NOTES FROM THE 2002 PRESIDENT

Thomas Ryan,
CSP, OHST, CHST, STS-Construction

One of the highlights of my career in safety and health has been serving as President of CCHEST (the Council on Certification of Health, Environmental and Safety Technologists) during 2002. The year is only half over and once again CCHEST is advancing faster than anticipated.

The most significant event this year has been the signing of an agreement on May 21st with the Occupational Safety and Health Administration (OSHA) that recognizes the Safety Trained Supervisor in Construction (STS-Construction) program. The CCHEST Board worked for more than two years to achieve such an agreement. Some of this time was spent in the transition between OSHA administrations in Washington, DC.

(Continued on Page 2)

VOLUNTEERS NEEDED FOR CCHEST BOARD OF DIRECTORS

Do you have an interest in helping moving CCHEST and its certifications forward? Would you be interested in serving on the CCHEST Board of Directors?

Currently, CCHEST has nine directors that govern CCHEST affairs. One is a Public Director who represents those outside of safety and health who rely on the certifications that CCHEST offers. Two are directors from the parent Boards—the American Board of Industrial Hygiene and the Board of Certified Safety Professionals. ABIH and BCSP operate CCHEST as a joint venture. The remaining six individuals hold certifications awarded by CCHEST. Directors volunteer their time and set the direction for CCHEST and its programs. The Board of Directors meets twice per year and directors are reimbursed for their direct expenses. Directors also have CCHEST committee assignments and may be involved in other occasional meetings.

In the last several years, all director positions held by individuals with CCHEST certifications have been filled through a nomination process.

(Continued on Page 2)

OSHA RECOGNIZES STS-CONSTRUCTION CERTIFICATION

On Tuesday, May 21, 2002, at the 12th Annual Construction Safety and Health Conference and Exposition in Rosemont, IL, a voluntary cooperative action between OSHA and CCHEST was signed recognizing the Safety Trained Supervisor in Construction (STS-Construction) certification.

Implementation of the non-regulatory agreement should have an immediate, significant and beneficial impact on achieving safe construction sites—a mutual goal of both OSHA and CCHEST. It recognizes the STS certification as verifying the safety and health knowledge of individual supervisors on sites. Those who employ STS-certified supervisors indicate to compliance officers that a site is being operated by individuals with demonstrated knowledge and ability and may contribute to a project’s qualification for a “Focused OSHA Inspection.” STS certification also helps employers to meet their responsibility of instructing employees in hazard recognition and control (29 CFR 1926.21(b)(2)).

(Continued on Page 2)
Outstanding year for CCHEST

Pat Conroy, Vice-President of CCHEST, was instrumental in moving the process along. He, along with the CCHEST staff, worked diligently in the efforts to attain recognition of the STS. I wish to thank Pat and the CCHEST staff for their perseverance.

While the 2001 Fall meeting of the CCHEST Board was cancelled because it was originally scheduled within a few days following September 11th, the Board was able to complete its key business by conference call. In part, this contributed to the most successful financial year that CCHEST has ever had. Overall, there was nearly a 25% growth in income from an expanded use of the CCHEST certifications. The greatest growth has been in companies that are finding that safety and health training and certification for first-line supervisors pays off. Employers have reported that not only are injury and illness claims reduced, but improved job skills increase productivity and work group performance.

During the first half of 2002, the use of the OHST, CHST and STS-Construction certifications exceeded budget projections for the year and are likely to lead to another outstanding year for CCHEST.

Being able to build a reserve fund for CCHEST offers many advantages. The reserve fund provides the capability to complete tasks essential for CCHEST to retain national accreditation for our certifications. Periodically, CCHEST must validate the examination blueprints against what those in practice actually do. Late in 2001, a revalidation project began for the STS-Construction Examination. That study is nearly final and results will appear on the CCHEST web site this fall. The STS-Construction Examination will then be updated to meet the new blueprint and go online in 2003.

In August, a diverse panel of OHSTs will meet in Chicago for three days to update the outline of OHST practice. A survey of many OHSTs will follow and lead to a new OHST blueprint early in 2003. Then CCHEST must update the examination contents to meet the blueprint later next year. As a result of a two-year planning effort, the insurance industry is participating in this OHST study to define the practice of loss control representatives and determine whether the OHST Examination can be used as an entry-level standard for the industry.

