

Minutes of the University Communications Resources Committee

Meeting held: Wednesday, September 29, 1993 - 3:00-5:00 pm  
Location: Board Room, 6th Floor, Newman Library

Present: David Bevan, Erv Blythe, George Crofts (Chairman),  
Jamie Evans, Ed Fox, Dan Gallagher, Marcia  
Harrington, Mark Hunter, Jo Johnson, Judy Lilly,  
Buddy Litchfield, Lance Matheson, Lenwood McCoy,  
William Richardson (for Tom McAnge), Mark Sanders,  
Frank Schima, Matt Swift, Shirley Travis

Guests: Phil (Theta) Bowden, Bob McCoy

1. Location of committee in governance structure and charge

Committee members were welcomed and reminded of the committee's location in the governance structure and the charge for the committee.

Lenwood McCoy mentioned that the restructuring of reporting lines means that the committee now has two members representing the same vice president. The committee may wish to recommend changes to the committee membership.

2. Business from last year

The subcommittees on universal network access and mail regulations (campus mail and e-mail) will continue this year. Members were invited to indicate their interest in serving on one or both of these.

3. Remarks from the chair. Assignment for becoming informed

As with other governance committees, the UCRC will have a chair next year other than an administrator; i.e., faculty member or classified employee. The members should make plans this year to select, by April, a chair for next year.

The committee should select a vice chair at its October meeting to minimize disruption if the chair is away during a scheduled meeting.

The chair suggested that any committee, and this one in particular, can serve better if it is informed. With networks, local and global, gaining importance, this committee should expect numerous agenda items about networks this decade. We need to find ways to gain some common background about networks to address issues. Members suggested finding some general reading, bringing speakers to meetings, becoming familiar with "network talk" (e.g., gopher).

4. Status of mail regulations

Robert McCoy, printing and mail service, reported that a draft mail regulation is being reviewed by Tom Head and Richard Stock. It will be brought to the committee soon.

5. Blacksburg Electronic Village update

Phil Bowden reported that summer activities for the Blacksburg Electronic Village (BEV) included revising software for general distribution. High-speed modems will be ready this month. There are three hundred beta test users of the software, which will increase with the announcement of the high-speed modem. BEV is approaching NSF and DoEd

about possible funding. Liaison has been initiated between BEV and K-12 schools.

Ed Fox suggested that a video tape of BEV be shown at the next UCRC meeting. It is important to inform people about BEV. There are opportunities for faculty to get funding on related projects, or to become involved in BEV. Successes will drive further involvement.

#### 6. CNS - status, issues, opportunities

Judy Lilly said there were over 1,700 data connections in the 1992-93 fiscal year with about 1,350 of these 10-Base-T connections. Since July, there have been 400 10-Base-T connections and 120 CBX connections. 10-Base-T is now in 33 buildings and three more buildings are being wired.

Ethernet is in the east wing of Payne Hall.

There is no CBX capacity concern.

A continuing problem is getting people trained to use the network. The only real possibility is getting people to help each other. Using software is easier than getting computers connected, physically and program wise, with networks. Cable TV may help with this operation. (Ed Fox mentioned that computer science will offer a course next fall to help with the concern. Colleges are invited to contact the computer science department to talk about particular needs the course should address.)

#### 7. Instructional Development Initiative

Erv Blythe reminded the members that the instructional development initiative last summer was in response to a program in the state senate. Tech responded to the program by investing in faculty who would use computing and computers in their teaching. Workshops were in humanities (classics), English, and mathematics. Participants worked both to learn hardware and software, and to try new ways of delivering instruction. The hope is to expand the program so that all faculty will be able to receive training every four years. SCHEV is being approached for some funding with the university covering the rest. Susan Brooker-Gross is likely to coordinate choosing participants. The criteria are likely to involve core and high capacity courses and the capability of units to benefit.

#### 8. Information Systems

In addition to the instructional development initiative, information systems is working to migrate administrative services to the world of open computing. Erv will talk about administrative computing projects in a future meeting. The move from the mainframe world is often misunderstood as a move away from centrally managed resources. Concern also exists that there is a move away from the "DOS" world. There will be focus of systems for efficiency, but no systems have been chosen.

Ed Fox suggested that we invite a person from each of the units involved in the instructional development initiative to speak about the summer program.

The next meeting will be OCTOBER 27, 3:00 - 5:00 pm.

