The XY0RR Burma Story
by Romeo Stepeninko, 3W3RR

Starting in 1990 I began making attempts to find a way to operate from Burma. My attempts were absolutely fruitless until help arrived, very unexpectedly, in the spring of 1991. A company located outside of Russia received a large order from the Myanmar’s government to provide and install radiolocation equipment. I knew the president of that company Hurrah! Preparations began immediately. Special permission was granted for a group of four people, under my supervision, to enter Myanmar (Burma) and do the job. Many problems were resolved in the process, but it’s better to list the accomplishments first:

♦ We obtained a license that authorized us to operate on amateur bands with a call of XY0RR. It was valid for 6 months.

♦ The copy of license and supporting documentation was delivered to the ARRL by Ed Kritsky, NT2X. When I visited the USA in July of this year we all went to the ARRL and were informed in person by Chuck Hutchinson, KB8CH and Don Search, W3AZD of the DXCC desk that the documentation is sufficient to give the DXpedition ‘green light’ (given that additional supporting documentation will be received by the League when we return from the trip - to verify that we were there). This was the cause for major celebration right there at the League - with champagne for all present!

♦ A group of four was formed - Harry RA3AUU, Gena UA9MA, Roman 4K2OT/UBIKA, and Romeo 3W3RR. Everyone here understood the risks involved and were ready to try. Good operating skills weren’t the only criteria - most important consideration was, once again, how people get along with each other - and it saved us a lot of aggravation later!

♦ We were looking for support with our venture and got it. Chip Margelli, K7JA, of Yaesu USA and Yoh Sakurada, JP1NWZ of Yaesu Musen, Japan were very helpful and agreement was reached for a generous donation of 3 sets of FT-990 and FL-7000 amplifiers. They behaved extremely well under the most demanding conditions and never failed us once. Thanks, Yaesu!

♦ There were no tickets to Burma for sale in Moscow. With great luck, we bought 4 tickets to Yangon a few days prior our August 26th departure.

♦ Ed Kritsky, NT2X came to Moscow on business and found time to help us with preparations. While I couldn’t get a Japanese entry visa in time to go pick up equipment, Ed (with his American passport, no need to get Japanese visa) had flown to Tokyo and with help from JA2JPA, JS6BLS/1, JA1ELY, JK1KRS brought back equipment one day before the military coup in the Soviet Union. We were very fortunate! If he was a day late, the expedition probably wouldn’t have
taken place in time! Read about Ed’s own adventures in November 1991 issue of QST magazine.

While I was visiting the United States in July this year, I met DXers all over America, in 16 states. Much support for the expedition was provided by clubs and individuals. NCDXF was the biggest financial sponsor of this trip. Donations also came from many Japanese hams and groups. My business partner Yuri Brajenko of MBI donated a large amount of money in preparation for this trip. I would like to give special thanks to JAOQ4, JA2JPA and CQ Ham Radio magazine as they were instrumental in having generators and fuel delivered from Singapore to Myanmar by yacht.

We later learned that the proposed location was changed from the islands off the coast of Myanmar to a location in the infamous ‘Golden Triangle’ This was the source of much concern, since no one knew what to expect there.

When the USSR coup happened, it interfered with our preparations. Airports were closed, banks were closed and no one knew when we could leave.

On the 26th of August we ‘stormed’ our way through the customs (they are always making trouble) in Shereatemeyvo Airport. While on board the plane, we found out that our ‘quartet’ were the only passengers going to Burma. Aeroflot only makes a stopover in Rangoon, so they decided to unload us in Calcutta and get us flown to our destination by Air India. An hour and a half later we were on the way by small plane to Burma. They were expecting us at the airport of Yangon with a helicopter. Immediately, a jeep waiting for us on the tarmac, drove us to the building of the airport, where our passports were stamped for entry.

Then we were flown to our destination. Our arrival was expected. Some time prior to our arrival, a patch of land was cleared for our operation. The generators and fuel were waiting for us there, being supplied by our hosts from the islands where operation was scheduled originally. With one stopover along the way were brought into the area where Burma meets Thailand and Laos - ‘The Golden Triangle’.

The DXpedition got off to a bad start. There were health hazards. Harry, RA3AAU, got very sick with stomach problems that our medicine couldn’t cure. While Gena, UA9MA, was getting off the helicopter, he was hit by a rotating blade on the head and we were afraid it could be serious. Fortunately, it wasn’t a deep wound and he operated with a bandaged head for the entire trip. I broke a toe while getting off the helicopter. Roman, 4K2OT, managed to catch cold - we were about 800 meters above sea level and it was chilly at night.

There were guards with us. It seems they were protecting us as much as they were protecting anyone else from us. We never saw anyone besides them. We were instructed to spend our time operating, as was previously agreed, and no wondering around! Starting our 4 KW generator, we were ready to put up log-periodic yagi provided by DX Engineering (USA), when we were approached by our guards who told us that having a large ‘structure’ would not be permitted under any circumstances. We were very upset and started putting up ‘Afghani Specials’ - long wire antennas proven to work during the YA0RR DXpedition. Half an hour later the first station was ready for operation! Fortunately, there were about a dozen tall trees and I climbed some to hang antennas. Soon after two other stations were ready to go.

Our living conditions weren’t very comfortable. We were forced to drink 7-Up, which during the hot day was reaching boiling point - not a very good drink! By the end of the expedition we were so full of it, not only did we vowed never again to drink it, but were listening ‘7 up’ and made 50,000 and 7 QSOs!

The operation itself was very demanding of our energy. Pileups were enormous, seems like they heard us everywhere, even though our antennas were simple ones. We worked about 40% Japanese stations, approximately 13,000 QSOs were made with North America. On the last days of operation (August 10-11), we started getting calls from stations in the USA, who were asking questions like: ‘What kind of expedition is that? Where do you operate from? How to QSL?’ Obviously, we worked most active DXers, with over 50,000 QSOs in our logs!

On the 6th or 7th day of operating we tuned 21 MHz and for two hours observed a pirate XY0RR, working USA on hi-speed CW. He was working them an hour or two before we started hearing him. He must have been someplace in UA9 or UA0, the same pirate who made trouble with my other expeditions.

We tried to pay attention to all bands and modes. When our guards were off - either the guards were changing or they celebrated some sort of local holidays - we managed to put up a 6-meter yagi and were fortunate to have good conditions. A seven hour operation...
produced over a 1,000 contacts there, mostly with the Japanese. We also attended all 160 meter openings into Japan on 1.910, spending all 20-30 minutes working anyone we could. The same goes for 40 meter openings towards the USA. Also, every day, for an hour or so, we were working the United States on 3.5 MHz.

