Cable Television Committee
Minutes
February 18, 2003

In attendance were Jeff Winston, Marty Greenstein, Peter Boers, Mark Thompson, and Peggy Fredrickson. The meeting began at 7:35 PM at the main fire station.

Hope Telethon:

Dave Levington and Linda Wade of Hope Sudbury are also in attendance. Dave is a former L-S principal. Hope Sudbury recently ran a telethon benefit for the 9-11 firemen.

The Hope telethon was web broadcast in addition to being on the local access channel. The high school server was used. Because each person going to the site gets his own video data stream, the server can probably only support about eight people at once.

Dave Levington wonders why there is not more local access programming. Problem has been that our past few coordinators recently have not done much outreach. We also don't think there is much interest in the town in general programming as opposed to meetings and sports.

Hope Sudbury is planning another telethon for this Fall.

Dave originated the telethon here in Sudbury based on what he saw in Maynard. Rick was very helpful on the telethon along with the Hudson AT&T people. The telethon ran for six hours (despite being originally planned for only four) and had several hundred people involved. Mark Thompson and high school staffers helped a lot.

A problem was that the high school kids did not participate (much). This is unlike Maynard where the kids help put on a 48 hour telethon, sleeping over in the high school. A difference may be that Joe Magno works for Maynard High. At L-S, the staff was busy with their own activities which may be a euphemism for simply not sufficiently motivated to take part in the telethon.

Sidney Taylor and Paul Sarapas teach video at the high school. Sidney teaches video arts whereas Paul teaches video journalism. Still, despite the additional presence of the access coordinator, students don't do public access shows. (Perhaps the students do video for themselves, just not for others.)

The telethon raised $25,000 net last November.

Video on the I-Net:

Training on the video I-net is taking place now. When we learn to use it, we will be able to show Selectmen's meetings live (or any other Town Hall event). The video I-net has been in place since last July. Brian Ernst, the Comcast engineer, trained Mark Minasian, Mark Thompson, Paul Barrette, and Bob Kavanagh. There was a problem with the Town Hall system preventing it from broadcasting live. Turned out to be a bad node which they are replacing. A test site was set up at Noyes and the programming was observed at Nixon School. The K-8 schools are bringing in a company called Signet to connect the broadcast to the internal video net of the school.

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To do a broadcast over the public access channel, you will have to pull a switch (not yet installed) to switch the video from the station to the I-net source. To get the signal onto the I-net requires a modulator. There is a modulator in Town Hall now.

The school department has all their cable boxes. There are modulators at all the K through 8 school locations that can source video. Mark has a modulator for the high school that he has not given to the school yet. This will be for school internal use as opposed to the modulator for the local access channel. We believe that Fred Walker already has a modulator since there are working video monitors at the high school. Hence, this modulator may become a spare.

Other news:

There was an I-net failure at the water department. Turned out to be the transceiver. Mark needs a name for someone to call at Comcast to get I-net repairs. Jeff will get one.

Channels 8 and 9 sometimes are snowy on reception.

Kevin Casey is replacing David Green GRAIN as ATTb becomes Comcast. They should be announcing HDTV very soon. Also video on demand is rumored for the end of the year.

Town Hall:

Mark Minasian came out to meet Valley Electronics last week to look at the Town Hall system. Unfortunately Valley had the wrong date and did not show. The meeting will take place next Thursday. Valley will set up projector to studio. The town will also set up a white board.

K-8 internet access:

The school department hired a consultant firm, Netversant, to connect their buildings using the fiber provided by Comcast. They are also working with Merrimack Educational Cooperative (MEC) who is their ISP to connect cable modems to their schools and to establish firewall for security and content filtering. By end of next week, this work should be done.

Wireless connectivity at Goodnow:

Bang Technologies looked at the library for wireless networking. Bang has worked with many municipalities. They plotted out where the receivers should go. They are to provide a plan to cover the whole library. They don't have a cost yet. Hopefully, Friends of the Library will pay for it.

The library looking at 802.11B. 802.11A runs at a different frequency than B and interferes with radars, etc. Jeff says that the library should make sure there is an upgrade path to G. G is a B type radio with A type digital logic. G is not an official standard yet, but manufacturers are beginning to support it.

