hoffbrau, Mountain View, CA

1 - Members present - W6OAT, NG6X, NQ6X, N6DJM, W6TEX, K6MA

2 - Rusty, W6OAT presented draft copies for DXAC Application for Korea (North-South) clarification of DXCC status. BOD briefly reviewed the application and backup documents which contained at least 20 pages. BOD complemented Rusty on completeness and detail.

3 - New art work and printing costs for California Award approved by BOD. - \$492.00

4 - BOD reviewed list of individuals and organizations, compiled by W6VG, who receive complementary copies of DXer. Appropriate deletions and additions were made.

5 - Discussion on "Text to Voice" converter now available for about \$325 from DX Solutions. It was proposed as a possible future club program with pro - con discussion to follow.

6 - DXer of the year chairman to be appointed in January.

7 - NCDXC Club Pins ordered (275) from N4NX. Estimated 8 week delivery.

8 - Short discussion on club activities to promote DX interest - such as publicizing Marathon, North-South rivalry in ARRL DX Test, 9 Band DXCC Awards, DX Ladder.  
de Stan, K6MA

NCDXC Membership Meeting - Dec. 14, 1991  
Harrys Hoffbrau, Palo Alto, CA

1 - Ron, NG6X opened the meeting.

2 - New applications for membership:

First Readings:

KB6JXT, Todd Jonz, Santa Cruz

K6AFL, Rowland Haggie, Menlo Park

Meeting Minutes - continued.

One Second reading, approved by members present:

AA6PV, Ronald Olson  
1739 Cape Coral Dr.  
San Jose, CA 95133  
(408) 926-9753 H  
(415) 966-3524 W

3 - 9 Band Award - AA6G to compile report - watch DXer for info/report.

4 - NCCC Christmas party announced for Dec 20 at Velvet Turtle, Burlingame. NCDXC Members welcome.

5 - International DX Convention - Visalia April 12 - 14

- K6ITL says lots of great prizes.
- Bus Trip - K6PU waiting by the phone for reservations. Please Call!
- Radisson House in Visalia has plenty of rooms left. There will be Bus shuttle service between hotels.
- Fliers being mailed out.

6 - Program. Bill, W6TEX: Short discussion of Digital to Voice repeater converter which NCDXC could use on W6TI. Unit is commercially available. Send any comments to BOD.

Visitor BV2FB, Ralph Yang, finally found the meeting place after 2.5 hours search after arriving SFO from Taiwan. Ralph told us that it took 25 years to become a ham. Many restrictions for many years because of proximity to mainland. There are 512 hams being licensed, mostly fone. His station located in condo, equipment includes 60 ft. tower and Yagi. He is looking for vertical for WARC bands. Members encouraged him to make a multiwire dipole for WARC Bands oriented to California/West Coast. Ralph had interesting QSL card designed by Ralph without ever seeing a QSL before, printed by a calendar publisher.

de Stan, K6MA

WE GET LETTERS

Walvis Bay, R.S.A.

Dear Friends,

We concluded our operation today in the recently announced new country of Walvis Bay. Our call was ZS9/W6KG, and in many ways it was our most successful operation in Africa since our start in August this year. We made 8000 QSOs with radio amateurs in 152 countries. We had a surprise visit here by two of our most active YASME directors, Martti Laine, OH2BH and Wayne Mills, N7NG. The two of them were on their way to Penguin Island where they had a big DXpedition assisted by Chris Burger, ZS6BCR and Pertti Turunen, OH2RF.

Here in Walvis Bay we stayed at the QTH of ZS9S, Capt. John Smith. We used his antennas and our equipment. Probably ZS9S and Ian ZS9A, are the most active permanent residents of Walvis Bay. Five years ago Ian was the Postal Chief and in charge of issuing ZS3 licenses to radio amateurs in the area now known as Namibia. Our call given to us by Ian was ZS3/W6QL.

While we were operating in C9QL before coming to Walvis Bay we announced in our letter of 6 Nov. that radio conditions were poor and that the sunspot cycle was declining. We found out here in Walvis Bay that most of the weak signals were from a partial mal-function in the front end of our transceiver. As we passed through Namibia on the 15th of Nov. a thief stole a large bag containing some 220 feet of RG8 coaxial cable that we use to connect our tri-band beam to our station. The stolen coaxial cable was replaced and our transceiver was repaired by Rudy Wiechers, V51W and Derek Moore, V51DM, both of Electro-Com Co. in Namibia. They did this below cost and we owe them a very big thanks.

