

# THE



# DXer

MARCH 1988

VOL XLI - NUMBER 3

## CALENDAR

- Mar. 5-6 ARRL DX Contest, Phone.
- Mar. 11 NCDXC March Meeting.
- Mar. 12 Electronics Flea Market, Foothill College.
- Mar. 16 NCDXC Board Meeting, W6VG QTH.
- Mar. 19-20 Bermuda Contest.
- Mar. 23 Deadline for inputs to April DXer.
- Mar. 26-27 CQWW Prefix Contest, Phone.
- Mar. 17 St. Patrick's Day.
- Apr. 22-24 Visalia International DX Convention, Grosvenor Holiday Inn, Visalia.
- Apr. 27 Samuel F. B. Morse's birthday, 1791.
- Apr. 29-May 1 Dayton Hamvention, Dayton, OH.
- May 8 Mother's Day.
- May 21 Armed Forces Day.
- May 28-29 CQWW WPX CW Contest.
- June 19 Father's Day.

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## NEXT MEETING: FRIDAY, MARCH 11 AA6G ON PROPAGATION, PLUS REPEATER EXPANSION

The next meeting of the NCDXC will be at Harry's Hofbrau, Embarcadero Road East, Palo Alto, on March 11, 1988. Cocktails at 6:00 P.M., dinner at 7:00, meeting at 8:00. The main speaker for the evening will be Chuck Vaughn AA6G, who will discuss the MINIPROP propagation program - what it is, what it does, and how it can be used to increase your DX totals. Along with the talk will be examples of typical problems that can be solved by the use of the program. Copies of the computer program are available from Chuck - see details elsewhere in this issue of the

DXer. As an added feature for the evening, the Repeater Committee will discuss the results of the repeater expansion vote, and will then open the meeting for a discussion of where we go from here.

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## REPEATER EXPANSION - A WINNER!!

Chief teller Ron, W6VG, reports that a total of 254 ballots were received. The vote in favor of the principle of repeater expansion was 159 in favor, 95 opposed.

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## FROM THE PREZ

The votes have been counted and the overwhelming result is "for" the repeater expansion principle. The actual voting results are shown later in this DXer. I am proud of the way our democratic process was applied and worked and of the majority directive stated. Now what do we do? To start, I have appointed Lou, K6TMB, Chuck, AA6G, and John, K6LLK, to review the vote comments and arrive at the next logical step to implement the expansion solution. Your comments and opinions are solicited.



Ted, KA6W

Rubin, WA6AHF, and his DXer of the Year committee have closed nominations and we will all learn who the deserving recipient is at the International DX Convention, April '88.

February is past and those of us who still wish to obtain a badge for participating in the ARRL DX Tests must operate in the phone test this month. Get out your D-104 and beat the Southern California gang! I think they are shooting their best shot ... CU in the pileups.

Vy 73 es gud DX,  
Ted, KA6W

**THE NORTHERN CALIFORNIA DX CLUB, INC.**

**P.O. BOX 608, Menlo Park, CA 94026**

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

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Vice Pres.	Jim Knochenhauer	K6ITL
Secretary	Roger Gearhart	W6PKB
Treasurer	Frank Holst	W6ZKM
Director	Lou Beaudet	K6TMB
Director	Chuck Vaughn	AA6G
Director	Ron Pantan	W6VG

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**NCDXC REPEATER W6TI/R**

Input 147.96 MHz; Output 147.36 MHz; Simplex 147.54 MHz		
Trustee	Bob Vallio	W6RGG
Repeater Committee chairman	Lou Beaudet	K6TMB

**NCDXC THURSDAY NIGHT NET**

On W6TI/R Thursday at 8:00PM local time.		
Operations Manager	Ralph Hunt	AG6Q
DX News	Phil Garrahan	W6LQC
Propagation	Al Lotze	W6RQ
Contest News	Bob Dorsey	K4UVT
Westlink	Dave Bottom	KD6AZ
Swap Shop	Steve Munro	KZ6Z
QSL Info	Jan O'Brien	K6HHD

**NCDXC DX BULLETIN BROADCASTS**

Trustee	Bob Vallio	W6RGG
W6TI, the NCDXC memorial station, broadcasts DX bulletins each Sunday at 1800 PST (Monday at 0200 GMT) on 7.015 and 14.002 MHz.		