CCHEST is exploring the opportunity to develop some additional certification programs with several industry groups. Should these dialogues progress, CCHEST may be adding new or expanding current products to meet the increasing needs of employers for high quality, nationally accredited certifications.

All of this activity will strengthen the organization. It is exciting to be a part of CCHEST and the expanding value of safety and health certification. As an educator in the field of occupational health and safety, I believe that a combination of education, certification and experience provides the best opportunities for successful employment in our field. CCHEST is both proud to provide the highest level of certification and to maintain the standards upon which the occupational health and safety field has come to rely on.

I would like to thank the staff—especially Dr. Roger Brauer—for the fine work they have been performing and continue to do. CCHEST is in very capable hands to maintain the excellent services provided to those with CCHEST certifications.

For those whose busy schedules allow, serving on the CCHEST Board is a great way to give back to this great profession we are involved in. I encourage you to become involved by volunteering to be on the CCHEST Board of Directors.

Volunteers, continued

Volunteers continuing to serve on the CCHEST Board of Directors are:

Bruce Swanson

Executive Director, ABIH

Executive Director, BCSP

Roger Brauer, Ph.D, CSP, PE

President, BCSP

Stew Burkhammer, CSP, OHST, PE

Stew Burkhemmer, OHST, CHST

Vice-President, CCHEST

Patrick Conroy, OHST, CHST

Vice-President, CCHEST

Lynn O’Donnell, CIH

Executive Director, ABIH

Executive Director, BCSP

Bruce Swanson

Director, OSHA’s Directorate of Construction

Assistant Secretary of Labor for Occupational Safety and Health, John L. Henshaw, signed the agreement with the following present:

Patrick Conroy, OHST, CHST

Vice-President, CCHEST

Stew Burkhammer, CSP, OHST, PE

President, BCSP

Lynn O’Donnell, CIH

Executive Director, ABIH

Roger Brauer, Ph.D, CSP, PE

Executive Director, BCSP

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Members of the press and others were invited to attend the signing which took place before Mr. Henshaw was scheduled to speak at the conference.

“This agreement enables OSHA to recognize a certification that verifies the safety and health knowledge of individual supervisors on construction sites,” said Henshaw. “We are delighted to encourage the promotion of safety and health at construction worksites through such programs as this certification program of CCHEST.”

“The CCHEST Board of Directors is grateful for the opportunity to partner with OSHA and the Director of Construction,” said Conroy. “Both OSHA and CCHEST recognize that the Safety Trained Supervisor (STS) certification contributes to OSHA’s goal of safety and health training of employees.”

**STS-CONSTRUCTION AND OHST REVALIDATION**

In order to meet national accreditation standards, peer certifications must periodically validate the contents of certification examinations. The objective is to ensure that an examination leading to a certification actually tests for knowledge and skills essential to the practice to which the certification applies. What should be included on a certification cannot be determined by a select few who believe they are experts. Content validity procedures are quite involved.

CCHEST is in the process of revalidating the contents of its current certification examinations. The first program to go through this process is the STS-Construction Examination. The process began during the fall of 2001. A panel of about 10 people who have close knowledge of those who are Safety Trained Supervisors in Construction participated in a series of conference calls led by a facilitator. The facilitator was a test and measurement expert. The panel had to concur in the tasks that Safety Trained Supervisors in Construction perform and the knowledge and skills required to perform those tasks. The panel’s effort resulted in a series of task and knowledge/skill descriptions.

Those descriptions were converted into a survey questionnaire that was sent to all STS-Construction certificate holders. The response rate was very good with nearly 40% returning survey questionnaires. Respondents had to rate the tasks in terms of what portion of their safety and health responsibility they devoted to each, how important each was in their own position, and how critical each was in protecting their workers. The responses are used to calculate what portion of the STS-Construction Examination should be devoted to each task. The outline of tasks, percentage of examination questions and descriptions of applicable knowledge and skills form the new STS-Examination blueprint. After questions are developed to meet the new blueprint, a new version of the STS-Construction Examination will be implemented.

Several individuals holding CCHEST construction certifications (CHST or STS) volunteered to participate in an item-writing workshop in conjunction with the Construction Safety and Health Conference in May. Many of these items will move through additional editing and evaluation and be included in the new edition of the STS-Construction Examination. Watch the CCHEST web site for details on the new STS-Construction Examination blueprint and the schedule for implementing the new examination edition.

