



## **Calhoun: The NPS Institutional Archive**

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Information Technology and Communication Services (ITACS) Computer Center Bulletin

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1995-11-08

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Monterey, California, Naval Postgraduate School

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411 Dyer Road / 1 University Circle  
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# BULLETIN

OF

## Computing



## Services

## Information

## Services



Naval Postgraduate School

Monterey, California

November 8, 1995

URL: <http://vislab-www.nps.navy.mil/~frazier/bul.html>

### Computing Services News Knox Library News

#### Building Web Pages Class

There's only one hotter topic these days than new Web pages, and that's learning how to create your own Web page. Helen Davis will give her very popular class on how to build your own Web page, at 1000, on 17 Nov., in In-122. This class won't be offered again until January.

#### More Great URLs!

There will always be more great URLs! On Computing Services workstations, and many other Unix workstations around campus, type `netscape` at a Unix command prompt. On many PCs and Macs, click on the Netscape icon. Then click on Open, and type in the URL shown. In this paper version of the Bulletin, it is often necessary to show a URL on two lines. You should type them on one line without spaces.

This Bulletin is available on the Internet, from the NPS home page. Also, the Bulletin's URL is shown on the banner above. In the net version of the Bulletin, it isn't necessary to type the URLs; the site is highlighted for you to access with a click.

#### URLS from the Library!

Income Tax Information on the Net:

<http://www.best.com/~ftmexpat/html/taxsites.html>

See URLs, p. 3

#### Visions of Libraries

##### *Fifth in the Continuing Series*

In a recent, and important, article in *College and Research Libraries*, "Requirements for the Digital Research Library" [July 1995: 331-339] Peter Graham, Associate University Librarian for Technical and Networked Information Services at Rutgers University Libraries, grappled with the definition of a digital library and with the implications for academic research library commitments and organizational structure required to put in place, and maintain, libraries of digital information.

Graham begins with the classic definition of a research library as one that acquires information, organizes it, makes it available and preserves it. After noting that research libraries are trying to provide an increasing volume of

information in electronic format to their clientele with varying success, Graham writes, "As yet, however, no research library has taken on the provision, organization, and preservation of information with the same long-term commitment we have made for print materials. It is an expensive, uncharted, and difficult task."

He continues, "The ability of the scholarly community to give serious weight to electronic information depends upon their [sic] trust in such information being dependably available, with authenticity and integrity maintained. Looked-for changes in scholarly publishing to help alleviate

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the serials crisis, for example, are usually thought to be bound up with the prestige of electronic journals in the academic tenure process. The ability of the academy to count on the long-term secure existence of electronic scholarly work will be an important determinant of the success of academic electronic publishing."

Graham believes that users will expect information placed in the "library's care a long time ago" to continue to be available to them and its integrity assured. He rejects the proposals that libraries need not acquire electronic information because it will be available somewhere on the network reasoning, "[s]uch proposals ignore the obvious truth that some institution must still, in the end, take responsibility for the information. That has always been a definition of the library responsibility."

In Graham's vision of the digital research library [DRL], in contrast to print libraries, "it is unlikely that there will be a high degree of content duplication across many electronic repositories, since for many purposes existence in a single place allows worldwide access. He does, however, envision many electronic storage repositories to meet the needs of individual institutions and "the requirements of redundancy." His digital library concept includes automated backup/restore procedures, disaster simulations, staged access, and refreshing mechanisms. He discusses the need for a full range of access mechanisms which consider the "granularity" of documents, asking, "How may one retrieve only part of a document (e.g., a chapter of *Moby-Dick* [sic!] or of a legal code, or a particular chart from a presentation)" from the digital library?

