
THE PULSE

For the Personnel of the Laboratory for Nuclear Science

Volume 3 Number 3

March 1995

Computer Security Update

Computer security is in the forefront as an issue that must be addressed by all computer users and system administrators. A recent *New York Times* article profiled one intruder's computer attacks on the San Diego Supercomputer Center and other commercial and non-commercial computer operations, illustrated how computer systems without adequate security today are extremely vulnerable on the Internet.

Because the LNS computers are connected to the Internet, issues such as computer security breaches can have a direct impact at the laboratory. For example if an owner's name and password combination are compromised, an intruder can gain access to the compromised machine's resources, at least at the user level. Intruders can also be more subtle and change various file names or the contents of various files without the user's knowledge. Such changes can have serious consequences for the owner of the files. Finally, these intruders can parasitically use the compromised machine's resources for illegal activities.

An incident where an LNS machine was compromised and used for illegal activities has already occurred at LNS. Last year a group of intruders based in Norway compromised a UNIX platform in the LNS Electronics Facility. The intruders installed pirated software and were

using the LNS machine as a world-wide distribution point for this software before Bob Bruen and Jeff Schiller (MIT Network Manager) discovered these activities. Such break-ins compromised the CPU capacity and disk space on the machine for quite some time before it was discovered. This resulted in downtime during the investigation of the attack. A recent break-in also occurred at Bates where a network sniffer program was installed on a machine there. This program captured name/password combinations of many LNS users.

(Continued on page 6)



McCue Joins Fiscal Office

Leo McCue joined the Fiscal Office as Assistant Fiscal Officer on December 1, 1994 as part of the fiscal office reorganization and implementation of the team management structure. Prior to his being hired by LNS, Leo worked for an outside contractor on the DOE contract reconciliation and close-out. For 13 years before that, he worked with ITT Sheraton Corp., an international hotel chain, as an accounting manager and divisional controller. Leo has a BS in Accounting from Boston College and an MBA from Babson College.




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Fiscal Office Has a New Line Up

TEAM A ROSTER

Team A provides budgeting, account reconciliation and fiscal reporting for the following teams in their league: Axion Search, Bates Operations, Electromagnetic Interactions Group, Gaseous Detector Research, Machine Shop, Mechanical Engineering Facility, Noble Fluids Research, Nuclear Interactions Group, Particle Physics Collaboration and Solar Neutrino Research. Members of these groups should contact the appropriate Team A player to resolve fiscal problems or questions.

The Team A lineup consists of Assistant Fiscal Officer Leo McCue, Account Reconciler Andrew Dixon and Accounts Payable Clerk Cheryl Cagnina. Leo joined the Fiscal Office as a permanent player after spending a year as a temporary working on the DOE contract reconciliation and close-out. Andrew joined the Fiscal Office over two years ago and Cheryl is the veteran player with 29 years at LNS in both purchasing and fiscal functions.

Leo McCue is responsible for managing the accounts payable and account reconciliation functions, preparation of budgets and proposals, payroll reconciliation and projection, approval of requisitions over \$2,000 and tracking of accounts against budget and sponsor guidelines. Questions concerning account budgets, balances and projections should be directed to Leo.

Andrew Dixon reconciles and verifies all M&S, travel and equipment charges to Team A accounts. This involves ensuring that all requisitions and invoices processed on the MIT statements are also reflected on the LNS fiscal reports. To facilitate this process, please forward all internal requisition copies to Andrew. Also included among Andrew's responsibilities are approving requisitions under \$2,000, processing Requests for Payment and maintaining all LNS account information.

Cheryl Cagnina processes all Team A invoices for payment on the MIT accounts payable system and resolves any problems with vendors. Cheryl also handles change orders and standing orders. In order to process an invoice Cheryl must have a signed and dated packing slip from the requisitioner. Please make Cheryl's job easier by forwarding all Team A documents in a timely fashion.