Scores" was presented with great humor and was well received by all. However, Tom was not the end to the evening's frivolity as we were regaled by the "Great Kahuna Sunspot Dance" by the Great Kahuna himself. These entertainers were followed by the treasurer's report (accepted as published in the *DXer*) and membership readings. Reinstated were Eric Woods, NV6O, and Robert Cox, K3EST. Also welcomed into the club were new members Paul Jahnke, K2ITG, Dan Ramsey, K6PJY, Bill Miner, WG6H, Matt Thomas, WX5S and Steve Bertsch, WA6YFD. The application for Alex Meyer, WB6AFJ, was withdrawn. Ted introduced a letter from Dick, WB6WKM, concerning the application of WB6AFJ, to be read into the club's permanent record. The application for Jim Waterman, K1LHT, was deferred by the membership until such time as Jim has a permanent northern California address. This action followed a motion by W6VG, which was seconded and passed. A motion was made by Duane, W6REC, that "The president or Board of Directors appoint a committee to determine what the members want the repeater to be." A discussion relating to extraneous chatter (non DX) on the repeater ensued. The motion was seconded and passed. A raffle was held before the start of the meeting, conducted by Steve, W6MKM. The ARRL Handbook was won by KG6XF and the 1000 club QSLs were won by guest WB6WFZ, who now has great incentive to become a member!

The meeting adjourned at 10:16 P.M. A great time was had by all.

Respectfully submitted,  
 Roger A. Gearhart, W6PKB  
 Secretary

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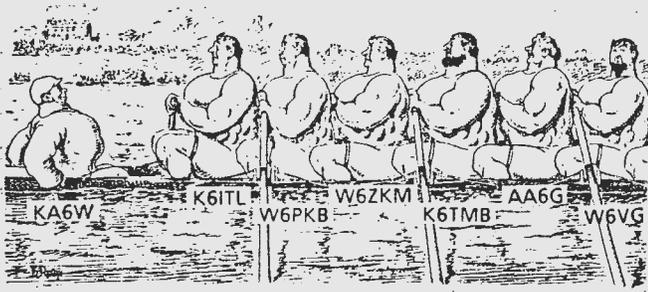
**MINUTES OF THE FEBRUARY 1988 MEETING OF THE NCDXC**

The February meeting of the NCDXC was held at Harry's Hofbrau, Palo Alto, on February 12, 1988. The president, Ted, KA6W, opened the meeting at 8:04 P.M. Vice president Knock, K6ITL, welcomed our guests, including ZL2LB. Knock also reintroduced the tradition of having guests sign the NCDXC guest book. Ted reminded everyone that the preregistration deadline for the International DX Convention is the end of February; N6IC is the registration chairman. The *DXer* of the Year committee, headed by Rubin, WA6AHF, welcomes written nominations. The deadline for receiving nominations is up to the committee but it is assumed to be some time in March. Bob, K4UVT, displayed the badge to be awarded to all submitting logs for the ARRL DX contests. Ted encouraged everyone to vote on the issue of repeater expansion, using the ballot to be found in the February *DXer*.

The excellent program by Tom Schiller, N6BT, on "Optimizing Your ARRL CW and SSB DX Contest

**MINUTES OF THE FEBRUARY 1988 MEETING OF THE NCDXC BOARD OF DIRECTORS**

The president, Ted, KA6W, called the meeting to order at 7:23 P.M. on February 17, 1988, at the home of W6VG. Present were club officers K6ITL, W6ZKM, W6VG, AA6G, KA6W, K6TMB and W6PKB, and guest W6MKM. Frank, W6ZKM, gave the treasurer's report and it was accepted by the BOD by a vote of 6 to 1. Dave, N6AUS, had again been invited to attend the meeting in his capacity as Data Base Manager but was unable to attend. Steve, W6MKM, reported that the raffle netted a profit of \$24 and Steve was encouraged to continue his efforts. The BOD discussed the need to secure a volunteer to chair the 1989 International DX Convention. A committee of K6ITL, AA6G, K6TMB and K6LLK was appointed to review the results of the repeater expansion vote and to study the available options. Lou, K6TMB, was appointed to respond to the motion by W6REC at the February meeting.



The NCDXC BOD - Steering a Straight Course

K6TMB reported \$1311.17 in the repeater fund. The programs for the March and May meeting were discussed and possibilities for a picnic were suggested. A picnic was not held last year but it was felt that the picnic tradition should be restored.

The meeting adjourned at 9:58 P.M.