Graham ends his article with a discussion of the commitments required "if electronic information is to have more than a fleeting existence." Graham is correct in noting that the solutions to the technical issues described above, as well as the social compacts of agreements on standards and intellectual property, are easier to solve than the problems associated with electronic preservation and access on a significant scale. He sees the permanent assignment of staff to long-term maintenance of electronic information. "Digital collections, like the online catalog, require continual maintenance if they are to survive more than a brief interruption of power, environmental control, backup, migration, and related technical care." To ensure the fiscal commitment, Graham suggests that "consortial arrangements may allow for lease or purchase of shares in a DRL. Shorter-term access might be provided to other institutions

on a usage basis or sold to certain classes of user. In conclusion, "all these [recommendations] are instrumental means of accomplishing the greatest requirement, that of conscious, planned institutional commitment to preserve that part of human culture which will flower in electronic format."

At NPS, we are exploring the ability of existing consortial arrangements, such as the Monterey Bay Area Library Consortium and of bilateral agreements such as memoranda of understanding between our School and others in the region, to put in place commitments for accessing [and eventually for preserving] digital information to develop our Digital Research Library.

*Maxine Reneker mreneker@nps.navy.mil*  
*Director of Information Services*

## *Navy Warfare Virtual Library*

### **Navy Warfare Center Laboratories Distributed Virtual Library**

On 26-28 September, the library directors of the Naval Research Laboratory and the Navy Warfare Center Laboratories met in Crystal City to review the results of a user assessment of the communities served by these libraries and to begin to develop the next phase of the identification of content and networking solutions that will allow the delivery of digital information to the scientists and engineers working in these facilities.

Participants included the Librarian of the Navy, representatives from the Naval Undersea Warfare Center, Newport; Naval Surface Warfare Center, Carderock; NRD, San Diego; Naval Surface Warfare Center, Dahlgren Division; and the Naval Air Warfare Center, Aircraft Division, Patuxent River. Mr. Bob Shnare of the Naval War College, and I, from NPS, participated in the meetings because a need for access to our library collections was identified in the focus group user assessment and because we are very interested in the development of this digital resource for the Navy.

Potential sources of content to procure and deploy were discussed intensively. A web-based union book and serials catalog to streamline access to the group's libraries, major commercial sources such as the publications of the IEEE, and significant Navy and DOD sources such as Navy patents were among those sources targeted for early acquisition. Online specifications and standards were cited as

valuable to the users in almost all focus sessions. However, because of the large amount of data (17M pages at 70-80K bytes per page), image transmission requirements, high costs, and networking implications, solutions to accessing these standards and specifications will require additional involvement by the Navy Laboratories Computer Coordinating Group.

The development of this distributed virtual library for the warfighting center laboratories will address the same problems of networking requirements, content licensing agreements, user support, and system maintenance that a digital research library at NPS will require. Continued monitoring and participation in the efforts of the warfare centers should provide some guidance in the implementation of our digital library.

*Maxine Reneker mreneker@nps.navy.mil  
Director of Information Services*

## *View Classified Videos*

The Restricted Resources and Services area of the Library is now able to offer the capability of viewing classified videos in its facility (Room 163). Hours of availability are Mon-Fri - 0900-1200//1300-1630. Please make an appointment if a group will be viewing.

## URLs (cont'd.)

whole slew of links to tax related information: tax forms(federal and various states), articles, U.S. income tax laws, tax software, state personal income tax rates etc.

U.S. Treasury Department Tax Forms

<http://www.ustreas.gov:80/treasury/bureaus/irs/taxforms.html>

The forms on this server are replicas of the official IRS forms. Most can be printed, filled out, and filed with the IRS. (There are some exceptions, though). You must download a .pdf reader. The page provides a link to download Adobe Acrobat reader for various platforms. [On Computing Services Suns, type *acroread* to read an acrobat file.]

California Income Tax Forms and Publications

<http://library.ca.gov/California/ftb/html/contents.html>

California income tax forms located at this site are in Adobe's Portable Document Format (PDF). You can download a copy of the Adobe Acrobat Reader from this page to view or print. [On Computing Services Suns, type *acroread* to read an acrobat file.] Information includes:

1. 1995 California Income Tax Forms, Instructions and Publications (avail. after Jan. 1, 1996)
2. 1994 California Income Tax Forms, Instructions and Publications
3. Federal Income Tax Forms, Instructions and Publications

Unabomber Manifesto

<http://www.pathfinder.com/pathfinder/features/unabomber/manifesto.html>

No longer the hot topic it once was, but, for those feeling nostalgic, a hyperlink version is still available. [Ed.: the wonderful thing about the Web, is that we can all make our manifestos just as accessible. (As federal and military people, we may not be able to speak quite as freely as Mr. Unabomber, but still...)]