-Leo McCue

TEAM B ROSTER

Team B consists of Assistant Fiscal Officer Jeanne Hillery, Account Reconciler Mary Hogan and Accounts Payable Clerk Peter Robicheau. Many of you are already familiar with Jeanne and Mary (they've been part of the LNS Fiscal Office for a total of fifteen years!). The newest member of Team B is Peter Robicheau, who started in July 1994 as a temporary replacement for Marisa Greene. It was clear from the start that Peter's wealth of accounts payable experience would be an asset to the Fiscal Office, and in December 1994 he accepted a full-time accounts payable position.

Jeanne Hillery is responsible for budget/proposal preparation and tracking, as well as salary and wage projections, monthly personnel activity reports, and requisition approval over \$2,000. Jeanne monitors Team B budgets daily, so you'll hear from her if your accounts have any problems. Questions concerning your budgets should be directed to Jeanne.

All M&S, equipment and travel expenses on Team B accounts are reconciled monthly by Mary Hogan. As part of that reconciliation, Mary needs to verify that expenses charged to your accounts are valid. To assist Mary in this process, please send all internal requisition copies to her. Mary Hogan is also responsible for sending out the monthly supervisor's M&S and Travel reports, processing Request for Payments, approving requisitions under \$2,000, and maintaining all account information on the LNS system.

Peter Robicheau is responsible for the entire accounts payable function for Team B. Much of his day is spent processing invoices, responding to vendor inquiries, and researching problem invoices. Peter cannot process an invoice for payment without first receiving a signed and dated packing slip from the requisitioner. Please send all Team B packing slips to Peter's attention in Room 26-519.

Team B is responsible for all budgeting, reporting, and reconciliation of the following LNS groups: Accelerator Physics Collaboration, Bates AIP & GPP, Bates Equipment, Bates Director Accounts, Central Facilities, the Computer Facility, the Engineering Facility, Heavy Ion Group and PHOBOS, Lepton Quark Studies, the Medium Energy Research Group, and Nuclear and Particle Theory. Any personnel within these groups should contact the appropriate Team B member when problems/issues arise.

-Jeanne Hillery

LNS Fiscal Office

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Team A Groups

Axion Search
Bates Operations
Electromagnetic Interactions Group
Gaseous Detector Research
Machine Shop
Mechanical Engineering Facility
Noble Fluids Research
Nuclear Interactions Group
Particle Physics Collaboration
Solar Neutrino Research

Team B Groups

Accelerator Physics Collaboration
Bates AIP & GPP
Bates Equipment
Central Facilities
Computer Facility
Engineering Facility
Heavy Ion Group
Lepton Quark Studies
Medium Energy Research Group
Nuclear & Particle Theory

Pull out and Save

Fiscal Officer

Day-to-day responsibility for management of the Fiscal Office
Coordinate lab-wide fiscal operations within the Laboratory
Responsible for coordinating fiscal information from the teams and providing this information to the Director, Associate Director, OSP and DOE
Coordinate with the Administrative Computing Program Manager all accounting related issues with Fiscal Information Systems. This includes the re-design of the Fiscal Information Systems and all LNS financial reports for the Fiscal Office and the LNS researchers
Responsible for the supervision for the close-out of the Department of Energy 3069 contract with the Laboratory

Assistant Fiscal Officer

Budget tracking for adherence to special guidelines
DOE Cooperative Agreement budget preparation
Electronic and paper requisition approval (over \$2,000)
Process research proposals
Salary & Wage projections, personnel activity reports
Signature authorization updates
Staff vacation reporting
Supervision of team members

Account Services

Foreign currency data and transactions
General accounting matters
Payroll
Petty cash
Vehicle and Xerox copier allocations and vouchering
Video conferencing allocation and vouchering

Account Reconciliation

Electronic requisition approval (\$2,000 limit)
M&S and travel reconciliation
Mailing supervisors reports, travel statements and cylinder rental reports
Maintain/Update: account information, data lists and internal/external commitments, expenses and credits
MIT Cash Vouchers
Request for Payments without a purchase order number
Vouchers for facilities

Accounts Payable

Batch invoices to MIT accounts payable
Change orders for purchase orders
Expedite payments to receive appropriate discounts
Liaison for problems between LNS and vendors
Maintain standing orders
Process LNS invoices and payments including consultants
Request for Payments with a purchase order number
Walk through hand drawn check for payments

Obituary

The obituary is in Roger's own words.