Respectfully submitted,  
 Roger A. Gearhart, W6PKB  
 Secretary

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**TREASURER'S REPORT - FEB. 1-29, 1988**

Checking account activity

Jan. check balance	\$4021.36
Deposits from dues	204.00
Other receipts	393.00
Subtotal	\$4618.36
Accounts payable	(715.45)
QSL Savings Reserve	(500.00)
Subtotal	(1215.45)
Current balance	\$3402.91

Bank of America Savings \$11805.83

Reserve Fund/Savings Account

Dues Life Members 86-87	\$ 624.00
Dues Life Members 87-88	624.00
QSL Cards	500.00
Subtotal	\$1748.00

At depletion of reserve fund-  
 Savings balance \$10057.83

Certificate of Deposit American S&L  
 1 yr 7.411% annual yield \$5995.21

Frank H. Holst, W6ZKM  
 Treasurer

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**LEE KRUTZ, W6DB, SILENT KEY**

NCDXC member Lee Krutz, W6DB, became a Silent Key on December 28, 1987, at the age of 66. He was in his shack, doing one of those things he enjoyed most, working DX on 40 meter CW. He was in QSO with JA6EET, early in the morning, when he was stricken with a heart attack. Only ten days earlier, he had had another heart attack and was in intensive care for several days before being allowed to return home to recuperate. Lee is survived by his wife, Linda, and two sons by previous marriages.

Lee was born in Lincoln, Nebraska, and lived there for many years before and during WW II. He held a W0 call while still in Lincoln.

In October of 1950, he became a "Tech Rep" for the Philco Corporation. His first assignment was with the 502nd Tactical Control Group in Korea, and lasted about a year. He then spent four to five years in Japan, a year in Hawaii, and two years in Alaska, before transferring to the WDL Division of Philco in 1962. He retired from Ford Aerospace & Communications Corporation (the successor to Philco) on January 1st, 1984, and moved to Gardnerville, Nevada. He moved to Hemet, California in 1986, where he was living until he passed away.

Previous calls held by Lee included KL7EBQ, WA6JND, and W6FV. He was very active on OSCAR 10 (in the CW mode) and loved to operate from his motor home during Field Day, using home-brew QRP rigs. He was very active in SPARK, the Philco Ham Club.

An additional facet of Lee's personality was, together with Chuck Smallhouse, WA6MGZ, providing communications support during the Baja 1000 off-road races every other year since 1973. He was a confirmed dirt bike rider, and he and Chuck covered about 2000 miles following one of the Baja 1000 races, exploring Baja California.

Lee held an Extra class license and joined the NCDXC in April 1983. He was a quiet man and will be sorely missed by the many friends he made over the years.

John Gibson, N6OM

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**AI6V TO BE QRV FROM ARUBA IN MARCH**

Carl, AI6V, will be active from Aruba during the month of March for both the ARRL DX Phone and CQ WPX Phone contests. During the contests he will sign P40V, otherwise he will sign P4/AI6V. QSLs for both operations go to Carl's home QTH given in the NCDXC roster.

Tnx QRZ DX

### POSSIBLE BOUVET OPERATION STARTING MARCH 5

There may be a Bouvet Island operation in our future!!! A press release from the Swedish Radio Society has announced that permission has been granted by the Norwegian PTT for an operation from Bouvet. The operator will be SM7DSE, who is currently signing 7S8AAA from a location in Antarctica. This proposed operation is scheduled for March 5-10. The callsign will be 3Y0FP. SM7DSE will leave Antarctica around March 1 aboard a West German vessel and if all goes according to plans will go ashore on Bouvet March 5. Keep your fingers crossed....

Tnx QRZ DX

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### SO WESTERN SAHARA APPROVED AS DXCC COUNTRY

The ARRL Awards Committee has voted to accept Western Sahara (SO) as a DXCC country. The following news release from the ARRL, dated Feb. 12, 1988, explains it all. "By unanimous vote (7-0), the ARRL Awards Committee has ACCEPTED the recommendation of the ARRL DX Advisory Committee to add Western Sahara, SO, to the ARRL DXCC Countries List. However, whether Western Sahara is considered a brand-new listing or a reactivation of the deleted Rio de Oro (Spanish Sahara) listing was left to be resolved by further consultation with the DXAC. Thus, pending resolution of that question, no details are yet available regarding submission of cards. However, the recent and continuing operation by S0RASD has been accredited and will be acceptable for DXCC credit. Western Sahara will count as a multiplier in the upcoming ARRL DX Contest."

EA2JG reports that the first batch of S0RASD cards have been mailed.

Tnx QRZ DX

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### HELP NEEDED FOR NCDXC ARCHIVES!

I've been digging into the background of the NCDXC DXer of the Year award, and have discovered, to my surprise, that a complete list of recipients doesn't seem to exist in the club records! I'd appreciate it if anyone with information on past recipients would pass it along to me. In particular, it would be helpful if past recipients would come forward and identify themselves! Please drop me a line via the club PO box or my home QTH, which is 5 Cedar Court, Menlo Park, CA 94025. Thanks in advance.

