BOARD OF CERTIFICATION IN PROFESSIONAL ERGONOMICS

THE PROFESSIONAL ERGONOMIST

The Newsletter of the BCPE

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SUMMER 2000 **VOLUME VIII NUMBER 2**

ERGONOMICS PROGRAM STANDARD

By Gary Orr, MSIE, CPE

Every year nearly 600,000 workers[1] are away from work due to work related musculoskeletal disorders (MSDs). The hazards include overexertion of the muscles or tendons, repetitive exertions without time to recover, static loads on muscles or tissue and tissue damage due to vibration. The result is painful muscle tears, swollen tendons, bulging disc and pinched nerves. "Musculoskeletal disorders such as back injuries and carpal tunnel syndrome are the most prevalent, most expensive, and most preventable workplace injuries in the country," said Labor Secretary Alexis M. Herman in announcing the proposed ergonomics program standard.

An MSD is an injury or disorder of the muscles, tendons, ligaments, joints, cartilage, or spinal discs. Most MSDs occur over time in tissue that has not been given an adequate recovery period. However, the job requirements can cause an MSD from a one time exertion, such as lifting.

MSDs account for one-third of all lost-work time injuries in the U.S. It's not just the numbers that are significant. Because these injuries can involve lengthy recovery periods, they cost employers from $15 to $18 billion in workers' compensation with $30 to $40 billion more in other direct costs each year. Carpal tunnel cases, for example, require an average of 24 days away from work for recuperation-more than time off for amputations or fractures. Yet fewer than 30 percent of employers have developed effective ergonomics programs to address problems involved with awkward postures, excessive force, heavy lifting, or repetitive motions on the job.

"This is a critical workplace safety and health problem that we must address if we want to make serious progress in further reducing workplace injuries and illnesses," according to OSHA administrator Charles N. Jeffress. "Solutions are available that can make a tremendous difference for workers. Often they are inexpensive and easy to implement." OSHA's proposal would protect 27 million workers at 1.9 million general industry worksites. The proposal does not cover construction, maritime, or farming operations.

One Size Doesn't Fit All

One of OSHA's goals in developing its ergonomics proposal is to offer flexibility for employers of different sizes in a wide variety of industries. OSHA wants effective protection for workers while minimizing requirements and maximizing flexibility for employers. To do that, OSHA's proposal incorporates several special features, including:

- A grandfather clause-to enable employers to continue current effective ergonomics programs.
- Quick fix – an option to fix a problem job in lieu of implementing a full ergonomics program for that job.
- Use of any combination of engineering, work practice, and administrative controls to reduce hazards causing musculoskeletal disorders (MSDs) rather than relying solely on engineering controls.
- Incremental abatement process-trying one control to reduce the hazard, then adding others one by one, if necessary, to fix the problem.
- Option for employers to discontinue major parts of their ergonomics programs if no MSDs are reported in a problem job within 3 years after it is fixed.
- Long compliance times for employers to implement a program and for small employers to take advantage of the information developed by larger companies.
- Extended compliance deadlines for employers who experience an MSD after the standard has been in effect for three years.
- No recordkeeping requirements for employers with fewer than 10 employees.

What MSDs are covered by the proposal?

OSHA's proposed ergonomics standard does not cover every musculoskeletal injury. The proposal covers only injuries that meet the following criteria:

- OSHA recordables-serious enough to require days away from work, medical treatment, or assignment to light duty work, and
- Directly related to the physical tasks an employee performs, and
- Specifically connected to the physical work activities that are a core element or significant part of the employee's job.

The proposed ergonomics standard would prevent an average of 300,000 painful, potentially disabling musculoskeletal disorders (MSDs) each year while generating $9 billion in savings annually. Preventing just one MSD saves an average of $22,500.

The emphasis is on protecting workers most at risk-those involved in manual handling or working in production jobs in

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[1] These and other statistics presented here appear on OSHA's ergonomics proposed standard and supporting documents, including the premble. These materials are online at OSHA's website at www.osha.gov or at the Bureau of Labor Statistics website at www.bls.gov.

manufacturing. Although these workers represent only about 25 percent of employees in general industry, they experience about 60 percent of the musculoskeletal disorders. The 1.6 million worksites that employ these workers would need to implement a basic ergonomics program.