Roger Lynn Gilson, son, brother, uncle, and friend, lost his battle with AIDS on Monday, January 23, 1995, at his mother's home in Payson. He was 38.

Born August 12, 1956 in Salt Lake City, a son of Charlene Kay and Arthur Ronald Gilson, Sr., he was the youngest of four children. He was reared in Eureka, Utah and attended public school there. He was selected to represent Tintic High in the summer of 1975 at both the American Legion's Boys State in Logan and the Utah National Guard's Freedom Academy at Camp Williams. He was graduated as class valedictorian by Tintic High School in May, 1974.

After attending classes in Office Administration at SUSC in Cedar City for two years, he married Ethel Marie Ewell, of Eureka, on March 20, 1976. They had one son, Andrew Frank, born August 2, 1977. They were divorced March 27, 1979.

Roger served in the U.S. Army from 1976 to 1979 and earned the rank of Specialist Four and acting Sergeant as junior Administrative NCO in the Office of the Division Surgeon, Fourth Infantry Division (Mechanized), Ft. Carson, Colorado. He was selected as post-wide Soldier-of-the-Year in May 1979, and was discharged with top honors in June, 1979. He returned to Utah in August, 1979 and found employment with the Anaconda Copper Corporation in Tooele as a laborer and underground ore train operator.

He relocated to Stoneham, Mass. in October 1982, and took a posi-

tion with the Center for Theoretical Physics, Massachusetts Institute of Technology, as a senior technical editor and electronic typesetter. He was also the Senior Partner of Prototype, Inc., an international electronic multi-media technical typesetting service, which he founded in 1984.

Failing health forced his double retirements in April 1993, and he returned to Utah to spend his remaining days with his family and the loving home care provided by his mother until his death. He was an extremely fortunate man to have had the unconditional love and support of his mother and siblings and his circle of friends. He was in awe of his mother's strength, dedication and courage throughout his illness.

Prior to retirement, Roger's greatest joys were frequent whale watches off the coasts of New England and international and domestic travel. He had vacationed in almost every U.S. state and territory, Northern Europe, Scandinavia, Japan, Hong Kong, and in June of 1989, he was in Beijing, China, during the student uprising and subsequent government massacre in Tianamen Square. He was arrested by the Chinese military, briefly detained and forcibly deported, unharmed, to Hong Kong.

In June of 1993, he became a part-time volunteer for the Utah AIDS Foundation, serving as a telephone receptionist, computer data entry clerk and staffer of the Foundation's AIDS Hotline. He also became a public speaker for their Education Out-Reach Program, lecturing to the public about the dangers of AIDS and its prevention and methods of treatment. Rapid development of peripheral neuropathy in his leg eventually made the three-times-

a-week drive to Salt Lake impossible and he resigned in March, 1994.

Gilson was a member of the Utah County AIDS Support Group in Provo and a frequent lecturer at numerous area high schools for the American Red Cross. In May 1994, he consented to be the subject of a well-received, in-depth profile article published in the Provo Herald, about living with AIDS in Happy Valley (Utah County).

Survivors include his mother, Charlene Kay Ashworth, of Payson. A sister and life-long favorite person and confidant, Pauline Underwood Furr and her husband Darrel, of Beatty, Nevada. Two brothers: Arthur Ronald Gilson, Jr. and his wife Kathy, of Craig, Colorado; and Ted Swen Gilson, and his wife Janae, of Denver, Colorado. A very special niece, Joi Lynn Furr, who unselfishly gave of herself in assisting with his home care. Six nephews and two additional nieces. Paternal grandmother, Ada Schmidt, of Eureka. Numerous aunts, uncles, cousins, and a multitude of friends, including the members of his support group, especially: Karen and Glenna Oldroyd, and Lavar and Dixie Strong, his best friend, Rickey Chambers, and his home nurse, Pamela De St. Jeor, a true angel of mercy, to whom he was touched, honored, and grateful for their unconditional and unquestioned love, support, and compassion. Preceded in death by his maternal grandparents, Lloyd and Gladys Kay; his step-father, Bob Ashworth; and several friends who died from complications associated with this pandemic.