We heard complaints regarding our ‘spread’ practices. I challenge anyone to use wire antennas, where every signal is only 3x3 and try to make sense out of the messy pile-up we were in. Over 5,000 stations were calling at the same time, those who knew who is QRV and those who didn’t. A hundred kHz was hardly enough make out any calls. I only regret the pileup couldn’t be spread 200 KHz! As a rule, we worked people calling on the outskirts of the pile-up itself, and power and antenna made no difference whatsoever. Everyone was the same strength and often we answered low-powered stations on the clear frequency and wouldn’t come back to a ‘BIG GUN’ in the middle of a pile, whose call can’t be made out.

As always, we’d like to commend Japanese operators for their courtesy on the air, no one made it to the proverbial ‘Black List’. We, however, want to mention extremely poor operating habits of Italian stations. Out of 84 stations blacklisted for this DXpedition, 70-something are Italians. We didn’t record ordinary ‘violators’ of ham ethics, to get on the ‘Black List’ one had to try very hard to make us very angry! This subject will be addressed in the article I’m preparing for publication in Europe.

Then came a the last day of operation; the helicopter arrived, forcing us to shut down altogether. We made our last contact with KH3AE and pulled the plug on XY0RR operation on September 11. The generator was donated to the Myanmar military that provided ‘accommodations’ for this operation. Departing by the helicopter, we left behind much of what we brought with us. We landed in Rangoon. I was hoping that the government of the country that invited us in the first place, would pay for our return trip, but it wasn’t the case. We had no choice but to leave immediately - Harry’s and Gena’s health problems were becoming our most serious concerns, so were mine and Roman’s. We also ran out of food, and wanted nothing more than to complete the ‘mission’ and get out.

We spent a good 6 hours in Yangon airport, while security officer took away all of the film we shot in Myanmar. They developed and printed the film, and returned us the photographs that were OK by them. He never gave us back over 20 rolls of slide film provided by the NCDXF, which they obviously couldn’t develop. There wasn’t much for me to do here.

After we landed in Bangkok we counted the money and learned we can only pay for ourselves, but hadn’t enough to pay for luggage all the way to Saigon. We were booked on a plane leaving an hour later. I told them how we would be met at the Saigon airport and would pay for luggage there - there was no other way out!

So there we were, landing in Saigon. I was hoping to get help from my Vietnamese friends. Unfortunately,
major political changes have swept that country for the last year. Most of my friends simply disappeared and were nowhere to be found. The pro-Communist coup attempt in Russia didn’t help matters, either - Vietnamese ruling Communist party sent congratulatory telegram to the coup leaders. When the coup in Moscow failed and democratic forces won, the Soviet Union ceased to be a ‘Big Brother’ for the Vietnamese ‘comrades’, we were on the opposite sides of the fence now. Officials in Vietnam were treating us as ‘suspicious foreigners’. Damn politics!

I was able to convince the Vietnamese customs to hold my luggage until we can come up with the funds to pay. Each additional day would cost us even more money. It made me worried sick, because aside from equipment the bags contained all of the logs for the XY0RR expedition and losing them would have been a catastrophe! We checked into a local hotel (with no money, on credit) and sent a fax to Ed, NT2X in New York, asking for help. Here we were in complete isolation, with no one to go to. We borrowed a Kenwood I left at XV2A a year ago after the Spratly DXpedition (ISOXV/1S1RR) and we got on the with wire antennas strung across the street. Antennas came down in the morning. I helped to arrange calls for Roman, Gena and Harry and over 10,000 contacts were made from Vietnam while we were there.

The team, just before departing for Spratly

In the meantime, Ed was working against time trying to get us out of the difficult position. Many phone calls went to Japan, because he couldn’t call us directly - the USA and Vietnam have no trade or diplomatic relations. JH3DPB, then JA2EZX and JA6LDD got involved, because Ajiro-san, JA2JPA was away on a business trip. They found a way to get us money - some of it by mail, some via Hata-san of Tishitsu Trading Company of Saigon. We spent 10 lousiest days, selling our clothing and personal jewelry. Unfortunately, gold and silver are very inexpensive in Vietnam and it didn’t solve our problems. We finally got the money to pay for the luggage, hotel, visit to the doctor and treated ourselves to a decent meal (we lived on one banana a day all this time!). My Soviet contacts sent us tickets back home, but they were from Hanoi, for the 4th of September. So we had another week to kill before that date.

The next morning, walking down the street I met an old acquaintance who worked for the government. Turned out his brother was a captain of a boat conducting sea research in the South China Sea, leaving the next day for the Chuong Sa, in the Spratly archipelago, for 3-4 days. I decided that this chance shouldn’t be missed, since my permission for the Spratly operation was valid until the end of this year. The captain was happy with several hundred dollars in his pocket. The ‘gang’ wasn’t very happy to hear the ‘good news’ about the trip, but ultimately went along ... Shortly after we boarded the ship and 30 or so hours later landed on a small island not far from the island of Dalat.

Unfortunately, just two days before the trip I donated the log periodic to XV2A and was unable to take it with us (the club station was closed for the weekend). So there we were, with all wire antennas and some food we bought with our last 50 dollars. Captain was kind enough to loan us a small generator and some fuel, which lasted us for almost 50 hours of total operating time. A total of 10,000 contacts were made.

By the time we returned to Saigon we were absolutely exhausted, and couldn’t care much for anything but going home, home, home. We expected additional funds to arrive, which could have covered our return trip to Moscow from Hanoi. Unfortunately, when the money arrived, a large sum was missing. We couldn’t afford to miss the plane on September 4th, because if we did, we could have gotten stuck there until November and even December - there simply were no tickets available! Thanks to the assistance of Hata-san of Tishitsu Trading Company, JA6LDD and JA2JPA additional money was raised an hour before departure to the airport. Another day was spent in Hanoi (airline didn’t want us on board, no seats were available despite tickets in hand). We had to pay someone off to get out of Vietnam and 18 hours later disembarked in Moscow. Our last $20 were spent on a taxicab to get home from Sheremetyevo airport. Two full bottles of vodka were consumed to celebrate the end of this very exhausting marathon. Our DXpedition was finally over!
It was tough to make 50,000 contacts in 12 days using wire antennas, with armed soldiers breathing down your neck in the discomfort of the tropical climate, sick and wounded - but we did it. We succeeded only because we felt the world wants us to succeed and hams everywhere were behind us. A truly world-wide effort, supported by Japan, the United States and European countries, by individuals and groups, with funds, advice and selfless work. Removing a single piece from this gigantic 'jigsaw' puzzle would have made the trip impossible. A super international undertaking!

We want to thank our DX-coordinator in Japan, Mr. Takashi Ajiro, JA2JPA who, together with CQ Ham Radio magazine and friends provided support before and during the expedition, on and off the air. Big thanks to JA6LDD, JA7JPZ, JA75GV. They helped us out of many tough situations.