CRAYON- Create Your Own Newspaper

<http://sun.bucknell.edu/~boulter/crayon/index.html>

A combination of internet oddity with real-life applications, this page allows users to create their own "newspaper" by selecting links to various news/media sources. In reality, the system creates an HTML file (similar to a hot list) that resides in the user's hard drive. The file can be accessed daily to scan news stories on the Net from the selected news sources. Items of interest: Today at NASA, Today's White House Publications, NPR and ABC news in audio format, Reuters On-Line Politics Summary, The Electronic Telegraph (London), The St. Petersburg Press (Russia), This Week in Germany, The Daily Yomiuri (Japan), China News Digest, and more.

Fire the Paperboy! Let Personal View Deliver Your News Free!

<http://www.zdnet.com/>

ZD Net Personal View is a free customized news service that delivers computing news from major news sources. Users can select the type of information they want to receive, and the system will filter out stories that do not match those parameters. You must register with them and

can access the personalized information only via a password. The information is currently free, probably due to the large amount of advertising at this site.

*Greta Marlatt gemarlat@nps.navy.mil*

### *URLs from Computing Services (and Others)*

Helen Davis found this bit of info: when you type in a URL in the open window, if it is an http link you can omit the http:// part. For instance, this

`www.nps.navy.mil`

will work to get to the NPS home page. (If you're logged in to an NPS account, you can omit .nps.navy.mil).

Helen also found this URL: AT&T Internet Toll Free 800 Directory - a searchable data base of toll free numbers.

`http://www.tollfree.att.net/dir800/`

Here's a challenger to Yahoo (absolutely everything organized in a subject tree). Try it out; they're number two (or three or four). Maybe they try harder.

`http://thebiglist.com/links.html`

Here's Unix Guru Universe (contributed also by Helen Davis): answers to every question your Unix guru may have (except "Why won't people get rid of files they haven't touched in years?") It answers a lot of non-Unix questions, too. A very dense concentration of information; you can quickly find your way to the answers you need. Then you won't need your Unix guru any more (except for the things which require System privilege). Includes some funny computer stories. You can see what makes computer geeks laugh.

`http://www.polaris.net/cgi-bin/catugu/ugu`

Also includes this bit of verse:

"Cobol Wizard," to the music of "Pinball Wizard"  
 "Ever since I was a young boy, I used to write Cobol.  
 From mainframes down to micros, I must have ported 'm all.  
 But I ain't seen nothing like him in any office stall.  
 That deaf, dumb and blind kid sure writes a mean Cobol."

Lots of people and groups have set up their own home pages through the Computing Services web server. To see a list of them all:

From the NPS home page, see Building web pages,  
 then Public Web Server  
 then Set up your own (this tells how to set your own page)  
 and finally: View all other

Our Webmaster, Charles Taylor, has added a table of

contents for the top few levels of the NPS Web structure. Click on it at the bottom of the NPS home page.

We recently included a long list of URLs Russ Bomberger had gathered over a period of months. He forwards us now an extensive list of government URLs. It's the largest single government list I've seen; have a look. It's too large to print a thousand paper copies of; the online edition of this Bulletin will contain at least the text of the URLs. If we can come up with a way to make the list into hot links, we'll do that.

Also in the online version of this Bulletin will be an update on the Internet Volunteer program at the Seaside Library, including an appeal for new volunteers. The Seaside Library is the best way I know of for the general public on the Monterey Peninsula to get a look at the Internet without paying anything at all, and it does depend on knowledgeable people like many of you. You can call the volunteer center at 655-9234. Seaside Library's homepage is at `http://bbs.ci.seaside.ca.us/sealib/index.htm`

Matt Koebbe contributed the following: As you may or may not know, the Chess World Championships were held recently in New York City (in the U.S. for the first time since - well, maybe the first time ever). As you might expect, there is a ton of chess information available on the Web, with the capability of playing people real-time all over the world.

