# Northern California DX Foundation Newsletter

## Winter 1983

N6ST, Editor

K6WD, Circulation

AA6AD, Reporter



## **WORLD COMMUNICATIONS YEAR 1983**

The right beacons transmit in sequence every ten minutes, commencing on the haur, ten minutes, twenty minutes past the hour etc. There is a two minutes twenty minutes past the hour etc. There is a two minutes are minutes are also minutes are accounted to the minutes are accounted. The transmission time for each beacons schown on the map.



NCDXF was pleased and proud indeed to see the cover of the September issue of "Radio Communication" published by the RSGB. All 8 beacons in the NCDXF 14.1 MHz beacon net are located and identified on the map. The printing, which is a little hard to read on this reproduction, explains the operation of the net. Thanks to David A. Evans, G30UF, General Manager and Secretary of RSGB for permission to reproduce the cover.

#### MARKET REEF DXPEDITION

Steve Lowe, G4JVG, wrote us a letter dated | July 31 from Market Reef during a short | break in the operation. G4JVG was with | OHONA, OHORJ and PAOGAM and they worked a | WHOLE lot of stations and countries.

But read what Steve says about landing on Market Reef and be grateful if you have a contact at all with anyone from that reef!

"You may be interested to know that Market Reef is now normally uninhabited and is only activated for between 1 and 2 weeks per year. It is difficult or even dangerous to land here in anything but the calmest of seas, and we had to wait 3 days in the Aland Islands before it was possible to make an attempt at landing. Even when we arrived at the reef it was impossible for the boat we had hired to get closer than 100 yards from rocks, and Lars, OHORJ, OHORJ had to swim that distance and row back to the large boat in a 9-foot row boat kept on the reef. All our equipment, including a 3-section 50 foot tower, HF and 40 metre beams, three complete stations including linears, RTTY equipment, and provisions for 4 people for up to 2 weeks had to be rowed ashore by Kee, OHONA. We hope it will be easier to leave the reef tomorrow (if the seas are calm enough).

PAOGAM and myself are much indebted to Kee and Lars for our being included in was was basically a Finnish expedition. it has been great fun, and a lot of work, but it was worth it."

#### MANY THANKS TO MEMBERSHIP DONORS

NCDXF salutes and thanks W4FRU for donating NCDXF memberships to 3 of the DX stations for whom he handles QSLs: FB8WJ, ZD9BV and ZD7HH. Many thanks also to generous members who donated memberships as follows: W6TWO for G3BII, W0CM for JA1ELY, WB6WKM for SP8YA, W8NDJ for W8VSA, WA6WXD for UB5GBD, K8EM for W8TO and W8LT, W6AXH for NB6F and Y03AC. Thank you sincerely to all these donors. We invite you to join this distinguished list. (See the back page.)

notices?". Well, not really. Instead we | to all new members. will try to make this Winter Newsletter | edition a reminder that next year's dues | are due. As further indication we enclose the addressed envelope. How's that for a hint? Along with your renewal check and, hopefully, a membership for a friend, won't | you answer the questionnaire or even sound | off on a topic of your choosing? \* \* \* \* #

#### BEACON TRANSCEIVERS

The TS-130 beacon transceivers used in the beacon net were supplied to NCDXF at cost | by Ham Radio Outlet stores of Burlingame, California and the Trio-Kenwood Company of Compton California. Trio-Kenwood is the | U.S. distributor of Kenwood products. We also wish to acknowledge, with thanks, that the Japan Amateur Radio League purchased and did their own own TS-130 modifications to turn it into a beacon also to KLM Our thanks transmitter. Electronics, Morgan Hill, CA for designing the balun and matching network for the two quad antenna systems. Materials were supplied to us at cost. And, of course, there would be no beacon net without the design for the electronics brains that make each beacon work - for this design and wonderful troubleshooting support, we thank NCDXF Advisor Jack Curtis, K6KU, of Curtis Electro Devices, Mountain View, CA.

#### MEMBERSHIP DRIVE

The board has set the goal of doubling Foundation membership in the next year. There now are 2500 members and the goal is 5000 members. This objective results from the need to increase the Foundation's income without raising individual membership contributions. More legitimate requests for financial support are being received than our membership and endowment income will support. To provide this support, forcastable income needs to be increased.