The organizers of this DXpedition want acknowledge all amateurs and groups that helped us with donations, special appreciation goes to:

Yaesu Musen Co, W6OSP, N6HVZ, RA4HA, VP2ML, K5VT, W5BOS, W8BLA, N4UCK, JA7DRM, KR4M, G4DYO, JA1BK, JH1ROJ, J9GAT, PA3DZN, AA5ME, K4TKM, JA1MIN, NU4D, W4WJ, W4FRU, KN4NZ, W4WMQ, K1BW, W6GO, K6HHD, XE1CI, WU2K, N7ZE, W2RQ, N01IM, WA2HNA, W2FCR, WA2HZR, DK8OK, KP2A, W8KKF, KB2HZ, F6HIZ, F6EXV, JA3DLE/I, JA1ACB, Hong Kong c/o VS6CT, W8GZ Memorial, Kannon Straights DX, Ehime DXG, Kurime DX Viking, Fukuoka DXA. Additional support provided by these groups:

Our gratitude goes to: Yuri Brajenko, NT2X, Shin-Ichiro Hata, ARRL HQ, Ham System Shonai, W6DU, WA2NHA, WZ6Z, W6CF, LZ1KDP, UA3AB, LZ2PO, LZ2UU, RA3AA, U23AWO Club, UJ8JLT, UL7IDX, UV3DCX, K7JA, JP1NWZ, JA1ELY, JH3DPE, WB2DND (Logging program), NR1R (Key paddle), UA6HZ, UYXSE, JKI1KRS, JR1CVV, JS6BLS/1, JH1PXH, JA2JW, UA3ADK, W5KNE, N4KG, KU4J, W4BBRE, WA4JUM, K9MK, NQ1W, AA6TT, N0XX, K3ANS, K8CH, W3AZD, UB5JM, W6SZN, JA7MYQ, W2MIG, all of whom helped with equipment, antennas and advice. Also thanks to Mr. X of the Myanmar Government.

Supporters Show the Flag for NCDXF

by Stan Kaisel, K6UD

Another article in this issue of the Newsletter announces the good news on Membership Renewals and New Member enrollments. Those members are also showing their support for the Foundation through their purchase of logo pins, logo stickers and rubber stamps carrying the Foundation logo. These indicators of your Foundation sponsorship on wearing apparel, QSLs and correspondence reminds other dxers that you are a supporter of the Foundation's activities.

There has been a steady increase in orders received over the last few years in response to mention in the Newsletter and to the ease of ordering using the Membership Application blank included with the Newsletter. The following statistics may be of interest:

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<th>Year</th>
<th>Rubber Stamps</th>
<th>Logos</th>
<th>Lapel Pins</th>
<th>Total Orders</th>
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<td>1988</td>
<td>64</td>
<td>76</td>
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With mailing costs added to product cost, offering these logo replicas is not a money-making proposition. In fact, we probably lose on overseas sales of logo stickers because they come packaged on a large diameter roll. We encourage purchase of the rubber stamp version of the logo for use on QSLs.

In whatever form you choose to display the NCDXF logo, we hope you will order these “goodies” to remind non-members about the Foundation. They cost just $6.00 postpaid for each version and have an important PR value. Keep your orders coming!
NCDXF at Dayton

The Northern California DX Foundation will have a booth at the 1992 Dayton HAMvention again this year. Please drop by to see us at booth #431. Last year the HAMvention was an unqualified success for the Foundation. We added many new members and met lots of current members whom we had previously known only on the air and by mail. Our booth is directly across from the W6GO/K6HHD booth and the K1EA and AK1A Pavilion Software booth. If you notice either of those booths, turn around, cross the aisle and say hi!

You will probably be pleased to know that each and every officer and director of the Foundation that went to Dayton paid their own way and received no compensation from the Foundation for any personal expense.

Bruce Butler, W6OSP, NCDXF Treasurer; Lou Beaudet, K6TMB, NCDXF Vice President; and Paul Granger, F6EXV at Dayton HAMvention 1991.

New FAX for NCDXF

by Steve Thomas, N6ST

The Northern California DX Foundation is pleased to announce that it now has a FAX number for your use. Our FAX number is (415) 948-4594. The FAX machine is located at the home of Eric Edberg, W6DU, the President of the Foundation and is available 24 hours a day. If you wish to contact the Foundation by telephone, you may call Eric at (415) 948-1748. If Eric is not at home, there is an answering machine on that line. Please be kind and call during normal business and evening hours only.

Where Do We Go Next?

Reviewed by Steve Thomas, N6ST

Long time Foundation supporter and leader of the ZA1A team, Martti Laine, OH2BH, has many, many DXpeditions to his credit. If you haven’t already gotten a copy, of his book, Where Do We Go Next, I strongly urge you to get one. In this beautifully illustrated book Martti talks about the lore and lure of DXing, discussing operating techniques, exotic locations, problems that had to be solved for an operation to take place. Some of the problems were logistical, some were sprained ankles and malaria, some were sunburn. You deserve to have a copy of this book for your own. It will provide you many hours of enjoyment and you read the well written text and savor the well-reproduced pictures, some in color. Check your incoming QSL cards for a stuffer with ordering information or write KTE Publications, 2301 Canenhill Avenue, Long Beach, CA 90815. You probably will be able to pick up a copy at the International DX Convention in Visalia or at the Dayton HAMvention.

Jane Marie Thomas, born January 21, 1992, to Melissa Thomas, AA6TD and Steve Thomas, N6ST (your editor). She is getting in a bit of code practice on Mom's keyer at the age of 6 days.
Odds and Ends
by Eric Edberg, W6DU

Many hitherto rare countries appeared on the scene during this last year. This is a good opportunity to report to you on the operations that your Foundation has helped to support during that period.

Christmas Island/VK9NS Navassa/KP2/N0TG
Penguin/ZS9Z/1 St Brandon/3B7
Kampuchea/XU/1AINUT Angola/D2ACA
Albania/ZA1A Albania/ZA1QA
Penguin/ZS6BCR Bhutan/A5
Annobon/3C0CW So Sudan/ST0/PA3ACA
Ethiopia/ET2A Afghanistan/YA3RR
Campbell/ZL1OK/ZL9 Bahrein/A92FN
St Paul/CY9CW Peter & Paul/PY0

Let us not forget the South Sandwich operation scheduled to leave as this newsletter is in preparation.

Some of those calls are rated in the top ten of the most wanted lists and all of them fall in the category of being missing from many DXers logs. We try to support the operations you need. From the sound of many of the letters we receive I think we do, but if you feel differently, let us know. Obviously, it is pleasant to receive pats on the back, but we want to know when you think we are on the wrong track too.

