MEMORANDUM

Barker

To: IMP Guys

From: J. McQuillan

Subject: A Catalog of Network Hardware Failures This Week

Date: March 9, 1973

IG#14

In the last few days I have noticed the following hardware failures in the network. Ben has been able to make headway on some of the problems in Washington.

1. Aberdeen modem interface 0 drops bits going into memory. We detected this by sending routing messages with checksum errors to the TTY at Tinker. The problem happens when all ones are being written, and happens to many bits in several consecutive words over a period of 1-3 ms. This now happens once every two days.

2. Belvoir modem interface 2 picks bits going into memory. This was also detected by the Tinker TTY approach. It usually picks the 40 bit, and sometimes one other bit, in a single word of a 70-word message. This happens 3 or 4 times a day.

3. Belvoir modem interfaces 1 and 2 were dropping input inter-rupts several times a day. We were able to restart the modem by issuing a new in OCP. Ben seems to have fixed this problem.

4. ETAC modem interface 2 seems to fail to send the first word of a packet sometimes. This happens several times a day, and we are investigating further. It causes spurious acks, and these we send to the Tinker TTY.

5. ETAC seems to sense power failures when none occur.

6. Lincoln had a memory problem earlier in the week. Bits 1 and 2 were being picked and dropped in the third 4k of memory. We discovered this with DDT and the PDP-1 IMP core verifier; Honeywell replaced a card.

7. UCLA seems to have a real-time clock problem. For a few minutes each day, it reports that it misses a sizeable fraction of the expected routing messages on all input lines, as if its clock were momentarily off.

8. There was a Cambridge-wide power failure earlier this week, and about half the machines in the IMP room did not auto restart.