73 de Lloyd Colvin, W6KG  
88 de Iris Colvin, W6QL

Editors Comment: Now that the receiver is working again, Lloyd and Iris should return to C9, and listen very carefully for that teeny peep at the bottom of the pile, carefully sending. . . de K6ZX. . .

### 3 EASY PIECES

#### ARE YOU QUALIFIED FOR DXCC?

A top DXer not only knows all the current DXCC countries plus all the deleted ones, but he also is keenly aware of possibilities for new ones. The following list comprises areas which many consider as sovereign areas. Should you hear a station on from any one of these, be sure to work it. There is still a lot of truth in the ancient saying "Work 'em now, worry later!" Be sure that if you know these, you will know some DXCC countries. Absolutely!

Ellinki Dimokratia  
Suomen Tasavalta  
Magyar Nepkoztarasag  
Shqiperi  
Nihon  
Kalatdlit Nunat  
Al Mamlaka al Urduniya al Hashemiya  
Han Kook  
Chosun Minchu-chui Immin Kongwha-guk  
al-Mamlaka al-Maghrebia  
Zhonghua Renmin Gonghe Guo

Passing mark is 20. That's twenty per-cent right but you will be on probation, your DXCC certificate turned to the wall. That's the law!

#### ARE YOU QUALIFIED FOR WAS?

If you wish to attain facility in any field, you had better give some attention to practicing. As a mid-life test of your qualification for the Worked All States Award, check your knowledge of the following:

- Which is the easternmost state of these United States?
- Which is the southernmost state?
- Which is the most westernmost state?
- Which is the most northernmost?

Not that any of these count for WAS but one has to attain a grasp of the big picture. Always. 75% should be a passing mark, anyone getting everything correct will continue to receive the DXer by fast mail! Employees of the DXer and relatives of the editor not eligible.

Answers at the end of the article. Don't peek!

#### CHINESE TELEGRAPHY

A good question to ask a DXer is if he ever worked into China transmitting in the Chinese language. Say it quickly and you might get an affirmative response. Ask how it was done and you may get a studied explanation, possibly even difficult to understand. One might have to study long to work DX in the Chinese language, or have an item usually not possessed by DXers.

Bill Bryson in his book "The Mother Tongue", notes that China uses a pictographic-ideographic system for an immensely complicated language. With some 4000 common characters in a language that possesses some 50,000 characters, ordinary Chinese typewriters are enormous and the typing speed is about ten words per minute. A typewriter that would take in every Chinese ideograph would be about fifteen feet long and five feet wide. So how did the Chinese handle the arrival of telegraphy?

Very simply! For telegraphy each character in the Chinese language was assigned a number, PERSON, for example was assigned 0086. Thus, even though you did not speak Chinese, you could translate a message just by looking up numbers in a book, this no matter what was your native tongue. But you had to go by the book.

Are you qualified for DXCC? Rather obviously the answers are:

Ellinki Dimokratia	Greece
Suomen Tasavalta	Finland
Magyar Nepkoztarasag	Hungary
Shqiperi	Albania
Nihon	Japan
Kalatdlit Nunat	Greenland
Al Mamlaka al Urduniya al Hashemiyah	Jordan
Han Kook	South Korea
Chosun Minchu-chui Immin Kongwha-guk	North Korea
Zhonghua Remin Gonghe Guo	China

Are you qualified for WAS? The answers are:

- Alaska
- Hawaii
- Alaska
- Alaska

Rational:

- Alaska is obviously the northernmost state
  - Hawaii is obviously the southernmost state
- On item 3 and item 4, for following should explain things. East starts and west ends at the 180th merid-

ian. This meridian runs through the Aleutian chain of islands in Alaska. It does appear the Semiscopchoi Islands are just beyond the 180th meridian. Just short of the 180th meridian of longitude is a small island and this is the westernmost point in the U.S. If you do not understand this, perhaps you are not ready for WAS! You might possibly, however, with your limited grasp of things, do well with DXCC.

