Major Gift from AT&T Creates Environmental Analysis Lab

In response to a proposal made by UC Davis faculty, AT&T recently agreed to make a major corporate gift to the campus. Geoffrey Wandesforde-Smith, of the Department of Political Science and the Division of Environmental Studies, and Kathleen Dixon, of the Campus Writing Center, asked for the resources to create a model teaching lab and classroom at Davis for wide-area networking.

AT&T made the award from its University Equipment Donation Program, which is designed to support the best applications of AT&T technology in higher education. The equipment and services that establish the facility, to be known as the AT&T Environmental Analysis Lab (AT&T/TEAL), have a fair market value of more than $200,000.

The new lab, to be managed by IT Information Resources, will feature the following donated equipment:
- 20 AT&T 3232 Energy Efficient PCs. These are powerful workstations running at 66MHz with 8MB of RAM and a 17MB hard disk space.
- 1 AT&T 3410 PC that comes with 16MB of RAM and a 55MB hard disk. This server machine includes a 52MB tape backup unit and an AT&T Paradyne modem.
- 2 StarLAN 10 Smart Hubs.
- 1 laser printer, and Ethernet LAN cards, sound cards, dual-speed CD-ROM for each of the 20 workstations.

Donated software for the lab includes MS-DOS, MS-Windows, UNIX System V Release 4 OS, StarGROUP LAN Manager, and the TCP/IP application suite (Telnet, FTP, etc.).

The AT&T/TEAL will be located in the new Social Sciences building currently under construction and slated to open in fall 1994. It will be open to the general public in non-peak hours, but will serve primarily as a national demonstration and testbed teaching facility for the use of wide-area communications technology in higher education.

In its first year, the new lab will especially benefit three undergraduate courses that use distributed network resources for environmental analysis: Political Science 107, Environmental Politics and Administration; Environmental Studies 161, Environmental Law; and Political Science 122, International Law, which emphasizes international environmental law.

"This award is the first of its kind at Davis," according to Wandesforde-Smith, "and is a major vote of confidence in the steps the faculty and the administration are taking to, together, make this campus a national center of excellence for classroom-based applications of computers and networks. It's a big feather in the cap of IT, and a tribute to the foresight and leadership of those in the Department and the College who have supported us along the way. We look forward to a sustained partnership with AT&T and with other corporate donors."

IT Staff Assisted Faculty Who Received Teaching Awards

As noted in a recent Dateline UC Davis article, "the work for which four Davis faculty received the Distinguished Teaching Award had a strong information technology component this year.

The 1994 recipients of this annual award from the campus division of the Academic Senate were professors Dwight Hirsch of Veterinary Microbiology, Thomas Sallee of Mathematics, Richard Walters of Computer Science, and Geoffrey Wandesforde-Smith of Political Science and Environmental Studies.

Two of the faculty, Walters and Wandesforde-Smith, have worked especially closely with the Division of Information Technology and done much to demonstrate that information technology can be an ingredient of good teaching at UC Davis. Among IT staff who have been acknowledged as contributing to their success have been: Carole Barone, Joan Gargano, Vicki Suter, Ken Weiss, Paula King, Steve Faith, Ivans Balkitis, Katie Stevens, and Dick Kaye.


Richard Walters

Geoffrey Wandesforde-Smith

Both Walters and Wandesforde-Smith mentioned IT in their acceptance remarks at the awards ceremony held June 7, 1994.

1994 IT Annual Report

Associate Vice Chancellor - Information Technology Dr. Carole Barone submitted the following annual report to the Information Technology Administrative Advisory Committee on June 10, 1994. (Also, see IT Chair Comments on IT Annual Report, page 2.)

Mission

The mission of Information Technology (IT) is to support, facilitate, and empower local access to, and use of, information technologies in support of the University’s mission of instruction, research, and public service.

Identity

The size of the Information Technology division increased by approximately one-third on January 1, 1994 with the merger of Bepro Graphics (campus printing services) and Illustration Services (medical illustration) into the organization. This report will highlight the work of these two new units along with that of the others that comprise the IT division.

- Advanced Networking and Scientific Applications (supercomputing, GIS, database and new technologies support);
- Communications Resources (voice and data networking and support);
- Distributed Computing Analysis and Support (distributed architecture design and services, security, campuswide information system);
- Information Resources (instructional support, administrative information systems, operations); Planning, Strategy and Administration (ITIL administrative); and Technology Resources (equipment purchase, maintenance and repair).

Accomplishments

In spite of the struggle with budget cuts and the aftermath of a restructur- ing to align the organization structure with the goals articulated in the recommendations of the Information Technology Strategic Planning Committee (ITSPC), which issued its final report in December 1992, the IT division has produced significant accomplishments. These are presented here in summary form. A more comprehensive report is available through the Office of the Associate Vice Chancellor - Information Technology, 1480 Chem Annex, cabarone@ucdavis.edu, 752-8899.

Information Technology Strategic Plan: The Information Technology Strategic Planning Committee Report was accepted by the Academic Senate in November 1993. The IT organization is working with the campus community to implement the action steps recommended in the report. Since the work of the planning committee is now nearly two years old, it is time to begin discussions of criteria for evaluating progress toward attainment of the goals and methods of updating those goals.

All of the accomplishments that follow are tied directly to recommendations found in the ITSPC report. (Annual Report) Continues on Page 6.
The "Netiquette & Info Tech Culture" column is written by various authors to help people deal effectively with the social side of networking, computing, audio/visual media, and related information technology.

Much social behavior on the Internet is self-policing and self-regulating. This article, comprised essentially of excerpted user postings on the Internet, represents, in the truest sense, the info tech culture that has developed over the years on the wide area networks — and especially attitudes toward what has become appropriate and inappropriate in this environment.

[Editor's Note: All items are reprinted here by permission of the author or of email list moderators when authors were not traceable in archives and/or credited in the original posts.]