These operations were quite expensive in total, and were made possible by your generosity. Due to declining interests rates these days our investment income has been sharply reduced making those contributions even more important. Thank you for your past, and hopefully, future help.

We try to keep our administrative expenses to a minimum but this year we have upgraded our computer in order to more efficiently handle Foundation membership records and other documentation.

Another addition of note is a FAX machine so you will be able to contact us quickly, when necessary. The machine is located in my home. If you wish to contact other Directors, I shall be happy to relay your messages. My personal phone can also be used. There is an answering machine attached should I not be available. FAX (415) 948-4594, Telephone line (415) 948-1748. These numbers will be included in all future Newsletters along with the Stanford Post Office Box number.

The Big Hitters!
The following individuals and organizations have contributed significantly to the Northern California DX Foundation since the beginning of 1991. If you see a call listed more than once, that individual contributed more than once during the last year. This is a public “Thank You” to all of you for your loyal support.

$100 or more

$200 or more
LA DX GROUP, LA7XB, W5FS, W6OSP, W6YFW

$300 or more
K0IR, K4TKM, N6HVZ, N6HVZ, OH2BN, WA5FAC

$1000 or more
W6OAT

$10000 or more
The Downing Foundation
The ZA1A QSL Caper
de W6OAT, as told to W6ISQ

Planning
On August 16, 1991, Martti Laine, OH2BH and Wayne Mills, N7NG, met with the NCDXF Board of Directors to discuss the forthcoming, month-long amateur radio training program/DXpedition to Albania. At that time, Martti and Wayne requested NCDXF Director W6OAT to take over the burden of handling the QSL cards. Rusty agreed, and with typical Silicon Valley engineering genius and enthusiasm, quickly developed a master plan to assure all QSLs be answered in record-breaking time with minimum labor.

The plan was this: Martti and Wayne would go into Albania with the first wave of operators. After two weeks Wayne would return to the U.S.A. bringing with him the logs plus the text to be printed on the QSL cards. At our end, we would design the cards and have them ready to go. By the time Chip, K7JA left Albania ten days later with more logs, the first logs brought by Wayne, would be computerized and printed. At the close of the operation Martti would ship us the rest of the logs. By that time, the second set of logs would be computerized. A month after Martti returned, we would have answered all the QSLs from the estimated 35,000 QSOs- A straight-forward plan worthy of any Silicon Valley planners, right? One small problem: it didn’t work that way!

Through no one’s fault, and for various understandable but unimportant reasons, a few glitches developed. N7NG left Albania on schedule two weeks after the start as planned, but he went to a convention in England for a week. Thus, no logs to input to the computer program, Other solvable, mini-disasters, delays, and problems were to follow, each of which came near to destroying the plan, if not the ego of the designers!

Print the QSLs
QSL work began immediately as planned. Wayne had given us a postcard showing the Albanian flag. Diane Beaudet, designer daughter of Director Lou, K6TMB, and fellow employee Eric Schroeder of the Pacific Marketing Group, used the post card to create the front of the ZA1A QSL card. For information on the reverse side of the QSL, Rusty, W6OAT, got an interesting idea from a QSL from TF3CW. We would show a printed box containing the computer-generated report label. With help from K1ZZ, ARRL, IARU, ARI and JARL, Rusty chased down a big collection of logos. Photographs were not considered. They would take too long to select and process. After his return, N7NG sent a short text which was immediately computerized with the logos and space for the QSO information. The entire design then was sent overnight to the Carqueville Press in Chicago with instructions to print 50,000 cards.

The next day, Martti sent out a news release with text information that was slightly different from that which we had sent to the Chicago press. Panic! Did we now own 50,000 QSLs with a conflicting story? We called Chicago and, fortunately, the cards had not been printed. W6OAT phoned Wayne, and together they revised the text. The rewrite was faxed to Eric Schroeder who re-worked the entire reverse side of the QSL with the new text and a few more logos. This new edition was faxed to Chicago. Print 'em.

A week later, W6OAT got a call that a pallet full of boxes had arrived at the loading dock of his company. Excitedly, he dashed down to open a box for a first glimpse of the cards from the world’s most wanted country. He opened the box and there were 50,000 order forms for the Clorox Corporation of Oakland, CA! Phone rings. From
Oakland, an equally incredulous employee at Clorox asked if Rusty might be expecting some postcards from Albania! Strangely still, a week later, another 8000 cards arrived without announcement or explanation from San Diego! Why? The shipper never explained.

The Program

Meanwhile, back at the computers .... there was no way the ZA1A expedition could take computer logging equipment into Albania. So, the brainstorming team of N6ST, N6TV, K6TMB and W6OAT went to work again, this time to create a program that would require as few strokes as possible to generate a QSL from the computer. They found a modified K1EA CT program designed for contest logging to be the answer. This program could be used for CW, SSB, RTTY on six bands and three WARC bands. Also the program had provision for a post-contest mode, which is essentially what we had. The team worked with Ken, K1EA, to develop a final program which required that only the call be typed into the computer to print out labels for all QSOs made under that call.

Program ready! Now to input the information with as few strokes as possible and still retain the correct data. First the date, frequency, and mode, were entered from the log. A report of 59 or 599 was assumed for all QSOs unless the log showed some other report. Under these fixed parameters, times could be entered at about 10 minute intervals and the time for an individual QSO would be interpolated. The accuracy of this method was verified against incoming QSLs. It worked remarkably well. Calls then were entered in sequence until there was a change in one of the parameters such as date, mode or band. True, it happened. Now and then the person who typed in the call did forget to change one of the parameters, which resulted in a hundred or so mistakes! All corrected later, of course.

As the calls were entered, a bug or two began to appear that no one knew about, not even K1EA. The CT program was developed for use in contests with perhaps 5000 contacts. So our greater number of calls had to be dealt with. Also, the unmodified K1EA program would print QSL labels, but it took two steps. We needed a one-time search and print, i.e. type the call and labels would print out for all QSOs with that call accomplished by just one input stroke. Another interesting problem: when we had entered about 32,000 calls, the program began counting backward with negative numbers on the assigned QSO number! K1EA generously worked with N6ST to correct these and other problems to modify his basic CT program for our specific requirements. We thank Ken profusely for his help.

The K1EA program has a theoretical maximum limit of just over 65,000 QSOs. But Martti presented us with more than 73,000 QSOs in 23 log books and various loose sheets of paper. Each operator had his own log book. More on this later. How to get 73,000 QSOs into 65,000 spaces? Answer: run the K1EA feature to remove duplicate QSOs for the same band/mode. With this culling technique, 9000 duplicates (shame on you) were taken out of the logs. Just enough to get below the program limit of 65,000 QSOs.

Rusty, W6OAT, at the computer generating QSL card labels.