Minutes of the University Communications Resources Committee

Meeting held: Wednesday, October 27, 1993 - 3:00-5:00 pm  
Location: 224 Williams

Present: David Beagle, David Bevan, Erv Blythe, George Crofts (Chairman), Jamie Evans, Mark Hunter, Judy Lilly, Buddy Litchfield, Lance Matheson, Lenwood McCoy, Mark Sanders, Frank Schima, Matt Swift

Guests: Phil (Theta) Bowden, Carol Eggleston, Wayne Donald

1. Approval of Minutes

The September minutes were approved.

2. Election of Vice Chair

Jamie Evans was elected vice chair.

3. Initiatives for Administrative Areas under Distributed Computing

Wayne Donald, director of systems analysis & services, gave an overview of computer initiatives for administrative areas. He focused on efforts to automate human resources information. A system is being purchased and modified to allow paper-less transactions including leave reports and personnel appointments and changes. A commercial system that can handle the core functions will be purchased and customized to handle our specific needs. Bids are due this week, a purchase may occur by year's end.

The system will have a unix server and support both Mac and Windows environments. Implementation will occur between six and eighteen months of the purchase. The time for implementation will depend on the resources available for customizing the system and purchasing equipment upgrades in unit offices. (Ethernet connection will be needed for the system.) Groups of users will help evaluate the bids.

4. Blacksburg Electronic Village Video

Due to equipment failure, the Blacksburg Electronic Village video tape could not be shown.

5. Subcommittee Discussion

There was a good discussion on subcommittees and topics the committee should investigate this year. Mark Sanders sees the need for much more education for faculty, staff, and students with respect to the electronic communication systems. A subcommittee could work on this issue. The subcommittee members should spend time deciding just what to investigate, but the topics would likely include general information to the campus community on communications infrastructure plans, information on distributed computing applications, the BEV, and the faculty and staff development projects. The subcommittee might also look at sub-parts of

the instructional development initiative that could be isolated and presented to wider audiences. Matt Swift sees a continuing role for the universal access subcommittee including a way to give people a voice in changes in the communications area.

Discussion should continue via our listserv. Committee members should identify the subcommittee on which they would serve.

6. Becoming More Informed about Network Issues

David Beagle will see if the library computer room could be reserved, so the committee could gain some first-hand experience and knowledge about network software such as gopher.

7. Date for Next Meeting

The next meeting will be December 7, 3:00 - 5:00 pm, beginning in the library computer laboratory.

Minutes of the University Communications Resources Committee

Meeting held: Tuesday, December 7, 1993 - 3:00-5:00 pm  
Location: 3:00-4:00: Library's Computer Room; 4:00-5:00:  
Moved to another room reserved by Buddy Litchfield

Present: David Beagle, David Bevan, George Crofts (Chairman),  
Ron Daniel, John Eaton (for Bernard LaBerge), Jamie  
Evans, Ed Fox, Mark Hunter, Jo Johnson, Judy Lilly,  
Buddy Litchfield, Lance Matheson, Tom McAnge, John  
Moore, Mark Sanders

Guests: Phil (Theta) Bowden, Greg Kroll

1. Introduction and Practice with Networks

John Moore and Greg Kroll gave the committee an overview of how the network (internet) can be used. Applying the software distributed and taught in the instructional development initiative workshops, Mr. Kroll gave the committee a quick, hands-on demonstration of some capabilities (and exasperations) of the world of networks. The network with the software make e-mail, file sharing, and on-line searches easy.

2. Approval of Minutes

The October minutes were approved.

3. Subcommittee Reports

A report from the subcommittee on network education is appended to these minutes.

4. BEV Video

The Blacksburg Electronic Village video expanded the committee's understanding of the electronic village concept.

5. Other Items as Suggested by Members

John Eaton reported that Ed Fox and David Bevan are involved in discussions about submitting dissertations electronically to the graduate school. Such dissertations will be stored on disk rather than in hard-copy form. They will be made available electronically on the network rather than from university microfilm as xerox copies.

Ed mentioned that technical reports may soon follow. The computer science department has four years of technical reports on-line in electronic form.

6. Date of Next Meeting

The next meeting will be January 25, 3:00 - 5:00, location to be announced.

ATTACHMENT #1:

Network Education Subcommittee Members of the UCRC  
Minutes of December 6, 1993, Meeting

Subcommittee Members: Dave Beagle, Daniel Gallagher, Lance  
Matheson, Lenwood McCoy, Mark Sanders

(Chair), Frank Schima, Shirley Travis

Lance Matheson, Lenwood McCoy, and Mark Sanders met to begin the work of the Network Education Subcommittee of the UCRC.

Our agenda was as follows:

1. Background
2. Possible "Plan of Work" for Subcommittee:
  - a. Identify Network Education Problems/Needs (e.g. need for better information distribution with respect to the campus network, central point for network access information, need for ongoing educational programs, etc.)  
  