The Basic Ergonomics Program

A "Basic Ergonomics Program" would be required for production jobs and manual handling jobs. Such a program requires at least the following elements.

Management Leadership and Employee Participation

- Name someone to be responsible for ergonomics and supply resources and training for the program.
- Be sure company policies do not discourage employees from reporting problems and let employees know how they can be involved in the ergonomics program.

Hazard Information and Reporting

Inform employees periodically about the following:

- Ergonomic risk factors (force, repetition, awkward postures, static postures, contact stress, vibration, cold temperatures);
- Signs and symptoms of musculoskeletal disorders;
- Importance of reporting signs and symptoms early to prevent damage and how to make reports;
- Requirements of this standard.

Set up a system for employees to report signs and symptoms of MSDs and respond promptly to reports.

OSHA would require a full ergonomics program only if an employee actually experiences a covered MSD. That means that 75 percent of general industry employers would have no responsibilities under the standard unless one of their employees was injured.

The Full Ergonomics Program

A "Full Ergonomics Program" would be required after a covered MSD has occurred. Such a program includes at least the Basic Program, Job Hazard Analysis, Training, MSD Management, and Program Evaluation.

Job Hazard Analysis and Control

A Full Ergonomics Program includes the following.

- Analyze problem jobs for ergonomic risk factors.
- Work with employees to eliminate or materially reduce MSD hazards using engineering, administrative, and/or work practice controls.
- Use personal protective equipment to supplement other controls.
- Track progress, and when jobs change, identify and evaluate MSD hazards.

OSHA anticipates that about 300,000 employers would need to adopt full programs each year to fix problem jobs. The average fix would cost about $150 annually. OSHA's proposal is job-based rather than facility-based. In other words, employers do not have to institute an ergonomics program for the entire facility, but only need to address ergonomics for jobs where injuries occur within the facility. Where the employer has determined that the MSD is limited to the individual who reported the injury, then the program can be limited to that individual.

Training

- Train employees in jobs with covered MSDs, their supervisors, and staff responsible for the ergonomics program.
- Teach recognition of MSD hazards, the ergonomics program at the site, and control measures used to reduce hazards.
- Conduct training initially, periodically, and at least every 3 years at no cost to employees and in a language they understand (e.g., Spanish).

MSD Management – For Workers Who Have Covered MSDs

Employers with a Full Ergonomics Program will respond promptly to an injured employee and provide access to a health care professional, if needed, for evaluation, management, and follow-up at no cost to the employee.

- Inform the health care professional about the job, the MSD hazards, and the ergonomics standard.
- Obtain a written opinion from the healthcare professional on how to manage the employee's recovery and ensure that the health care professional shares it with the worker.

The employer will also provide necessary work restrictions and work restriction protection (WRP) during the recovery period (100 percent pay and benefits for employees put on light duty; 90 percent pay and 100 percent benefits for employees who must be removed from work). WRP benefits last until the employee can return to work or the MSD hazards are fixed or 6 months have passed, whichever comes first. WRP can be offset by workers' compensation or similar benefits.

Program Evaluation

- The program must be evaluated periodically and at least every three years.
- In the evaluation the employer must consult with employees in the jobs covered by the program.

Recordkeeping

OSHA proposes to exempt employers with fewer than 10 employees from the burdens of keeping records. Employers with 10 or more employees would be required to keep the following records of their ergonomics program (for 3 years or less in some cases):

- Employee reports and the employer's response,
- Job hazard analysis,
- Hazard control records,
- Quick fix controls,
- Ergonomics program evaluation, and
- MSD management records.

Compliance Dates

- MSD management - promptly when an MSD is reported.
- Management leadership and employee participation - one year after the standard goes into effect.
- Hazard information and reporting - one year after the standard goes into effect.
- Job hazard analysis - two years after the standard goes into effect.
- Interim controls - two year after the standard goes into effect.
- Training - two years after the standard goes into effect.
- Permanent controls - three years after the standard goes into effect.
- Program evaluation - three years after the standard goes into effect.

