

SHORT CIRCUIT: *AMATEUR RADIO NEWS*

Fairbanks, Alaska

December 1988

HAM RADIO COMMUNICATIONS *AHEAD OR BEHIND THE STATE OF THE ART?*

Monthly Words of Wisdom from the Prez.

John Lehman (AL7JJ)

On of the reasons why no one outside of Motley group regulars has heard me on the air much this month is that I have been doing most of my telecommunications communicating and building on computer networks. I bring up the topic, because it illustrates where ham radio is going (hopefully) over the next few years, and also illustrates that when it comes to digital communication, we are still well behind the state of the art.

Consider: over the last month I have

- Refereed a paper for a journal published in New York with the editor in Hawaii,
- Revised two conference papers with editors in North Dakota and New Jersey, plus a session chair in Los Angeles,
- Coordinated placement for the MIS International conference this year with administrators in Minneapolis, and programmers and hardware vendors in Massachusetts.
- Interviewed four people for a faculty position at UAF,
- Commiserated with a friend in Ohio on his divorce,
- Checked on current unpublished research with an editor in Minneapolis and colleagues in Quebec, Ann Arbor, and Los Alamos, and

Investigated new educational software through a clearinghouse at the University of Washington.

All of this done at either 1200 or 2400 baud, and with no path specifications other than the ultimate address, and no commands fancier than "send" and "read." For this activity, I need no license, and no technical training. When will I be able to communicate as easily with ham radio?

On a related note, much of my copious free time this month has been taken up with investigations of how to make IBM-PCs, Unisys, Apple, and generic UNIX computers talk to each other in a consistent fashion. One of the interesting findings is that as part of the Open Systems fashion this year, IBM is now supporting TCP/IP as an alternative protocol to SNA.

The relevance for ham radio is that there is at least some discussion of merging TCP/IP (the basis of ARPANET and Ethernet) into packet radio networks, which would be a giant step towards bringing packet into the 1980's. Technically it shouldn't be too hard (famous last words) -- TCP/IP source code in C costs about \$100 from advertisers in Dr. Dobb's Journal, so interfacing with packet hardware should require no more than a few person-years of programming, in case anyone needs a winter project.

Joan gets to run the December meeting again while I travel to Minneapolis via 747 rather than X.25 network. By January maybe work will quit interfering with ham radio!

Next Meeting
Friday, 4 November 1988
 6:30 pm in the Globe Room
 UAF Geophysical Institute

The December meeting features a Christmas Party with music, a visit from Santa Claus, and good cheer for all members. A potluck dinner begins at 6:30 pm. Each member or family should bring a dish to feed 8 to 12 people plus themselves. The Club will provide plates, cups and plastic ware to hold food and beverages. Coffee, tea and juice to drink will also be provided. You may bring other beverages for yourselves as well if you like.

Santa will bring small gifts for children ages 10 and under. There will be a door prize drawing for adults. A movie will conclude the evening. Is anyone interested in dancing in the halls?

Please note the special time!

From the Southern Front
 by Sandy Ohmstead

Ron Ohmstead recently had a chance to visit Bert Curwen in Arizona. Bert is still waging his war with leukemia. The first round of treatments didn't quite do it, and Bert had to go back to Arizona for another round. If this one doesn't do the job, he may be in for marrow transplants, which will take place in Los Angeles (if they are needed).

The Borealis 147.09/69
Repeater and Autopatch
 Adapted from an article by WL7BON
Arctic Flutter, published by Borealis ARC
 PO Box 56859, North Pole, AK 99705

The Borealis Amateur Radio Club operates several repeaters in the area, including the 50 watt 147.09/69 machine located on Ft. Wainright's Birch Hill. This repeater features a sophisticated RC-85 controller with auto-

patch, and has an emergency power source. Both repeater and patch are open for use by area amateurs. To use the equipment, we should follow the operating procedures established by the Borealis club, and should be familiar with proper control sequences.

Bob (WL7BON) reminds us that autopatches are closely watched by the FCC, and recommends a story in the June 1988 issue of QST on the proper use of patches. Remember that autopatches are a privilege accorded to ham radio, not a right. Use of patches requires our careful attention, and lots of discretion to avoid treading on the toes of the rule makers.