Doing Research Before Querying a Discussion Group

Last year a hot debate erupted when a graduate teaching assistant at a major, large, top 10, Eastern university, assigned a class of undergraduates to use Internet to seek information on research paper topics. The TA did not instruct the students to use the library first and then pose well-formulated questions to the net. BIOSPH-I was flooded with questions on basic environmental science.

Both the TA and the students were outraged by the large number of responses received from list readers who objected to being asked fundamental questions that ought to be dealt with by the students themselves. The root cause appears to be that neither the TA nor the students had any idea who was at the other end of the line. All they saw was a computer that should be giving them answers.

What was said to them repeatedly is this: The courtesy issue is that traffic on BIOSPH-I is voluntary. If you want people to take the time to answer your questions, indeed you have done some legwork on your own and have a genuine problem looking for additional information. Otherwise, you are soaking up volunteer resources which could be better used to meet needs not answered elsewhere.


Conserving Network Resources: Macellarch

I'm finding the online-news list extremely useful, but I wonder if you might post a message further elaborating on some guidelines for everyone.

The main things I see happening are:

1. People clicking "reply" or typing "r" and including a long message (often 100 lines or more) and typing a one-line reply at the end.
2. People replying to a post by annotating it extensively, where their annotation isn't that useful (usually these are long posts, too).
3. People posting short items that are simply box mots ("Yes, I agree to," followed by a one-line signature). People with long signatures.
4. People replying with ad hominem attacks or with messages that should have gone to email rather than the whole list.

5. The off-topic issue, which you just added to the discussion (why in the Journalist Ph.D. discussion going on here...), but also people posting totally random news items.

I don't think any of these are "make or break" problems for the list, but they certainly make many more items "cullable." I read through the online items I get, and delete about 2/3 without saving them at all (because of these above items).

Untraceable source (1994). Electronic message to online-news@marketplace.com, March 2.

Considering Limited Capabilities of Some Systems on Internet

Many systems don't like articles over 6000 bytes or SKR (this includes the headers), so if you have a really long piece you may want to break it up. It's usually good etiquette to put "(LONG) at the end of the subject line if you post something more than a few pages long. Oh, and I think it's generally preferred that things not be double-spaced or right-justified.

Reminder for everyone: Be sure that there is exactly one blank line between the headers and the article, not one or two; remember the first line of the article! (Some machines have a line-eater that removes the start of your posting if it's indented.)


Letter Bombing (and Rumors) Not Appreciated on Net

[Editor's Note: The TAP (Taxpayer Assets Project) letter, signed by Jamie Love, referred to in this message was sent to multiple addresses on the Internet. It asked recipients to send a form letter to Steven Wolf of the National Science Foundation protesting reports that "metered pricing on the Internet" might replace the current practice of charging a flat rate. In a note to the Cornell University community, M. Stuart Lynn pointed out that the TAP letter was ill-conceived and showed a poor understanding of what is accruing and charged on the Internet. He went on to say the following about letter bombing:]

This TAP letter is an example of the danger of participating in letter-bombing and why such is considered poor net behavior. It results in clogging up people's mailboxes with unwanted letters (I should probably include this one in that category), and causes a lot of unproductive time to be spent in cleaning up the aftermath.

In this electronic network age, it is too easy to launch a thousand e-ships (or more) at the press of a single key-stroke. I personally will not participate in such an endeavor. And I always assume a request to forward a form letter is a hoax, and unless I have reason to be reasonable to the contrary.

Wood [of the TAP letter is not a hoax (it is on sincerely-held misunderstandings). I cannot believe that Jamie Love would have sent it had he understood the facts.

M. Stuart Lynn (1994). Posted to taskforce@evryry.educ.uc.edu by Mike Roberts.

Apple and Bookstore Partnership Provides Additional Campus Computing Resources

In September 1993, the UCD Bookstore Computer Shop began to participate in the Apple Computer Incorporated's Academic Partnership Program. This equipment donation program helps the University reinvest in its campus technology plan with earned credits from purchases of Apple products through the Computer Shop.

As part of the new program, Apple tracks University purchases through the Bookstore Computer Shop for each six-month period and awards points for each system sold. For the first redemption period, the UCD Bookstore Computer Shop's efforts resulted in approximately $20,000 worth of Apple equipment donated to UC Davis.

Information Technology used the accumulated points to select seven newly-released high-end Macintosh 7100/66 systems. The Craft Center will receive one system, which will provide students with access to the latest CD ROM, multimedia, and authoring tools. Five Apple systems will be used by students in the Medical Imaging lab. The latest campus-developed multimedia resources and coursework. Information Technology will install the final system in their Information Resources department in order to review all of the technology and software related to the PowerPC and to facilitate the rapid integration of the new technology on campus.

Apple Computer, Information Technology and the UCD Bookstore anticipate a continued expansion of the biannual Academic Partnership Program for UC Davis. Information Technology has been asked to assist in the distribution process and is creating a proposal mechanism to ensure that the donated equipment will provide the greatest overall benefit to the campus. Future IT donations will be posted to an on-line list, and interested parties can subscribe to apple_donation@ucdavis.edu.

IAAC Chair Comments on IT Annual Report

[Editor's note: The 1994 IT Annual Report on page 3 of this issue.]

Beyond question, Information Technology has assumed a new strategic position in the life of UC Davis in the last year. Associate Vice Chancellor Barron's annual report speaks to the developments that have contributed to this outcome, across a broad front. From a complainable perspective, two or three things stand out.

First, after some delay attributable to a very thorough review, triggered by the Academic Senate, there is a decision to move more quickly with Network 21. This project, now approved by the Regents in November 1993, will bring fiber-optic cable to every place on the Davis campus where the cable can be used and be useful. This new infrastructure will replace the slower and more limited "third-wire" access to the network we now have. Network 21 will, thus, put in place the tools UC Davis needs to transform itself as a place of higher learning.