(From: Bill Bryson's "The Mother Tongue")

de Hugh Cassady WA6AUD

## PROPAGATION

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Report Issued In-Part from Data Released by the Space Environment Services Center Boulder Colorado

### SIX MONTH SOLAR CYCLE OUTLOOK

Solar prediction models are still suggesting an increase in solar activity early in January or February of 1991. Preliminary analysis of activity during December has verified that activity levels have increased at least during December. Activity is expected to continue to increase, reaching a peak in January or February, followed by a decline to more quiet conditions until near June or July of 1991. Major flaring has increased dramatically during December. Models indicate a slight risk of at least one major proton flare occurring during the next pulse of activity. Although no proton flares have yet been observed during December, models still indicate a potential for proton flaring, particularly between approximately 7 January and 21 January.

Geomagnetic activity is expected to be higher in January than it has been so far in December. Monthly magnetic indices are expected to peak between February and April. Preliminary estimates indicate a potential planetary average A-index of near 23 between February and April, 1991.

Auroral activity could peak in January or February, depending on how intense the pulse of solar activity becomes during these months. If solar activity is below the levels expected for these months, auroral activity will probably peak in March. Models indicate a slight risk for a major auroral storm sometime in January or February, caused by potential major

flaring. If the storm materializes as models suggest it might, auroral activity may become visible over low latitudes. However, this activity is strongly dependent on the intensity of major flaring. The models are not in full agreement with regards to the intensity of major flaring which might occur during these months. Hence, some reservations are being made with regards to the accuracy of the models.

HF radio propagation conditions are expected to be relatively good during January and February, except for periods of geomagnetic storming which is expected to significantly hamper attempts at HF DX communications. The number of M-class flares is predicted to produce fairly frequent daytime HF signal absorption, distortion and potential periods of near blackout conditions during potentially intense solar flares. However, MUF's will be enhanced due to the increased solar activity, which will permit very good DX opportunities on frequencies above 30 MHz. Night-time propagation conditions are expected to vary from very good to very poor. During periods of quiet geomagnetic activity, night-time propagation conditions are expected to be very good, with sufficient F-layer ionization to permit good DX possibilities on higher HF bands. However, fading and signal flutter will dominate the higher latitude paths. During periods of potentially strong geomagnetic activity, propagation conditions will deteriorate significantly over most latitudes. High latitudes may experience severe flutter and absorption during these periods. But overall average conditions during January and February should be relatively good.

VHF radio propagation conditions are expected to be normal to above normal in January and February. Frequencies near the 6 meter wavelengths are expected to be particularly enhanced during early January and possibly February as well. Openings above 50 MHz are anticipated during the early part of 1991, due to the increased ionization and enhanced MUF's. There is a good chance for auroral backscatter communications on all VHF bands during magnetic storm periods. If the intensity of magnetic storming materializes, widespread VHF auroral backscatter communications may become possible over high and middle latitudes, with a slight possibility for low-latitude auroral backscatter as well. Conditions should then fall to normal or slightly below normal levels from March until about June or July 1991.

## FCC CREATES CODELESS CLASS OF AMATEUR RADIO LICENSE

For the first time ever, starting in February it will be possible to obtain an Amateur Radio license in the United States without passing a Morse code test. This was announced by the FCC at its open meeting yesterday, December 13th. The Federal Communications Commission (FCC) has eliminated the need for new Technician class Amateur Radio license applicants to demonstrate proficiency in Morse code in order to have all amateur privileges above 30 MHz. The implementation date may be as early as February 1991. Technicians who obtain their licenses prior to that date will be grandfathered, meaning their existing HF privileges will continue.

The codeless Technician written examination will have 55 questions (existing Elements 2 and 3A). New Technicians wishing to gain access to the HF privileges below 30 MHz will be required to pass the Element 1A (5 WPM) Morse code test before three Volunteer Examiners accredited by Volunteer Examiner Coordinators, and will be given a Certificate of Successful Completion of Examination (CSCE) to serve as evidence of their qualifications. That CSCE must be retained by them in perpetuity to prove they have met the requirement to gain access to the Novice HF bands. Novices wishing to upgrade to Technician must pass Element 3A to gain the VHF privileges of the Technician class. Novices will need to retain a copy (preferably the original) of their Novice license in order to show that they have met the 5 WPM requirement for HF band access. This is because there will be no call sign designator to indicate Technicians who have or have not passed a code test. VECs will supply the FCC with a list of those codeless Technicians who passed element 1A.

