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Facilities Quarterly

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY FACILITIES DEPARTMENT NEWSLETTER

APRIL 1998

For Reference

Not to be taken from this room

ERGONOMICS FOR YOU

Ergonomics is the science of designing workplaces, equipment, and jobs to fit people. It has become a central concern in today's hi-tech workplace where repeated motions or incorrectly located equipment and furniture can lead to repetitive motion injuries (RMI) or reduced productivity. The LBNL Ergonomics Committee, headed by Larry McLouth of EH&S in partnership with Facilities architect Nick Peterson and representatives from other Lab divisions, has developed a systematic ergonomic evaluation and upgrade process to help limit the occurrence of RMI.

Minor upgrades, such as keyboard trays, glare screens, and a trackball mouse often require only a trip to the Ergonomics Display Center, located in the Medical Building (Building 26). If the ergonomic evaluation indicates more serious problems requiring new furniture, whether it's a chair, desk, or work area, the evaluator will refer you to the Work Request Center.

Before the Ergonomics Program came along in 1997, there was, according to Nick Peterson, a "lack of clarity over how to go about correcting these problems. Now, people at the Lab have a definite step-by-step process to follow, and the efforts of EH&S,

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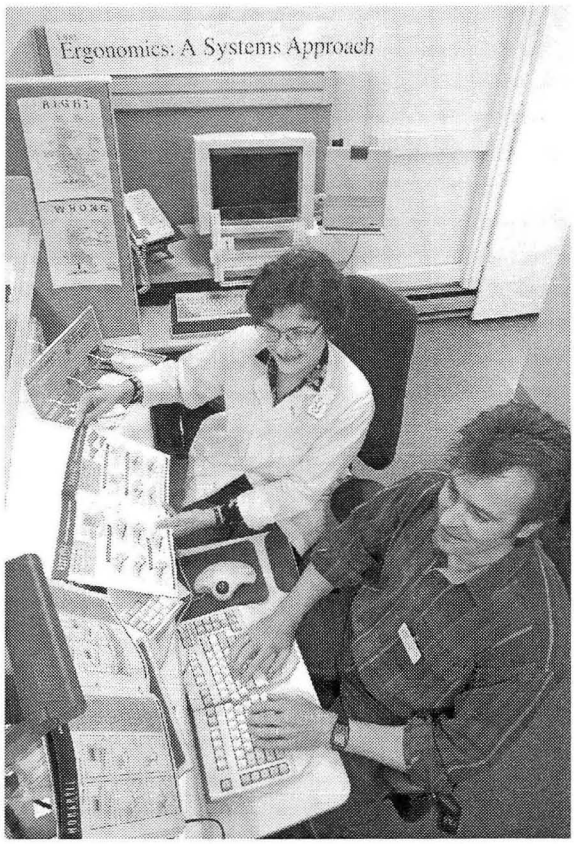

EH&S ergonomics evaluator Charlotte Bochra and Facilities architect Nick Peterson at the Ergonomics Display Center. (Photo by Roy Kaltschmidt)

SMALL PROJECTS PARTNERSHIPS

Every year, Berkeley Lab funds several hundred small institutional and programmatic construction projects. Unlike major line-item projects, these jobs must be completed within the fiscal year or lose their funding. These small projects are also diverse, ranging from correction of Laboratory Self-Assessment Database (LSAD) deficiencies to laboratory upgrades. The Small Projects Group is Facilities' "rapid response" design and construction team, organized to efficiently handle engineering and construction for projects valued from a few thousand dollars to $100,000, with some special assignments ranging higher.

With members from all the design disciplines, including architectural, civil and structural, electrical, and mechanical, the Small Projects Group is equipped to handle the full range of design and construction work. Group Manager Bill Wu stresses good communication between discip The engineers interact on a continuing basis, identifying areas where their designs must w

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INSIDE

From the Facilities Manager
Focus on Service: Move Coordination
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ERGONOMICS

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Facilities, Procurement, and the other divisions are more clearly defined and coordinated than before."

If you have a problem with your work area, call Charlotte Bochra at the Medical Center (x4268) for a workstation evaluation. The EH&S evaluator will then send a report, with recommendations, to you and your supervisor. Each division is responsible for providing a safe work environment for its employees. Your supervisor will work with your division safety coordinator to obtain upgrade funding.