Ron, W6VG

### DXCC PROGRAM EXPANDED 80, 40 and 10 METER DXCC AWARDS CREATED

At the recommendation of the DX Advisory Committee, the ARRL Board of Directors, at their Jan. 22-23 meeting, voted for expansion of the DXCC program. Endorseable DXCCs for 80, 40 and 10 meters were created, with contacts valid back to November 15, 1945. Note that the start date is earlier than that for 5BDXCC - old timers will undoubtedly have many cards which could not be used for 5BDXCC, but which will be valid for these new awards.

The new awards will be phased in gradually. Applications for the 10 meter award will be processed starting on July 1, 1988. Applications will be accepted during a two week window prior to this date (beginning June 15) and held for processing beginning July 1. No applications will be processed prior to July 1. For the 10 meter award, the application with the highest total number of valid credited countries will be assigned the Number 1 certificate. Subsequent numbers will be assigned in accordance with the number of country credits. Those applicants who are tied will be assigned the same number, with the subsequent number(s) left vacant. For example, if there are two Number 3s, a Number 4 certificate will not be issued.

The 80 meter award is effective November 1, 1988. A similar two week window will be used. The 40 meter single band award will be similarly instituted, effective May 1, 1989.

Details of this enhanced DXCC program will be announced in April QST.

Tnx QRZ DX, *The DX Bulletin*, and the *ARRL Letter*

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### ACTIVITY IN IRAN

John Allaway, G3FKM reports in *RadCom* (RSGB) that he had a conversation with several Iranian visitors to the RSGB Telecon 87 Convention. According to that conversation there are at present six properly-licensed



A QSL from the Good Old Days.

EP callsign holders. These are Reja, EP2MRD; Dawood, EP2DL; Hassan, EP2HZ; Mohammed, EP2HRD; Saeed, EP2ASZ; and Ali, EP2AK. EP2HZ was to have been on the air quite legally during the weekend of the CQ WW DX Contest (phone) and seems to have been worked since.

**NCDXC PRELIMINARY CLAIMED SCORES  
ARRL CW DX CONTEST**

Outstanding! Simply an outstanding effort by all! How outstanding? 10,673,375 points, that's how outstanding. That's more than 2 million points more than the club scored in both modes last year. Three W6 records were broken in the process: W6QHS and N6GG both broke the 20 meter single operator record held by N6GG. W6RJ broke his own W6 80 meter single op record, and N6RO destroyed the old W6 two transmitter multi-op record by over a million points. Lots of folks earned their badges.

Please get your summary sheets and logs into the ARRL Before the deadline of April 6, 1988, and remember to indicate NCDXC participation. Also be sure to send you summary sheet to K4UVT. Now let's go out and round up them varmints on SSB. May the Great Kahuna provide us with better propagation for the phone weekend.

73.

Lou, K6TMB

<u>Call</u>	<u>Counts.</u>	<u>Mults.</u>	<u>Score</u>	<u>Comments</u>
KG6AM	72	52	11,232	
KD6AZ	351	106	111,618	
W6CF	215	84	54,180	
K6DR	375	109	122,625	
W6ERS			88,000	
W6FAH	20	11	660	
KG6GF	1200	280	1,008,000	Multi-single
N6GG	570	77	131,670	20M single op
W6GO	1086	266	866,628	
KA6HSM	46	16	2,208	
K2ITG	440	130	771,600	
KN6J			200,000	
N6JV	500	166	249K	
K6LRN	350	146	153,300	
WX6M	107	71	22,791	
K6MA	400	150	180K	
W6OAT	441	231	305,613	
KE6OT			25,200	
WG6P	851	134	342,102	
W6PKB	225	45	30,375	
W6QHS	837	86	215,946	20M single op
W6REC	355	113	120,345	
W6RJ	346	68	70,584	80M single op
N6RO	2677	351	2,818,881	Multi-two
NC6S	256	82	62,976	
WX5S	53	53	8,427	
K6SIK	52	28	4,368	
AK6T	1400	205	861,100	
K4UVT	471	150	211,950	
A16V	1640	260	1,279,200	Multi-single
W6VG	388	114	132,696	
N6VV	1000	236	708,000	
W6XR	230	103	71,070	
W6YVK	138	38	15,732	
K6ZX	75	68	15,300	

Total preliminary score 10,673,375 points.

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**QUO VADIS  
or  
HAVEN'T WE BEEN HERE BEFORE?**

During the February meeting a motion was passed directing the NCDXC Board of Directors to "determine what the members want the repeater to be." The discussion on the motion showed clearly that the motion was related to non-DX chatter on the repeater. The Board of Directors has directed me to reply to this motion.