There has been no change to the Novice license in any way, nor has there been any change made above the Technician class. Novice examinations will continue to be available both by two Novice examiners (no test fee), or by three accredited VEs (no test fee if only elements 1A and 2 are involved). The FCC decided to retain the current Novice Class operator license as an alternate entry level license for those persons able to pass the 5 WPM Morse code test instead of the more comprehensive written exam required for the Technician Class license.

At a press briefing held just after the Commission's meeting, FCC Private Radio Bureau Chief Ralph Haller said "The Amateur Service is not growing as it should relative to what it has to offer." He said that the Amateur Service is where our nation's technical expertise comes from—that the changes should attract people who are interested in computers and digital communications, and should help the US to become more competitive.

In a news release today, ARRL President Larry Price, W4RA noted with pleasure that the Commission had decided to retain the Novice license as a means of entry into Amateur Radio and to adopt a codeless license with a meaningful written examination requirement. "Our members were very strong on both of these points, because they couldn't imagine how we could maintain the character of the Amateur Radio Service without them," Mr. Price said.

President Price sounded a note of caution with the privileges the Commission plans to grant codeless licensees. He indicated that the formula developed by the ARRL Board, which called for privileges above 220 MHz, was based upon extensive membership input. It was carefully balanced to offer attractive privileges while protecting existing patterns of amateur activity. While it will take some time to gauge the reaction to the Commission's action, Mr. Price observed that the FCC formula is likely to be less acceptable to many amateurs than the League's. He asks that League members share their views with their elected Directors, who will collectively determine League policy.

"Before we can decide whether to request that the Commission partially reconsider its action, we'll have to see the Report and Order," said Mr. Price. Usually it takes the FCC from several days to several weeks after a Commission action to release an item after editorial review. There is a 30 day window of opportunity following release in which petitions for reconsideration can be filed. Mr. Price noted that ARRL Board was holding its regular meeting on January 18-19 1991. "The timing looks good for a careful review of the Commission's action at that meeting," he said.

COLUMN

The Morning Report . . .

160 Meters  
'KD7P/NH7 1.828 1300Z

80 Meters

'V73AS 3.508 1235Z  
K4SXT/ DU3 3.503 1235Z  
3D2XV 3.502 1316Z  
RA0QA 3.504 1510Z  
3W4DK 3.502 1530Z  
XW3DV 3.505 1545Z

40 Meters

RW0AB 7.006 1155Z  
HG3DXC 7.003 1510Z  
XU1DK 7.009 1423Z  
BV2A 7.006 1515Z  
KD7P/NH7 7.001 1130Z  
9M6OO 7.003 1200Z  
3D2AG 7.005 1255Z  
UH3E/UA9TF 7.004 1325Z  
FK8GJ 7.007 1455Z  
VR6BX 7.159 0300Z  
9N1HMB 7.007 1505Z

20 Meters

UL7G/RW4LQ 14.007 1620Z  
JX7DFA 14.010 1710Z  
FR/N6AA 14.185 1535Z

10 Meters

J8/KE1PK 28.025 1512Z  
ZS9Z/ZS1 28.445 1640Z  
VP5VPH 28.407 1615Z  
TU2QQ 28.521 1750Z

This year I thought conditions in CQWW CW were best in recent memory. 40 Meters was especially good. I was happy to hear ZC4CZ on 20 CW, XZ2CW on 10, 15 CW and D44BC on all bands. I talked to N6AA after the test. He worked 3851 Q's, 151 Zones, 369 Countries for a raw score of about 5.8Million. This morning (26 Dec.) some of us worked 9N1HMB. We hope he was real. QSL to JA6CBG. Other QSL info:

TU2QQ 91 CBA  
3W4DX RW3DX  
3W4DK UA3DK  
VP5VDH WD8MQJ  
3D2XV VK2BCH  
XW3UB

XU1DK Liason DK, Box 80, Kojimachi, Tokyo  
102-91, JAPAN

CLASSIFIED

WANTED (Standing Order)

Ideas for future club programs. Provide topic, contact name and telephone number. Forward to any club officer. Thank you. de W6TEX

WANTED

Feature items for future DXer issues. One to two pages of text plus illustrations is the best size. If you don't come through, you will be faced with more ARRL Letter reprints. de K6ZX

The Morning Show Continues . . .