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ERGONOMICS PROGRAM STANDARD *continued from page 2*

Frequently Asked Questions (FAQs)

Why is it called an "Ergonomics Standard" when it only deals with Musculoskeletal Disorders (MSDs)?

Given that OSHA has traditionally limited its protection to physical hazards the discussion of ergonomics was limited to MSDs without mentioning cognitive issues. However, the title (Ergonomics Program Standard) of the proposal specifically included the word "Program" to indicate that the Agency advocated a programmatic approach to resolving MSDs. The approach was based on the input the Agency received from stakeholder meetings. Establishing a program to address ergonomics does not preclude cognitive issues, while the Agency's purpose is to reduce MSDs, many employers have found that the ergonomics program has been useful for detecting and resolving quality issues that stem from cognitive issues.

Why Is Work Restriction Protection (WRP) in the proposal?

The purpose of MRP is to get employees to report early and thus prevent serious physical harm. No one has suggested that current workers' compensation systems provide an incentive for employees to report their injuries early; this is the sole reason that WRP has been included in the proposal. This proposed requirement is based on the same rationale that medical removal protection (MRP) was included in lead and in six other OSHA health standards.

Workers can recover from many musculoskeletal disorders (MSDs) in a matter of days if they are able to rest the injured area. Often restricting work activity or putting the injured employee on light duty allows the employee to rest the injured area while continuing to be productive during the recovery period. Sometimes, particularly if no light duty jobs exist, an injured employer may require the employee to go home to recover, but does not pay the employee for time away from work. In those situations the employer or physician has imposed work restrictions on the employee and the employee should not bear the costs.

Workers on light duty receive 100 percent of pay and benefits, and workers removed from the workplace receive 90 percent of net pay (similar to many workers' comp systems) and 100 percent of benefits. WRP continues until the employee is able to return to work or the MSD hazards are eliminated or 6 months have passed-whichever comes first. If employees receive other income, such as workers' compensation payments, insurance payments, or wages from other employment made possible because the employee can't work at his or her regular job, the employer can offset WRP payments against these other payments.

For updates on the progress of the standard check OSHA's website at www.osha.gov. OSHA also has materials on a free CD-ROM. To receive a copy, call OSHA Publications at (202) 693-1888.

This article is the opinion of the author and does not necessarily represent the opinions of the Occupational Safety and Health Administration or the Board of Certification in Professional Ergonomics. The author would like to thank Susan Hall Fleming in the Office of Public Affairs at the Occupational Safety and Health Administration for allowing me to liberally use portions from her article "Ergonomics: Preventing Injury and Preserving Health" published in the Job Safety and Health Quarterly (Vol. 11, 2, Winter 2000, pgs 22-28).

BCPE CELEBRATES TENTH ANNIVERSARY

The Board of Certification in Professional Ergonomics (BCPE) marked its tenth anniversary earlier this year. Incorporated as an independent, non-profit organization in 1990, the BCPE provides voluntary certification to ergonomics/human factors professionals whose education, training, and experience indicate broad competence in the application of ergonomics to products, processes and environments for the purpose of safe, comfortable, and effective human use. To date, almost 1,000 individuals have been awarded the BCPE designations of CPE/CHFP (Certified Professional Ergonomist/Certified Human Factors Professional), AEP/AHFP (Associate Ergonomics Professional/Associate Human Factors Professional), or CEA (Certified Ergonomics Associate).

Instrumental in the formation of the BCPE were Steven M. Casey, PhD, CPE, Alphonse Chapanis, PhD, CHFP, David J. Cochran, PhD, CPE, H. Harvey Cohen, PhD, CPE, Jerry R. Duncan, PhD, CPE, Hal W. Hendrick, PhD, CPE, Dieter W. Jahns, MS, CPE, David Meister, PhD, CPE, George A. Peters, MS, CPE, and Melvin H. Rudov, PhD, CPE. The dedication of these individuals, and others over the years, has been vital to the success of BCPE. The organization also credits its success to the professionals seeking BCPE certification. "Without the commitment of these individuals to professional development," states Kris Alvord, BCPE Executive Administrator, "the BCPE could not have achieved its current level of recognition."

