

THE ERGONOMICS CENTER OF NORTH CAROLINA
AT
NORTH CAROLINA STATE UNIVERSITY

CHARTER

1. DESCRIPTION OF CENTER:

The Ergonomics Center of North Carolina (Center) is a Public Service Membership Center specifically authorized by the North Carolina General Assembly and established in October 1994 with the original name North Carolina Ergonomics Resource Center through a partnership between North Carolina State University (NCSU) and the North Carolina Department of Labor (NCDOL), Division of Occupational Safety and Health (OSHNC) to assist employees and employers in the prevention of occupational trauma disorders (CTDs). In FY 2001-2002, funds appropriated by the North Carolina General Assembly for the Center were allocated directly to NCSU for the Center's use, negating the previous funding arrangement between NCDOL and NCSU. In June 2002, the official name of the North Carolina Ergonomics Resource Center was changed to The Ergonomics Center of North Carolina (Center). In an effort to better meet the needs of its ergonomics stakeholder community, the Center underwent revitalization—changing the organizational hierarchy, business infrastructure, and marketing initiative. Responsibilities and rights of Center Members are given in the attached By-laws.

2. GOALS AND OBJECTIVES:

The primary goals of the Center are to act as a bridge for technology transfer and information exchange between the university and industry, and to improve productivity, safety, and the well-being of people in all sectors of business and industry, and government. The Center will support business and labor in their pursuit of humanizing the workplace and in maintaining viable and competitive jobs. By emphasizing applied research and timely delivery of programs, the Center identifies, analyzes, and corrects ergonomic deficiencies in the workplace. In all of its programs the Center emphasizes employee participation and involvement. Employees provide invaluable information and feedback on current problems, evaluation and testing of proposed improvements, and assume an active role in implementing the recommended changes.

The Center is member-based; however non-members may obtain ergonomics services at non-discounted fees. Center clients will include companies from diverse businesses worldwide. Member companies, through their representatives on the Center Advisory Board, will take an active role in preparing and shaping the Center programs and plans. Member companies will act as a catalyst for transferring the Center research findings to industry at large.

The primary objectives of the Center are:

1. Increased levels of productivity and quality as a by-product of maintaining ergonomically sound jobs and processes.
2. Reduction in lost time accidents/injuries known to occur when ergonomics is absent from the workplace.

3. Reduction in compensation costs by assuring timely return of injured employees to work and minimizing the potential for recurrence of their injuries.
4. Reduction in health and liability claims that may arise as a result of improper workplace design.
5. Reduction in health and liability claims that may arise as a result of improper product design.

These objectives will be met in three areas of industrial design:

1. Job Design: specifying job content, duration and scheduling of rest breaks, and sequencing of tasks within the job.
2. Workplace Design: specifying the physical characteristics of the hardware, including material handling devices, and tool design.
3. Product Design: specifying the physical characteristics of a product. This includes providing adequate instructions for use and insuring acceptable product quality.

The Center will provide a full range of programs, each of which is tailored to meet specific needs and goals.

1. Conducting ergonomic audits ranging from simple walk-through surveys for problem recognition to objective measurement and evaluation of workplaces/jobs to determine the ergonomic soundness of the organization.
2. Developing and implementing improvement projects to address recognized deficiencies.
3. Conducting ergonomic training and awareness programs directed towards managers, engineers, supervisors, employees and medical personnel, as well as the public at large.
4. Testing and evaluation of existing consumer products to assess potential product deficiencies.

3. RELATIONSHIPS

There are no other centers or institutes at NCSU or at any other campus of The University of North Carolina comparable to the Center. Over the past two decades, a strong industrial ergonomics outreach program has developed between the Edward P. Fitts Department of Industrial and Systems Engineering, in the College of Engineering at NCSU, and the NC Department of Labor. This relationship is the basis for the Center, and as a result it will be located in the Edward P. Fitts Department of Industrial and Systems Engineering, and administered by the Dean of the College of Engineering. Several other Colleges and Departments at NCSU also have academic and/or outreach programs in ergonomics that may be utilized by the Center.

The Center utilizes an integrated approach for the recognition and solution of workplace problems. Therefore, although the primary focus is ergonomics, the Center also may call upon the skills and talents of faculty from various colleges at NCSU and from affiliated universities, OSHNC staff, and member companies.

4. THE EXECUTIVE DIRECTOR AND ADVISORY BOARD:

4.1 Executive Director: The Executive Director reports directly to the Department Head of NCSU's Edward P. Fitts Department of Industrial and Systems Engineering and will implement the plans and recommendations of the Center Advisory Board and the Commissioner of the North Carolina Department of Labor (Commissioner).