If the evaluator recommends a minor upgrade (e.g., buying a particular piece of furniture or equipment), he or she will provide a list of ergonomically sound equipment to order from, or may recommend visiting the Ergonomics Display Center to try out furniture and accessories and to get ordering information. Also, check with your supervisor on ordering procedures for your Division. Some items may need assembly or installation services available through the Work Request Center.

If the evaluator recommends a major upgrade of your workplace—such as a new layout, modulars, or furniture—contact the Facilities Work Request Center and ask for an ergonomic upgrade design. Nick Peterson or another Facilities architect will meet with you to discuss the evaluator's recommendations and develop options and estimates for your workplace. When you have selected an option, the architect will, with your supervisor's approval, issue a job order to remove existing items and assemble/install new items. Once the new items arrive, Facilities personnel will rebuild the workstation.

If your chair is giving you problems, the Ergonomics Committee and Facilities offer the ergonomic chair loaner program, which allows you to try out any of several "off-the-shelf" ergonomic chairs available through Stores. If the loaner is satisfactory, you keep it. If not, it can be returned without a protracted procurement process.

Having the proper environment is only half the battle; working in an ergonomically correct way is not always intuitive. Ergonomic training is available through the UC Berkeley Campus Occupational Health Program, which offers a 2-hour workstation ergonomics course ("Ergonomics for Computer Users") to Berkeley Lab employees for a small fee. If you spend most of your time working on computers, you should consider taking this course.

For more information about ergonomics, visit LBNL's Ergonomics Web Page: http://www-ehs.lbl.gov/ergo/index.htm. Also, plan on attending the LBNL Annual Ergonomics Fair this summer to find out what's new in ergonomic furniture and accessory design. EH&S personnel will be there to answer your questions.

FROM THE FACILITIES MANAGER...

This issue highlights some of the changes and innovations the Department has made in the past few years, all directed at improving customer service and customer satisfaction. These changes also exemplify the growth of the Department to encompass much of the support function at the laboratory, growth accomplished through a spirit of teamwork.

This teamwork—the integration of many parts to accomplish a needed service—is epitomized by the partnership between the Work Request Center, the Move Coordinator, the Small Projects Group, Space Planning, the Shops within the Department, and telephone and computer services in ICSD. A seemingly minor request to move from one space to another involves all these functions; however, the customer now sees little of this, making only one call to the Work Request Center.

Space Planning itself is an example of how the Department has evolved. From an administrative function that tried to keep track of who was in what space, this group now tracks the persons occupying the space, their division, and the funding associated with the space, and feeds the CFO all the details for the space charge. From assisting divisions in finding adequate work areas, the space team now often initiates suggestions for relocation in order to help consolidate divisions and group synergistic research efforts together.

You have earned the right to pat yourselves and each other on the back. Your sense of partnering has made the department more efficient and effective in providing support to the research community.

Work SMART — Work SAFELY — If it is not safe, STOP the work.

Thank you,

Bob Camper

FACILITIES DEPARTMENT

Facilities provides Berkeley Lab with a full range of architectural and engineering, construction, and maintenance services for new facilities and for modification and support of existing facilities.

Architectural and engineering services include facility planning, programming, design, engineering, project management, and construction management. Maintenance and construction functions include custodial, gardening, and lighting services; operation, service, and repair or replacement of equipment and utility systems; and construction of modifications, alterations, and additions to buildings, equipment, facilities, and utilities. Additional services include bus and fleet management, mail distribution, stores distribution, and property disposal.

Ongoing Facilities activities include renewal and upgrade of site utility systems and building equipment; preparation of environmental planning studies; in-house energy management; space planning; and assurance of Laboratory compliance with appropriate facilities-related regulations and with University and DOE policies and procedures.

FOCUS ON SERVICE: MOVE COORDINATION

Relocating one's office or laboratory is never easy. Packing and unpacking is a chore, but it is all the details that can leave one muttering to oneself, wondering what's been left out. Changing telephone service and installing new hookups, moving computers, installing network drops and restoring network service, arranging for new locks and keys, planning an office layout—all are part of virtually every move. Often there is painting, carpeting, and electrical work to be done besides.

Until a few years ago, the multiple contacts and coordination required for all this were the responsibility of the division making the move. But since its inception in 1995, the Facilities Move Team, headed by Move Coordinator Ron Woods, has earned many letters of gratitude from relieved clients for arranging a smooth transition to a new office or laboratory. Coordination support covers phones, computer drops, seismic restraints, labor and transportation, cleanup, and painting. And there is no charge for the coordination service, only for the moving services themselves.