Second, as a result of several decisions by both the Academic Senate and the campus administration, IT gets a new oversight structure, starting in fall 1994. The old Senate Committee on Computing, which died at the start of 1994, and the Chancellor's Information Technology Administrative Advisory Committee (ITAC) will effectively be merged into a new Campus Committee on Information Technology. This is more than just a cosmetic reshuffle. The new joint committee offers a model for a fresh approach to University governance. If this new enterprise breeds trust, and if it can move beyond mere oversight to planning and policy development, then it will provide some effective joint leadership. The benefits of this could extend beyond the case of IT, and I would not be surprised to see that happen.

Third, a variety of important initiatives are making the people who are the IT division, as well as computer and networking technology itself, closer and closer to the heart of teaching, research, and service. This increasing interdependence between people of IT and people in other academic and administrative units brings with it stresses and strains and new challenges. But I don't think anyone is going to adapt. We have not seen the end yet, of the joint association reorganization and rethinking of how we do our work.

The word is, however, to our students, to our colleagues at other universities, and to Dana Vanderford-Smith, Chairman-designate, The UC Davis Campus Committee on Information Technology.
Gis Incorporated into UCD Curriculum

by Bonnie Johnston, Planning, Strategy & Administration

What is GIS? It’s a Geographic Information System, which allows you to enter, store, manipulate, analyze, and display spatial information. Although GIS was first made popular by geographers and land management planners, it is now used by biologists, ecologists, hydrologists, sociologists, and other researchers who work with data that can be expressed spatially. “I began using spatial analysis techniques in graduate school, and they continue to be indispensable in my hydrology research,” says Wes Wallender of Hydrologic Science and Biological and Agricultural Engineering.

The three problems listed to the right under the title of this article are projects that students in UCD’s new GIS class (Introduction to Geographic Information Systems, EIB/HYD 198), taught by Wallender and Grant Paul of Information Technology), were able to solve by creatively applying GIS spatial analysis techniques. Assisted by Tim Aliss of IT (who also helped teach the lab portion of the class), students used Arc/Info Software in Information Technology’s work-station based Visualization laboratory. While Grant has been teaching short courses in GIS use for the past two and a half years, this is the first time that GIS has been incorporated into UCD curriculum as an academic class. He feels that the class was very successful, and Wallender agrees: “Students performed better than anticipated — their projects were thoughtful and ambitious rather than originally intended.”

Grant feels that both the short course and the full-length academic class serve a particular need on campus. While many of the people come into the short course as an overview of the system as an understanding of how GIS works, the full class gives students an opportunity to apply the information they’ve learned to a real-world problem. The course is split into two sections — during the first half of the quarter, students learn how to use Arc/Info’s many functions; during the second half, they must apply what they’ve learned to a project of their choice.

Students Eric Sanderson and John Dale chose to apply spatial analysis techniques to track the evolution of Sacramento property boundaries as social constructs. Examining the years shortly before the Squatters’ Riot in 1850, Eric and John compared property boundaries as defined by speculators (who bought large lots of land and then re-sold them piece-by-piece for large profits) and squatters (who defined property boundaries by usage rather than by deed of ownership). GIS allowed them to transform huge amounts of historical data into several graphic representations, which could then be subjected to further analysis.

Glen Fitzgerald, an Agricultural Ecosystem student, found a very different use for GIS analysis. Looking at data on rice paddies in Yuba County, he focused on the link between land management methods in rice production and methane emission from rice fields. Since rice production contributes approximately 25% of the world’s methane emission (one of the contributing factors to the greenhouse effect), Glen wanted to determine whether new legislation regarding methods of rice straw disposal would increase or decrease methane emission from rice paddies. He used GIS analysis to create topological representations of fields using both the old method of disposal (burning the rice straw) and the new method (incorporating the rice straw back into the soil). Glen found a significant increase in methane emissions in fields where rice straw is incorporated back into the soil, indicating that the impact of this legislation should be studied in greater detail.

Illustrating one of the more traditional uses of GIS, John Gard and Raghu Kovish were able to select ideal sites for construction of traditional highway lanes into I-90 (carpool lanes), considering such diverse factors as traffic flow, peak driving hours, and support for an increase in carpool lanes among local residents and freeway users.

Other students found equally creative applications for GIS. Lindsey Swayne examined the causes of deforestation in the areas surrounding four Chinese villages. James Juster and Kaylene Keller were able to locate optimal areas for a new wildlife preserve in Costa Rica. Pauline Low and Tracy Pen examined the correlation between urban development and water quality in the Lake Tahoe area. One very enterprising student, Eric Jarvi, far exceeded the original assignment, creating a graphical interface for the GIS system.

To demonstrate the power of his interface, he used data from the Housing Viewpoint’s annual survey to create overlays which a user can combine to find the apartment complex which most closely matched their preferences. The user chooses the features that they want in an apartment, and the system displays a map of Davis, highlighting all the apartment complexes which offer these features.

Hoping to increase the prominence of GIS on campus, Grant and Wallender are already working to improve the class for next year. “For the next offering, we will increase the lecture/discussion from one to two hours per week to allow for more discussion of concepts, and to have campus and off-campus GIS users share their experiences,” says Wallender. “Paul will assist additional computer homework exercises that go beyond the tutorial. Finally, students will continue working individually or in teams of two, but will choose from two or three projects we design...” Next year, a follow-up course in GIS will be taught using the visualization laboratory... we will have a two-course sequence. This sequence will be the capstone of a Minor in GIS and Spatial Analysis, [which] the Campus GIS Committee is preparing.”

For more information about GIS, you can call Wes Wallender at 752-0688 (electronic mail address: wwallender@ucdavis.edu) or Paul Grant at 752-8266 (electronic mail address: pgrant@ucdavis.edu). If you are interested in IT’s short course on Arc/Info, you can call Paul Gutierrez at 752-0141.
Jack Kerouac Had Never had to Worry about Email

by Joel Snyder, Opus One

[Editor’s Note: The following article originally appeared in Internet World, June/July/August 1994, Vol. 7, No. 3. It is reprinted here with permission of author Joel Snyder and editor of Internet World Daniel Dern.]