The reply is simple: The members' wishes, as we understand them, are contained in sections 3-109 of the Procedures Manual and are reprinted in part below.

3-109 (b) Primary purpose of the repeater is for exchange of DX information and to conduct weekly on-the-air club meetings. Secondary purposes include communication among club members to exchange technical information and news of general interest. Other purposes include participation and handling of emergency traffic, providing assistance to Civil Defense, State and local police and providing communication service to the public.

3-109 (c) Use of the repeater for "ragchewing" not of general interest is discouraged; members are expected to QSY to an appropriate simplex channel or another repeater.

Implementation of the direction stated in the Procedures Manual are also simple. Courtesy and common sense are the guidelines. Keep your transmissions short, pause for breakers, keep non-DX oriented ragchewing to a minimum, and have fun.

73.

Lou Beaudet, K6TMB  
Chairman, Repeater Committee

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**NCDXF SUPPORTING KH1 DXPEDITION**

The NCDXF has committed \$2,000 in support of the March '88 DXpedition to Baker and Howland Islands, KH1, being led by Jim and Kirsti Smith, VK9NS and VK9NL. The expedition will consist of approximately 10 radio operators and 3 non-ham scientists from the Fish and Wildlife Service of the US Department of the Interior. KH1 ranks as #39 on the world-wide most-needed list, and as #14 for Europe.



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### SMOM

Rome is the seat of the smallest sovereign state in the world which is not, as most people think, the Vatican but the Sovereign Military Order of Malta. It is situated on the Via Condotti and is accorded sovereign extra-territorial rights by the Italian State. The Order was founded in 1113 to protect pilgrims to the Holy Land. The Knights of St. John of Jerusalem having in turn been driven from both the Holy Land and Rhodes, were granted the island of Malta. There they remained until both the occupation of Napoleon and then the British occupation of Malta left the knights without a home. They settled in the palace in Rome left to them by the archaeologist Antonio Bosio, where they remain today.

The Order issues passports, has its own diplomatic service and vehicle licensing system - number plates bearing the letters SMOM - and the Order still carries on the humanitarian work around the world for which it was founded.

G4NXG in RadCom (RSGB)

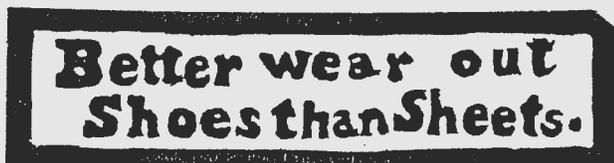
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### RSGB 75th ANNIVERSARY SPECIAL PREFIXES TO BE ISSUED

1988 is the year of the 75th Anniversary of the Radio Society of Great Britain. A number of special events are planned for the year, most of which will take place during the latter part of July. DXer readers who are planning a vacation to Europe this summer might find a visit to one of the events time well spent. The main celebrations will start with the National Convention in Birmingham. This will be a three-day event held on Friday, Saturday and Sunday 15, 16 & 17 July. It will consist of a bigger and better trade exhibition together with a display of amateur radio equipment through the ages and social events held in the evenings in the grounds of the convention complex or in one of the on-site hotels. RSGB Headquarters (located north of London) will also hold open house on 19, 20 & 21 July. Overseas amateurs visiting the special events will qualify for a special call with prefix GV. These calls are to be administered by the RSGB, so will likely be available with a minimum of red tape.

Jim, W6CF

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### GET YOUR OWN COPY OF MINIPROP

Chuck Vaughn, AA6G, has volunteered to make available to NCDXC members a copy of the MINIPROP computer program, the subject of Chuck's talk at the March meeting. This program, written by W6EL, is distributed free of charge, as "Freeware" software. Those wanting a copy for MS-DOS computers only should send Chuck a double-sided, formatted, 5-1/4" disk in a disk mailer with sufficient return postage. Send your disks to Chuck Vaughn, 4387 Othello Dr., Fremont, CA 94555.

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### DATES SET FOR FOOTHILL ELECTRONIC FLEA MARKET



The Foothill College gang has set the dates for the 1988 run of flea markets. A good way to remember the dates is that except for April (Visalia convention month) they all take place the day after the regular monthly meeting of the NCDXC. Check off the following dates on your calendar:

- |          |           |
|----------|-----------|
| March 12 | July 9    |
| April 9  | August 13 |
| May 14   | Sept. 10  |
| June 11  |           |

The flea market runs from 8 AM to 2 PM. The Sunnyvale VEC group (W6NLG) will be conducting exams for Novice thru Extra on these same dates up at the Electronic Museum site. Call 408-255-9000 for additional info on the exams.