A call to the Work Request Center is all that's needed to take advantage of this full package of services. As soon as he is notified, Woods sets up a meeting with the client (he suggests appointing a move representative) to discuss scheduling and the scope of the move. Next, the Move Team visits the old and new office locations, noting telephone jack numbers, computer network information, fax machine and printer requirements, location of electrical outlets, and other details. The information gathered is distributed to the LBNL service groups that work in partnership with the Move Team.

Together, Woods and the client develop a floor plan, identifying problems such as inadequate electrical outlets, locations of phone plugs and network drops, and fire code restrictions. Woods can usually suggest alternatives, and coordinates

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COMPLIMENTS

Ed Ritenour of the Network and Telecommunications Department applauds Facilities' quick response and repair of the UPS circuit breaker in the basement of Building 50A, which provides electrical power for both the Laboratory's main telephone switch and LBLnet's main routers: "Needless to say, failure of this equipment would have produced catastrophic consequences, affecting both voice and data communications at the Lab. Thanks to the immediate actions by Bob Sommers, who notified our management staff and contacted the on-call electricians, and the quick response by Jim Murphy and his efforts to resolve the problem, a catastrophic event was averted."

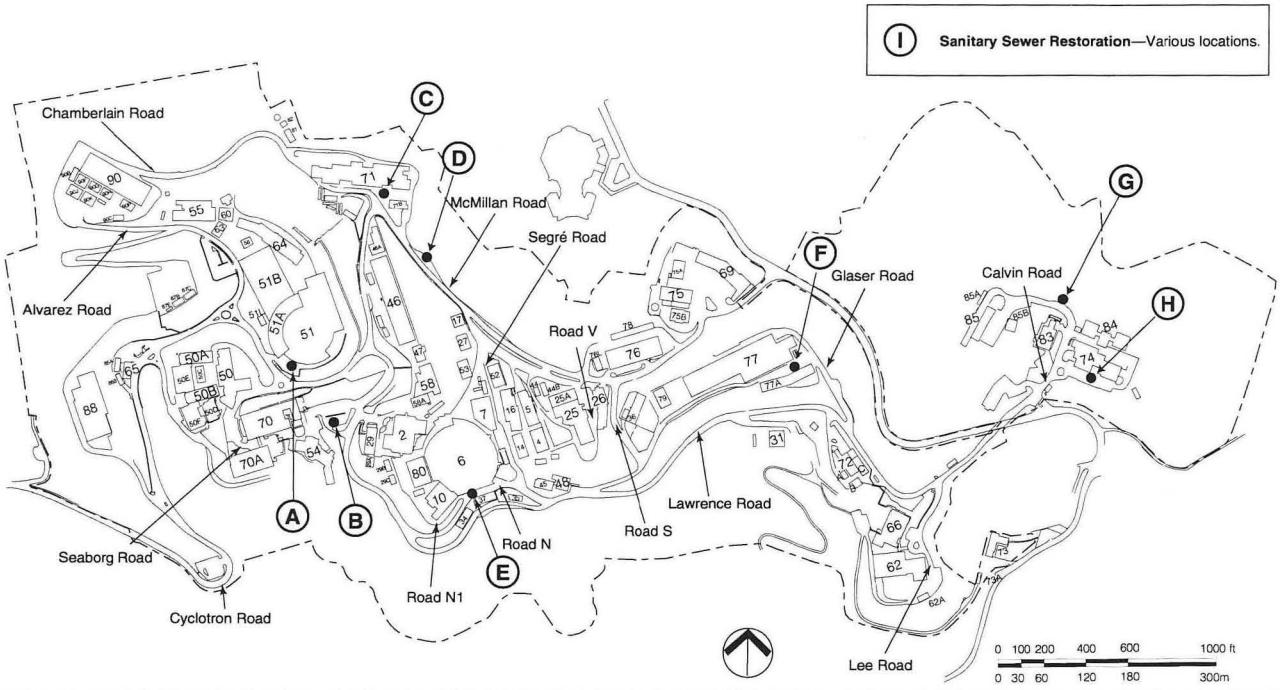
WORK REQUEST CENTER

Telephone	6274
Fax	7805
Quickmail	Facility
E- or VAX-Mail	LBL-Facilities@lbl.gov
cc:Mail	WRC-Facilities
Mailstop	76-222

WRC welcomes questions or comments about the Facilities Quarterly.