Getting access to your Internet email when on the road is a common problem, especially for those of us who travel semi-frequently and to different areas. The problem is particularly acute in situations where there are inexpensive solutions that let you keep in touch without breaking the bank.

No matter which of the techniques you use, making sure you get all the information before leaving town. You’ll need phone numbers, modem settings and speeds, and possibly special keywords, passwords, and procedures. A practice session before you leave is also a very good idea. You’ll want to make sure every- thing works while you can still get local help.

For the infrequent traveler, a laptop and modem are all that’s needed to make you sufficiently mobile to borrow or rent a computer on the road, but you’ll have the greatest chance of success if you bring along a system and software you’re familiar with. This doesn’t have to be expensive: low tech, low weight, low speed Linux such as the Toshiba T100 can be found for $400 or less.

Once you’ve equipped, you’ve got to figure out how to bridge the long distance between you and your email. There are two basic techniques. The first is to use the telephone network to get you all the way to the far end. The other is to dial to some local computer system or network access point (for free, usually), and use the data network lines to get the email.

Dialing back to the office using normal long distance is one of the most expensive ways of staying connected, but it has simplicity on its side. No flopping around, no fancy software, and no monthly fees. To save money, don’t call direct. Most hotels see long distance as a profit center and charge exorbitant rates. A one-minute call from a hotel in Atlanta to Arizona last month cost $5.64! Instead, use a telephone credit card to place the call and avoid most hotel charges. To get help placing a call, try 800-321-0288 for AT&T or 800-877-8000 for Sprint.

A common alternative is to try and get a guest account at an Internet site where you’re traveling. This usually works; if you’ve got the time to track down local postmasters and beg for accounts. But there are no guarantees, and the effort can be substantial.

As your time on the road increases, 80s-style service can be an alternative. The costs for this service have dropped dramatically over the past decade, with monthly fees and per-minute charges quite reasonable.

One plan from MCI will map a local dial-in modem to a toll-free 800 number for $5 a month, with per-minute charges of 52.6¢. This means you can dial, for example, 1-800-JANS-VAX, and the call will ring on your normal, local dial-in modem number. Other services also increase the monthly charge and reduce the per-minute charges to less than $0.20. Most of the larger long distance companies are now offering this kind of service. Try calling AT&T (800/222-0400) and asking about their Starline and Realtime services, or MCI (800/444-2222) for their Private 800 or 800 Business services.

MCI’s Private 800 is especially interesting to dial-in users, because it requires a 4-digit password before the call will go through. This helps screen incoming calls and hackers before the charges add up.

An online service such as the Compuserve Information Services (800/648-9980) or MCI Mail (800/444-6245) can set up an email access point when on the road. For $9 a month, Compuserve Information Services offers unlimited connect time and a $9 email usage charge. That means you can send or receive about 60 Internet messages a month without additional fees (but note that Compuserve charges you for email in both directions). If you forward your email to your Compuserve account before leaving, you can read and respond while on the road at little or no charge.

Compuserve’s advantage is that they have local dial-in service to Modem Park in the US, which means no long distance charges. Unfortunately, there is no way to directly access the Internet from Compuserve (although there is an Internet-to-Compuserve gateway).

MCI Mail doesn’t offer the non-email services Compuserve does, but it has a lower charge if all you want is email, with toll-free 800 numbers, and no charges for access or reading mail. Sending an email with MCI Mail, which covers most US destinations, is more expensive, though, with charges starting at $0.50, and going up from there.

Both MCI Mail and Compuserve have alternative pricing plans which may make sense, depending on how much mail you get and how frequently you travel.

A warning if you take this approach: forwarding mail unselectively can be dangerous. A malicious sender can fill up your mailbox, keeping legitimate messages from getting through.

If you need more than email, or don’t want the headaches of tuning on and off email forwarding, you can get public access Internet accounts from many different vendors. If you do this, write down your site’s numeric IP address as well as the normal DNS address. Most have no surcharge for access from their home city, which may be a free or inexpensive call, depending on where you’re staying. A few services also have inexpensive access via 800 numbers or through a connection to a network such as Sprintnet (formerly Telenet), BT Tymnet, or CompuServe.

Sprintnet, SprintNet, and BT Tymnet all have access numbers in most major and many smaller cities in North America. To connect, one way to the road, you can Compuserve at 800/848-8990, Sprintnet at 800/877-3045 (press 5), and Tymnet at 800/336-0149 to find the closest phone number.

The monthly minimums are usually pretty high, but one low-cost contender is Holonet (510/704-0160), in Berkeley, California. Since Holonet is on the Internet, you can get from there back to your home email system. Holonet charges a low minimum of $6/month, with hourly rates of $2 and $4 (off-peak and peak hours). Holonet is connected to two different public access networks, depending on the city you’re calling from. For example, calling from Boston would cost a total of $2.95/hour in the evening, while Tucson would be $5.75/hour. Holonet also can arrange for local access in many international locations as well.

Holonet isn’t the only company offering this service. PSI (800/827-7482) has World Dial, a monthly minimum of $19.95 starting at $1.25/hour (but covers a very small set of cities); Delphi (500/544-4005) doesn’t charge for right-time access via Sprintnet or BT Tymnet, but does have a minimum charge of $15; Portal (408/973-9111) has a $20/month charge, but only offers very low off-peak rates through Sprintnet and BT Tymnet of $2.50/hour, and WEL (415/332-4335) charges $15/month with a $6/hour fee for access through CompuServe’s network.

Information Resources Facilitates Distance Learning

Tim Leehane of IR Instructional Services has been helping Assistant Professor Patrick Brown of Pomol-oby communicate electronically with twelve stu- dents for several months now. From February to August, Leehane developed a script for students and instruc- tor to share materials submitted electronically and showed Brown how to set up a public directory. Leehane also taught the students a one-hour course on how to use the Fetch program to pick up and drop off email, how to compress and decompress files and how to put it all together into a package to au- tomate the process. Both Leehane and Brown have been monitoring the success of the training and this electronic solution to distance learning.