Intel has also teamed up with the Internet Chess Club (ICC) to provide the first real-time coverage of a major sporting event. Check out the "Chess Space" home page at: `http://www.redweb.com/chess/`

for more information. (Note that an archive of games to date is also linked to this page.)

And for those who think that chess is a participation sport, you can play against GNU (one of dozens of on-line chess computers that you can play against) by looking at "Inside Chess"'s Hot Chess Links

`http://www.grandmaster.bc.ca/chess/clinks.html`

Our SGI workstations actually have a pretty decent 3-D chess program that will be able to test your chess mettle. Just login to any of our SGI workstations (not rlogin), and type "chess". Unless you do this a lot, you might as well pick level "0" at first. :-)

## NPS Web Access Statistics

You can see how often the central NPS web server is accessed, by week, hour, etc. Probably of greatest interest, you can see the top 40 most-accessed files - who's putting out information that people are interested in. The statistics are at

<http://vislab-www/stats>

You've probably seen statistics on other pages. Apparently, producing them is a non-trivial task. Here's what Matt Koebbe tells us.

Given the volume of accesses which this server receives, it took some time to get everything working, and you might be interested in knowing what it takes to produce these reports. At the moment, once a week a cron job starts on the server and cycles the logs to a temporary file. This file is then accessed by the program, `getstats()`, which has been optimized and compiled on our prime computational engine, `algieba`. Running as a lowered-priority (`nice()`'d) background job on an SGI Onyx, it takes almost 12 hours to process the 66 Mbyte, 654,000 line logfile. Later, another program executes on the server, which generates the graphs, turns them into transparent GIFs, embeds them in the appropriate HTML documents (which it also generates), and moves the whole collection to the proper directory. Notice that the final figure of 148 requests/hour is AFTER we've thrown out all requests for files which end in ".gif" or ".jpg". This is necessary because the server logs every in-lined graphic as a separate request.

The remaining detail is authoring a cgi-bin script which will allow a user to find out how many times any particular file in their document tree has been accessed.

*Matthew Koebbe [phaedrus@nps.navy.mil](mailto:phaedrus@nps.navy.mil)*

Many, many of use will be waiting eagerly for Matt to get this last feature running. Everyone who has a Web page wants to know "Has anybody noticed? Has anyone found their way to my page?"

Maybe someone will be interested in this story of the only time my home page was noticed. I (the editor, Larry Frazier) used to know a guy named Jim Horning (not the one who works in Bullard; this guy works at Digital in Palo Alto). He was trying out an alpha release of a new Web searcher being circulated within Digital, and hunted for his name. It showed up in a caption of a picture of

NPS' Jim Horning, on the Web page of Doug Williams' retirement. He saw my name in the caption, remembered the name from years ago, and searched for my home page. So, you never know when you'll hear from old friends via the Web. (Also: that's a pretty impressive Web searcher!)

The following is a computer-related topic, isn't it? The comments of Scott Adams (creator of the Dilbert comic strip) on software development, engineering, and management are certainly valuable to readers of this Bulletin. Readers are cautioned to note only his social commentary, and to take no notice of any commercial aspects.

<http://www.unitedmedia.com/comics/dilbert/>

The online version of this Bulletin also contains a link to Adams' comments on management, building on the concept of the Peter Principle (that people tend to be promoted to their level of incompetence). Briefly, he notes that the less capable are placed where they'll do the least damage.

## Web Pages: The Finer Points

[Ed.: This is from Charles Taylor, in charge of the NPS Web Page. He presents his recommendations for group pages, pages representing campus departments and organizations, when you're no longer a beginner at building Web pages.]

Because I am the webmaster at the NPS home infostructure, people often request that I add a link to the "[Academic Departments at NPS](#)" page, the "[Campus-Wide Clubs and Associations](#)" page, or the [Research](#) page pointing to their web page as appropriate. They usually request this through e-mail. Sometimes, if I'm not doing a million other things, I e-mail them back with a few comments on how they might improve their pages. Recently I had a chance to do this and I thought that since I often see these same things, I should post the letter in the bulletin (with the names changed to protect the innocent :)

) so that other web authors could benefit from it. Think about this: could this e-mail have been sent to you about your home page?

