

SHORT CIRCUIT: AMATEUR RADIO NEWS

Fairbanks, Alaska

January 1989

HAM RADIO COMMUNICATIONS

RESEARCH ON THE NORTHERN FRONTIER OF SCIENCE

[The following letter was forwarded to the editor of Short Circuit by Dan Stephenson (AL7KJ) as an item of interest to local hams.]

Sirs:

I have some developments that I thought you would be interested in.

I work here at the Central Alaska Primate Research Center, and we have been conducting long term experiments with communication skills in gorillas. We have six primates here at the center, and have been working with these animals for seven years now. Our original subject, Jake, is approximately ten years old now, and the remaining animals are from nine years old to one and a half years old.

Our animals are from South Central Africa. They were found in a cage, constructed by poachers, and were apparently well fed and taken care of. We suspect they had been set aside for pets, or later sale to the zoo industry.

Early work in Norman, Oklahoma has demonstrated that primates have the ability to accomplish communication to a fairly sophisticated degree by means of sign language. This communication in Oklahoma had developed a vocabulary of approximately 400 words and symbols, and had suggested the capacity of abstract thought in their individuals. Our research here had originally been along the same lines, using simple sign language, augmented by symbol logic-boards. This had been the general trend in the training until approximately 18 months ago.

I worked the evening shift with Jake and his training mate, Homer. We were in residency and a quiet evening was in store. My charges did not seem to reveal any interest in their symbol boards and were quietly signing to themselves.

I had my TenTec Argosy in the car and had planned to set it up for a trial run of Field Day. After getting the antenna up across the residence, Jake ambled over to watch me as I set up the rig. He casually asked what my box had to eat and I told him it was not food, but a special sign box that I used to talk with my friends, like the box he uses in the daytime.

I got the rig fired up, and Homer joined us. They



were very interested in the CW I heard, but did not seem surprised by the SSB. This is not surprising, considering they have seen radios about the compound all of their lives.

A few days later, we had another slow night and Jake asked me if he could talk to Homer on my sign box. I laughed, initially, but then thought that it could be fun. I talked to Dr. Felix Hornick, the staff veterinarian, and he said that he was constantly surprised at the native intelligence of his charges, and that the expansion of their training to include Morse Code would not be a problem.

I set up the training material immediately. Early on, Homer had the edge on Jake as we progressed through

the code groups. Jake did not seem to catch on immediately, but slowly developed the ear for it.

Numbers and punctuation were our first great hurdle, and the punctuation finally had to be considered a mind burp, and left at that. Numbers, on the other hand, seemed to get better conceptual association, and adding and subtracting bananas finally was accepted.

I set up my HeathKit UltraPro keyboard and sent messages for the boys to copy. They had great fun up through about 12 words per minute, and seemed to get a good bit of abstraction from the process. They had a heavy fist, though, but great patience.

Their interest in Morse Code at one time threatened several of the ongoing educational programs the other specialists here at the Center had in progress. The boys would get frustrated with the symbol-logic boards, and attempt communication through the boards with each other.

Jake was the first to show real frustration. He asked me when he was going to be able to call Homer and talk with him. I told him that it would not be until after we had made special plans. He agreed, as long as we were working in that direction.

Dr. Hornick agreed to purchase the equipment for the experiment, and we bought two HeathKit HW-8 transceivers. The next step was getting the boys their licenses.

We went through Ed-Data Line, Inc., of Chicago, and asked if there was record of three veterinarians that had Extra Class licenses. They indicated that there were. One was at San Diego, not surprising considering the class of work they do there. The second was in Kansas City doing postgraduate work with the Internal Revenue Service. The final VEC/VET we found was in Beijing, China, working with Panda Bear communication.

We contacted all three of these VEC/VETs and asked if they would come here to central Alaska for testing of the boys. They agreed, and we went about finding the funds for their travel.

Money had been available through the Seattle

Seahawk football team recruiters' fund, and they were told that these individuals were interested in assisting several local "boys" through their training and these "boys" would be forever indebted to the Seahawk football team if they were given the help of these three people. They did not express much interest until we told them that their combined weight was 645 pounds. The money was immediately made available and the VEC/VETs were flown here first class.