Roger wanted to acknowledge and publicly thank his physician, Dr. Robert A. Frampton, and his staff, Louise and Pat, for their expert medical care.

My life was a most excellent adventure.

(continued from page 1)

The Lab is taking several steps to begin a program to implement better computer security system at LNS. The Lab is also cooperating with appropriate MIT experts and monitoring the network and disk usage on the computers to detect possible security compromises. The Computer Group is also discussing options with MIT to make the computer systems more secure. Steps are being taken on both the VMS and UNIX systems at LNS to enhance computer security.

On the VMS side, Kerberos will be configured within Multinet to provide better security when using telnet from VMS machines (especially to the MIT EREQ computers). The LNS Computer Group has already configured Kerberos on a computer group workstation running VMS and has successfully tested the security options with the EREQ computers in Central Purchasing. As soon as the full testing of Kerberos on VMS is completed, they will begin to install this security enhancement at LNS.

On the UNIX side, the Laboratory is currently interviewing several candidates for the position of full-time UNIX system administrator. The new UNIX system administrator will be responsible for better security arrangements for the UNIX machines at LNS. At the present time, plans call for the following steps to be implemented for each of the UNIX machines.

(1) Isolate one UNIX system and make the system secure. This will mean comparing installed binaries against the CD ROM versions and making other checks and verifications to insure a clean system.

(2) Implement and Evaluate security systems. A procedure will be followed to install various security software packages one at a time on the secure system. Each package will be evaluated for the appropriateness for LNS and extensively tested to insure that it works correctly.

(3) Individually check the integrity of each UNIX machine's installed system and application software. After the machine's software base is verified to be clean, install the appropriate security packages on that UNIX platform. This process will need to be repeated for each UNIX in the Laboratory that is attached to the LNS network. This process may require some time because the UNIX operating system on each hardware platform may be slightly different from the benchmark secure system and may require customizations and patches to have the security software function properly.

(4) Vigorous monitoring of the computer security of all UNIX machines on the network will be a part of the standard job responsibilities for the new UNIX

system administrator.

Several users have asked for a listing of useful software tools for enhancing computer security and a bibliography of relevant materials recently written on this subject. These are listed below.

Software Tools

The following is a list of free software tools that can be used in addition to the usual vendor supplied software.

(1) **Crack** will check a password file for easily guessed passwords.

(2) **Tripwire** will detect a change in relevant files and alert you.

(3) **Cops** is a set of programs that will search for weaknesses in a system and report them. It will look to see that proper privileges are set on directories and for unmask settings on files.

(4) **TAMU Security Package** was developed by Texas A&M after their system suffered a serious break-in.

(5) **TCP Wrapper** will monitor network software to keep track of who logs into a system using telnet and ftp.

(6) **MD5** will provide a finger print/checksum for files so that comparisons can be made to ensure the integrity of files.

(7) **Netlog, Multinet, Tcpdump, and Ethermon** will all monitor network packets and activity in slightly different ways.

(8) **CMP** will check whether or not your ethernet card is in promiscuous mode. This mode is used by software that monitors network packets. You can tell if a sniffer is active on your system.

(9) **Pretty Good Privacy (PGP)** is an encryption package that will encrypt a plain file for sending it over a network. No one will be able to read the file unless they have the required decryption key. It is a good protection for mail traveling over the internet.

Information Sources

Two important national centers for security are the Computer Incident Advisory Capability (CIAC) which is under the auspices of the Department of Energy, and the Computer Emergency Response Team (CERT) whose Coordination Center is at Carnegie Mellon University. Both of these centers issue advisory announcements and offer help when a break-in occurs. Often they inform you that you have been compromised before you realize it.

See page 10 for more details.

Physics News

Krebs Gives Talk on the Future of Basic Research

Dr. Martha Krebs, Director, Office of Energy Research, Department of Energy, gave a talk entitled, "The Future of Basic Research at the Department of Energy," at MIT on Friday, February 10, 1995. Krebs discussed the budget, the unique national user facilities under DOE, the renewal of High Energy Physics, the challenges DOE faces, concerns for the future, and our opportunities to contribute.