Local Access Coordinator Training:

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Rick's course in Final Cut Pro starts next month.

We think that Comcast should send Rick to the annual Northeast Regional ACM Conference. The next one is March 13 in Brooklyn.

Studio upgrades:

Peggy spoke to Robert Haigh of Wakefield local access who wrote an article in Mass Talk, the newsletter for the Massachusetts chapter of the ACM. ACM stands for the Alliance for Community Media, a national organization with state and local chapters. Robert is a proselytizer for digital recording, editing, and playback using DVDs and hard drives - that is, no tapes. Robert sometimes is a paid consultant, but often will, because of his enthusiasm for the subject, advise poor towns like us for free.

Peggy spoke with Rick about needs for the station. We need a digital tape playback deck. This should cost about $3000. We also need a time base corrector and a waveform monitor. We should ask Mark Minasian about whether, in actuality, the studio already has one or both of these.

We also could use a wireless microphone to use with the camcorders.

Peggy suggests we buy two DVD burners, for $600 each. One for the town hall and one for the studio. This would allow us to record as we shoot directly onto DVD, avoiding tapes. With a DVD player ($200 including cable connection to the Leightronix), we could playback onto the local access channel without ever going to tape.

Goodnow Library meeting room:

Last month we discussed the possibility of getting a grant from the Sudbury Foundation for the library to put cameras in their meeting room. That is not likely since the library has two grants now.

The meeting was adjourned about 9:15 PM.

The following are Frequently Asked Questions about the I-net with responses from from Mark Thompson and Jeff Winston received via e-mail prior to the meeting.

1) The INet connects government buildings. Where is its headend?

   Headend is at the Flynn Building

2) Explain the various glass fibers that make up the I-net:

   There are six fibers in each building. This gives us 3 pairs of fiber to use. A pair consists of one fiber for transmission (send) and the other is for reception (receive).

3) Does the INet resemble the cable to the rest of the town having both TV and computer data on the same fiber or are there separate fibers?

   No, we use fiber 1 and 2 for TV, 3 and 4 for Data, and 5 and 6 for backup in case the above fibers become defective.

4) If the town (or we) wants to cablecast TV over the INet, can it do so only over the computer data channel or is there a separate one for that?

   There is a separate jack in each of the buildings to cablecast over the I-Net.

   Some of our town buildings can just receive the cablecast and other town buildings and all the schools can broadcast and receive cablecasts.

5) If a town building wants to do regular Internet as opposed to INet data, does it need to use a different physical connection?

   The K-8 system provides the internet connection for all the schools with the exception of LSRHS and all of the town buildings except for the Goodnow Library which uses both the Minuteman Library Network and the K-8 School system for internet.

   The same physical connection is used for Internet and I-net data.

6) The schools seem to have a special part of the INet all their own so that the school people and the Town employees cannot look at each others data. Is that a firewall or is it different fibers or channels?

   All the buildings, schools and Town, are connected directly to the Flynn building in a star configuration. Schools and the town are kept separate through managed switches and a firewall.

7) Is the I-net fiber to the building or coax?

   Six fibers to the building

8) What frequency does a cable modem look at to get Internet data?

   Fibers 3 and 4 are connected to 100MHz transceivers which connect the buildings. This gives us the connectivity between buildings. If we want internet access we go through the firewall at Flynn and access the T1 line which the K-8 schools acquired through MEC. All schools with the exception of Noyes will be using a AT&T Cable modem as their primary internet source and the T1 will be used as a alternative.

   The internet data can be assigned to any channel of the 110 allocated to the residential network. Typically I think it's one of the lowest channels, (which are the worst for video)

9) Is the light signal on the cable continuous or does it blink on and off. What I am really asking is how does the light signal get converted to an oscillating voltage to go on the coax for the "last mile". What is the name of the thing that does it?

   First generation fiber communications were of the "blink on and off" variety (kind of like AM radio), but now they've gotten much more sophisticated, with multiple carriers, OFDM, phase modulation, etc.

10) If the INet is fiber to the building, does that imply that one could run gigabit Ethernet over it?

    Yes, we could run gigabit Ethernet over the fiber but we would have to replace the equipment supplied by AT&T broadband with equipment that could run gigabit Ethernet.

Respectfully Submitted,
Marty Greenstein