Information Resources Helps Aggie Kids Compute

Information Resources participates again in the annual Aggie Kids Computer Camp. This year 450- 500 students aged 6-12 are expected to enroll for the two-week summer sessions. Classes last approximately two hours and meet twice a week, Tuesdays and Thursdays from 1:00-3:15 pm. From late June through late August, the students are going to be ex- posed to a variety of computing environments. This year IR instructors introduce them to the ESI (Infor- mation Super Highway).

For more information, contact Peter Peterson at ppeterson@acu.edu or 752-2131.

Listen for Computer Training Information

Information Resources has an electronic mailing list for announcing new classes, course schedules, and other Information Technology computer training information. This mailing list is called it-instruction@acu.edu.

To subscribe, send email to instruction@acu.edu containing the following one-line command in the body of the email message (leaving the "Subject" line blank and rest of the message blank):

it-instruction@acu.edu [firstname] [lastname]

Substitute your last and first names for [firstname] [lastname]. For more info, send email to learn@acu.edu or call 752-2131 or 752-2956.

If Units are National Prize Winners

Several of the Information Services and Repro Graphics and the UCD-Software Information Office resulted in several award winners this year’s nation- al publications contest sponsored by the College Spine Information Office.

At the Division II level, the Aggie women’s soft- ball poster captured second place in the nation. The poster was photographed by Markus Pitterer and designed by assistant athletic director Doug Dall.

At the Division I level, first place in the western district went to a poster highlighting the Aggie women’s gymnastics program, with design by Dino Gay and concept/photography by Steve Stevenson.

Other posters earning consideration were:

• football, which placed 7th in the nation in Divi- sion II, with design by Rick Hayes and concept and photography by Steve Stevenson;

• basketball, which placed eighth in the nation in Division II, with design by Rick Hayes, concept by Debra Wilson, and photography by Jim von Rummelsfuhl;

• baseball, which placed ninth in the nation in Division II, with design and concept by Doug Dall and photography by Jim von Rummelsfuhl.

Retirement of Hamlet and Othello

After June 31, 1994, the managed UNIX systems no longer will be able to logon to Hamlet and Othello interactively. One of these systems will remain, up through October 1994 for copying files.

Information Resources has put a utility in place for people to move files off the decommissioned DEC 5000s to the ESI-managed Sun servers Chip and Dale. You obtain instructions on using this utility.
from the Campus Wide Information System. It is lo-
cated at the end of the following directory path: Bulletin News (Change UCD Computing
News)/Campus Computing News/Computing
Announcements/Hamlet-Othello Retirement.

If you have any questions about the procedure, contact the Information Technology Campus Access
Point at ihelp@ucavis.edu or 752-2548.

Retirement of Alcor/Maxi and Move to Euclid
In mid-to-late summer, users of IT-managed
VMS systems will be asked to move off the Alcor/
Maxi systems to Euclid, a DEC 3000 Model 800
running Open VMS. A copy utility for self-help use
will be provided to facilitate moving files off the
VAX 8600.

Third-party software to be dropped during the
upgrade will include: CAMP, CTRLC, NCARD, SPEAKFASY, IMSL, IFPS, UNSC, PESCF. If you
copy your own executables, they will probably be
larger (files include more instructions), but not in
all cases. Also, though you won’t have the A11 ex-
porter/importer on Euclid, you will be able to use
FTP to transfer files to/from the Unix machine.

Upgrade of Suns to Solaris Operating System
All IT-managed Suns workstations are being
upgraded to Solaris 2.3 by early to mid-September
1994. Users of these systems may not notice much
change from the Solaris 1.x operating system.
outside of increased performance. However, a short
list of system command changes will be compiled for
distribution by the IT-Campus Access Point
(ihelp@ucavis.edu or 752-2548).

X-Terminals to Replace 12 ELCs in Storer Lab.
Half of the Sun ELC workstations in 1020 Storer
(12 out of 24) are going to be replaced by NCD X-
Terminals when they are physically installed. In the
long-term, probably all of the ELCs will be replaced by X-terminals.

New Mail and News Hub Servers
Three new Sun servers will be installed as the
campus electronic mail and news machines this
summer. A SparcStation 2000 with 4 CPUs
upgradable to 8 CPUs will be the new mail spool
hub. Of the other two (SparcServer 20x), one will
serve as the mail routing hub and the other will be
the Usenet news-server.

As part of this upgrade, the two Sun 670MIPS Rocky
and Bullwinkle will be opened to interactive user
logging, taking over the functions of Hamlet
and Othello. Bullwinkle at least will be available
for public use by early to mid-August.

Strategy for Passwords on IT Systems
Information Resources will change the way pass-
words are created on the IT-managed systems this
summer. Passwords—a proactive password checker
developed by Assistant Professor of Computer Sci-
ence Matt Bishop, will be installed. Most password
 cracking programs search a large dictionary look-
 ing for matches. Passwords performs such a search
on a prospective password to ensure that this form
of attack will be unlikely to succeed and that pass-
words will be more secure. Password lifetime can
be extended beyond the current 90 days and users
will have more freedom in selecting their pass-
words.

Computer Classrooms Summer Hours
Here is the schedule for use of classrooms man-
aged by Information Resources effective from June
20, 1994 to September 23, 1994:

Meyer Hall 113, 114: M-F 8:00 am to 5:00 pm
Hutchison Hall 8, 14, 76, 86: M-F 8:00 am to 7:00 pm
Storer Hall 208: M-F 8:00 am to 7:00 pm
Jart Hall 1101, 1102: M-F 8:00 am to noon
Any IT-managed computer room not listed
here is closed for the summer.

Contributors to Inside IT for the July 22 issue include
Iwao Biliot, Dana Dreyman, Jennifer Koester, Marco
Kapuyoga, Peter Peterson, Tom Arons, Brian Hall, Paul
Schneverman, Johnson Lai, and Doug Dall.