Presently, the BCPE is a member of the National Organization for Competency Assurance, maintains a cooperative agreement with the Center for Registration of European Ergonomists, and recently formalized a reciprocal relationship with the American Board of Industrial Hygiene (ABIH) whereby each organization recognizes the other as the premier certifying body for its profession.

ABIH TO OFFER ASSOCIATE INDUSTRIAL HYGIENE CERTIFICATION

The American Board of Industrial Hygiene plans to introduce a new industrial hygiene certification in 2001 for those professionals who have IH responsibilities, but do not qualify for the Certified Industrial Hygienist (CIH) designation. This will include EHS professionals who do not practice IH a majority of their total work time as well as those who primarily function in a single IH rubric area such as air pollution, ergonomics, health physics, etc. and do not meet the CIH requirement for broad-scope IH work experience.

The basic qualifications will include:

- A bachelors degree with at least 30 semester hours of science and math
- IH college or PDC courses covering fundamentals, measurements, controls and toxicology
- four years of post-bachelor, professional-level industrial hygiene experience (at least 25% IH activities)
- successful completion of a written exam

The certification will be designed to demonstrate the applicant's competence in applying the fundamentals of industrial hygiene knowledge and skills.

As with the CIH certification, a five year recertification requirement will be built into the process and an application for third party accreditation through the Council of Engineering and Scientific Specialty Boards (CESB) will be submitted.

Contact ABIH for more details at 517-321-2638; Fax: 517-321-4624; email: abih@abih.org; or website, www.abih.org.

RE-CERTIFICATION REFUTED

by George M. Samaras, PhD, DSc, PE, CPE
george@samaras-assoc.com

In Volume 8(1) of this newsletter, Drs. Rice and Smillie advanced a set of arguments for periodic re-certification. In the same issue, Dr. Wichansky informs us of the survey results of our perceived value of certification and re-certification. It is my opinion that periodic re-certification is both unnecessary and counter-productive. On the other hand, I firmly believe in lifelong learning and that my work product is a measure of my professional worth. Our BCPE has a problem. As a non-governmental entity, it cannot be in the business of licensure (my PE is a license; my CPE is not) and yet its goal to credential American Ergonomists is both noble and, potentially, of significant future value to our profession. But is the value to our profession, and to the publics that we serve, in the area of:

(1) quality control (a one time check and credentialing of newly minted ergonomists), or

(2) quality assurance (establishing policies and procedures to ensure that all certificants continually meet minimum standards of quality or competence)?

I believe that this is the fundamental issue underlying "re-certification". Before making a choice, let's examine the Rice & Smillie arguments and the Wichansky analysis of the certificants' position.

Public Accountability

Licensing, certification, and registration are historically governmental activities intended both to protect the public from charlatans and to minimize the incidence of malpractice. In the practices of medicine, law, accountancy and engineering these programs have worked reasonably well, though clearly not perfectly. There are innumerable instances of "properly certified" physicians, attorneys, accountants and engineers (very well known within each profession; sometimes becoming known to the public at large) who have no business practicing. We, the public, do not cease going to doctors, lawyers, accountants, or engineers, simply because there are a few bad apples in the barrel. I think, therefore, that it is best that we ignore the Rice & Smillie assertion that *"The credibility of the certification process and of the certificants themselves is questioned whenever a single certified practitioner is unable to maintain competency"*. The public intuitively understands the concepts of dispersion and *"caveat emptor"*. Variations in our competence (both within our membership & over time) are inevitable (that is why we, too, have E&O insurance) and this should not be a determinative factor in our decision. The survey of BCPE certificants, that appears to have both face and content validity, indicates a clearly negative response to re-certification every five years, even though 87% of the respondents agreed that certification raises the professional standard for ergonomists. To me, that is indicative that quality control, not quality assurance, is our preference.