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### NEW ARRL SECTION FORMED

The West Indies ARRL Section has been split into two Sections, the Puerto Rico Section, and the Virgin Island Section, by action of the ARRL Board of Directors. No date for implementation of the change was announced. Watch QST for further details. Many ARRL contests, such as the Sweepstakes, use Sections as multipliers. The addition of a new section in the Caribbean area will give a boost to contest scores, but is a potential thorn in the side of those of us in the Western Reaches who will have to work twice as hard to catch both a KP4 and a KP2 for full multiplier credit.

Some discussion also took place at the Board meeting regarding splitting the state of Washington into two sections. The matter was postponed, but will likely surface again at some later date.

Jim, W6CF

## TECHNICAL TOPICS

[Editor's note: The following article by Pat Hawker, G3VA, appeared in *RadCom* (RSGB) for January, 1988, in his Technical Topics column. While reading it I was reminded of the phase noise problem with our "advanced technology" digital radios, which sometimes create more havoc than the Woodpecker. Hi Tech gone wild? NCDXC's Dave Barton, AF6S, is not the David Barton quoted, incidentally.]

At a recent IEE international conference, Radar-87, the keynote address, given by David Barton of ANRO Engineering Consultants, USA, noted that 90 per cent of major radar research and development projects have been ending in failure to deliver a usable product. He put much of the blame on the customers (military and civil) demanding only the latest technology. He stressed that:

"The role of consumer education in radar is just as important as in matters of household safety, diet and health. But who is to perform this service? Medicine in this past century had more than its share of snake-oil salesmen. As professionals we must make sure that we are not performing the same dubious role for our users. The user must be assisted in selecting and specifying radar functions which are appropriate to his system requirements." For radar, I would suggest one could simply substitute amateur radio!

David Barton also expressed some pertinent opinions in respect of rf power generation: "Throughout this (postwar) period, the attempt was made to get as much power as possible out of a single tube, and to use multiple tubes only when absolutely necessary. Presumably this was the result of cost considerations... As a result of the pressure for high output powers, tube designs were pushed to the limit of emission density, heat dissipation and breakdown voltages, with resulting reliability problems which remain today. Low reliability also is traceable to the small production quantities of these tubes.

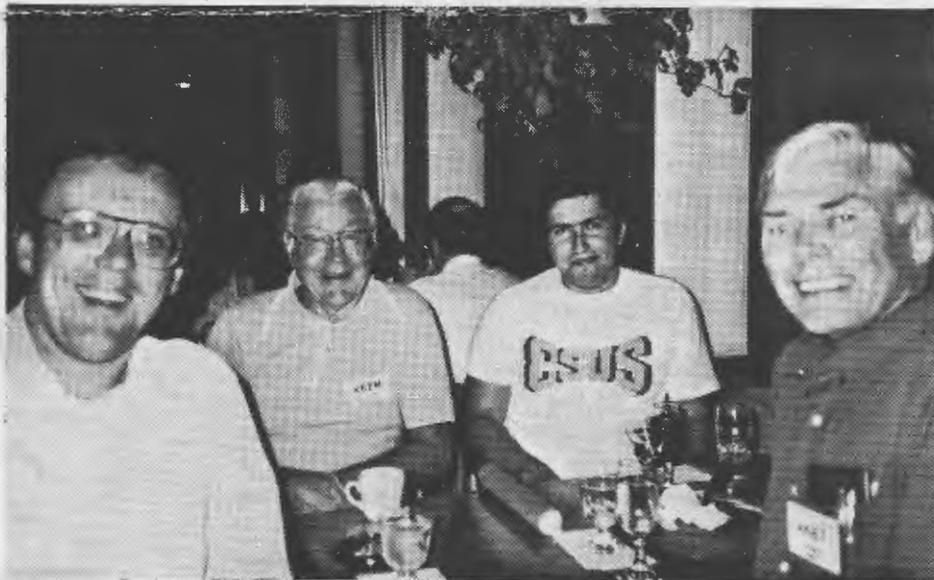
"About 10 years ago, advances in transistor technology made it possible to consider development of solid-state radar transmitters. Even with advanced devices, power levels were (and are today) pitifully low in microwave bands. But the solid-state industry was not discouraged, and their marketing efforts found assistance from the reliability engineer. The deficiency in power output was presented as a fundamental advantage; many sources would have to be combined, giving great redundancy and reliability. Radar customers who previously would not accept dual-tube

transmitters, now began to insist on modular transmitters having hundreds or thousands of solid-state sources in the name of reliability. Even with its multiplicity of modules, the usual solid-state design cannot compete economically with tubes unless the radar waveform is changed to permit use of very high duty factors. As a result there are radar systems being designed today in which the high-energy pulse, needed for maximum detection range, consumes almost half of that range as dead time..."