Methods of approach:  
  
Committee brainstorming & discussions  
Canvassing our colleagues  
Data collection as appropriate
  - b. Determine what programs are currently in place"
  - c. Identify network education "strategies"
  - d. Provide recommendations back to UCRC
3. Work Assignments?
4. Adjourn

After a general discussion regarding our charge and how we should go about the work of the committee, we had a very productive discussion with respect to #2 above. We began to identify some aspects of electronic communication ("networking") that could benefit from additional education efforts around campus. These included information regarding:

access to the university network (including a host of initial installation and configuration issues),  
access to the internet,  
ethernet installation,  
security issues,  
home access/configuration issues,  
general information on "networking,"  
student access issues

Following this discussion, we began to identify places where information on these and other topics is currently, or might be made available. That list included:

4Help  
Fastline  
Spectrum  
Collegiate Times  
University Info (ERIS) system  
Campus Computing Labs  
Traditional mail notices  
Student registration information  
Prospective student mailings  
Undergraduate and Graduate catalogs  
Campus TV  
Videotape training modules  
Floppy disk tutorials

Mark Sanders agreed to send a memo to Judy Lilly, Bill Sanders, and Tom Head asking what types of network education efforts were currently in place from CNS, User Services, and LRC respectively.

In preparation for our next meeting (probably in February) we decided that each of the subcommittee members should ask his/her colleagues the following question: "What information about electronic communication would you like to see made available at Virginia Tech?" You might also ask them for suggestions on how that information might best be made available.

We adjourned at 11:55 a.m.

Respectfully submitted,

Mark Sanders, Subcommittee Chair

ATTACHMENT #2:

Copy of Memorandum Sent

MEMORANDUM

To: Tom Head, Judy Lilly, Bill Sanders, & Ed Fox From: Mark Sanders

Date: 12/8/93

Subject: Network Education Subcommittee

The University Communications Resource Committee (UCRC) has established a new subcommittee titled "Network Education" that I have been asked to chair. In concert with the general purposes of the UCRC, the purpose of the Network Education subcommittee is to examine current network education practices at Virginia Tech and generate suggestions for enhancing those services. These would in turn be considered by the larger UCRC group, with the final result being one or more recommendations coming from the UCRC to the university community at large. This is in keeping with the UCRC's charge which includes a provision to "...recommend policies regarding planning, purchasing, installing, and utilizing the university's communication resources."

With that in mind, our subcommittee is in the process of identifying what is currently in place in terms of educational support for "networking" at Virginia Tech. The subcommittee has identified User Services, CNS, LRC, and the CS Department as current sources of general "network education" for students and faculty on this campus.

Obvious sources of information about "networking" include 4Help, FastLine, CNS telephone support, and the network education component of the Faculty Development Initiative. But there are all sorts of other educational services provided by Virginia Tech personnel relating to "the network." It would be very helpful to the subcommittee if each of you would provide me with a brief annotated list of the types of educational support you now offer with respect the network. Annotations might include any detail you think might be relevant and useful to the subcommittee.

I would appreciate your input before January 15, 1994. Feel free to contact me if you have questions about this. Thanks in advance for your assistance with this request.

## Minutes of the University Communications Resources Committee

Meeting held: Tuesday, January 25, 1994 - 3:00-5:00 pm

Location: Conference Room, Graduate School  
206 Sandy Hall

Present: Marc Abrams (for Ed Fox), David Bevan, Erv Blythe, Tom Caceci, George Crofts (Chairman), Jamie Evans, Nigel Hatton, Mark Hunter, Jo Johnson, Bernard LaBerge, Buddy Litchfield, Lance Matheson, Tom McAnge, Mark Sanders, John Schorger

Guests: Matt Swift

### 1. Approval of Minutes

The December minutes were approved.

### 2. Subcommittee Reports

The subcommittee on mail will meet January 26 to discuss the mail regulations prepared by University Mail Services.

The subcommittee on network education is gathering information. CNS and LRC have sent information on opportunities for instruction. The subcommittee's effort may evolve to the task of increasing publicity of the educational opportunities that exist.

### 3. Presentation on Information Systems Plans

Erv Blythe reported on plans of information systems to move to open computing structures and issues connected with that action.

Administrative use of computing at Tech was developed in the 1970's, and the techniques reflect the technology and software available then. Noticeable advances are not possible without new equipment and software. Given the number of people using the systems (2,000 regular users, 8,000 casual users, plus many more infrequent users such as students adjusting schedules) and the volume of programs and files (the equivalent in stored bytes of five million, 500-page books), administrative systems are important to the functioning of the university. New approaches will increase connections between operations (e.g., between financial aid and admissions), should allow greater capabilities to customize operations, and reduce people approvals of forms by creating system checks.