We believe that with the help of the present members the goal can be achieved. If each of you receiving this Newsletter will recruit one new member, our goal will be reached. On the last page is a renewal form for you and two additional forms for | the new members that we hope you will | through the engineering departments recruit. If you need more forms, feel free | universities! We'd prepared a fine form to copy them. You might want to donate |

| Foundation membership as a gift a DXer | friend to introduce him or her to our We are often asked, "do you send membership | activities. The current Newsletter is sent

> In addition to this direct appeal, we are hoping to identify an overseas member in each DXCC country who will volunteer to recruit new members in his country, collect their dues and forward the completed applications to our Secretary for processing. In that way we save a great deal of postage, reduce currency exchange problems, and build a group of members in the country. Martti Laine, OH2BH, recruited over 100 new Foundation members in Finland. If any overseas members would like to volunteer, please let me know. Just received. SMOAGD sent in 19 new NCDXF memberships from Sweden plus renewals from all 8 of the Sundsvard DX group. Thanks Erik.

> I have been assigned the fund raising responsibilities for the Foundation and would appreciate any suggestions that members may have for generating financial support for Foundation activities. particularly interested in identifying active DXers who have the capacity to give larger one-time gifts to the Foundation for its endowment. If you know of DXers with the capacity to make these kinds of gifts, please let me know and we will follow up. Your continued support of the Foundation and its activities is sincerely appreciated by the Board of Directors and by the recipients of financial support. Remember: We are member supported.

de Stanley F. Kaisel, K6UD.

#### BEACON OBSERVER REPORT

To date, we've received some 155 reports and inquiries about the beacons from 23 countries. Also we have had many informal reports of the beacons being used to evaluate current band conditions. One sign of the beacon popularity has been the appearance of "policemen" on the beacon frequency!

We found, of course, that we had greatly underestimated the time and energy required to do justice to all the questions that would be asked. The inquiries (mostly resulting from the article in June QST) are written by the gamut from pre-SWL children applied.

To the seriously interested we set forth. in long letters, our ideas of employing the beacon network for two purposes. First, to give a means of studying HF propagation by making observations at different times of the day, during different seasons and under | the effects of the varying solar indices. Second, to get from the reports some | worthwhile observations of such things as | non-traditional propagation modes, and we'd all learn something.

So far, the result has been a mixed bag. Maybe we can come up with a couple of conclusions: the average U.S. amateur isn't | much interested in learning anything about radio and wants an instant reward for his efforts. My average European amateur (many | are SWLs) is very keen on learning and contributing. Percentage-wise, I have five times the interest in the Netherlands as I have in the U.S.!

My problem is that some of these European fellows are certain that they've signed up for a free correspondence course! A "beacon | newsletter" is probably a solution to the | problem of answering all the individual | letters - we're considering it.

Have we done any studies so far? Frankly, not many. We are bogged down in the clerical end. There is a great problem in making | quantitative comparisons of reports from | many observers. Some of the most consistant | observers are SWLs with 30 feet of wire and | a general coverage receiver. They've never | heard more than four beacons. In the same | city, a fellow with five elements at 100 | feet hears all eight beacons in a row and says, "What's next?".

But, so far, on a broad scope we've put together a few conclusions. Or perhaps they are all questions. Why is the ZS beacon | heard so consistently? I'd swear that during much of October it's been in here day and night, often at the 0.1 watt level. Why is the JA beacon reported the least? | Many days I can't hear it in San Francisco. The 4X6 beacon is heard more often than you | would expect here. But several of us have noticed that, at certain times, power levels don't seem to make much change in the signal level from the 4X6! Why?

One reasonable answer on ZS6DN's signal is | extreme low-angle radiation. Dave, ZS6DN, | and SSB stations move up or down a little.

letter, but could find very few to whom it | isn't only limited to great signals from his 20-meter beacon, have you heard him on 75-meter phone lately? There's interesting coverage of this phenomenon in Pat Hawker's "Amateur Radio Techniques".

> Some of my observers reported good signals from 4U1UN/B during the month it was off the air. Extremely long delayed echoes?!

> For those seriously interested in learning more about HF propagation, particularly the newer knowledge, the available books are limited. You should first get Jacobs' and Cohen's "Shortwave Propagation Handbook", Cowen Publishing Company (CQ Magazine). This book is often available at your local amateur radio store. A really great new book (1982) is Les Moxon's "HF Antennas for All Locations", Radio Society of Great Britain. This book is available through the ARRL or your local store. Moxon has a dandy chapter on today's concepts of HF propagation. Then there's always great stuff on antennas and modern ideas of HF propagation in Pat Hawker's "Amateur Radio Techniques", RSGB. We trust Pat Hawker; he quotes our own Foundation advisor, Mike Villard, W6QYT!