CONSTRUCTION AND YOU

Current construction projects affecting parking or vehicular or pedestrian circulation



Project Contacts. The name in parentheses after each project is the Project Manager (PM) or other person responsible for project oversight. This person will be happy to answer any questions about the project.

(A) Building 51 Painting

APRIL	MAY	JUNE

Control of pedestrian traffic during May and June to allow for painting of curved wall between EPB Hall and fence gate. (Bill Wu, x5216)

(B) Bldg 54 Conference Center Modifications

APRIL	MAY	JUNE

Construction activities may impact local parking through June. (Richard Stanton (x6221)

(C) Bldg 71 Painting

APRIL	MAY	JUNE

During June and July no pedestrian access to west entrance of Building 71. (Bill Wu, x5216)

(D) Blackberry Canyon Switching Station Replacement

APRIL	MAY	JUNE

Laydown yard will use parking strip on McMillian Rd near Bldg 71B to year's end. (Chuck Taberski, x6076)

(E) Bldg 6 Second Floor Conversion

APRIL	MAY	JUNE

Construction continues through June. Parking spaces on south side Bldg 6 are reserved. (Richard Stanton, x6221)

(F) Bldg 77A Waste Treatment Unit Enclosure

APRIL	MAY	JUNE

Traffic controlled during normal working hours in June and July while siding is installed. (Bill Wu, x5216)

(G) Calvin Rd Crib Wall Replacement

APRIL	MAY	JUNE

Calvin Rd to and from Building 85 barricaded, with single-lane traffic control, during May and June for work on storm-damaged crib wall. (Bill Wu, x5216)

(H) Bldg 84 Genome Sciences Laboratory

APRIL	MAY	JUNE

Construction activities may impact local parking through spring. (Richard Stanton, x6221)

(I) Sanitary Sewer Restoration

APRIL	MAY	JUNE

Will impact parking at various locations for 2–5 day duration through summer. (Charles Allen, x6439)

"CAUTION—CONSTRUCTION AREA"

Construction barricades and warnings are there for your protection. Under no circumstances should you cross a construction barricade, or disobey posted warnings or directions. Please contact the Project Manager for escorted access to construction areas.

ON THE DRAWING BOARD

projects in study or conceptual design

Bldg 77 Rehabilitation of Building Structure and Systems

Initial funding is set for FY99. This project will rehabilitate Building 77's structural system to restore lateral force resistance and arrest differential foundation settlement. In addition, the project will modernize the building's architectural, mechanical, and electrical systems. (Lonny Simonian, x6088)

Bldg 74 Rehabilitation of Building Systems

A conceptual design report has been prepared for the upgrade of Building 74 mechanical and electrical systems, seismic upgrade of the structure, and code upgrade of architectural features. As part of the project, the Building 84 utility center will be expanded to accommodate Building 74 utilities, including relocated mechanical equipment and new electrical switchgear. If this project is funded, project design will begin in FY2000. (Richard Stanton, x6221)

Sitewide Water Distribution Upgrade, Phase 1

A conceptual design report has been prepared for upgrades to Berkeley Lab's 9.6 km (6 miles) of high-pressure water supply piping. The project will replace all cast-iron pipe, install corrosion protection for other piping, and provide other enhancements that will make the system more robust and extend its life substantially. The project will also install a new emergency fire water tank to protect the East Canyon area.
(Charles Allen, x6439)

IN PROGRESS

funded projects

Bldg 51 First Floor Space Conversion—North

Approximately 5500 square feet of space in the northern portion of Building 51 is being converted for the Superconducting Magnet Group. The project will provide additional electrical power, lighting, fire protection, piping for mechanical systems, and a bridge crane. The project also includes demolition of existing outdated and abandoned equipment, and relocation of other existing equipment. (Lonny Simonian, x6088)

Bldg 54 Conference Center Modifications

This project will construct a new deck on the south and west sides and a new concrete walkway on the east side of Perseverance Hall. The upgrade will provide an informal meeting area at the perimeter of the conference center and direct exterior access to both conference rooms. (Richard Stanton, x6221)

Bldg 6 Second Floor Conversion

Construction continues for conversion of space on the second floor for offices, laboratories, and a conference room. The work includes an elevator at the main entrance. (Richard Stanton, x6221)