The Executive Director is responsible for the day-to-day management, operation and administration of the Center, and the preparation and implementation of the Center Annual Plan. The Director is responsible for the technical content and performance of the Center, its staff and students, and for relations with the NCSU faculty, the NC Department of Labor, Division of Occupational Safety and Health (OSHNC), Center Members, and non-member clients.

4.2 Center Advisory Board: The Center Advisory Board (Board) will have eight voting members. The Commissioner and the Dean of the NCSU College of Engineering each will appoint to the Board two individuals selected from Member Companies, and one member from the public at large. In addition, the Commissioner of Labor and the Dean will each appoint one member of their staff to the Board. The Center's Executive Director will be an ex officio member of the Board. The staff member appointed by the Commissioner will serve as Chair of the Board. It is the responsibility of the Board to oversee the operations of the Center. The Board will receive, modify and approve the Annual Plan of the Center, review and approve the Center programs and projects, determine Center fees, give advice regarding the development of intellectual properties, establish a schedule of services and approve By-Law or policy and procedure changes. The Board will report its actions and make its recommendations to the Dean and the Commissioner at the conclusion of each meeting. Final approval of board actions will be made by mutual agreement between the Dean and the Commissioner.

4.3 OSHNC monitor. A monitor will be appointed by the North Carolina Commissioner of Labor to monitor and evaluate the quality of work by the Center and the degree to which it meets industrial and compliance needs. The monitor reports directly to the Commissioner. It is the monitor's responsibility to give an unbiased view of the success of the Center and its strengths and weaknesses.

5. BUDGET ESTIMATES

As of October 1994, through special appropriations from the North Carolina General Assembly, the North Carolina Department of Labor would provide the base funding for the Center. A Memorandum of Understanding between NCDOL and NCSU details the relationship, budget and allocation. In FY 2001-2002, funds appropriated by the North Carolina General Assembly for the Center were allocated directly to NCSU for the Center's use, negating the previous funding arrangement between NCDOL and NCSU. While the Center will receive partial funding through NCSU's College of Engineering, substantial revenue will be obtained through (1) private and/or government funded research; (2) training workshop conducted at the Center or client's facilities; (3) annual membership fees; and (4) ergonomics consultative services provided for member and non-member companies worldwide.

Membership fees will be recommended by the Center Advisory Board, and approved by mutual agreement of the Dean of the NCSU College of Engineering and the Commissioner of Labor. For nonmember companies and industry-at-large, fees are quoted based on the type and scope of selected

programs. Quotations are available for all programs ranging from a walk-through survey to total development and implementation of comprehensive ergonomic programs.

6. SPACE NEEDS

Center will be staffed by experienced ergonomists, researchers, and appropriate support staff (marketing, IT, accounting) (see Chart 1). The Center will require approximately 7,000 sq. ft. to house its staff and laboratory. Since there is no space currently available at NCSU, the Center will rent commercial space within 15 to 20 miles of the main campus.

7. EFFECTS ON INSTRUCTIONAL PROGRAMS

The Center, through its research programs and state-of-the-art laboratory will have the potential to enhance and further develop existing ergonomics courses and programs. Students and faculty with interest in ergonomics will have a steady supply of practical and challenging problems that would form the basis for many worthwhile dissertation and thesis research topics. The Center will provide opportunities for undergraduate students to carry out their senior design projects at member companies.

When warranted, Center will augment and enhance its professional resources by relying on the skills and talents of faculty from various NCSU colleges and from affiliate public and private universities, and from affiliate practitioners throughout North Carolina. The Center will advance the cause of ergonomics across The University of North Carolina and these other colleges and universities in North Carolina by providing opportunities for direct funding of relevant research projects.

The Center will utilize several state-of-the-art systems for conducting basic and field research in ergonomics. The Center laboratory is equipped with micro- and minicomputer-based systems that are configured to allow for optimum utilization of resources during data collection and analysis. Specialized equipment and instrumentation are also available for the conduct of one-of-a-kind projects. The Center laboratory will be available for members and affiliates in pursuit of specific Center collaborative studies and projects with center personnel.

8. ORGANIZATION

The Dean of the NCSU College of Engineering will have primary University oversight responsibility for the operation of the Center, Center programs, allocations of resources, Center By-Laws and compliance with policies and procedures.

Day-to-day management of the Center will be the responsibility of the Center's Executive Director who will implement the plans and policies of the Center. A Center Advisory Board will give advice about the operation of the Center and make recommendations to the Dean and the Commissioner.

Duties and responsibilities of the Dean, the Executive Director and the Advisory Board are outlined in detail above and in the Bylaws.