> In summary, we are certainly open to suggestions for improvement in what we are trying to accomplish. It has really been rewarding to have the fellows in the Northern California DX Club learn to follow the WWV Solar Indices reports and then relate them to propagation observations. Remember Casey Stengel's sage comment? "You can observe an awful lot just by watchin'." All for now, I have to go count the sun spots today.

de W6RQ

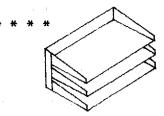
#### BEACON NET FIXED ON 14.100 MHz, - SORRY

Suggestions "to move 14.100 beacons to 14.095 MHz to clear SSB QRM."... de G3ZAY (Cambridge University Wireless Society), HB9AVE, and others. This is a good suggestion and has been heard many times. But, W6WX/B and KH6O/B are specially licensed by the U.S. Federal Communications Commission to operate specifically at 14,100 +/- 1 kHz. That is how our license of the past 5 or 6 years has been stated and we cannot change it. About all we can do at this time is try to spread the information about the 14.1 MHz beacons via newsletters, bulthe "high-sighting" concept making for | letins, etc. and request that nearby RTTY

"CQ Ham Radio" in Japan carried a beacon | activity from rare zones on the low bands story as did the "Old Man" in Switzerland, "DL" in Germany and others. OH2BH has been spread this information | trying to throughout Europe.

Thanks to all for the help.

de W6ISQ



#### THE "IN" BOX

Right on top of the In Box is a note to say "Welcome Aboard" to SP8YA who was issued NCDXF certificate number 2500. We thank WB6WKM for entering the subscription for friend SP8YA. Congratulations and his thanks.

We acknowledge with great appreciation the encouraging notes and comments received from W6PT, W3IF, JE2MFE, K3WPI, W9DY, N7DGZ, W6TD, W9NN, K6JG, WA6OET, W1RFW, WOJRN, KZ2W, W6GC, W4BV, AG5G, W5FGO, K4AUL, and WB6APX. NGETK.

With his contribution, one member listed 18 "plus others" countries where DXpeditions have produced new countries for him. We're pleased to hear that and hope others also have been similarly rewarded. That's why we are here.

"I agree with 'sponsor now, worry later'. I am convinced that there is absolutely no way to figure what will and won't count according to ARRL"... de WA2VUY. "On recommendation of my friend Martti Laine, OH2BH, I enclose dues for membership"... de OH2JL, G3BRD, WA2EUA and others. We are most | grateful to our European Advisor, OH2BH, for his help in giving out information and answering questions about NCDXF. We also appreciated his help in establishing beacon station OH2B at the Helsinki University of Technology.

Newsletter quoted Summer we the "W6-anon" who was upset that the Heard Island station "was not on any of the Advanced or General portions of the bands." In response, we received, "I worked VKOCW on 14283 with my Argonaut and on CW at 14051"... de KQ9L. Also, "VKOCW could be found every night on about 14018 listening | up around 14050"... de KE9A. KE9A also adds | newsletter sure 'hit the spot' ... just had "what can be done to promote more

| for 5BWAZ?" Suggestions?

"Please use \$25 of the enclosed check to help finance someone of lesser means in the world of DX and make note in the NCDXF records that the donation is in memory of (my long-time friend) Orris Hoffmann, WB9FUM"... de K9DX. Amen. It is done. Thank

something can be done to spur "Hope DXpedition to ZA"... de W4NYN. Note elsewhere that OH2BH presented a transceiver to a ZA group visiting Helsinki. Perhaps such goodwill will ultimately be rewarded.

A nice note from one of our loyal DL-SWL members, Reiner Petersen. He sends a picture postcard showing an aerial view of his home QTH along the Elbe River. A spectacular view of a flat plain as far as the eye can see. What a DX location!

Interesting article about the status of A6 operations in "DXpress" sent by editor PAOGAM. It explains that licenses are only issued to permanent residents. At present only contacts with A6XJC qualify for DXCC. Other A6 stations are active intermittently but have not forwarded translations of their licenses to ARRL for proper approval. (Note: half of DXpress is written in English, half in Dutch.)

From F6EYS about his (and others) 3000 km DXpedition through Europe. "More than 12,000 QSOs with 73% CW in 9 operating days from HBO, 4U1ITU, C31, (Much) DX on 40 meter band."

NK6F writes from Saudi Arabia ... "vacation in Europe. Stayed with DJ9ZB and attended ham radio exhibition European Friedrichshafen. Met many European DXers. My next trip will be to YU for Winter Olympics in Sarajevo. I am an ice hockey fan." An ice hockey fan??!! And working in Arabia??