With the modified K1EA program, it was possible to type one call and get labels for all QSOs immediately, up to three QSOs per label. That is why we requested the amateur to send all QSLs in one envelope; so we could answer them all at once. Actually, we also requested two envelopes, so that
if we could not find all the QSOs requested for confirmation, we could immediately QSL the contacts that we could find. If no label was printed out for a particular QSO, that card was set aside to be searched for individually later.

Twenty three log books from many operators presented an inputting problem which introduced errors. There were operators from six countries: DL, I, JA, OH, W and ZA. Each nationality has its own peculiar style of writing, and each individual operator his own style of writing his national style. Interpreting the writing was, in some cases, quite a chore. One operator, realizing his writing was indecipherable, took his log book home and transposed his hieroglyphics to legible lettering.

Add this readability problem to the fact that log books were the record of the individual operator and not in sequence with any other operator. Thus, a three hour ZA1A 40 meter CW run might begin in log book number 4, continue in log book 17, and finish in log book 12. There were even a few cases where ZA1A was on the same band and mode simultaneously from two transmitters. The only answer was to put together a date-time matrix for each log book, then merge it all to get a master sequential log of the operation.

For the cards set aside for special handling, we went to the master composite log to determine the log book number for date and time of the claimed QSO. In most cases, it was the call that had somehow been transposed when entered into the computer. If the date was wrong, that was a real problem. NCDXF president Eric, W6DU, spent days checking these individual problem cards in the log before issuing a “call not in log” stamp.

**QSL Problems**

We directed that QSLs be sent to Box 1, Los Altos, CA. That box belongs to Ross Forbes, WB6GFJ. Ross’s mother and father (Jack, WB6QDC) emptied the box daily for over a month and slit open the envelopes. A big job. Imagine opening 20-25,000 envelopes, many stapled or sealed shut with Scotch or thread tape right up to the very edge so a regular opener could not be fitted under the flap to start the slit! Pre-slitting saved the QSL handlers many hours.

Early instructions mistakenly instructed the cards be sent to W6OAT’s callbook address rather than P.O. Box 1. Rusty wanted to avoid this route because he might never have found his phone or other bills among all those QSL cards. W6OAT thanks W6OA, W6AOT and W6OWT for forwarding the mail mis-addressed to them!

One of the most frustrating elements for a mass-QSL operation in answering QSLs, is to find the call on one side of the card and the QSO information on the other. In a big operation, or even a small one, flipping takes extra time and is aggravating. Please put everything on one side. All DXpedition QSLing folks will automatically thank you. And some sent us an SASE with a return envelope so tiny that it wouldn’t fit even their own QSL. Big return envelopes can be folded, ya know fellas! Most QSLs are easy to read. But some get so arty it requires a committee to decipher the call and information. Best to put your call and QSO information in plain block letters. Thank you.

Some operators who did not have IRCs, etc. just sent an SAE with some token of appreciation, such as scout patches, calendars, post cards, anything to show interest and thanks. We appreciated the
sentiment, and, of course, responded to those too. A few of the fellows sent in cards showing the callsign as ZA1AUP! But only on CW.

In Conclusion
The DXpedition shut down October 7, 1991. The first batch of QSLs went out October 17. By January 17, 1992, all QSLs that had been received had been answered, even the problem cards. We estimate 45-50,000 QSOs have been confirmed to date in 20-25,000 individual pieces of mail. We have responded to all Bureau QSLs, one of NCDXF’s firm policies.

Thirty four amateurs chipped in to do the QSL chores. We are sorry we don’t have room to acknowledge all of them here. However, it was a very dedicated few who did the heroic work and most of the nitty-gritty too. Brainstormers, W6OAT, N6ST, K6TMB, N6TV and their great friend on the other end of the modem, K1EA, top the list for highest honors. The first huge batch of cards was answered from W6OAT’s house. After that first onslaught, the QSL headquarters was moved to W6DU where his living room was dedicated to QSLs for a couple of months. He worked full time on the QSL job. We also thank WB6GFL for the use of P.O. Box 1, and Jack and Esther Forbes, for their mail services.

We did what we had hoped to do: QSL a huge number of cards in the fastest possible time. Cards, no doubt, will continue to come in for years. But now we have this great QSL program and know how to use it.

So, what’s the next DXpedition? And who would like to do the QSL chores?

In this issue we intended to have an article about the Downing Foundation, which gave a very substantial grant to the Northern California DX Foundation for the support of Education or native operators. Unfortunately we have run out of space due to the XY0RR and ZA1A QSLing articles. Look for the Downing Foundation article in the next issue.

NCDXF DXCC Rocks
by Jack Troster, W6ISQ

Greetings, Rock Hounds. Our NCDXF rock collection is well along to being outstanding. To date we have received 86 samples from 73 countries! Here are the DXCC rock countries:

3D2-Conway, 3D2-Rotuma, 3Y-Peter I, 4S, 4U11TU, 4X, 5Z4, 6Y, 7P8, 9V, BY, CT, DL, EA, EA6, F, FO8-Clipperton, FO8-Fr. Pol, G, GM, GU, HB, H80, HK0-Mal, HV, HZ, I, 1A0-SMOM, J2/A-Abu Ail, JA, KG6, KH3, KH5-Pal, KH5-Kingman, KH6, KH9, KL7, KP5-Des, LA, OJ, OH, OHO-Mkt RF, P4, PJ2, KP1, PY0-SP&P, PY0FRndN., SM, ST0-So. Sud, SV, SV5, SY, T77, TA, TF, UA9, V51, V73, VE, VK, VS6, VY0-StPaul, XE, YB, YU, Z2, ZA, ZD8, ZK1, ZS, ZS0-Penguin,

These have been cataloged and identified by geologist Don Eberlein, W6YHM, and appropriately filed in viewing trays. The collection is mounted in trays in a box so as to be capable of being taken on exhibit to meetings and maybe even conventions. Each donor is to receive a certificate of appreciation, recognizing his contribution as official. If you travel or DXpedition to a country not yet listed, please send us a small rock from there. A cube or orb of about an inch is ideal.

We have received rocks from some very interesting locations, both the northern-most and the western-most points of Europe, SMOM, the Colosseum in Rome, even a piece of the Berlin Wall, the latter sent by Baldur, DJ6SI! A detailed listing and cataloguing of the collection will appear in the next issue, when we have more space.

Incidentally, there is no cost to NCDXF in putting together this rock collection. It is all being done by private expense. And, keep sending ‘em in. Who will send in DXCC number 100? THANK YOU ALL.
Letters

Dear Lou,

Thanks, Lou for the two thick envelopes I have received with practically every QSO confirmed, enough for any DXCC mode awards. This whole effort is one of the most successful in Ham Radio. It was great to be in a round-table led by OH2BH and exchange season’s greetings with three native Albanian stations last Sunday!