The IT Information Campus Access Point (IT-
CAP) has moved out of Surige II. The walk-in help
desk services are located now on the first floor of
Shields library in the Copy Center’s space. The
phone-in services and offices are located on the
fifth floor of the Chemistry Annex and will be
moving again at the end of the summer to Aca-
ademic Surige.

Illustration Services has moved temporarily out of
Surige II as well. Until early fall 1994, it will be
located in the Surige I Annex.

Other IT Moves
Information Resources’ subunit Instruction Ser-

ices has moved its entirety to the fifth floor of
the Chemistry Annex, also, as has the entire Ad-
vanced Networked & Scientific (ANS) unit for summer
1994 only. The Visualization Lab maintained by ANSA continues op-
eration in 3018 Surige IV.

Telephone home numbers and email addresses
for IT-CAP and the personnel in all these groups
remain as they were.

Kerouac...

(Continued from Page 4.)

All these options add up to one answer: yes, you
can stay connected while on the road. Choose
whatever service fits your budget and style,
and you can stay in touch, from Moscow, Russia or
Moscow, Idaho.

Old Slim is a senior analyst with Opus One, in Tuscon,
Arizona, specializing in international networking
and information systems. Opus One is working with the
California State Legislature to bring direct email access
to Senators and Assemblymen. Old Slim can be reached at (602)
324-0494 or via email to jvel@OpusOne.COM.

Obtain List of Internet Access Providers by Email
You can now obtain a free list of commercial
Internet-access providers by email. This list provides information on 38 US and 40 interna-
tional providers, with contact information and de-
scriptions of voice, email, and FTP access at each
site. To obtain the list, send email to
diss@era.com. Ask for the DLIST.

In Memorium,

John Keller

Information Technology employee John
Keller died May 17, 1994 in Sacramento.
Mr. Keller was born February 26, 1944
in Woodland, CA.

His military service included four years in the
US Air Force. He graduated from Wood-
land High School and attended various tech-
nical schools.

Mr. Keller joined the University of Cali-
ifornia in 1967 as a television technician with
Instructional Media. After the Information
Technology reorganization, he was assigned to
Technology Resources and worked as a senior
television engineer.

Mr. Keller is survived by his wife Carol,
daughter Kathy, and son Shawn, as well as
many friends at the University from his 25
years of service at UC Davis.

A memorial service was held May 25,
1994 at the Harry A. Nauman & Son funeral
home in Sacramento. Donations in memory of
John Keller may be sent to Faith Commu-
nity Church, 21704 West Golden Triangle
Road #420, Santa Clarita, CA 91350.
Network 21: The project has been on hold since Executive Vice Chancellor and woodrow Wilson. Vice President Network 21 Oversight Committee, Chaired by Vice Chancellor for Research Robert Shelton to review the project plans. In the meantime, IT has taken the following actions to prepare the campus for a fully networked environment.

[NOTE: The situation has changed, and the project is back on track again. See "ITAAC Chair Comments on IT Annual Report." page 2]

Improvements in Current Network Operations and Services

- Campus Modem Pool Expansion/Enhancements: Replaced aging and obsolete modems with new equipment, including the installation of communications servers which facilitate the backbone, service, and management of the pool. The size of the pool was increased from 72 to 224.
- Due to the development of several statistical performance monitoring tools, the service being provided has been vastly improved. The volume of calls made and answered has increased from an average of 2,600 to 8,300 per day. An IT workgroup has been established to provide a consistent service to monitor progress and ensure proactive steps to maintain service levels and meet increasing demand for network connectivity.

- Network Operations Center: Installed a functional Network Operations Center (NOC) with expanded hours of operation. The availability of new support center was increased from 7:00 am to 11:00 pm daily. The center is equipped with the latest diagnostic equipment, and the restoration capabilities in its current configuration allow the system to monitor and address main issues that will operate in the Network 21 environment for a 24 hours/day, 7 days/week basis.

- Internet Network: Designed and implemented a project to furnish access to the campus backbone system, to accommodate online students. For example, Art Building, Wickson Hall, Sproul Hall, Hunt Hall, Kerr Hall, and Wellman Hall. A total of 32 departmental local area networks were installed and 9 separate Devnet connections were completed, thus providing network services to the campus from the classroom is an important byproduct of this project.

- Touchstone Registration Server: In cooperation with the Information Resources Source unit of IT and the Office of the Registrar, installed a fully operational and responsive telephone touchstone student registration capability. Despite what may have been exceptional demands on the system by students, the system has performed well.

- Local Area Network Installations: Across a broad spectrum of campus units, provided 140 work esthaties and collected knowledge of the network. It is important to note that all installations incorporate the standards that have been established by the University.

- Social Sciences Remote Switching Node: We are in the final stages of implementing the plan to equip the New Social Sciences building with its

provide redundant, dedicated, CWIS service.

- World Wide Web is being used to:
  - Distribute security notices
  - Distribute site licensed software
  - Distribute forms
  - Provide class materials in Political Science 102
- The Registrar has agreed to make the catalog available through the Web.

- Electronic "help line" services have provided answers to nearly 3,000 inquiries about software, hardware, and IT services.

Publications and Communications

- Network 21 Planning Tips: This series, coupled with the IT Times articles on networking and Network 21 topics, has done much to inform campus administrators and the general campus about the Project.

- CUITEMS: This series (patterned after the Network 21 Planning Tips) has met and continues to meet the Phase 3 recommendations that campus department members are informed of the ways they can cut telecommunications costs. Issue #2 is due out in June and will highlight voice mail as a productivity tool.

- [NOTE: Issue #2 has been sent out to departments. Future issues will address telecommunication and portable (wireless) communications options.

- Payroll and Personnel Services Factsheet: This information piece met an urgent need to explain in lay person's terms the complex technical and organizational issues surrounding development of the UC-wide system.