Credibility

Credibility seems to be a central issue for Rice & Smillie. But credibility is a judgement and will vary based upon the particular observer's frame of reference! I can say I am "trained as an engineer" (I have an undergraduate engineering degree), but I am legally prevented from calling myself an "engineer" without that P.E. license. Furthermore, that license only works in the United States, and only in the particular States, where I am registered; elsewhere, I am not an "engineer" for the purposes of competing for work. Not only does the "State" judge my credibility; so do you! Suppose we have an intractable GUI problem for a life-critical medical device. I am fairly good at that sort of work, but if you had to choose, would you choose me or an individual without a CPE, but whose name just happened to be Dr. Jakob Nielsen? I know whom I would choose and, regardless of the CPE, it would NOT be me!

So now we are confronted with "thresholds" of credibility, in addition to "loci" of credibility. I suspect the problem would continue to snowball if we were to continue the analysis. My reading of the International Ergonomics Association's stance on "re-certification" is that they slyly sidestepped the whole issue, by requiring *"the applicant must demonstrate their continuing work in ergonomics"* (Minimum Criteria for the Process of Certification of an Ergonomist, Version 3, November 1999). I am sure that most of us would be happy, periodically, to send in an affidavit that we have continued to do work in ergonomics for the past five years. Does that satisfy any quality assurance criteria? I think not! Based upon the survey results, most of us feel "clearly negative" about non-testing alternatives to certification for competency. There is a good reason for this feeling. Passing the BCPE test is our operational definition of competency in ergonomics. Why then, five years later, would we agree to something other than that test as a competency determinant?

Regulatory Systems

Rice & Smillie identify a number of non-governmental "regulatory" bodies (NOCA/NCCA and CESB) to whom they believe the BCPE should submit for credentialing (in essence, this is meta-certification, in that the certifying body is being certified). I question the value of such an exercise, especially since there is no governmental recognition or acceptance from such a process - and thus no legal or practical advantage to us. The benefits put forth by Rice & Smillie are (a) our Board of Directors will behave themselves; (b) credibility (again), and (c) national recognition of the credential. My recommendation is (a) that we vote miscreant directors out of office, if ever the need arises, and (b) that we all focus on doing high quality work for our clients, so that the certificate has practical value (and, also, so that they continue to employ us).

Course of Action

In the beginning, I reformulated the "re-certification" question in industrial engineering terms: quality control or quality assurance. Clearly, this is an oversimplification! In any viable organization, it is the integrated quality system that is crucial for success and QC/QA are but elements of this system, which extend to all of the organization's stakeholders (suppliers, customers, owners, employees, etc.). Who are the BCPE's stakeholders? I would suggest to you that the "suppliers" are our universities, the "customers" are our employers, we (the certificants) are the "owners" (but we are also the "product"), and the "employees" are the directors and administrative staff. Implementing an integrated quality system must include:

(1) qualifying our suppliers (the college and university programs),

(2) verifying our product (the existing certification process, which must be validated),

(3) understanding and documenting our customers' requirements (are we just making assumptions or do we actually have any pertinent marketing data),

(4) maintaining the integrity of our product, once it has been delivered (the intent of re-certification discussions), and

(5) systematically modifying our policies and procedures as our organizational knowledge grows.

Re-certification is one, possibly small, component to implementing a viable quality system. It is not, and should not, be the primary concern of a voluntary, non-governmental certification

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RE-CERTIFICATION REFUTED

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organization. As I stated initially, our BCPE has a problem; maybe we can solve it together. Let us focus on what makes our certification appropriate and valid for our customers. Let us make certain that folks with our certification provide high quality work products for our customers. Let us help each other to improve and extend our skills. Then, let's worry about whether our credibility is dependent upon re-certification.

BCPE HOSTS PANEL SESSION AND NETWORKING RECEPTION AT THE IEA 2000/HFES 2000 CONGRESS

Beautiful San Diego, CA was the setting for the 14th Triennial Congress of the International Ergonomics Association (IEA) and 44th Annual Meeting of the Human Factors and Ergonomics Society (HFES). In keeping with the Congress theme, "Ergonomics for the New Millennium," the BCPE hosted a panel session, "The Value of Ergonomics Certification: International Perspectives," before an audience of approximately 50 professionals and entertained more than 150 attendees at its annual Networking Reception.