Merry Christmas and Happy New Year.

73,

OH2LU

Dear NCDXF,

I must say that I have been very impressed with the NCDXF. This is in direct contrast with another DX organization that I sent $15 to and never heard anything from. Your quick response to my questions and timely delivery of videotapes made it a very easy decision for me to join the NCDXF. Also Rusty (W6OAT) dropped by one evening on 20 CW to say HELLO, and that also was appreciated.

I can’t say enough good things about the ZA1A operation. Even with my modest station (800 watts to a tribander at 50 feet or a vertical) I had little difficulty working ZA. As a matter of fact, I was the first one in the Rockford area to work ZA1A (blind luck never hurts Hi Hi). My only disappointment was hearing them one evening on 80 meters but not being able to break the pile-up. Just received two ZA1A QSL cards. Congrats on FB Job!

Enclosed is $10 for postage for the three tapes. I gave the NCDXF a big plug at our meeting last evening and most of your brochures were distributed. Hope you get a few new members from our area.

Gary Hilker, K9LJN Blackhawk DX & CC

Many thanks for the loan of this tape. The Ottawa Amateur Radio Club very much enjoyed the presentation and we are looking forward to seeing the other tapes we ordered. I’m enclosing a M/O for $10 (US). Put the Balance in NCDXF general funds as a gesture of our support!

Paul Cooper, VE3JLP Ottawa ARC

We will spread the word about NCDXF!

Gary T Ernst, KOGVB Eastern Iowa DX Assoc.

Dear Steve,

Thanks for printing our “QSL Lessons” and for bringing it to our attention. I’m more convinced of them than ever. Would probably add one - to note their call and date on envelope somewhere.

73,

Jay FY/N4QDX

AUCKLAND, NEW ZEALAND

ZL1AMO

Ron Wright
28 Chorley Avenue
Auckland 8, New Zealand

SWEDEN

SM3CER

WUZONE 14 + IZUZONE 18

Jan-Eric Stelten
Stolkrusten 18
561 36 Sundsvall, Sweden

PSK31/PSK31 QSL direct or via SSA, Ostermarksgatan 43, S-123 42 FARSTA, Sweden
NCDXF Beacon Upgrade
by Bob Fabry, N6EK

A number of exciting changes are being planned for the NCDXF beacon network. This network has been in operation on 14.100 MHz for ten years and pioneered the sharing of a single frequency by a number of beacons which transmit in turn. It is expected that many people who have not listened to the beacons regularly in the past will soon find them more useful. Please take a moment to read about our plans and give us your comments.

Timing Derived from GPS Satellites

We plan to use a Global Positioning System (GPS) satellite receiver to provide an accurate time reference for the beacon transmissions. This should completely eliminate the problems of time drift and of resynchronizing after a power failure which have plagued the current beacon network. The transmission times should be within a millisecond of nominal for the new beacons.

We anticipate that precise transmission timing will facilitate automated beacon monitoring stations. Such stations might be attached to packet clusters and provide real-time band-opening information to the DXers connected to the clusters. It is also possible that automated monitoring stations could compute the propagation delay times from various beacons and draw conclusions about instantaneous propagation modes.

In addition to providing real-time data for DXers, automated monitoring stations could log propagation data for later analysis. By combining the data from many stations with WWV propagation information, it is possible that new insights into HF propagation could be obtained.

Computer-Controlled Frequencies

The original NCDXF beacons were crystal controlled on 14.100 MHz. For about a year, the W6WX/B beacon has been transmitting experimentally on three bands. The computer program in the controller simply sends ASCII commands to the transceiver to change frequencies. The interesting question is, “On which bands would it be desirable to have NCDXF beacons?” One has to weigh the amount of use the beacons will have with their potential for interfering with other users of the frequencies.

At this point, there seems to be fairly strong support for having NCDXF beacons on three bands at 14.100, 21.150 and 28.200 MHz. The NCDXF has already received FCC permission for the use of these frequencies by the W6WX/B beacon. In addition, the IARU has recently endorsed the use of 18.110 and 24.930 by the NCDXF beacons. These frequencies are at the boundary between the phone and CW portions of the bands. The 10 MHz band has been omitted so far because of the need to “avoid interference to the fixed service outside the US.”

As we go into the first sunspot decline in which the WARC bands are well used, one can argue that a reliable, uniform, world-wide beacon network on 10, 14, 18, 21, 24 and 28 MHz would be a real asset. Is it possible to choose a frequency on the 10 MHz band that would not cause interference to the fixed service or other hams? How about 10.149 MHz?

Faster Beacon Cycle

Currently, each beacon transmits in a one-minute time slot every ten minutes. The transmission includes nine seconds of keying at each of four power levels (100, 10, 1, and 0.1 watts.) A number of DXers have commented that they would be more likely to listen for the beacons if the cycle was not so slow. If one imagines wanting to listen to the beacons on several bands as a prelude to some serious operating, the slow speed of the current cycle looms as even more of a disadvantage.

A ten-second time slot has been chosen tentatively for the upgraded beacon network. By the time you read this, we hope the W6WX/B beacon will be transmitting for ten seconds every two minutes on 21.150 and 28.200 MHz. To allow this, the keying at each power level will be shortened to about one second.

The choice of ten seconds is somewhat controversial. Some feel that this makes the keying at each power level too short. Others feel the length of the cycle is still too long. Please take a moment to listen to the ten-second transmission and then let us know your opinion.

More Beacons

At the same time we put the new equipment in the field, we expect to install some additional beacons in parts of the world which are not now covered by the network. There are currently nine beacons: 4U1UN/B, W6WX/B, KH6Q/B, JA2IGY, 4X6TU, OH2B, CT3B, ZS6DN/B and LU4AA/B. With a ten-second time slot, one might imagine twelve or eighteen beacons and a two-
minute or three-minute cycle time. We welcome suggestions for the location of new beacons.

Where to Send Comments

Address your comments on the proposed changes to the beacon network to Jack Troster, W6ISQ, NCDXF Beacon Coordinator, P. O. Box 2368, Stanford, CA 94309-2368.

New Programs

by Josephine Clarke, WB6ZUC

Three new slide shows are on the list: Micronesia/Melanesia, the YL DXpedition to Wallis Island and A51JS. KQ1F and K1XM have given us a fine set of slides of their V63-KC6-P29 1989 trip, showing not only radio operating but also diving among the lovely coral reefs of the area. The YL DXpedition to Wallis in 1989 shows a group of YLs who surprise the locals by putting up their own antennas and then proceeding to operate a satisfying total of contacts and in the process having a good time. Finally, Jim Smith sent us the A51JS slide show of his Bhutan trip. This one will help you to visualize how arduous it was to put Bhutan on the air.