The financial cost of the change (likely \$2,000,000 per year) is less of a concern than overcoming the inertia of current activities. Upward to 200 people will have to become literate in new programs and approaches, up to 80% of the current maintenance and development will have to be suspended, units would have to alter work processes and organizational structures, and users will have to receive training. Some "untouchable" processes must be dashed.

The question and answer period following the presentation included:

Q. How will the planned changes be communicated to the faculty and staff?

A. It is hoped that deans and others hearing the presentation will



spread the word. Erv is willing to meet with other groups to give presentations.

Q. From where will support to units come?

A. Now, there is no support. Erv and others are aware of the concern and give it attention, but no full solution has been found. Information systems hopes to find fool-proof software. It does expect to support items it distributes.

Q. Which other universities have tried this shift?

A. Few have gone this way. Some have hired groups to come in and make the change. In those cases, many campus people end up working for the contractor.

Q. Why so many "unix" boxes?

A. Unix is the way we will go on central machines. Either mac's or intel machines will accommodate users.

Q. Who is funding the "conversion to mac's?"

A. It is part of the \$2,000,000 per year cost.

Q. What are the implications to faculty?

A. It is hoped faculty can access a host of information on students, find purchasing easier, and access information through the network more easily.

Q. Will systems development people move physically?

A. Likely, certainly during the training phase.

Q. Who sets the parameters for the new systems?

A. Often there are few choices. Just shifting to the new technology will give users choices for making changes.

Q. How will it help Vet. Med. with its system?

A. The new approach should allow migration of the current Vet. Med. system.

Q. What is a peripheral system?

A. The library acquisition system is an example.

Q. What are some examples of integration?

A. Alumni could have access to placement information. We should think of the new approach as providing open systems. The real payback is to allow basic change.

Q. What is the time-frame for risk on the 3090?

A. It will be 3 or 4 years before the transition, which is too long for it to be at risk.

Q. What lifetime will the new system have? The current system lasted 20 years.

A. Some parts will last only 3 to 4 years; e.g., interaction on central machines (connected processing). The core data approach

will last 5 to 10 years.

Q. Why compress the transition time?

A. That is necessary to get some action.

Q. How will you get "buy-in" from the faculty?

A. The attempt is through the deans and committees, such as this.

#### 4. Date of Next Meeting

The next meeting will be February 22, 3:00 - 5:00, in 206 Sandy.

Minutes of the University Communications Resources Committee

Meeting held: Tuesday, February 22, 1994 - 3:00-5:00 pm

Location: Conference Room, Graduate School  
206 Sandy Hall

Present: Marc Abrams (for Ed Fox), David Bevan, Ron Daniel,  
Jamie Evans (Acting Chairman), Jo Johnson, Bernard  
LaBerge, Judy Lily, Buddy Litchfield, Lenwood McCoy,  
Bill Richardson (for Tom McAnge), Mark Sanders, John  
Schorger

Guests: Tom Head, Matt Swift

1) Approval of Minutes

The January minutes were approved.

2) Subcommittee Reports

Bernard LaBerge: Did not have a report, but will have a report at the next meeting.

Mark Sanders: His subcommittee continues to talk about network education. The members have surveyed their respective faculty to gather ideas and opinions with respect to network education. They will present some findings at a subsequent UCRC meeting.

3) Communications Network Items (Judy Lilly)

CNS has a request from the commission on university support (chaired by James Armstrong) to give a presentation on the university network. These comments to UCRC can serve as a warm up to that presentation. (Perhaps, in this connection, we could set a time outside the normal UCRC meeting for a training session to actually see some of the network at work. Some folks still have not gotten away from the cbx connections.)

CNS projects another 2000 connections for the next fiscal year. (If anyone wants connections for the summer, orders should be in by May 1st.) CNS is currently investigating atm, fddi and switched ethernet. It is also looking at networking all the dorms. East Payne Hall is currently the only dorm with ethernet. Perhaps one-fourth of the dorms each summer could be wired for ethernet. Student usage in payne is out of 60 connections, 20 are active. Perhaps we should encourage more students to request that dorm to take advantage of more ethernet connections. There was a suggestion to have publicity in the educational publications concerning ethernet as well as to deans directors and heads. Perhaps the Collegiate Times could carry low-level article concerning ethernet, what it is, what it can do, etc. Judy said that they are putting together a quick reference guide, perhaps it could be published.