On the Borealis repeater, the patch is accessed with the usual * up, # down. To bring up the patch, enter the * code and the telephone number in a continuous sequence. Key your transmitter and send *4523553, for example, without unkeying. After you key in the number, unkey the transmitter. You will hear a voice announce "Autopatch" from the controller.

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At this point, you have a choice. If you do nothing, the controller will read back in voice the number you just dialed, and will wait for you to key your transmitter as permission to dial. The controller will NOT dial until you key the transmitter as a signal to continue.

If you key your transmitter after the word "Autopatch," the number will not be read back. The controller will dial the number immediately.

The controller will time your call and advise you with a voice message, "30 seconds left," before a time out. You should complete your conversation and hang up. If you have an urgent need to continue the conversation, you can ask for an extension at any time during the call by transmitting **3. The controller will respond with "Timer X" and will reload the patch timer with the patch timer extend value.

The controller will also warn you if you have not transmitted for a long interval by sending a warble tone. Key the transmitter to prevent

147.09/69 Repeater Codes	
Patch Up:	*
Patch Down:	#
Tone Pad Test:	5
Signal Report:	8
Demo messages:	30, 31, 36, 3*
Emergency Autodial Codes	
AK Troopers:	*1
Fairbanks Police:	*2
N. Pole Police:	*3
Eielson AFB Police:	*4
Ft Wainright Police:	*5
Fairbanks Hospital:	*6
911 Emergency:	*9

the controller from dropping your connection.

If you want to redial the last number called, you may do so by sending **. The controller remem-

bers its last number for 15 minutes. Just be sure you know what the last number really was.

To hang up, send the # sign. The controller will respond with "call complete." Don't forget to identify your station at the end of your call and on your last transmission, *even if you did not actually complete a call!*

The controller is programmed with autodial numbers for Borealis members, and with several emergency numbers. The most important is the *9 code, which will connect you with the area wide 911 emergency number. For *9, the controller behaves differently. It will not read back the number, and it will not wait for a confirmation before dialing.

This controller will also read back a signal strength report if you transmit a single 8 code, will test keypad tones if you transmit a 5 followed by the keys you want to test, and can play back several demonstration messages. Smart controllers can be fun if not over-worked.

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Arctic ARC Repeaters

by Steve Estes (KL7XO)

Quiet Hours on 28/88

The 146.28/88 KL7KC repeater is our wide area coverage machine. This repeater is monitored 24 hours a day for emergency calls. The people who monitor 28/88 would appreciate the observance of quiet hours from 11 pm to 6 am. During this time, calls on the repeater should be kept brief. Long ragchews, testing of tone pads and similar activities would best be left for daytime hours. If you need to use the repeater during quiet hours, go ahead. Just be discrete and brief.

Repeater Committee

People interested in working on or planning for repeaters are invited to contact Steve Estes. There will be a meeting of interested hams at Denny's Restaurant on Airport at 9:00 am Saturday, December 3 (the morning after the club meeting). You need not be a wizard to participate.

**Look for the 50th anniversary ham
radio display at the Noel Wien
Library beginning in January.**

**Ham Exams
Saturday, December 3
Noel Wien Library at 1:00 pm**

If you are coming to the exam, please bring all the paperwork necessary to document the license you have and the upgrades passed. The examiners cannot give exams to people who forget their Certificates of Completion for previous tests. If you forget, your choices will be to take all levels between what you can document and the exam you really want to take, or to skip the test and come again.

Either alternative is likely to generate hard feelings, which none of us want. If you plan to take the exam, be sure to bring the paperwork with you.



**Going to the Dogs
The Yukon Quest in 1989**

Jim Dixon and Wigi Tozzi, representing the Arctic ARC, have worked out an agreement with the Yukon Quest Committee for the club to provide communications support to the race this winter. The agreement was presented to and approved by the AARC board of directors at the November meeting. The board is pleased to announce that the club will be an official sponsor of the quest this year.

Problems encountered in previous years have been addressed and solutions found.