At the panel session, representatives from the certifying and/or professional organizations of the Board of Certified Safety Professional (BCSP), Japan Ergonomics Society (JES), the Ergonomics Society of Australia (ESA), the Canadian College for Certification of Professional Ergonomists (CCCPE), the Center for Registration of European Ergonomists (CREE) and the International Ergonomics Association (IEA) joined the BCPE in a global discussion of certification in the field of ergonomics. Specific matters addressed included the possibility of certification as a means of ensuring competency, re-certification vs. lifetime certification, and accreditation of the credentialing body itself. Key throughout the forum was the certification process, comprised of formalized education and applied work experience, measured by either portfolio review or written examination, for each of the organizations and certification as a way of defining standards of practice.

That evening, more than 150 certified professional ergonomists, human factors professionals, associates, and interested individuals attended the annual BCPE Networking Reception. Co-sponsored by Aon Ergonomic Services, Ergonomic Technologies Corporation, Humantech Inc, and Liberty Mutual Research Center, the reception offered friends and colleagues the opportunity to gather in lively discussion and collegiality while enjoying food and drink. An enjoyable time was had by all and we thank our co-sponsors for their part in making the reception a success. We hope you will mark your calendar for next year's reception in Minneapolis, MN.

CALENDAR OF EVENTS

October 20-21, 2000	BCPE Annual Meeting Bellingham, WA
November 28, 2000	BCPE Exam in Las Vegas, NV at National Ergonomics Conference & Exposition. Postmark deadline for applications: Sept. 28, 2000
March 12, 2001	BCPE Exam in Orland, FL prior to the Applied Ergonomics Conference. Postmark deadline for applications: January 12, 2001
April 2, 2001	BCPE Exam at various locations throughout the United States and Canada. Postmark deadline for applications: February 2, 2001
October 7, 2001	BCPE Exam in Minneapolis, MN prior to the Annual Meeting of the Human Factors and Ergonomics Society. Postmark deadline for applications: August 7, 2001

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HIGHLIGHTS OF BCPE MID-YEAR MEETING MAY 2000

The Intersociety Liaison Committee reported that the American Board of Industrial Hygiene (ABIH) passed the following resolutions:

- ABIH recognizes BCPE as a premier certification board for the Ergonomic profession.
- ABIH will provide public support for BCPE's certification process as appropriate. This may include web site links, providing BCPE information at the ABIH booth, assisting with BCPE exams offered at the AIHA/ACGIH Conference & Exposition and other mechanisms available to ABIH.
- ABIH will explore ways of involving BCPE when developing ergonomic questions for the ABIH exams.
- ABIH will actively seek to maintain a communication link with BCPE to keep BCPE informed regarding areas of mutual interest.

The Intersociety Liaison Committee recommended that BCPE make similar reciprocal resolutions to ABIH. This later was made into a motion, was seconded and carried (MSC).

Other committee reports were given by the Examination Material Development Committee, the Re-certification Committee, and the Marketing Committee.

The following motions were discussed and passed:

- To accept as policy the document regarding the unauthorized use of BCPE designations.
- To offer the exam Version 2.0 as a pilot exam in which the successful examinees are permitted to apply to obtain certification without subsequent retesting. Examinees must meet all normal BCPE application criteria in order to apply, including payment of fees.
- To accept recommendations of the re-certification committee as part of our strategic plan and develop a process for refinement and implementation.
- To accept the standardized version of the Ergonomist Formation Model and that it be utilized as the basis for all publications and new brochures.
- To put a check box on the billing invoice for those certified to agree/not agree to have their contact information sold.
- To adopt the policy to rent the BCPE mailing list to publishers, individuals, companies only for purposes clearly related to the interests of human factor/ergonomics.
- That if an AEP/AHFP cannot meet the 5-year deadline to transition, s/he must address the BCPE Board of Directors. The AEP/AHFP will be required to petition for a waiver, including a basis for that petition, as well as submit a plan towards achieving the CPE/CHFP. The BCPE Board of Directors will be required to approve or amend the plan.
- To define CPE/CHFP retired status as doing only occasional work and where the retired status will be decided on a case-by-case basis by the Board of Directors.
- To postpone elections of new directors until the IEA/HFES meeting in July 2000.
- To accept Roger Jensen for a 1-year term as newsletter editor which will include development of a job description, criteria for newsletter editor, as well as produce four newsletters per year, and that we accept Norman Schwalm as an associate editor.
- To institute a Certification Maintenance Fee late penalty of $25.00 on any payment made after the due date, i.e., individual billed $100 for June but pays after June 30, so individual pays $125.