Homer pushed the curve up on his written, and easily passed the CW code test at 13 wpm. Jake did very well, considering his age, and got past the academic portion of the test with the coaching of the Seahawk football coach. His CW was a little tough, and he only got the 5 wpm, enough for the Novice.

We completed the paper work and sent it off. The waiting period turned out to be the most difficult part of the whole 18 month ordeal. Both Jake and Homer were unable to understand that the FCC works in strange ways, and sometimes very slowly at that.

Finally the long awaited day came, and their tickets arrived. They were on the air immediately, and talked for hours on the Novice bands.

Our next goal is to get another primate at Norman licensed and to get a schedule set up. Unfortunately, the football coaches are more involved there in Norman, and let their animals work in the abstract very little of the time.

Homer seems to like Packet, and his logic-symbol board now has several hundred new symbols. We have indeed made great progress here.

The Link-Alaska Repeater Project

1/4 wave mag-mounts \$15 for 144, 220 mhz
5/8 wave mag-mounts \$25 for 144, 220 mhz
Antennas for 440 available, slightly more \$\$

HF mobile antennas, 10-75 meters \$70

Profits go toward establishing repeater links along Alaska highways including a link between Ester Dome and Denali repeaters.

Contact Steve Estes (KL7XO) at 479-5819.

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**Minutes from the
AARC Repeater Committee
3 December 1988
by Steve Estes (KL7XO)**

The meeting was held at Denny's on Airport way. It was called to order after breakfast about 10am. Among those attending were KL7XO, AL7FG, AL7FQ, KL7EDK, KL7B, NOSN, AL7KB, NL7F, WL7BQS, AL7IF, WL7BSM. The 1988 repeater network plans were discussed and the goals achieved reviewed as follows:

On Ester Dome (146.28/88 & 223.28/224.88) a 20 Amp power supply was installed, donated by KL7HPR. A station master antenna was installed, donated by KL7EDK, and tuned by KL7DIY. A 120 watt power amplifier was installed. The 440MHz link receiver link receiver is working again, but needs PL decoder and installation. The autopatch was to be modified, (*it has been*) for smoother operation, and the noise source fixed.

The remote receiver and link transmitter to be located at 9 mile CHSR are built but not working yet. Dick, KL7B, is fixing my mistakes and will have this on the air soon.

Provisional approval by the Delta city council has been obtained to use their site on Donnelley Dome for the 146.22/82 repeater which will be linked full time to the Ester Dome repeaters. Thanks to KL7NO for donation of the 220MHz linking radios. Still needed are PL encoders/decoders for the link, DTMF decoder for control, antennas and feedlines.

The 146.16/76 repeater has been installed near Denali Park with the help of AL7FG and NL7ED. It has good local coverage in the Park Headquarters area and "DX" coverage from Cantwell south to about 20 miles north of Healy. Needed are PL encoder for the link and DTMF decoder for control.

A letter will be sent (*it was*) to GVEA requesting use of facilities in Healy to house radios for a link between Ester Dome and Denali Park.

A priority for 1988 was a link to the Minchumina repeater. But due to its uncertain future the plans are on hold.

The following were discussed as goals for 1989:

For Ester Dome add a receiver voter, PL tone encoders/decoders for the transmitters and link receivers and a CW ID board for the remote receiver.

For the 146.34/94 machine to upgrade the autopatch controller for "*" up and "#" down operation. 146.22/82 repeater installed at Donnelley Dome (Delta) with PL tone encoder/decode on the link and DTMF decoder for con-

trol.

The Denali Park 146.16/76 machine linked to Fairbanks via Healy.

If equipment and a suitable location can be secured on Bean Ridge above Manley we will attempt to install a repeater linked to Ester Dome. The boat club was suggested as a possible source of funding since their emergency communications would be served.

If equipment and facilities can be secured on a mountain near Paxson we will install a remote transceiver linked to Ester Dome.

Reindeer Mountain above Cantwell and a ridge south of the Yukon River bridge were suggested as sites for solar powered linked transceivers. Reindeer Mt. will link to Fairbanks via Denali and Healy. The Yukon river will link direct to Ester Dome.

It was decided that Ester Dome and the remote receiver have highest priority followed by Healy and Donnelly Dome. Manley, Paxson and the Yukon River will be accomplished as the funds and opportunity arise.