From: Charles Peyton Taylor ←

To: Xxxxx@xxx.nps.navy.mil ←

Date: 9/28/95 2:55am ←

Subject: Re: new or home page -Reply -Reply ←

Dear Xxx,

It's up. I looked at the page, and put it on the NPS Xxxx page. I have a few suggestions:

1. If anyone asks, your URL is  
<http://vislab-www.nps.navy.mil/~xxxxx/>  
You can give this out in your correspondence or whatever.
2. Those blue lines on your page look AWFULLY familiar. Use graphics to give a sense of place. They should say "You are in the XXX infostructure". Right now, they say "Xxx ripped off the graphics from the NPS Home infostructure". Having a consistent motif of shapes and colors helps. Notice how restaurants will have wall paper and furniture painted in matching colors? [Ed.: Here's a source for hundreds of graphics lines and icons to give your page its own sense of place:

[http://www.yahoo.com/Computers\\_and\\_Internet/Internet/World\\_Wide\\_Web/Programming/Icons/](http://www.yahoo.com/Computers_and_Internet/Internet/World_Wide_Web/Programming/Icons/)

3. Real men don't <blink>. <BLINK> is not HTML, it's a Netscapism. (By the way: I found out you can disable <blink> in Netscape for Windows using the netscape.ini file.)
4. Headings (<H1> though <H6>) are not sizes, they are like newspaper headlines; they give titles to sections of a document. Netscape 1.2 and up, and Mosaic Mac and Win are making use of the <BIG> element (an HTML 3 element), so you might want to use that instead.
5. The "XXXXX" list and the "XXXXXX" sections might look better as unordered lists (<UL>). See the "Intermediate HTML Subjects" document (off the "Building Home Pages at NPS" document) for info on lists.

[http://www.nps.navy.mil/internal/tutorial/building\\_pages.html](http://www.nps.navy.mil/internal/tutorial/building_pages.html)

Altogether it looks like a great start, and will be a great infostructure, especially once you fill out the "XXXXXX" part.

*Charles Peyton Taylor ctaylor@nps.navy.mil*

[The editor would like to note that one of the reasons the Web has been so popular is that you can easily get started by grabbing anything you see that you like, and incorporating it into your own page. Charles makes a good point, though, about providing cues to the Web traveler. Researchers for years have noted the problem of getting "lost in hyperspace". We need to provide every cue we can to help people orient themselves in their Web travels. The editor would like to add his pet peeve (besides Blink): don't use fancy patterned backgrounds. They take a long time to arrive, and not even Unix workstations can do anything else at all while a pattern is arriving. Finally, see Matthew Koebbe's article below about Web tools in the

VisLab, for another view on "Netscapisms".]

Have you all noticed the Cyberscope page in Newsweek (this does not constitute an endorsement by NPS, DoD, or the Federal Government)? They find interesting Web sites, some of them I don't see mentioned elsewhere.

### *Send Us Your URLs*

You must all be too busy exploring the Web to send in your URLs (as we encouraged you to do last issue). From netscape, just click File, then Mail Document, then type in frazier, then click Send, to share that great Web site you've just discovered.. We'll publish it (anonymously, if you wish), and somebody out there will be grateful.

*Norma Lee Dobay nldobay@nps.navy.mil*

### *Your Web Bookmarks from Anywhere*

Netscape has a built-in feature which will save your bookmark file as an HTML file. You can point to this file from your home page, and it will be visible throughout the Web, (from other Web access you may have, for instance) just as your home page is.

1. If you haven't already set up your homepage on the Computing Services network, here's how:

```
cd
mkdir public_html
```

This doesn't work unless this directory and your home directory are world readable (this is the default when you receive your account).

2. Use netscape to make the bookmarks file an HTML file:

- Pull down the <Bookmarks> menu and select <View Bookmarks>.

This will open a new window with your bookmarks.