Thanks to the Kansas DX Newsletter and the Redwood Empire DX Association for their newsletters. Also thanks to the Grupa Argentino de CW for their extensive Spanish language DX newsletter.

"We have a special station, HG5BNV, from International Fair every Budapest September. My NCDXF paper always on the wall there"... de HA5DW. "The

to thank you and let you know my pleasure of membership"... de WB6APX.

WA8MLV writes "I really like the 'Speaking the Language' section. Great! ... I'd like to see a list of "national days" for various countries. For example, 5th of May Mexico, 1st  $\circ f$ July for Canada (Dominion Day)" OK everyone, send in your national days! "What languages is your NCDXF Newsletter written in other than English?" ... de K8LWP. Just English, although we understand that parts of it have been translated and reprinted.

"We have recently founded the Southern Africa DX Association. It was formed with the intention of assisting others in DX operations, and also to try assist hams in with Africa equipment, countries in etc."... de ZS6XD, Chairman.

Many thanks to magazines and newsletters for NCDXF notices - K4TWJ, W1YL, K4IIF, LIDXB, QRZ DX, N6JM, TDXB, 73, WA6AUD, DJ9ZB, G3FKM. I know there are others and I apologize for not including you here. Who are you? Next time!

#### WELL, WE'RE LEARNING

The summer issue of the Newsletter was the first one we mailed using our Non-profit organization frank instead of a postage stamp. After the issue was in the mail we learned that non-deliverable copies would not be returned to us but would be routed to the dead letter office and eventually destroyed. We have solved that problem with this issue by adding a statement which declares that return postage is guaranteed. Now we can find out who has moved! If you didn't get your copy of the Summer 1983 NCDXF Newsletter, write us at our Stanford P.O. Box and we will send you another copy while they last. We are sorry for the inconvenience this may cause anyone. Please send us a change of address notice when you move so it won't happen again. Thanks...

#### DAVE BELL, W6AQ

We were pleased to read a very nice article | about NCDXF Director Dave Bell, W6AQ, in | November "Worldradio". It tells of Dave's | professional activities and long-standing | This is a long way from NCDXF matters, but interest in amateur radio. It was written | we couldn't help thinking about it. After by Lenore Jensen, W6NAZ, who has done much | all, chasing DX and chasing a "fox" is all public relation work outstanding amateur radio.

#### ALBANIA

Most readers probably have seen recently published photographs of our Advisor Martti Laine, OH2BH, presenting amateur equipment to an Albanian delegation. The Albanians were in Helsinki to participate in the track and field meet this summer.

#### DONATIONS RECEIVED

NCDXF wishes to thank W9DE for his donation of a KWM-2 transceiver plus power supplies and ancillary equipment. We also thank K4KG for his donation of a KWM-380 transceiver. Both donations are most generous and we appreciate them. Thanks to you both.



#### EDITORIAL?

Would you like to write an editorial on an amateur radio subject of your choice? Send it to us. One page, double spaced. If more than one is received, we will submit them to an impartial judge of editorial matter to select the winner.

#### FOX HUNTING EVENT

In a few months the Olympic Games will begin at Serajevo and later in Los Angeles - just like a huge DX contest. It might be fun to have a "mini" Radio Olympics some time. Start with "fox hunting", already a favorite sport in Europe. Fox hunting could be done both in winter and summer.... snow shoes and skis, or running shoes, bicycles or motorcycles. Then maybe the participating "hounds" should sit down at every fox location to copy and send some high speed Morse code. But then maybe someone is already planning such a competition.

Fox hunting seems to be gaining popularity in the USA. Perhaps this sport should be taken up at the club or Intercollegiate level. First Annual Intercollegiate Fox Hunt?

for | fun and a good workout! After all, doesn't take too much imagination to think the Olympic runners (or skiers) and then | this, on September 24, 1983, BY1PK made exchange a directional antenna for those | QSOs on SSB with 8N1WCY again, At this time relay batons.... then point those "hounds" out of the L.A. Collesium toward the mountains to the east ... and the Mojave Desert beyond ... and voila ... you've got a fox hunt Olympic event.

OK, OK ... that was just for fun. Now back to serious DXing.

de W6ISQ

#### CORRESPONDENCE

We receive a lot of correspondence-type mail with many different requests, questions, etc. And there are time when we just get so swamped we can't answer them all.