Finally, the opportunity to link into the Evergreen Intertie (*see article this issue*) was discussed. We decided to modify the autopatch so that these links, which can last an hour or more, can be done.

**Next Meeting
Friday, 6 January 1989
7:30 pm in the Auditorium
UAF Geophysical Institute**

TCP/IP, Info-Packet and -Hams

#07 FXDDR Wed 30 Nov 12:43

From: Don Rice UAF CSG-West Ridge

Subject: Short Circuit

Just got the latest newsletter and it reminded me to mention something that the gang may or may not be aware of. Anybody with ACAD3 [*the UAF VAX computer*] access can now look at the INFO-HAMS and INFO-PACKET mailings coming across bitnet. All that is needed is the command definition:

\$ @uacn:[sxl]uacncmds.

(Many people already have this in their login.com files.) Then type \$ digest or more specifically \$ digest ham or \$ digest packet. The command by itself will print a menu of available topics, and there are a lot of them besides ham and packet. Once you have selected a topic, it will tell you which issues are available and allow you to read through them, save articles of interest in your files, and a lot of

other things. It keeps track of the issues that you've read, too.

You've probably heard from Greg Eubanks by now about the TCP/IP software mentioned in Lehman's article. If not, it would be worth pointing out that TCP/IP is available now in the public domain by Phil Karn KA9Q et al. There are versions available for [IBM] PC clones, Mac, Amiga, Atari ST, and Unix (not sure if the unix version is in distribution yet). The software is on Greg's BBS and can also be picked up over bitnet. The process of getting it properly configured takes some work. If people were interested in experimenting, I could try putting my machine on the air with it. If I had more time I'd see about organizing a group to experiment with TCP/IP, but two masters degree programs don't leave much time for such stuff. If somebody else would take care of the organizing and address selection (which is supposed to be internationally coordinated) I'd be willing to give it a shot...[any volunteers? Contact Don directly or through Short Circuit]

Don Rice KL7J IQ

SILENT KEY

Bert Curwen (KL7IRT) has gone on the ultimate DX-pedition. Bert lost his war with leukemia in mid-December while in the hospital in Tucson, AZ.

AARC Meeting Notes
by Joan Soutar (NØAJW)

The Christmas Party was enjoyed by children and adults at the December Meeting. Santa's visit(aka KL7XO) was a huge success with all the kids from babies ten year olds. Adults chatted or watched a film on the 1987 Yukon Quest after a potluck dinner.

Left on the table in the Globe Room was a black pot

containing a delicious macaroni and shrimp salad. Please contact Joan at 479-6224 to claim the pot (she ate the salad!).

The January meeting will be held Friday, January 6, at the Geophysical Institute Auditorium. Coffee and refreshments will be ready at 7:30 pm. The program for the month is a code copying competition. Spend some minutes to refresh your mind about dits and dahs. You need not be a whiz. Special sections for novices, techs and fumble fingered folks as well as the 20+ wpm crowd. [Rumor has it that there will even be a special section for phone contest ops and voice DX'ers. Ed.]

Coming for the March meeting is another round of the AARC Ham Bowl! Volunteers are needed for two teams of 4-5 individuals holding different level licenses. Call Joan at 479-6224 to volunteer before she twists your arm.

Minutes of the AARC Board Meeting
December 19, 1988
Joan Soutar (NØAJW)

Present were John Lehman, Joan Soutar, Lewis Overton, Lynn Rice, Jim Dixon, Steve Estes.

Approved use KL7KC during the Yukon Quest.


The Seattle link-up on 2-meters was discussed. Check in on the third Tuesday of the month at 5 pm on 146.28/88.

The Board approved retroactively use of the club logo by Estes and Marshall for T-shirts and sweatshirts sold at the hamfest, and approved in principle purchase by the AARC of the remainder of their stock, pending financing.

Approved a 1989 budget, with \$1,632 current balance.

- \$600repeaters
- 400newsletter publishing
- 600hamfest seed money
- 32miscellaneous small items

The next meeting of the Board is tentatively scheduled for 5:30 pm, January 23, 1989 in the Geophysical Institute Library, 5th floor, Elvey Building. Confirm with John Lehman or Joan Soutar.

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