- Select the <Edit> button to expand this window so that you can edit the bookmark file.

- Select <Export Bookmarks...> which will open a new window. Fill in the <Selection> window with:

```
~user/public_html/bookmarks.html
```

(In place of 'user', put your login name.) Then press <OK> to save your HTML-ified bookmark file.

3. The file can be accessed, via this URL, from any machine on the web:

```
http://vislab-www.nps.navy.mil/~user/
bookmarks.html
```

You will probably want to bring this file up in netscape, and add its URL to your bookmarks (the same way you add

anything else to your bookmark list). For answers to further questions about setting up your bookmarks file contact Helen Davis, Ingersoll 112, x2446.

*Helen Davis davis@nps.navy.mil*

## System News

### Uninterruptible Power

Hoo-ray Hoo-ray: the UPS upgrade for Computing Services has been finished. This project provides an upgraded UPS system with expanded capabilities and UPS power to staff offices, IN-141 Lab, and the equipment in the VisLab IN-148. We are completely automated, with generator backup to keep the network routers and servers, as well as the mainframe, up when commercial power fails. [Ed.: Thus, if your house has power, you can still dial in and cruise the Net and run centrally-served software, even if NPS is without power.]

*Bob Gentry bgentry@nps.navy.mil*

## VisLab

### HTML-based Doc. for VisLab Apps.

Computing Services' Scientific Visualization Lab has begun to build its own "web" of HTML-based on-line documentation. The top of this tree is located at

<http://vislab-www.nps.navy.mil/~phaedrus/docs/>

and, for the moment, consists of software that has been built and installed within the last 2 weeks, including the word processor TeX/LaTeX, and various Web development tools including latex2html.

As we organize this documentation, we are working also to make it as visually satisfying as possible. While the Visualization Lab retains its commitment to supporting cross-platform standards where such exist, as the current curator of this documentation site, I have chosen to implement the Netscape extensions to HTML 3.0 where they improve the digestibility of the information being presented. As regrettable as it is, the use of these extensions is made necessary by the WWW Consortium's failure to

consult graphic artists and typographers when defining their protocol. For further discussion of the issues involved, please read the excellent article "Severe Tire Damage (on the information superhighway)" at <http://www.best.com/~dsiegel/damage/index.html>

I note that, despite its [anti-standard] content, I first learned of this article via a link from the home page of a member of the WWW Consortium itself!

I hope that you find these pages useful, and yes, we do plan to implement an FAQ page sometime in the near future. Your thoughtful feedback is appreciated.

### *New Web Tools on VisLab SGIs*

All of the following tools are explained in more depth in our HTML-based documentation which begins at <http://vislab-www.nps.navy.mil/~phaedrus/docs>

The tools include:

latex2html(1): a program which converts LaTeX source documents into an indexed directory of HTML files and in-lined gif images. Be advised that it works better if you invoke latex(1) on the source code first (it will use the intermediate files) and there are many legitimate TeX and LaTeX constructs which it cannot handle.

addbevel(1): adds a bevel around a GIF or RGB image. Looks like you've added a matte, or produced an inwardly-sunken button.

makebevel(1): turns an RGB or GIF image into a raised button by adding a bevel.

mapedit(1), version 1.5: is an interactive GUI which allows you to define an ISMAP by drawing circles and rectangles on your GIF image. It then produces the map file for you in CERN or NCSA Web server format. (This allows you to make one unified graphic image and connect different parts of the image to different Web pages.)

asWedit(1): is an X/Motif graphical text editor which can verify that your document satisfies the protocol specification of HTML 2.0 or 3.0 (3.0 by default).

### *VisLab Has Two Crays For Now*

NPS Computing Services has entered into an agreement with Cray Research Inc. (CRI) for the loan of a four-processor Cray J94. This machine arrived and was made available to the user community on October 20 1995. The

name of the new system is `jedi.nps.navy.mil`. It uses the same login data base as all other Computing Services Unix machines, but requires an extra step in our registration process. Please contact our accounting office (In-147, x2731) if you would like an account.