While these considerations mostly apply specifically to radar, there are, I would suggest, lessons to be learned. For instance, it shows the reasons why some of the older ('fifties) valves are less vulnerable to flash-over, inter-electrode shorts etc than the later ceramic tetrodes. The note from Percy Greenwood, G2BUJ, on the 4-65A (QY3-65) power tetrode in the October *TT*, has prompted John Roscoe, G4QK, to comment: "I preferred the more powerful QY3-125A (4-125A). I had a pair in 1953, used one at a time, and they remain enshrined in my memory as the best valves I ever handled. I paid 5 pounds each for them, slightly used, and later sold them to Rowley Shears, G8KW, probably for the same price."

Pat Hawker, G3VA, *RadCom*, Jan. 1988

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Bob K4UVT, Phil, K6ZM, Alex, K16EZ, and Pat, AK6T, plotting secret strategies for their next contest effort.

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## TOP BANDERS - TAKE NOTE!

Twenty kilometers of steel wire mounted on 24 tubular steel masts, each 60 meters tall. Sound like an antenna? It is. It's also the Riyadh International Stadium, in Riyadh, Saudi Arabia.

The large oval building, its builders found, acted as an antenna to receive signals from a local radio station

broadcasting at 1.2 megawatts (far higher than the legal maximum for stations in the United States). The received signals generate electric currents with low amperage but very high voltages - 4 volts per meter of steel.

Total voltage cannot be accurately predicted because the phases of the currents vary: some are in phase and additive, others are out of phase and cancel. But construction workers reported sparks leaping from cranes to steel girders, ionizing the air to create electric arcs.

British consultants Ewbank Preece Ltd. are attacking the problem by surrounding the structure with concentric rings of steel mesh that extend into the ground, reducing the strength of the electric fields.

Ventilation ducts have been rebuilt in short metal sections with wooden connectors; water-supply pipes are similarly divided into sections joined by rubber hose. Both ducts and pipes are grounded at short intervals.

Audio signal cables are clad with aluminum tape, as are wires for digital control signals sent to the stadium's electronic scoreboard. Cables linking television and surveillance cameras - themselves shielded in metal casings - have been replaced to optical fibers immune to interference.

IEEE Spectrum, Aug. 1987 - Thanks NT6G

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### A LETTER FROM 4S7EA

[Editor's note - the following letter from 4S7EA was received recently by John, N6JM. Thanks to John for sharing it with us.]

Sri Lanka, 21 January 1988

My dear John,

TKu for the QSL & green stamp. I am glad to know that you are attached to the Worldradio newspaper. Sometime back I was a subscriber & got the issues regularly. But things are so expensive I had to give it up reluctantly. It was really fine reading all the news from the Ham World.

So I am fortunate to contact you & write these few lines to your DX column from Sri Lanka.

I am now 52 yrs, licensed in 1957 & now going on my 31st year of ham radio. I am an engineer in the Overseas Telecommunications Service & my job is satellite & radio. My XYL is CHANDRA and one son aged 12 yrs KAVI. Although my XYL is not a ham she is very fond of ham radio. She keeps all my visiting ham friends entertained. Hi Hi. As for my station I use a TS520SE and two element triband cubical quad antenna. I am active on SSB, CW, RTTY AMTOR and satellite. So far I have worked over 60 countries via Oscar 10. For satellite working I use a FT726R and

antenna - 70CM 20 element cross Yagi & 145 - 12 element cross Yagi. For RTTY AMTOR FEC I use AMT2 interface with a Commodore VIC 20 computer. I am also active on 50 MHz and use a TS600. I am the only 50 MHz stn in 4S7. I have worked Japan, YB & VU2 on 50 MHz. On AMTOR I'm the only station from Sri Lanka.

I'm very regular on the bands and look for Stateside every day from 0100 to 0200 UTC on 14185 long path.

Ham radio started in Sri Lanka well over 50 years ago and presently we have approximately 130 4S7s. The licensing authority is the Director of Telecommunications. RAE is held once a year in August, and one should pass in a theory & regulations paper. Morse speed required is 12 wpm. Maximum power allowed is 100 watts. Visiting foreign hams are allowed to operate in Sri Lanka. You must send in your application to the Director of Telecommunications, Telecom Headquarters, Colombo, 3 months before your arrival. Callsign allocated will be N6JM/4S7.