From JF11ST comes a video of the Peter I area with fine photography to make you feel you are there. Next, Tom Christian speaking ad lib and showing his own slides to a local club tells you everything about Pitcairn Island. The World Radiosport Games is a professionally produced video which only generates good comments and which is popular. More Than Radios and the Legacy We Leave to the Young are videos to give your club a "lift" and inspire all the members.

The Banaba video augments the KN6J/VK9NS slide show and gives another version of operating from this island. ATV and Seeing is Believing present another aspect of the hobby and even take us on a DXpedition across the countryside with the camera attached to a balloon. New Horizon is a well-done video of one man's decision to take a year off to sail the Pacific with his family while doing some ham operating, of course. W7TQO sends us his video account of the year he spent in Indonesia showing both the area and other hams operating from there. XF4L brings us a Revillagigedo operation in video to augment the slide show of the same expedition so you have a choice of modes to show. Jack Reeves talks and shows his slides about his Ethiopian DXpedition which was not exactly a quiet assignment.

We have long and short versions of the Russians operating from Spratly. The long version includes the long wait and effort to get there while the short version shows only the island operation. Again, you have a choice. K3NA and KN3T sent us the Jarvis video which is being shown on public television so you know the quality is good plus, it is interesting. Lastly, the Spanish operators who put Annobon on the air gives us their video which is being converted from PAL format and should be ready for circulation when you read this. Happy viewing de NCDXF.

New Members & Where Our Members Are

Over the last 3 years our Foundation has experienced excellent growth and steady renewals by existing members. Over the last year, 201 members took advantage of their Visa or Mastercard to join, renew membership or purchase NCDXF supplies. Here is how the numbers break down:

<table>
<thead>
<tr>
<th>Year</th>
<th>New</th>
<th>Renewals</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>222</td>
<td>1087</td>
<td>1309</td>
</tr>
<tr>
<td>1990</td>
<td>199</td>
<td>1301</td>
<td>1500</td>
</tr>
<tr>
<td>1989</td>
<td>388</td>
<td>970</td>
<td>1358</td>
</tr>
</tbody>
</table>

Our members are scattered all over the world:

3B9, 1; 4X, 1; 7Q7, 1; 9H, 2; 9M6, 1; 9N, 1; A92, 1; BV, 2; BY, 4; CE, 1; CP, 1; CT, 5; CT3, 1; CX, 1; D, 53; D44, 1; DU, 3; EA, 9; EA6, 1; EI, 1; F, 14; FG, 2; FP, 1; FR5, 1; G, 28; GI, 1; GM, 3; GW, 4; HB9, 11; HC, 2; HK, 6; HL, 1; HR, 1; I, 37; JA, 43; JW, 1; JY, 2; KP4, 1; LA, 20; LU, 2; LY, 2; LZ, 6; OA, 1; OE, 9; OH, 90; OK, 7; ON, 7; OY, 1; OZ, 6; P29, 1; PA, 5; PY, 10; SM, 109; SP, 3; SU, 1; SV, 2; TF, 3; TI, 3; UA, 13; UA0, 15; UA2F, 1; UB5, 9; UC, 1; UD, 2; UG, 2; UH8, 1; UJ, 2; UL7, 2; UM8, 1; UO, 1; VE, 39; VK, 6; VK9N, 1; VP5, 1; VP9, 1; VU, 1; XE, 3; XX, 1; YB, 12; YI, 1; YN, 2; YO, 4; YS, 2; YU, 3; Z21, 1; ZL, 3; ZS, 7.
Slide Shows and Videos

The Northern California DX Foundation has a number of slide shows and videos available for loan to organizations wishing to show them at meetings. Clubs borrowing materials are responsible for postage in both directions. The amount involved can be learned from the postage on the package when it comes to you and is usually about $2.90. Please give the name of your club, the day of the month you meet and more than one choice of program in case there is a great demand for them. Correspondence should be addressed to Josephine Clarke, W6BZUC, P.O. Box 788, Kentfield, CA 94904.

Available Slide Shows:

2. KYFY on Africa of 1978 (62 slides)
3. Colvins on Easter, Galapagos, St. Andrews, etc 1984 (140 slides)
4. W6RBC & ZL1AMO, Kermadec 1984 (56 slides)
5. AH0DC (Shipa) CQWW Contest Operation of 1983 (82 slides)
6. 1985 Clipperton expedition (191 slides)
7. Penapa Island by NGHR, travelogue (81 slides)
8. Shibitol Island expedition of 1982 (48 slides)
9. Midway by NAGT & KD7P (150 slides)
10. Antarctica, Antarctica, Palmer, Peter, Macquarie stations (101 slides)
11. VR6, Pitcairn, Mar/Apr 1979 by ZL1AMO & ZL1ADI (51 slides)
12. SM0AOD 1982 Pacific DXpedition (150 slides)
13. RU5, Burnum by ON5NT (37 slides)
14. TU11, Bequia by ON15T (61 slides)
15. VK3DXU/2, Lord Howe Island by K2UO (52 slides)
16. 3A, Monaco, by F6EYS & F6HIX of 1984 (43 slides)
17. SX5, Uganda by DJ6SI of 1985 (115 slides)
19. XK0S, Marshall Island (34 slides)
20. Andorra, by DL1HHT, DL3HAI, DL5BAD, DL4BBO, DLABH (50 slides)
21. 1985 Clipperton Expedition (176 slides)
22. Peter I Island, 3Y, of 1987 (127 slides)
23. KP2N, 1986, CW/QW DX CW contest (55 slides)
24. OI0MA, Market Reef, 1987 (28 slides)
26. XX9CW by DK7PE, 1986 (15 slides)
27. 1988 Palmyra by EK8J, KP2A, WA5MOE, W0LX, F6EXV, JS3DQ (93 slides)
28. 1988 Kingman by the above operators (96 slides)
29. 284U, KC4, VK9Y, VK9X and 9V1 by W7SW (73 slides)
30. Banaba Island, 3T3I5+T30 and T27 by KN6Y & VK9NS (80 slides, 80 slides)
31. XFI3, by XE1L, XE1OH, XE1HA, OH2BH, OH2U, JH4RAF, W6RGG & N7NG
32. Publishing the DX Bulletin by Ched Harris 24 min
33. Rotuma 1988 by W6ZSN, 73 minutes
34. 411FS, MV Ml, 1989 with Finnish, Soviet & American DXers by K72A 16 min
35. ZS8M, Marion Island by Peter Sykora, ZS6PT 1 hour
36. YG-KC5-P29, Micronesia/Melanesia by KQ1F & K1XM 20 min
37. YL DXpedition to Wallis Island June 1989 by N7MT, N7HAT, N4DZK, K4OMX 20 min
38. A3S1, Stuart by VK9NS, Jim Smith 1 hour
39. HC8X, Galapagos by KQ1F 34 min