Checkpoint crews will receive transportation, a place to sleep, and food at the checkpoints. Race officials will use hams for communications from the checkpoints.

Reserve your checkpoint early!



People interested in participating should contact Jim or Wigi by January 1, 1989 to request a checkpoint location or to volunteer for other jobs. If you want a particular assignment, get your bid in early. Some of the more popular checkpoints and jobs go early.



**Arctic ARC Board Meeting
November 21, 1988
Sandy Hunstein (WL7BEU)**

MOVED: by Jim Dixon (NL7HI)
THAT THE CLUB PROVIDE COMMUNICATIONS FOR THE YUKON QUEST; WIGI TOZZI (AL7IF) AND JIM TO ACT AS CO-SPONSORS TO ORGANIZE QUEST SUPPORT AS REPRESENTATIVES OF THE CLUB.
Seconded by Joan Soutar (NØAJW), passed.

Len Betts (NL7NF) has never gotten his prize for the Novice Round-Up. The club has allocated the money, plaque has never been given him. Wigi is going to check on the plaque tomorrow, and it will be presented at the December meeting.

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MOVED: by Lennie Torgerson (AL7JJA)

1. WHEN PEOPLE CORRESPOND IN THE NAME OF THE CLUB, THEY SEND A COPY TO THE SECRETARY. IT SHOULD BE STANDARD PROCEDURE. Seconded by Lewy Overton (NØSN), passed.
2. WHEN PEOPLE GIVE REPORTS TO THE GENERAL MEMBERSHIP, A COPY SHOULD GO TO THE SECRETARY. Seconded by Lewy, withdrawn after discussion.
3. ALL CORRESPONDENCE BE DONE THROUGH THE SECRETARY [amended to add ...OR A DESIGNEE OF THE BOARD. Seconded by Lewy,; amendment proposed by by Jim. Passed as amended.

MOVED: by Lewy

THAT THE CLUB ACCEPT PAID ADVERTISING. Seconded by Wigi, passed. Number of pages of advertising will be left to the discretion of the editor.

MOVED: by Lewy

PRICE PER AD: \$5 PER 1/8 PAGE, \$10 PER 1/4 PAGE, \$20 PER 1/2 PAGE. Seconded and passed.

[Note: these fees apply to commercial ads, not to those placed by individual hams, which remain free.]

MOVED: by Joan

THAT JANUARY 13 BE THE DATE FOR THE [January general membership] MEETING. Seconded by Lewy, failed.

MOVED: by Joan

THAT THE BOARD PREPARE A BUDGET FOR 1989 BY THE NEXT BOARD MEETING. Seconded and passed. Submissions are due to Lynn Rice (NL7FT) two days before the next board meeting.

MOVED:

NEXT BOARD MEETING TO BE MONDAY, DECEMBER 19, IN THE GEOPHYSICAL INSTITUTE LIBRARY AT 5:30 PM. Seconded and passed.

Board members at large, elected at the November meeting, are Dick Attwood (KL7B), Steve Estes (KL7XO), Lewis Overton (NØSN), Lennie Torgerson (AL7JJA), Wigi Tozzi (NL7IF). Officers and past president are also board members.

50th Anniversary by Jim Dixon (NL7HI)

No further ideas have been submitted for how to celebrate the club's 50th anniversary. People are again encouraged to contact me with ideas for what we can do to make this a special year for the club.

An anniversary display will be up at the Borough at the Borough Library in January, promoting 50 years of ham radio in Alaska. Anyone having pictures that are available to be put into the display is requested to contact me.



Ham Ads

Kenwood PC-1A phone patch, used twice: \$50. MBA-TOR cartridge with TTL cable for C-64: \$25. AEA CP-100 TU, has optional RS232 port, mint: \$125. Call George M. Winford (KL7VZ) before 7 pm.

Muppet Board, a learning toy for C-64 & Atari computers, good for children 3-5: \$30 or best offer. Joan, Adam or Lewy 479-6224, evenings or weekends.

Merry Christmas, everybody!

The Link-Alaska Repeater Project has antennas for sale:

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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Arctic Amateur Radio Club

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