There is a lack of education all across campus. Everyone needs to be educated concerning networking. The computing center will be hiring students to assist with the 4help line. This will be the first time they have used students. The vttnet and the prompt were scheduled to change February 15, but many people did not receive the information that they needed a PID first, now it will change March 8. Vttermserv will be the new prompt, access

will require a PID and password. Everyone needs to get a PID in essence.

CNS is in the process of putting in the same type system at the Telstar location. It will be put in test during the summer. NoVa will have to pay for service for high speed modem pool access. They will no longer have low speed access.

Q: What effects did the ice storm have on the network?

A: CNS is looking at putting a UPS on major pieces of equipment, getting the network on an uninterrupted power supply (UPS). Switch rooms are on UPS, gasoline generators. Hubs will usually come back up, but the routers have to be restarted by CNS.

In April the electronic drop/add will be opened up to all students. Currently it is just for drop/add, but there is a plan to have registration on-line.

Judy suggested that to show how video operates over the network Gordon Miller could do a presentation in the media lab showing what is available and what is coming. Judy will work on getting such a demo arranged.

#### 4) Printing Services Update (Tom Head)

Printing services has moved off campus to the old K-mart building. Its former campus location is freed for the Art and Art History Department. Printing has seen an improvement in productivity that should be a cost savings. It will make office calls if people need help, just give them a call if you need consulting.

The campus copy centers are going digital. They have a docutech, a 600 dpi scanner and copier, that can be tied into the network for postscript printing so users could send jobs directly to the printer. There is optical storage available on demand. The network access should be up by the fall for these items.

In long-range planning, Tom sees Printing services becoming an archive business. For example, CD-ROM would be a production service for certain items. Major publishers will be out of the printing business, but providing electronic service such as CD-ROM. However, printing services is currently above last years numbers, so business is up. They are looking at the issue of the computing center getting out of the printing business. An investigation into campus high speed printing needs to be performed.

#### 5) Status of Information Systems Initiatives (Carol Eggleston)

The faculty initiative continues. It is slowly getting people off the mainframe. By August 1st, about 250 faculty will have participated in the faculty initiative. Five hundred people have subscribed to the Blacksburg Electronic Village project in the first 4 months, about 50 subscribers per week. Bell Atlantic has donated a high speed modem to each school.

Q: What if someone wants to distribute information on BEV?

A: Andy Cohill is the person to contact. There is a service, perhaps like a computerized newspaper, that he uses to distribute information.

Q: With VM going away, will services now provided on VM vanish?

A: No, while specific application software will likely disappear, the fundamental service will be migrated to the new environment.

(February Minutes approved at the UCRC meeting held March 29, 1994)

Minutes of the University Communications Resources Committee

Meeting held: Tuesday, March 29, 1994 - 3:00-5:00 pm  
Location: Multi-Media Laboratory, 220 Hancock Hall  
Present: Marc Abrams (for Ed Fox), David Bevan, George Crofts (Chair),  
Ron Daniel, Judy Lily, Lance Matheson, Tom McAnge, Mark  
Sanders, John Schorger  
Guests: Tom Head, John Nicols, John Pollard, Matt Swift, Neal Vines

1) Approval of Minutes

The February minutes were approved.

2) Demonstration of Video Over the Network (Gordon Miller, Director)

Gordon Miller presented an overview, with demonstrations, of the Multi-Media Laboratory. The lab provides hardware, software, and assistance for individuals to develop video presentations. Two-thirds of the use is for presentations and demonstrations in undergraduate instruction. One-sixth of the use is in support of applied research (developing media presentations to sponsors) and the remaining one-sixth is used by student organizations.

3) Subcommittee Reports

Mark Sanders: gave an oral summary of the network education subcommittee's report (see attached). The subcommittee will continue to seek ways to educate faculty on networks. The report lists several campus sources of information on networks. A goal is to inform faculty so they may become educated when they find needs to use networks. No single approach can be effective given the audience size and knowledge levels. Adding more venues to the current ones can be valuable.

4) Election of Next Year's Chair

David Bevan (biochemistry and anaerobic microbiology) and Mark Sanders (vocational and technical education) accepted their nominations for the UCRC chair, for 1994-95. UCRC members should vote by e-mail, sending their choice to Jamie Evans <JLE@VT.EDU>. Jamie will count all votes received by April 16.

NOTE: John Pollard, John Nichols, and Phil Benchoff will "dress rehearse" training presentations at the next UCRC meeting. Members are urged to critique, constructively, the presentations.

Attachment: Report of the UCRC Subcommittee on Network Education