Oblast corner: Josephine, WB6ZUC has accomplished this task. W6TSQ only needs to work two more. UI8V (181) and UJ2K (193).

See you all next month. de Steve, WC6I

More DX Tidbits . . .

TJ: CAMEROUN: TJ1BJ qui est actif jusqu' en juin 1991, a installe des antennes pour 40 et 80 et pense etre actif sur ces bandes a la mi-decembre. Si le resultat est bon is essaiera d'en installer pour le 160. from Les Nouvelles DX, 13/12/90

DXCC Project Activity Report #8

The following is the DXCC Project Activity Report for the 7 days ended December 16, 1990.

	New Appls	Endorsements	Total
Backlog	1301	2947	4248
Received	28	59	87
Processed	(126)	(101)	(227)
Backlog 12/16	1203	2905	4108

As of Friday 12/14 processing had begun on new applications received on September 14 and endorsements received on June 21.

de Lou, K6TMB

Editors Note: In this hurry up atmosphere, a bit is being dropped on the floor. 5 countries out of a submission of 327 is not a great percentage, but looms large in the final count. That was the error rate on my recent submission. de K6ZX

NORTHERN CALIFORNIA DX CLUB  
MEMBER LIST --- JANUARY 1991

<u>A---D</u>	<u>E---I</u>	<u>J---N</u>	<u>Q---R</u>	<u>S---W</u>	<u>X---Z</u>
<u>A---*</u> NS6A Duane K6AAL Burley W7ACC Bob AA6AD Bruno W6AED Bud W6AEO David WD6AFC Bill SMOAGD Erik WA6AGO Terry N3AHA Ace WA6AHF Rubin W4AI John KG6AM Dewey ZL1AMO Ron N6AN Hal K6ANP Len KJ6AP Michael K6ASI Bill WA6AUD Cass WA6AUE Jim WA6AVU Hank HB9AW Gerard K6AYA Pat KD6AZ Dave	<u>E---*</u> NQ6E Bob N6EA Bob N6EK Bob WD6EKR Walt W6EMD Dave KF6EN Ed K1ER John WA6ERB Bob W6ERS Uncle- Vern KC6ESL John W6ETR Kenny KA6EUD Tom WB6EXW Gary KI6EZ Alex	<u>J---*</u> KN6J Bob KT6J Joel WA6JCD Bruce W6JD Doug WA6JDB Jay W6JHN Al WB6JJJ Bill N6JM John N6JV Norm WB6JXU Roger W6JZU Smitty	<u>Q---*</u> KC6O Paul NV6O Eric WA6O George WJ6O Tommy W6OAT Rusty N6OBX Mike N6OC Cab K6OCY Chuck WA6OEY Jim WB6OFM Martin W6OG Clint WB6OHJ Bob N6OJ Chuck K6OJO Steve WB6OKX Art W6OL Howard N6OM John N6OO Claude K5OS Joe N6OSF Gene W6OSP Bruce KE6OT Al WB6OTB Dick K6OZL Ron K6OZV John	<u>S---*</u> AP6S Dave NC6S Ken K7SA Warren KI6SC Henry WA6SDR Dick DJ6SI Baldur K6SIK Bill WA6SLO Dick K6SMH Jerry KB6SP Fred K6SQL Bill K6SSJ Bob N6SSM Bob N6ST Steve W6SUJ Pat W6SYL Paul N6SYP Ken W6SZN Kip	<u>X---*</u> KK6X Jim NG6X Ron NQ6X Bob WT6X Jim W7XA Al W6XB Ken KG6XF John N6XG Walt N6XH Dave N6XI Rick K6XJ Perry K6XM Greg K6XN Ted W6XP Stan W6XR Natan K6XT Art K6XV Bob KD6XY Larry