The next CCHEST examination to undergo revalidation is the OHST Examination. In August, a sample of people holding the OHST will work with a facilitator for three days in the Chicago area. The panel will define the current practice of OHSTs in terms of their main job functions and tasks and the knowledge and skills needed to perform those functions and tasks. During the fall, about half of those holding the OHST will receive a survey to find out how well the description developed by the panel fits those in practice. The results will define a new examination blueprint for the OHST and a new examination is expected to be in place by the end of 2003.

Recertification is one of the most important test development activities
for a certification examination. By following recognized procedures, employers, government agencies and the public can be assured that the examination truly reflects what practitioners do. In addition, the certification meets one of the key standards for national accreditation.

Recertification is an expensive process. Keeping CCHEST financially healthy allows for these somewhat hidden, but critical activities to be completed on a regular schedule.

CCHEST CERTIFICATIONS OFFER A CAREER PATH FOR MANY

Studies show that approximately half of those who achieve the OHST and CHST certifications advance in their careers in safety and health to the Certified Safety Professional (CSP) or Certified Industrial Hygienist (CIH) professional credentials. The OHST and CHST certifications provide a stepping stone from part-time, adjunct or junior-level responsibilities into full-time, professional responsibilities and the certifications associated with professional practice.

Many people enter the safety and health field from a variety of crafts, jobs and careers outside of safety and health. They may become involved through a company safety and health committee. They may represent a union, work group or have supervisory responsibility that includes safety and health. Their interest grows and they seek a greater involvement or assignment in safety and health. Often this progress in safety and health responsibility parallels continued education and academic study in safety and health.

CCHEST continues to hear from community colleges, companies, industry associations and individuals seeking guidance on how to advance in safety and health. Advancing in education, job responsibility and experience and certifications often go together in helping people move from a craft or career in some other field into a leadership or professional role in safety and health.

CCHEST DIRECTORS AND OFFICERS FOR 2002

Individuals who serve on the CCHEST Board of Directors volunteer their time and do not receive compensation for their service to CCHEST. They are reimbursed for direct expenses related to official CCHEST meetings and other approved activities.

New Public Director

Joining the CCHEST Board in 2002 as the second Public Director is Linda Sennett. She is a Managing Director and Consultant for the Polaris Team in Savannah, Georgia and Maryville, Tennessee. She holds a Bachelor of Arts in Applied Mathematics and Liberal Arts. In addition, she holds a J.D. from South Texas College of Law. As the Public Director, she represents the interests of those who are not in the safety and health field. Like other directors, she volunteers her time.

The first Public Director, Sandra Drew, ended her two three-year terms on CCHEST at the end of 2001. CCHEST wishes to thank Sandra for her many contributions to the CCHEST programs and their direction. Her background in school administration and marketing brought many insights into improving CCHEST.

2002 Officers

CCHEST directors elected Patrick Conroy as Vice-President for 2002 and Adrian Hertog as Secretary-Treasurer for 2002-2003. Thomas
Ryan, who served as Vice-President in 2001, serves as President in 2002.

**2002 Directors**

Only one director, Tom Ryan, completed his first three-year term in 2001. He was elected to serve a second two-year term that extends through the end of 2004.

2002 Directors are pictured on page 4. Following is a complete list of CCHEST directors and officers:

**President**
Thomas Ryan, OHST, CHST, STS-Construction, CSP (BCSP-elected)

**Vice President**
Patrick Conroy, OHST, CHST (CCHEST-elected)

**Secretary-Treasurer**
Adrian Hertog, OHST, CSP (BCSP-elected)

Branden Jones, OHST, CSP (ABIH-elected)

David Gioiello, Jr., CIH, CSP (ABIH Board Representative)

Robert Milligan, CHST, OHST, STS-Construction (CCHEST-elected)

Linda Sennett (Public Director)

Kenneth Sheffield, OHST (ABIH-elected)

Henry Smahlik, CSP, CIH (BCSP Board Representative)

**CCHEST ACCREDITATION RENEWED BY CESB**

CCHEST received official notice from the Council of Engineering and Scientific Specialty Boards (CESB) that it approved re-accreditation for all three CCHEST certifications: OHST, CHST and STS-Construction. This accreditation continues through 2006.