Bldg 2 Lithography Laboratory Conversion

This project will provide 25 square meters of class 100 clean room space in the first-floor lithography laboratory in Building 2. The project includes lab utilities, ventilation, modifications to support spaces and building systems, a make-up air handling unit, and additional chilled water lines for clean room temperature and humidity control. (Lonny Simonian, x6088)

Bldg 34 Chilled Water Plant

Construction started in January 1998. The project includes installation of an additional cooling tower and chiller serving the ALS. The original construction of Building 34 provided space for this expansion. Construction is expected to be completed in April 1998.
(Lonny Simonian, x6088)

JGI Production Sequencing Facility

Located in existing buildings in Walnut Creek, California, this 5,800 square meter (62,600 square-foot) facility will house the automated DNA sequencing operations of the Joint Genome Institute (JGI). Tenant improvement design is underway for Building 945. The landlord's construction of Building 944 tenant improvements is scheduled for completion in mid-May, and outfitting work for Building 944 will begin in June. Occupancy is scheduled for Fall 1998.
(Kirk Haley, x5973)

PARTNERSHIPS

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around each other or where construction phasing is important, thus avoiding the kinds of redesign and rework that cause delays and cost overruns.

The efficiencies that result from good communications within the group also extend to working relationships with other Facilities resources, such as the craft shops, Estimating, and the Move Team, as well as partners in other divisions who frequently participate in Small Projects Group work.

EH&S is very much a member of the project team, coming onboard as soon as an assignment is received to assist in the Safety Analysis and Documentation System (SADS) process. This review identifies any environmental health or safety concerns associated with such work as storm drain installation, or removal of asbestos floor tile or lead-based paint. The Fire Department, also part of EH&S, reviews all design drawings for code compliance prior to any construction. Other EH&S Departments monitor jobsite compliance with Berkeley Lab regulations and building codes in cooperation with Facilities inspectors. The appropriate EH&S group must also approve installation of such equipment as fume hoods and radiation and laser interlocks.

Small Projects also routinely works with ICSD's Networking and Telecommunications Department on installation of telephone and computer drops and other equipment, as well as with Procurement and other departments.

On the UC Berkeley campus, any work done by Small Projects in Building 1 (Donner) or Building 3 (Calvin) is coordinated with the appropriate Campus authorities, including Physical Resources, the Fire Department, and EH&S. According to Bill Wu, "We have a very close working relationship with Campus, we understand each other's needs, so we're able to get a lot accomplished." This close cooperation is particularly useful to researchers who work both at UC Berkeley and Berkeley Lab.

A call to the Work Request Center is all that's needed to initiate a small project. The Small Projects Group will usually get the assignment if the project needs engineering or if it includes mandatory work related to code compliance or safety, such as installation of interior walls or electrical panels. Small Projects also works up preliminary estimates for unfunded projects. The group takes about a week to respond to a work request. Estimates take from a few hours to a week.

Having Small Projects as a single point of contact allows the client to focus on the desired results of the project, while Small Projects handles the details. As Bill Wu says, "When the project is complete, all the client needs to do is pick up the key."

MOVE TEAM

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with the Fire Department on code considerations and with the division's computer systems administrator and telephone coordinator (as well as with ICSD) on telephone and computer network issues.

If design work is required at the new location, Woods arranges a meeting between the client and the necessary Facilities crafts, such as the carpenters. The Small Projects Group (see page 1) is brought in for more extensive remodeling, engineering design, or code-related work.

If additional furniture is needed, Woods can expedite orders through Procurement, work with the Carpentry Shop on items such as shelving and custom cabinetry, or possibly find what's needed through the Excess Property Warehouse. Woods also keeps tabs on items surplused from other moves that can be reused.

The experience of working together on hundreds of moves has made for strong working relationships between the Move Team and other service organizations within and outside Facilities. "The level of cooperation has never been better, both within Facilities and with other divisions," says Woods. "We help each other get the job done."

SPACE PLANNING

Working through the Move Coordinator has the additional benefit of bringing the Facilities Planning Group's Space Coordinator, Dick Dicely, into the picture. Instead of waiting for divisions to request space when the need has reached a crisis level, Dicely is in regular communication with Division space coordinators, seeking forecasts of future needs and searching for solutions. By improving flexibility, LBNL can more readily take advantage of new opportunities and make better use of existing space.

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