Available VIHS videos:

1. XU1JS (plus BV0YL and BV0JA) (35 minutes)
2. 71RL of 1976 and 1978 (includes ZK92R, Messiah Reef)
3. VK02R DXpedition of 1978 (plus Gogasawa)
4. Frankford Radio Club ARRL phone parody + JH7YF WWCW
5. MJ1ST/711 DXpedition to Okino Torishima of 1979 (25 minutes)
6. Australian expedition - Climbing Big Ben, Heard Island (35 minutes)
7. Ham Radio in the South Cook Islands by ZK1CA & ZK1CT (70 minutes)
8. VR6 by ZL1AMO & ZL1ADI (copy and slide show above)
9. Locking Up in Rio Linda, 1986 by W6GO/K6HHD (45 minutes)
10. Revillagigedo, XF4DX, of 1987 (15 minutes)
11. Northern Texas Contest Club - towers and contesters (45 minutes)
12. It Started With A Broken Fence - KH3DPB Tail Tower tale (15 minutes)
13. Pile Up Busters, Humorous. (10 minutes)
14. FG/W2QM/FS, French St Martin, DXING Senior Style - Another Wrinkle to DXing
15. 1984 Laccadive Island DXpedition, VU7WCY, plus 1983 VK0HI from TY (60 minutes)
16. The K6UA contest station story (25 minutes)
17. HK07U DXpedition of 1983, Melpole (25 minutes in Spanish)
18. The Ship That Didn't Have - VK0IS Heard Island DXpedition (90 minutes)
19. The New World of Amateur Radio (28 minutes)
20. S0RAS3 1987 by the Lynx Group, The Western Sahara Story (37 minutes)
21. Auckland Island 1988 by ZL1AMO, ZL1BQD, N7NG (60 minutes)
22. Dr. Owen Garriot's First Talk to hams about the Space Shuttle
23. Russian Ham Radio Tour by WA5WXR, Oct 1986 (45 minutes)
24. 3V DXpedition 1987 - WA4WWA copy of the slide show
25. Peter 1987, from K7ARW
26. 1987 Siryl Id DXpedition by K4SMX, K1MM, VK2BIL, N2QO, N4WW & K2PA
27. 1988 Malagasy, Vysotskij Island by OH2BH, UZ2AU, OH5NZ, UR2AR, OH2RF, UWSAX 23 min
28. 3W8DX & 3SWC by HA5MY, HA5WA, HA5SP, HA5BBC, Nov 1988 Produced by W4BBR
29. Abrua, P40V CQWW Test (12 min)
30. A Message from Barry Goldwater, K7UGA (12 min)
31. Navassa of 1988 by N2EDF, K2GE, KE4VU, KD2NT, N4GQR, KT2Q, W3GH (38 min)
32. Rhodes, 5V5, by N2QO & SV0A, April 1989 (40 min)
33. NO1Z/GH1, Howland Island 1988 by NO1Z, 731AAB, TRUJD, VK9NS & VK9NL (20 min)
34. Boeing AR at the Electronic Convention and Great Wall of China (audio tape + VHS 30 min)
35. KC Club DXpedition to Tongosnoke Island (30 min)
36. Tuvalu 1988 by K6EDV and ZL1AMO (27 min)
37. Visalia Convention of 1990 recorded by W6NLO (2 hours) NA at this time
38. Rotuma, 1988 copy of the slide show (73 min)
39. WX8CW & WX8DX 1989 by HA5SP & HA5WA (27 min), produced by W4BBR
40. XU8CW & XU88X 1990 by HA5SP & HA5WA Produced by W4BBR (27 min)
41. All Ohio Amateur Radio Direction Finding Competition + BY1PK (32 min)
42. ZS8M by ZS6PT, partial copy of the slide show (40 min)
43. Jim Smith, A3S1, VK9NS, visits the SF Bay Area by WA6BXV (80 min)
44. R0ZG/RN7A, N77D & W7YS, Aug. 1989 Lake Tekakio, Silberia (30 min)
45. VU7, Laccadive Isd 1984 (65 min)
46. VU7, Andaman Islands 1987 by Combattore Radio Club (30 min)
47. 3Y5X Bouvet 1989. Video by JF11ST (in Japanese, good photography) 35 min
48. VR6TC speaks to the Turlock ARC, 1990 by K6BNM (125 min)
49. 1990 World Radiosport Team Championships in Seattle (25 minutes)
50. ICOM's "More Than Radios" The legacy we leave to the young. (25 min)
51. T3R-T3T Barbuda, Nov 1990 by SM7PKK, TF1CW, OH1RY (22 min)
52. This is ATV by Western Washington AT Society (12 min)
53. New Horizon: South Pacific Adventure by A62LF (55 min)
54. YB3AQN: Indonesian Stations and Sightseeing by W7TSQ 25 min
55. XF4L of 1989 by JH4HRP, XE1OH, OH2BH, W6RGG, XE1L, OH2BU and N7NG 25 min
56. ET4A by W4BB, Jack Reeves May 91 12 min
57. ISOXV by UW3R et al July 1990 35 min or 2 hours (your choice)
58. Jarvis 1990 by K3NA and KN3T 35 min
59. 3C0CW, Amboin 1991 by the Garrotta Club of Spain
60. Aracuana DX Group of Brazil, about contest sites and ops 30 min
1992 Contribution

The Northern California DX Foundation relies heavily upon the generosity of its members to fund various projects. We urge each member to consider making an annual contribution of $25 U.S. or its equivalent in foreign currency or IRCs. However, we do not wish to exclude anyone from the Foundation for financial reasons. If $25 is not within your budget, then please give whatever amount you can. Naturally, we welcome contributions in excess of $25! The NCDXF is an organization as described in Section 501(e)(3) of the Internal Revenue Code and all contributions are tax-deductible to the extent permitted by law for U.S. taxpayers.

Name: __________________________  Callsign: __________________________

Address: __________________________

Contribution: $100 □
$50 □
$25 □
Other □

Total enclosed or charged (contribution plus supplies)

☐ New member  ☐ Renewal

Please print or type clearly

Are your name, address and callsign on the Newsletter mailing label correct?

☐ Yes  ☐ No

Use the envelope supplied with the Newsletter to send this form along with your contribution. If the envelope is missing, send contribution to:

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Stanford, CA 94309-2368 USA

Please charge my: ☐ VISA ☐ MASTERCARD  ☐ My Check is enclosed

Expiration Date: __________________________  Card Number: __________________________

Please also send me the following Foundation supplies:

NCDXF Pin $6.00 ea.

Roll of NCDXF Labels $6.00 ea.

NCDXF Rubber Stamp $6.00 ea.

Quantity

Signature: __________________________

(for charges only)

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