- IT Calendar: The monthly calendar was launched in December 1993. It has kept the campus current regarding information such as events, seminars, workshops, etc. The people networking required to put out this document has also facilitated cooperation and coordination across campus, in providing network and other related training opportunities to the UC community.

- Mining the Internet: IT Publications and Public Relations continue to receive email requests for "Mining the Internet." Using the "Internet" training materials, first produced in 1991 for the California Educational Computing Consortium at UC Davis. As a result of a notice describing them in California Complete Reference and the Internet Yellow Pages, IT is receiving about 40 requests per month.

- Quick Tips: These tips sheets describe various "getty" options for "Mining the Internet." More than a dozen uses of information technologies on campus. This series has been very popular with students and faculty, especially for use as class handouts.

Instruction, Classrooms, Student Labs, and Operations

- Instructional technology support continued as a blend of traditional and emerging methods.

- Video services were provided to 140 faculty resulting in 21 productions, 106 videotaped courses, and the five teleconferences between UCD and the Washington Center. The productions included the entire lecture of Professor of English from the English Department (Chem 9) as well as a self-paced learning series of 15 lectures and 9 lab demonstrations for Computer Science Professor (Chem 9). Over 20 classes for BiO Sci 1C, BiO Sci 101, Chem 2A, and Chem 118 were offered by broadcast. The lab was added to additional classrooms over the campus cable system.

- Graphics services were provided to 167 faculty resulting in 21 graphic images and 28,783 photographic images delivered in 188 productions. Major productions included "Art and Science Education 101, 5 courses in Food Science and Technology, and 3 courses for the School of Law.

- Multimedia services (which include video and graphics specialists as well as multimedia authoring expertise) developed temporary, permanent, and traditional slide/ tape presentations into self-paced learning modules. Dedicated Macintosh computers in 1101 Hart Hall provide simultaneous access for 30 students to material which was only accessible to one student at a time in the traditional multimedia systems. The central UNIX systems included installation of communication hardware which removed network bottlenecks, upgraded processors, enhanced security procedures, automated tape backups, and more effective disk space management routines. Moreover, certain commercially available file sharing services and file sharing services applications which provided a common platform for the development of developer efforts this past year. IT has developed a formal development methodology and an infrastructure to support project management procedures for this development effort. This process, plus the recognition of System Arch. "Annual Report" continues on Page 6

Lois Unger Assumes Directorship of Media Collaboration Department

Lois Unger, formerly Director of Repro Graphics, has been appointed to the position of Acting Director of the Media Collaboration Department of Information Technology. Unger brings years of very successful management experience and a broad and deep understanding of media to this new position. She replaces Dr. Carol Barone, who recently left the work of Repro Graphics. Illustration Services and Instructionally.

Associate Vice Chancellor - Information Technology Dr. Carole Barone states: "Lois Unger brings to her new appointment a wealth of experience in the field of multimedia. Lois has demonstrated in these units, a strong and well-articulated philosophy of service and quality, which she will surely bring to UC Davis campus. With her leadership, we are confident that we will be able to provide the type of service and quality that will enhance our mission to support the needs of the campus.

Lois Unger
From the User Perspective: Groupware Calendaring Programs

In November 1993, UCD Employee & Staff Affairs sent out a request for reviews of groupware calendaring programs to members of the Computer Consultant’s Association. Division staff were seeking actual user response on software that would work in a mixed DOS, Windows, and Macintosh environment and that would work with departments within and outside the Division.

Here are several of the more-detailed responses to that query (updated to reflect changes in software versions and user impressions since November 1993).

MeetingMaker
Paul Dordy, L&I’s Office
In the College of Letters and Science Dean’s Office, the desktop computing is primarily Macintosh-based. We use MeetingMaker from On Technology to schedule the dean’s and a majority of the staff’s calendars.

MeetingMaker has served our purposes quite well, being especially strong for setting up quasirecurring schedules in a short period of time. It also is exceptionally strong for getting ad hoc meetings within the office scheduled quickly and easily. MeetingMaker also has facilities for scheduling a shared calendar space (conference rooms).

We have run into some problems with privacy notifications in that people can view only their own calendars, and it can be tricky getting access privileges and notifications to behave properly.

Since it is a client/server application, having all data in one place and accessible by all (configurable according to each user’s desires), MeetingMaker helps our busy office members stay in touch with each other and eliminate waiting lines at office doors. Remote times is a useful feature particularly revered by the deans and management. Along with that, it’s the heartbeat of the office.

Out-of-office (read “not included in the Dean’s Office List of people who are not available”) is not a problem. We are carefully watching the marketplace and other calendaring corridors into developments in this area. Cross-campus scheduling or the ability to access another user’s calendar would complete the functionality and eliminate hundreds of hours of phoning, contacting, and reminding.

We have since evaluated MeetingMaker XP and found it to be a step backward for the Mac because of the interface. We are still running MeetingMaker 1.5.

We also look forward to future upgrades of MeetingMaker to allow us to use it for the counselors as well … that is, scheduling appointments. It is our first available appointment with a number of counselors by a single glance on a condensed screen. Our counselors currently are using a package called “front desk,” a legacy first to use the name “Office,” Microsoft Corporation has acquired its meaning, and so WP-Manager evidently thought it better to switch than fight.)

Symmetry will have even more client versions, including seven UNIX variants. The Mac and Windows clients will be as double as remote clients (so that if you have a PowerBook or Windows notebook, you will be able to hop on via LAN or modem to check your messages using only one version of the software).

Symmetry is a web-based calendar system supported by Peachtree Software. There are some serious disadvantages to it, not the least of which is that there are no features or development on the horizon, and a continually baffling data file.

Schedule+ Peter J. Hunter, Student Housing
I have about 75 users in Student Housing running Schedule+ (version 1.0) under Windows for Workgroups (version 3.1) in conjunction with Microsoft LAN Manager (version 2.2).

I have found Schedule+ to be an extremely cost-effective calendaring solution since both MS Mail and Schedule+ were included in the upgrade from Windows to Workgroups. (This solution, of course, assumes a department has Windows already, which Housing did.)