The present proposed budget for DOE basic research is 2.8 billion for 1996. The Galvin Task Force was appointed to review the future of the National Laboratories. The Galvin Task force has said that DOE should move to strengthen fundamental science and engineering in both the laboratories and universities, but that there should be downsizing of national labs and changes in management.

The short-term goal for the renewal of high energy physics is to improve user services and to have more research time. The mid-term goal is to improve facilities, and the long term goal is to help support research efforts at the Large Hadron Collider (LHC at CERN, Geneva, Switzerland). DOE will continue support of the construction of the B factory, the LHC effort and the Fermilab main injector. Krebs plans to continue to involve the physics community in the process of establishing priorities.

This past year was a great one for energy research. The Top Quark was discovered and there are indications of massive neutrinos. Clifford G. Shull from MIT received the Nobel Prize for pioneering work with neutrons. However, there are uncertainties with the new Congress. It is necessary to communicate policy making and why the country needs basic research. It is also important to write letters to editors, and to let the general public know the benefits of basic research.

Paris A. Sphicas, Particle Physics Collaboration Group, was one of the six finalists for an award in the field of particle physics. The Bodossaki Foundation, Athens Greece awards the prize to Greek scientists under the age of 40. Prof. Sphicas has played a leadership role in the CDF experiment at Fermilab. Preliminary results of the status of the Top Quark were recently verified at Fermilab.

Roman W. Jackiw, of the Center for Theoretical Physics is the 1995 winner of the Dannie Heineman Prize for Mathematical Physics. The citation proposed by the selection committee says, "For his imaginative use of quantum field

theory to throw light on physical problems, including his work on topological solitons, field theory at high temperatures, the existence of anomalies, and the role of these anomalies in particle physics." The Dannie Heineman Prize for Mathematical Physics was established to encourage further research in the field of mathematical physics. Since 1959, the Prize has been administered by the American Physical Society and The American Institute of Physics. Jackiw will receive the award at The American Physical Society meeting in Washington DC, on April 19, 1995.

Gordon Conference Schedule -- Nuclear Physics

**23 July - 28 July
Tilton School
Tilton, N.H.**

A.B. Balentekin, chair
D. Beck, chair

**QCD in Nuclear Physics and
Astrophysics**

Probing the Spin Structure
R. McKeown, B. Frois, C. Jones,
R. Prepost

Theoretical Perspectives
J. Randrup, G. Bertsch, J.W.
Negele

Relativistic Heavy Ion Physics
J. Thomas, P. Braun-Munzinger,
P. Jacobs, W. Zajc

*Fundamental Applications of
Nuclear Physics*
P. Parker, S.J. Freedman

*Solar Neutrinos and Neutrino
Physics*
R. Stokstad, J. Bahcall, M. Gai,
W. Louis

Properties of Hadronic Systems
R. Springer, D. Kaplan, C.
Roberts

The Early Universe
T. Kajino, G. Fuller, C. Hogan, A.
Olinto

Dark Matter Searches
C. Alcock

*Prospects in Electromagnetic
Physics*
B. Mecking, D. Geesaman, X. Ji,
M. Musolf

Physics Review Letters Online in July

Physics Review Letters (PRL-o) will be online in July through an agreement with the Online Computer Library Center. The online version will provide the same information as the paper version. It is anticipated that the other physics journals will follow. Physics Review Letters is the leading physics letters journal. It provides rapid publication of short reports of important research in all fields of physics.

Professor Wit Busza Joins Ranks of Mac Vicar Fellows

Prof. Busza's teaching of 8.02 (the first-year class in the principles of classical physics) is outstanding and has been recognized with departmental teaching awards and the School of Science teaching award. He has led in the development of the new small-class format for these important core subjects, a format that provides freshmen with a better transition into MIT. He not only led the study to identify the basics approach, he co-authored the study guides, gives a lecture/demonstration each week for 8.01 and prepares 12 exams. Few faculty members are so dedicated to excellence in undergraduate education as Professor Busza. Efforts of this sort are essential to maintaining the vitality of education at MIT.

Selection for the honor recognizes outstanding classroom teaching, major innovations in education and dedication to being an apostle of teaching in helping others achieve teaching excellence.