<u>B---*</u> WM6B Ed OH2BH Martti KA6BIM Dave W6BIP BIP W6BJH Ted JA1BK Kan K6BQN Bill K6BR John WA6BSS Bill W6BSY Mac W6BUY Jack KB6BW Martin K6BW Lou K6BWX Dick K6BZS Jan	<u>F---*</u> NA6F Don W6FAH Bob K6FD Ray KJ6FD Jeff W6FDU Ben W6FGD Marv K6FO Norm W6FQV Roy KE6FV Steve W6FWX Kim	<u>K---*</u> KN6K Keith W6KG LLOYD W6KH Dick WB6KJE Mike K6KLY Russ K6KM Bill W6KNH Clyde W6KOE Dave WB6KQI Virg W6KQK Andy K6KQN Vince AA6KX Bruce W6KXG Jim	<u>P---*</u> NW6P Tom WG6P Dennis AA6PG Dave W6PHF Dave AA6PI Dave K6PJY Daniel K6PKO Jerry W6PKM Lindy W6PNV Bob K6PU Ken W6PVE Gerry N6PYI Greg	<u>T---*</u> AA6T LLOYD AK6T Pat KD6T Jim KI6T Gary NI6T Gary W6TC George AA6TD Melissa W6TER Gerry W6TEX Bill WA6TJM Dave W6TMA Ken K6TMB Lou WA6TOO Harry W6TPH Bill K6TS Tom W6TSQ Sam W6TT Elvin W6TUI Bill N6TV Bob W6TWO Rolph	<u>Y---*</u> KR7Y Hugh KI6YB Charlie WA6YFD Steve W6YFW Glenn W6YHM Don W6YK Ed W1YL Ellen K6YT Fred W6YVK Ev W6YWH Wes K5YY San
<u>C---*</u> KW6C Michael KX6C Harry NY6C Greg K6CBL Jack N6CCL Larry SMOCCM Lars W6CF Jim N6CM Bob W6CSI Norm WA6CTA Ed W6CTL Bill WB6CUA Randy W1CW Bob F2CW Jacques K6CXT John W6CYO Clyde W6CYX Bob	<u>G---*</u> AA6G Chuck KB6G Tom NT6G Mark KD6GC Steve KG6GF Larry WB6GFJ Ross N6GG Rich N6GK Greg K6GNX Bill W6GO Jay K5GOE Woody WA6GTU Joe KB6GV Vince	<u>L---*</u> AI6L Jerry NB6L Don KJ6LD Henry W6LD Jack W7LDJ Chuck AA6LF Steve N6LFX Jim K6LLK John WA8LLY Steve K6LM Jim W6LPM Andy K6LQA Bill W6LQC Phil K6LRN Dick KB6LT Nolan KE6LT Gene N6LTN Roland	<u>Q---*</u> AG6Q Ralph AK5Q Mickey KB6Q Al WB6QDC Jack W6QDE Vince W6QEU Pete W6QHS Dave WA0QII Rod W6QL Iris KK6QM Barbara WB6QMD Linda KF6QO Karl N6QP Tudor K6QW Norm	<u>U---*</u> K6UD Stan WB6UDS Rich K6UFT Gordon K6UJG Ron WB6UOM Ernie W6UR Joe KI6UT Chuck K4UVT Bob K6UWD Mason	<u>Z---*</u> AA6Z Paul NZ6Z Steve WZ6Z Howard KE6ZE Dave W6ZKM Frank K6ZM Phil W6ZM Bill WB6ZUC Jo K6ZUR Chuck K6ZX Doug N6ZX Jim
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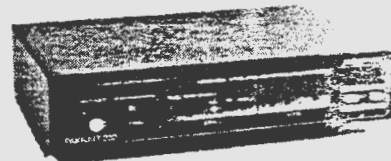
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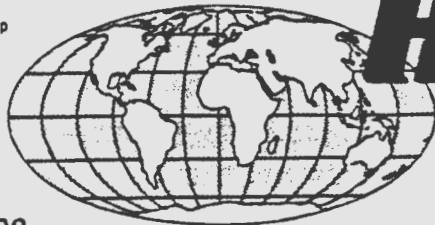
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