I think I have jotted down a fair cross section of ham radio activity in Sri Lanka for your information. Recently we formed a small activities group, the 4S7 DX Association and hope to put up a nice DX Award for working Sri Lanka. I shall keep you informed. Can you please send me a copy of the constitution of the NCDXC?

Shall close now wishing you and family the very best for 1988. 73, Sincerely,

Ernest

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(Tnx LA DX Group)

**LETTERS LETTERS LETTERS**

**HERE COMES THE TRAIN!**

de N6JM -

In reference to the item on "musical CW" in the last issue of the *DXer*, this reminds me of when the U.S. Army sent me to radio school where the letter "Q" went with "Here Comes the Bride."

Also, old railroaders will recognize the pattern for a grade signal was two long blasts, one short blast and one extra long blast continuing across the crossing. You could make a "Q" out of it, depending on how fast it was sent.

Our new light rail motormen (or motorwomen) use this signal at crossings too, although it sounds like a Volkswagen approaching instead. As they always blow it too late, it often comes out rather rapidly - and some of these guys have lousy fists. You might say the "Q" here means "Here Comes the Train!"

73.

John, N6JM

**CLUB QSLs - A TIP**

de NW6P -

Has anyone in the club mentioned that the new club QSLs are 1/2 x 1/2 inch larger than the old ones? They require an envelope called size A6 for mailing. Although not found in the Safeway, any stationery store stocks the A6.

73.

Tom, NW6P

**WHO'S ON PACKET?**

de W6GO -

I'm interested in maintaining a list of Northern California DXers also on packet. I'm aware of packet activity by

K6PBT	NU6O	W6OAT	WB2CHO
KZ6Z	NV6Z	W6RIA	WG6H
N6OJ	W6GO	W7MAP	WU6O
N6VV	W6NLG	WA7G	WW6D

Are there others out there? Most of these stations have also checked in on the WG6H-1 DX PCBS on 144.91 MHz.

73.

Jay, W6GO

**ROSTER CHANGES**

Please make the following changes to the Nov. 1987 edition of the NCDXC membership roster.

**NEW MEMBERS -**

- K2ITG E. Paul Jahnke, 18338 Las Cumbres, Los Gatos, CA 95030. (408) 354-4549 (H), (408) 744-7502.
- WX55 Marshall Thomas, 3131 Homestead #16F, Santa Clara, CA 95051. (408) 296-1732 (H), (408) 986-1000 (W).
- WG6H William L. Miner, 1453 McGregor Ave., Petaluma, CA 94952. (707) 762-5938 (H).
- W6NWS Larry Knain, 3583 Barley Ct., San Jose, CA 95127. (408) 251-5383 (H), (408) 492-7679 (W).
- K6PJY Daniel H. Ramsey, 2726 Roosevelt Ln., Antioch, CA 94509. (415) 757-8148.
- WA6YFD Steven A. Bertsch, 673 Plum Street, Novato, CA 94945. (415) 897-1655 (H).

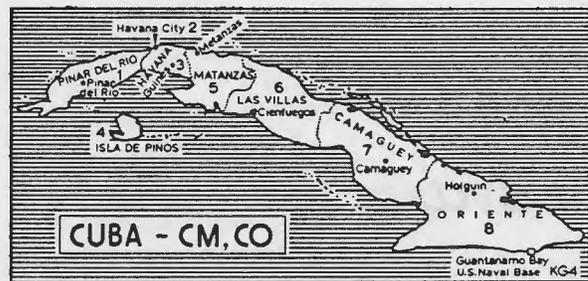
**REINSTATEMENTS -**

- K3EST Robert Cox, 3039 Campbell Pl., Davis, CA 95616. (916) 758-7422 (H), (916) 752-3910 (W).
- NV6O Eric Woods, 121 Prospector Ct., Folsom, CA 95630. (916) 988-1197 (H).
- WA6TJM David L. Angel, 6326 Paso Los Cerritos, San Jose, CA 95120. (408) 997-6290 (H), (408) 437-8452 (W).
- W6TUI William Woody, 2004 E. Vassar Ave., Fresno, CA 93703. (209) 221-6150 (H & W).

**CHANGES -**

- K4UVT change home phone to (408) 732-2912.
- W6AED change address back to 8670 Sunnyside Cutoff Road, Sandpoint, ID 83864, phone (208) 263-7976.
- KG6GF change address to 1010 Nez Perce Drive, Hollister, CA 95023.
- W6REC change phone to (209) 745-3935, ZIP code to 95632.
- KI6T ZIP code should be 95628.
- K6XR change phones to (415) 573-0209 (H), (408) 432-6624 (W).

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