MIT Tech Talk February 8, 1995

Computer Facility Migrates to Distributed Workstations

The migration is taking place so that the computer facility can upgrade its current equipment and so that there will be less chance of single points of failure. In simple terms this means that the computer will have a better chance of being more efficient. There will be less downtime and less chance for the whole system to fail. The information below explains in more detail the VMS and UNIX systems and what goals have been met and what goals still need to be reached.

VMS

The Laboratory purchased the first workstation about five years ago and since then workstations have been added on a regular basis. Three years ago the central computer configuration was changed from a VAX8800 and two VAX6220s to a VAX6520 (Pierre) and a VAX6420 (Irene). This year the VAX6420 was replaced with two VAX4000/90A workstations.

One VAX4000/90A serves the users in buildings 24, 6, and 44 and the second, in building 26. Both machines act as servers for users in that building. A third new workstation performs many functions that are needed to support user operations. For example, it handles print and batch queues, network routing, performs downline load host functions (its function is to save software and then ship to a device as needed), mail, and MAC support.

Most of the installation of the distributed system has

been completed. User files were moved from the High Speed Controller disks to a server machine in the local area. This required the installation of several nine gigabit disks on some workstations which in turn required that VMS on the VAX Stations be upgraded from version 5.5 to version 6.1. The upgrade of the three main cluster servers was completed February 10th and the larger disks are now in place.

UNIX

For several years, a Decstation 5000/200 (Marie) has been running Ultrix in the computer facility along with several other UNIX machines located around the Laboratory. The demand for UNIX machines at the Laboratory is growing and the need for these machines is expected to continue. Two additional Alpha machines running UNIX (OSF/1) are in place. The Ultrix and OSF/1 machines share password files and disks, but executable code is not compatible. Twenty new X-Terms and four OSF/1 Alpha servers are located in Center for Theoretical Physics. The LNS computer Facility supervised the installation of additional wiring to support these machines. Each Alpha machine serves in the CTP as a boot node and disk server for a subset of the X-Terms.

The overall migration plan has proceeded smoothly and is on schedule. Work will begin soon to add a

Fiber Distributed Data Interchange (FDDI) capability to the local network. This increase to a 100 megabyte backbone will take place over the next six months. The High Speed Controller disks are scheduled to be shutoff by March 15, 1995, and the HSC will only be kept alive to serve the 9-track tape drives. Nine-track tapes with data you wish preserved should be converted to 8mm before May 1, 1995. The 8mm tapes are smaller than the older 9-track tapes and are therefore easier to store. In addition to costing less, the tapes are able to hold gigabytes of data. Shutdown of the HSC, the 9-tracks and the VAX6520 (Pierre) will be accomplished by June 30, 1995.

Contest to Create a T-Shirt Design

LNS will celebrate its 50th anniversary and Bates its 25th in 1996, and we are planning a number of activities. First, we would like to have a contest to create a new t-shirt design for LNS and Bates.

A prize of \$100 will be given for the best design. The rules are:

- Contest entries must be submitted no later than Friday, April 21, 1995. All designs must be submitted on paper to Jean Flanagan, 26-540. Your name and extension should appear on a separate piece of paper.

- All personnel including graduate students of LNS may submit designs and you may submit more than one design.

- "LNS," "Bates," "1996," "50 and 25" must appear on the T-shirt.

The judges for the contest are Bob Redwine, Stanley Kowalski, Anne Maloney, Heidi Stirling, and Leo McCue.

MIT Mail: From Now to the Future A Look at Coming Changes

Paula Sevanto, Austin Petzke, Glenn Johnston, and Michael McNamara of the re-engineering team gave a presentation to LNS employees about the mail services at MIT. Even though most of the people surveyed at MIT are pleased with the mail services, it was pointed out by the re-engineering team that the technology of how the mail is taken care of at MIT has not changed since the 1930s. Approximately 7 million pieces of mail go out of MIT and there are approximately 12 million pieces that are incoming. The cost of processing the mail is 6 million.