Because a J90 processor is a bit more than twice as fast as an EL90 processor, `jedi` is the computational equivalent of `sirius`, our existing eight-processor Cray EL98.

Other aspects of its configuration are that it has 1 GB (128 MW) of RAM and over 110 GB of magnetic disk. The J94 is being offered as a no-charge "material replacement" for our existing (and aging) EL98.

One reason for this offer from CRI is the first advantage listed below:

Advantages of the J94 (`jedi`) over the EL98 (`sirius`):

- A more modern system without the hardware flaw that has affected some multitasked jobs.
- An IOS based on the SPARC architecture that should be more reliable than the Motorola 68000-based architecture on the EL. This IOS would support more interfaces such as ATM [Ed.: That's Asynchronous Transfer Mode, not Automated Teller Machines. You won't be able to get cash at a Cray.] and HIPPI network adapters.
- Lower maintenance cost than the EL.
- True Y-MP architecture with features such as the Hardware Performance Monitor.
- More disk space.
- Faster throughput for jobs that still 'fit'.
- A better upgrade path: up to 16 processors can be included in the cabinet as well as 4 GB of RAM.

Disadvantages:

- Half as much real memory -- 128 MW instead of 256 MW.

According to the marketing from Cray Research, the Cray J90 series has more capability than anything else in its price class. To quantify that: a 16-processor CRAY J90 system has 25.6 billion bytes per second (gigabytes) of memory bandwidth, more than 10 times that of competing systems in its class.

By the time you read this, all services (including the Data Migration Facility) will have been transferred from `sirius` to `jedi`. If all goes well on the new machine, within 6 months we will transfer the EL98 maintenance contract to it and send the EL98 back to CRI.

As a point of interest: we have not [entirely] left our astro-

nomical naming convention. It was pretty hard to "top" the brightest star (`sirius`) in the heavens so we gave it the name "`jedi`", which was the J90's code name while it was in development. We also remember (and honor) the "Jedi" Knights from the \*Star\* Wars movies.

*Mike McCann* `mccann@nps.navy.mil`

## *I-DEAS 2.1 Installed on VisLab SGI and on `alcor.cc.nps.navy.mil`*

We have finally received a second license for I-DEAS and `alcor.cc.nps.navy.mil` is now exporting the directories `/ideas/ms2` and `/ideas/team` for the version 2.1 implementation of the I-DEAS software. Note that we now have the Test and Measurement package as well as the University Consortium and Team Data Manager packages. More details available on the VisLab web page, and in the VisLab's `msgs`.

## *New LaTeX on VisLab SGIs*

Donald Knuth's TeX produces high-quality typesetting, especially for mathematical text. LaTeX adds to TeX a collection of commands that simplify typesetting by letting the user concentrate more on the structure of the text rather than on formatting commands. The latest version, LaTeX 2e, has been installed on the VisLab SGIs. This version incorporates graphics translation previously requiring separate modules. See the HTML-based documentation for more details.

We have also implemented the X-based viewer, Xdvi(1) and the "dvi to PostScript" utility, `dvips(1)`, which are typically found at any site which has implemented TeX. All have been installed on `alioth.cc` and come with on-line man pages. HTML-based documentation is also available at

[http://vislaw-www.nps.navy.mil/~phaedrus/docs/tex\\_latex/latex.html](http://vislaw-www.nps.navy.mil/~phaedrus/docs/tex_latex/latex.html)

The HTML-based documentation is still in very early development and everything is subject to change except for the top-level page located at

<http://vislaw-www.nps.navy.mil/~phaedrus/docs/>

NOTE: Our TeX/LaTeX installation is still under some modification. For example, I think `xdvi(1)` produces a very "light"-looking document and am still trying to find a way to darken it up to the old version which has always

existed on dubhe.cc.nps.navy.mil.

NOTE2: The xdvi(1) and dvips(1) programs invoke a very sophisticated font processor which invokes the MakeTeXPK command in order to generate any fonts which do not already exist. Unfortunately, this program wants to write files in alioth:/usr/local/lib which is only possible on alioth. So, if either program produces weird fonts (because it can't find or create the ones you specified and grabs what's there), you can get around the problem by rlogging into alioth and re-executing the command. Once the fonts are made, you'll be able to execute the command locally.