W6RQ is especially overwhelmed trying to answer all the questions about the beacons, QSLs, how to understand various propagation phenomena, etc. W6RQ is extremely concientious about the mail and answers questions in detail - being an old Bell Labs engineer! But he has a huge backlog of mail. One suggestion is that W6RQ write a beacon "answer sheet" or newsletter designed to answer the most asked questions. He does appreciate reception reports - it is the questions which need answers that inundate him.

#### ASIAN REPORT FROM JA1BK THE FIRST SSB OPERATION FROM CHINA

In the midst of great expectations that SSB operation would be made from BY shortly, the first ever two-way SSB QSO was made on 1983 between BY1PK September 19, 8N1WCY. The Chinese delegation which was visiting Japan for WARIC had brought with | them a Chinese operator's license in order to operate 8N1WCY, a station in commercation | of WARIC. After the 1st day of the WARIC conference on September 19, 1983, YJY, the station master of BY8AA, operated 8N1WCY and called BY1PK on CW at 14.050 MHz to make a QSO, and, after that, he exchanged messages with BY8AA also. Then he exchanged | messages once again with BY1PK. After this, | to work many countries that are difficult 8N1WCY asked BY1PK to make a QSO on SSB. | on CW. Then 8N1WCY called BY1PK on SSB at 14.150 | MHz. To this BY1PK replied in SSB, realiz- | 73 de PAOGAM ing thus the first 2-way SSB QSO in the

about strapping a small backpack on some of | history of Chinese amateur radio. After we (several JAs including JA1BK, JA1MIN, JA1KSO, etc.) sent our messages to Tong, using call of 8N1WCY. See the reproduction of the QSL card for this QSO.

> I believe that you all know well that Tom, VE7BC, operated on SSB from BY1PK after this first ever opening and also about recent BY4AA operations on both CW and SSB.

> I am scheduled to be QRV on SSB for 3 days starting November 3, 1983 from BY1PK.

> Mizoguchi, JA1BK, NCDXF Asian de Kan Advisor

#### EUROPEAN REPORT FROM PAOGAM

Our travelling European Advisor, Martti Laine, OH2BH, requested his friend Greben, PAOGAM, present the European report in this issue. PAOGAM is editor of VERON's DXpress (Netherland).

Most of the "European DX Countries" were activated this year. During the summer period many hams go on holidays and take a rig with them. This year travelling hams were active from HBO, C3O, LX, OHO, 3A, FC, and SV5. Ham radio only trips were made to GU, GJ, OJO, T7, OY, and EA6. And we always have some people around on the Norwegian islands. The most unexpected activity this year was by W6LAS from Mt. Several amateurs are involved in Athos. efforts to activate 1AO, SV/A, HV, ZA and others. Although 1AOKM is active a few weekends every year, still many people do need it.

We still have well known around the world DXpeditioneers here in Europe. Daldur, DJ6SI was so unlucky that he could not join the AD1S/KH5 expedition, but will now activate some countries in Africa. "Italian Blue Team" surprised the world with their BV activity. Karl, DL1VU, will make another trip through the Pacific and will activate many islands with CW only. This will give many people the opportunity

QUESTIONAIRE	
Satellites:	
Have you operated via satellite? [ ] Mode A [ ] Mode B [ ] Mode J	[ ] Mode L
Equipment	Antennas
If not, do you plan to operate satelli	ite soon? Mode?
DXpeditions:	
How many times should a reasonable peroperators specifically state how many	rson try to work a DX $pedition$ (unless the DX $pedition$ QSOs).
[ ] One QSO per mode - any band [ ] [ ] One QSO per mode per band [ ]	One QSO per band - either mode As many QSOs as you can get through
Discussion:	
Research:	
When you read your favorite amateur ma	agazine do you read from
[ ] front to back [ ] back to front Do you know why you read the way you	
Are you [ ] right handed? [ ] lef	It handed?
Propagation:	
What questions would you like to h pamphlet?	ave answered or discussed in a short propagation
Do you monitor the propagation indices	reported by WWV and others?

# AMATEUR RADIO STATION OF CHINESE RADIO SPORTS ASSOCIATION

[ ] no

TO RADIO	8N/WC	Y/JA BK	CFM OUR	QSO/ <del>YOUR RE</del>	PORT-	
DAY	MONTH	YEAR	<del>BJ</del> T/GMT	BAND	MODE ZXSSB	
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TNX/PSE YOUR QSLI RMKS:

[ ] yes [ ] no

Do you know what they mean? [ ] yes

VY 73! OP TONG

1983

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## THANKS

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