How the Mail is Done

Mail is picked up at the Cambridge Post Office three times a day and sorted on campus. Approximately 10% of the mail is delivered to an individual's office and approximately 90% is delivered to a department, building, floor, or office, for further distribution by departmental staff. There is no centralization of mail and there is little automation. Postage meters in individual departments are not being used enough and there is a lot of junk mail. Some thought has been given to posting catalogs electronically. Interdepartmental mail needs to be updated and the various lists combined.

The Near Future

A new mail manager, Martha (Penny) Goyer has

joined the staff. New mail services will begin July 1, 1995. There will be a distributed mail center and new steps will be taken to automate the mail. We will probably pick up mail in Bldg. 36 on the first floor near the loading dock.

Middle Future

The re-engineering group has been consulting on designing an address database in order to have proper addressing schemes for internal and external mail and standard formatting for address labels. A campaign to reduce unwanted and duplicate mail will be initiated and postal bar-codes will be automatically done when generating address labels. One central mailing list database will be used by MIT offices for interdepartmental mail.

The Further Future

The goals are to establish a new central mail facility, standardize MIT addresses, provide authenticated on-line change of address ability to a central mailing list of MIT staff, and provide the ability to subscribe or unsubscribe to internal mailing lists.

Watch TechTalk for further announcements

(continued from page 6)

The Internet Engineering Task Force (IETF) has been producing standards for the Internet for many years. They are an important source of information and software for security.

A number of books are available on the subject of security:

- (1) Cheswick and Bellovan, **Firewall and Internet Security**, Addison-Wesley, Reading, MA 1994.
- (2) Farrow, R., **UNIX System Security**, Addison-Wesley, Reading, MA 1991
- (3) Garfinkel, Simpson, **PGP. Pretty Good Privacy**, O'Reilly and Assoc., Sebastapol, CA, 1995.
- (4) Garfinkel, Simpson, **Practical UNIX Security**, O'Reilly and Assoc., Sebastapol, CA, 1991.
- (5) Hunt, C., **TCP/IP Network Administration**, O'Reilly and Assoc., Sabastapol, CA., 1991
- (6) Krol, E., **The Whole Internet**, Second Edition, O'Reilly & Assoc., Sebastapol, CA.,
- (7) Russell, Deborah, **Computer Security Basics**, O'Reilly and Assoc., 1991.
- (8) Schneier, Bruce, **Applied Cryptography**, Wiley, 1994.
- (9) Stallings, William, **Protect Your Privacy**, Prentice Hall, 1995.
- (10) Stallings, William, **Network and Internetwork Security**, Prentice Hall, 1995.

Home Pages for Security References:

<http://www.digital.com>—Digital Equipment Corporation's Home Page

<http://www.greatcircle.com/firewalls> -- General Circle's Firewall Page

<http://www.tansu.com.au/Info/security.html> -- Security XReference Index to information resources related to Network and Computer Security

These book are available at the Coop, Quantum Books and the BU Bookstore.

Around LNS

Baby News

Dick Adams - Birth of grandson, Jared Timothy McCrystal, 2/24/95

Nacho Diaz - Birth of son, Abishia, 1/24/95

Jim Grenham - Birth of grandson, Cameron Jason, 2/2/95

Jim Kelsey - Birth of son, Jacob Robert, 12/25/94

Larry O'Brien - Birth of daughter, Sarah, 1/10/95

Congratulations

Larry Longcoy - Received Associates Degree in Electrical Technology from Northern Essex Community College, January 1995.

Dan Tieger - Elected to Board of Directors of the Bicycle Coalition of Massachusetts

We Welcome

Denise Cormier - Senior Secretary (Technical)
Part time CTP

Evan Reidell - Senior Secretary (Technical) CTP

Jeffrey Templon - Postdoctoral Associate,
Nuclear Interactions Group

Scott Van Verst - Research Scientist, Nuclear
Interactions Group

Jianguo Zhao - Postdoctoral Associate, Nuclear
Interactions Group

Departures

Douglas Warnock - Senior Technician Bates

John Wasik - Machinist A LNS Machine Shop

THE PULSE is a publication of the Laboratory for Nuclear Science for the LNS Community.

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If you have any ideas and/or suggestions for new features in **THE PULSE** please let us know.

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