Direct any questions and/or comments to  
*Matthew Koebbe phaedrus@nps.navy.mil*

**Computer Help**

Computer questions (Unix, PC, Mainframe, Cray)?  
 Send email to *consult@nps.navy.mil*  
 or call ext 3429 or visit **Consulting (Help Desk):**  
 In-146, Mon-Fri 0900-1130 1315-1545

Status recording: 656-2713  
 Dial-up: 656-2709; up to 9600 bps  
 TAC Access: 647-8422

**Computing Services POC**

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Unix Systems Administration		
Joe Blau	In-111	3204

Hiram Cooke	In-116	3662
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**Unix Workstations**

In-141 has 17 Sun SPARC 10/41; Ro-222, 15; Sp-311, 8; Ha-201C, 4.  
 (Each has an HP LaserJet 4si printer.)

**Mainframes**

We operate (1) An Amdahl 5995-1100 (384 MB processor storage, 1 GB expanded storage). Interactive computing is provided under VM/XA CMS, batch processing under MVS/ESA with JES3 networking. (2) A Cray Y-MP/EL 98 (8 cpus, 2 GB memory, Unicos) and a Cray J94 (4 cpus, 1GB memory, Unicos).

Hours of Operation: VM/CMS, MVS: 24 hrs/day, 7 days/wk  
 Status recording: 656-2713; Dialup: 656-2709 (to 9600 bps)

*Mainframe Terminals*

In-141	3	3192-2 Graphics/APL
In-364E	14	3192 Graphics/APL
Bldg223	11	3178-2 (1 APL)

*Mainframe Printers*

In-140	IBM 3800-3 Laser (215 ppm)
	IBM 3262 Impact (650 lpm)
In-141	Tek 4693D Color Printer/Plotter
In-148	Shinko CHC-743MV Color Printer
In-364	IBM 3268 Impact (APL)
Sp-311	IBM 3203 Impact (1000 lpm)
Ro-222	Ha-201B IBM 3262 Impact (650 lpm)

**Manager, Visualization Lab In-148**

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Matt Koebbe In-102A <i>phaedrus</i>	3778

7 Silicon Graphics: 1 380 VGX, 1 Onyx, 3 4D TG, 1 Indigo<sup>2</sup>Extreme, 1 Indy, 1 ea.: Abekas frame recorder, Mac Quadra 700, HP 730, DECstation 5000, Sun SPARC 10/41

**Manager, Learning Resource Centers**

Kathryn Strutynski GL-375 <i>kstrutynski</i>	2696
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**LRC's:** Open: M-F 830-1630

Ro-262	20 Mac Quadra 700	6 PC 486/DX 50
GL-203	33 PC 486/DX 33	
GL-318	19 HP 730	1 PC 486/DX 33
In-151	11 PC 386 (25/33)	1 HP LaserJet IIIsi
In-371	6 PC 486/DX 33	4 PC 386/25
GL-128	15 PC 386/20	2 Z-248 (286)

**Knox Library**

Director: Maxine Reneker, Kn-261	2341
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*MReneker*

**Library Catalog (BOSUN)**

Available via dialup to the Unix network, via gopher from most networked computers, and from VM/CMS.  
 Mon.-Thu. 0700-2300  
 Fri., Sat. 0700-1800  
 Sunday 0700-2200

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 Renée Lightcap 1066  
 Code 003, 08, 42, 47, PSD  
 Chris Abila 2195  
 ME, ACADGROUP, PH, EC, SM, OC, OR,  
 MR, AA, SP, 52 Mohamed Abuaita 1064

devillie@cs.nps.navy.mil  
 User Groups Coordinator Ann Sires  
 lady21@aol.com  
 Past Pres/Newsletter Andy Melton  
 awmelton@nps.navy.mil  
 Past Pres Bill Swain  
 wtswain@nps.navy.mil or  
 WTSwain@aol.com

**General Points of Contact**

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 Computer Users Council (CUC)  
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