In addition to the workstations clients included with the WFW upgrade, we purchased the MS Mail Server Postoffice option (version 3.2). The Server Postoffice allows for the centralized storage of each user’s calendar file, such that they are available even if an individual’s workstation is powered off.

Schedule+ is used extensively in the department. Many of its usefulness stems from the fact that it is tightly integrated with Microsoft Mail. All notifications for meeting requests, cancellations, etc. are received and replied to via MS Mail. If a user is sent a meeting request, s/he receives a mail message and can accept, decline, or tentatively accept the request with a click on a single button. If accepted, the meeting is automatically booked. In any case, a reply is sent to the meeting originator.

Security on scheduling is only flexible. Individuals can designate “no access,” “view only,” “read only,” “read/ create,” “read/update,” or “assistant” levels of access to any individual in the mail system. Schedule+ also allows resources such as rooms, projectors, vehicles, etc., to be easily scheduled.

The product also has a task/project manager built into it, as well as the ability to write and keep daily notes.

There are only a couple of shortcomings, and they are pretty minor. The current version of Schedule+ will not book recurring meetings for groups. This is an inconvenience, as members of a group must book recurring meetings for themselves.

Student Housing has been using Schedule+ for about 18 months and is extremely satisfied with it.

WordPerfect Office Gordon Neider-Adams, Environmental Toxicology
If you’re evaluating programs, I strongly and unreservedly recommend that you take a look at the WordPerfect Office (WP/O), available for DOS, Windows, Macintosh, and UNIX.

The Office is a single program that performs email, calendaring, scheduling, and to-do lists. We’ve had the software installed on our network for a number of months now, and people like it a lot.

The program soon will be upgraded and renamed to WordPerfect Symmetry 4.1. (Though WordPerfect was the

Meeting Maker Keith R. Prior, Division of Education
In the Division of Education and the CRESS Center we have used Meeting Maker for several years. However, ours is an exclusively Macintosh network environment. Meeting Maker does come in cross-platform versions.

In my humble opinion, these utilities work very well if everyone designates and maintains their personal calendar. They fall apart if a significant player doesn’t get the picture and keep his or her calendar up-to-date. The only solution I have found for the negligent player is to have someone else more compulsive manage their calendar as a proxy.

In all other respects, I find MeetingMaker to be a really nice resource scheduler and meeting planner.

Network Scheduler Bill Wagman, Graduate Studies
In Graduate Studies, we were using Network Scheduler. We now have pretty much given up using it as the users weren’t too happy with it.

I was not wowed by the product from the beginning. I encountered bugs and questions that the support people technical support people were not successfully able to resolve or answer. They didn’t seem to have a connection with the programmers.

Network Scheduler also demanded we set up a PC environment with two Macs. I bought it based on the recommendation of others who used it, but it was not sure the best choice.

It didn’t do a number of things our folks wanted it to do, but it’s entirely possible that we also didn’t spend enough time in learning the product.

OPT Work Group to Recommend Campus Standards
The Office Productivity Tools Work Group (OPT) has been established to define campus standards for an office productivity tool set for the areas of scheduling, personal calendar, document routing, and electronic mail.

Joyce Johnston of IT Information Resources oversees this project. The group includes representatives from Accounting and Finance, ADAMAN, the Academic & Environmental Sciences, Chancellor’s Office, Mail Division, Personnel, Registration Office, Admissions Office, VM Diagnostics, and Information Technology. Unit.

The OPT Work Group’s final report proposing campus standards for an integrated office productivity tool set and recommendation of a test set were made in mid-September, 1994. Later evaluations will include forms design, imaging, indexing, infohunting, videoconferencing, and workflow applications. For more information, call Joyce Johnston at 707-879 or send email to jmjohnston@ucdavis.edu.
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Network Administrator Resource Program (NARP) has initial goals of compiling a comprehensive list of campus network administrators and creating a catalog of IT services for them to access by the end of the summer. Technology Resources has developed a new service to assist departments who do not have a local staff in the maintenance and operation of their local area networks.

- **Communication Options**
  - Advances in digital imaging offer new communication options.
  - The ability to image from disk to the Campus Color Printer Color Copier has made transfer of text and images to paper very easy.
  - Uploads of large files is now supported.

- **Geographical Information Systems (GIS), Databases and Supercomputing**
  - A new addition of eighty computers to the Visualization Lab, two faculty members were able to teach GIS classes as part of their regular curriculum.
  - The GIS Center has funded the "GIS and Special Data Analysis Colloquium," which will be attended by faculty members from all UC campuses.

- **Printing and Library Copy Services**
  - October 1, Reprint Graphics as a service for the Library, began providing copying services.
  - The service has received very positive feedback.

- **Facility Support Center (FSC)**
  - The IT staff, in collaboration with the Teaching Resources Center, is working closely and collaboratively with faculty members from a broad range of disciplines. During the past year, members of the IT staff have fostered a variety of relationships, a number of which are cited in this report.

- **Erratum**
  - The article "How to Get Where You Want to Go and How to Do What You Want to Do" in the last issue of the IT Times (Vol. 2, No. 5, page 8) included an incorrect URL (Universal Resource Locator) for the local World Wide Web server. The correct address is http://www.ucdavis.edu:80/ homepage.html.

- **Contracts and Grants**
  - AT&T IT staff worked with faculty members Geoffrey Wandesforde-Smith and Kathy Daxon on a proposal to AT&T that resulted in a grant of approximately $200,000 worth of equipment for a student lab in the new Social Sciences building.
  - Cal Trans IT staff submitted a proposal for a $300,000 computer system funded by Cal Trans. Several IT staff members are working on the contract, which includes a close collaboration with a state-based company to create the Davis Community Network (DCN). Sun has donated a computer system to support the Davis Frenet. This machine is up and running.
  - Calit2 submitted a proposal for a $300,000 computer system funded by the NSF. The proposal is currently under review.

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