The revision of the website was discussed, and it was agreed that the website RFP should be sent out to various vendors.

The annual meeting will be held in Bellingham WA with the revised dates of October 20 and 21, 2000.

AON Aon Ergonomic Services

For all your ergonomic needs contact:

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330 E. Kilbourn Avenue - Suite 450
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(414) 225-5373 - (800) 556-5115
Di_Chartrand@ars.aon.com

Aon Ergonomic Services
1420 Fifth Avenue - Suite 1200
Seattle, WA 98101-4030
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Kevin_Quaid@ars.aon.com

ERGONOMICS

SECOND INTERNATIONAL CONFERENCE ON PLEASURE-BASED HUMAN FACTORS DESIGN

First announcement and call for papers.

Singapore
June 27-29, 2001

Purpose:

The conference will address pleasure-based design of products, interfaces and environments. There will be contributions from industry and academia. Pleasure-based design has become increasingly important for design of interfaces, such as web pages for e-commerce, product design, such as a personal digital assistant, and for design of work environments, as another dimension of job satisfaction. The study of pleasure in design is a new paradigm in Human Factors - from Pain to Performance to Pleasure.

The intention is to bring together people who can help in conceptualizing pleasurable design - for the purpose of industrial design, HCI design, and environmental design.

One important agenda is to develop theories and methods for predicting and measuring pleasurable design. How can one design for pleasure and how can one predict user reactions?

This field is multidisciplinary and our aspiration is to bring together professionals from several fields, including: (alphabetic order) Anthropology, Experimental Psychology, Human Factors, Industrial Design, Marketing, Product Design, and Usability.

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SECOND INTERNATIONAL CONFERENCE *continued from page 6*

Pleasurable design or aspects thereof have been dealt with previously in research and in practice, but often under different names: Affective Computing, Comfort Assessment, Emotional Interface Design, Esthetics, Hedonic Psychology, and Kanzei Engineering.

Submission of papers:

Submit an extended abstract (1000 words) by February 1 to Dr. Tham Ming Po:

E-mail: MingPo.Tham@motorola.com

Abstracts will be refereed and authors will be notified by March 15.

Final paper - about 5000 words - is due May 1 and will be reproduced in the Conference Proceedings.

Select Papers will by published in a book by Taylor & Francis.

For layout of paper and references please follow the style guide for Human Factors:

http://www.hfes.org/Publications/AuthorGuide.html.

Endorsed by International Ergonomics Association

BCPE ROSTER CHANGES

The BCPE exam has been given every month, March through July, so far this year with two other exam offerings scheduled for the fall. While the results of the July 29th exam are not available yet, successful examinees through June are:

CPE/CHFPs

William J. Boyd MS CPE
Steven Chervak MS CPE*
Kenneth M. Crombie MS CPE
Theresa C. Gates MS CPE
Jodi M. Glunz MS CPE**
Richard W. Goggins MS CPE
Kevin M. Jacobsen MS CPE
Miriam Joffee MS CPE
Thomas O. Lambert MS CPE
Scott P. Linn MS CPE
Richard T. Osgood MS CPE
Hidekazu Sawada PhD CPE
Deborah L.Thompson MA CPE
Breca Horstman Tschida MS CPE
Mary C. Waitkus MS CPE
Marcus T. Whitehead MS CPE**

*transitioning from AEP

**previously CEA

AEP/AHFPs

Joshua R. Egbert BS AEP
James R. Mallon MSc AEP
Sean P. McDonald MS AEP

CEA

Martin J. Saltiel BS CEA
Kathleen M. Shear BS CEA
Mark S. Basich MS CEA
Louise M. Montague BS CEA
James W. Morrisette MA CEA
John R. Stevenson PhD CEA
Jerry J. Woods BS CEA

Applicants qualifying for associate certification by waiver of Part I of the examination year-to-date are:

Aaron W. Bangor MS AHFP
Rex W. Bryan MS AEP
Margaret A. Lanza MSIE AEP
Niall V. O'Brien MSc AEP
Nathan P. Rucker MS AEP

No longer current in their certification are: Mary Eastman MS, Dona Kambeyanda MS and Harry Snyder PhD.

These changes bring BCPE's total number of currently certified to 872: CPE/CHFPs 772, AEP/AHFPs 72, and CEAs 28.

We wish to acknowledge and thank our proctors for their help this year-to-date: Kris Alvord, Mary Brophy CPE, Vincent Ciriello CPE, Kevin Costello CPE, Karen Cunningham CPE, Joe Davis CPE, Jerry Duncan CPE, Shari Falkenburg CPE, Hal Hendrick CPE, Karel Jahns, Nancy Larson CPE, Bill Marris CPE, Don Morelli CPE, Terry Morris CPE, Brian Peacock CPE, John Pentikis CPE, Tom Rowell CPE, Mel Rudov CPE, Lawrence Schulze CPE, Bob Smillie CPE, Jack Stuster CPE, Robert Thomas CPE, Sheri Ulin CPE, Chuck Woolley CPE, Mike Wynn CPE, and Anna Wichansky CPE.

BCPE's VISION:

To be the premier ergonomics certifying body, and BCPE certificants accepted as essential for practice across application domains and specializations.

BCPE's MISSION:

To protect the public, the ergonomics profession, and its professionals by defining and assuring standards of competence, and advocating the value of ergonomics and certification.

BCPE'S 1999 FINANCIAL SUMMARY

BCPE's financial picture for 1999 was one of stability and just meeting expenses with very little income reserve leftover. The first full year of the new Certified Ergonomics Associate (CEA) certification lacked the anticipated revenue despite very high interest. CPE/CHFP certification revenue was down from the previous year, although total application revenues were fairly stable compared to 1998. The mainstay of the BCPE continues to be the support of our certified ergonomists, human factors professionals and associates with their payment of annual certification maintenance fees. Expenses were down in 1999 by $2,000 from 1998. If you have questions regarding the 1999 report, please contact BCPE Headquarters and ask for Karel.

Statement of Revenues and Expenses
January 1, 1999-December 31, 1999

Revenues	
Application Fees	$14,385
Certification Maintenance Fees	76,405
Directory , Candidate Handbook, and Search Fees	133
Miscellaneous	260
Labels/Disks	316
Newsletter Subscriptions	679
Exam Retake Fees	570
Website	300
Meister's *Practice of Ergonomics*	2,142
Total Income	**$95,190**
Expenses	
Salaries	$34,813
Payroll Taxes, L&I & Unemployment Ins.	3,467
Rent	8,084
Medical Insurance	3,078
Casualty Insurance	363
Hard/Software Maintenance	1,077
Capital Improvements	2,759
Equipment Rental	523
Office Supplies	465
Business Meetings	8,886
Information Dissemination	
Telephone/Fax	2,004
Copying/Printing	2,767
Postage/Shipping	2,708
Marketing	1,290
Newsletter	2,687
Candidate Handbook	1,551
Website	1,250
Standards Development	919
Legal & Accounting	1,245
Taxes	-463
Bank Charges	1,918
Promissory Note	12,000
Miscellaneous	1,122
Total Expenses	**$94,513**
Excess Revenue over Expenses	**$677**

THE PROFESSIONAL ERGONOMIST

The Newsletter of the BCPE

Summer 2000
Volume VIII Number 2
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