There are about 200 safety, health, environmental and ergonomics titles available which people can pursue. 13 of these designations hold national accreditation in the United States. CCHEST offers 3 certifications of the 13.

**CCHEST AND NCCER SHARE COMMON GOALS BUT DIFFERING ROLES**

About a year ago, CCHEST became aware of safety and health training programs in construction offered by the National Center for Construction Education and Research (NCCER). What was most interesting was that NCCER had developed training programs in safety and health that promoted using the STS-Construction and CHST certifications as capstones for training. The training programs were designed to qualify individuals for these CCHEST certifications.

NCCER is affiliated with the University of Florida. Its primary mission is to set standards for and train people in the many crafts associated with the construction industry. It is working with many construction companies and vocational programs to standardize skill development for construction crafts. As part of that activity, NCCER also developed a series of training programs that progressively develop safety and health knowledge and skills for construction workers and supervisors. The safety and health programs fall under the guidance of a large committee of safety and health professionals in the construction industry.

Within the series of programs, one is called the 40-Hour Safety Supervisor program. Completing this training qualifies a person to meet the training required for the STS-Construction certification and prepares students to sit for the STS-Construction Examination. Another program in the series is the 100-Hour Safety Technician Training Program. It prepares individuals to qualify and sit for the CHST Examination.

NCCER publishes training materials for these programs. Visit their website at [www.nccer.org](http://www.nccer.org) or contact their office in Gainesville, FL at 1-888-NCCER-20 for additional details.

CCHEST does not offer training for its certifications, as that is a conflict of interest for a nationally accredited certification organization. CCHEST does not endorse specific preparation or training programs that prepare individuals to qualify and sit for certification examinations. However, CCHEST is pleased that an organization like NCCER and its Safety and Health Committee have seen the value of the certifications that CCHEST offers and have designed preparation programs for people who may be candidates for these certifications.

CCHEST also knows of the following organizations that offer review and study sources for the CHST Examination:

**American Society of Safety Engineers**
1800 East Oakton Street
Des Plaines, IL 60018-2187
847-699-2929
[www.asse.org](http://www.asse.org)

**Span International Training**
4226 Greenbriar Drive
Nixa, MO 65714
888-589-6757
[www.spantraining.com](http://www.spantraining.com)
A trend in higher education in the United States is to use national examinations in various fields to measure how well a professional program prepares its students for their chosen field. Some state boards of higher education require professional programs to use such assessments.

Recently, Central Maine Technical College located in Auburn, ME, had Spring 2002 graduates of its Occupational Health and Safety program sit for the OHST Examination. Each of the 12 students submitted applications for the OHST and, under current OHST rules, were eligible to sit for the examination.

While CCHEST reports examination scores to the individual candidates only, the school arranged with the students to obtain their score reports for use in analyzing how well their programs prepared the students for entry into safety and health positions.

An additional benefit for those students who passed the OHST Examination, and fully meet the experience standard for the OHST, is that they will receive the certification near their graduation date or as soon as they accumulate the necessary experience.

The CCHEST staff worked with Central Maine Technical College to process the students' applications as a group and to ensure that they would be able to sit for the examination at approximately the same time.

The Central Maine Technical College program included a one semester hour preparation course for the OHST Examination and management of application and examination fees to ensure that students could be processed as a group.

**VA REIMBURSING CCHEST EXAMINATION FEES**

CCHEST certification examination fees are now being reimbursed by the Department of Veterans Affairs (VA). Qualified individuals can seek reimbursement for OHST, CHST and STS-Construction Examination fees.

The Board of Certified Safety Professionals (BCSP), one of CCHEST's parent organizations and a nongovernment organization, received a certificate of approval for tests offered. BCSP applied through the State of Illinois Department of Veterans’ Affairs to gain national approval.

Public Law 106-419 (http://gibill.va.gov), passed on March 1, 2001, allows for active duty, Reserve Component personnel and military retirees who are eligible under various entitlement programs (including the Montgomery GI Bill (MGIB), Veterans Education Assistance Program (VEAP), etc.), to receive reimbursement of examination fees approved by the VA for professional certification.

Those who are eligible and have recently taken, or plan to take, a CCHEST examination should contact their regional VA office for additional reimbursement details.

**CCHEST ONLINE**

CCHEST's web site offers a variety of information for certificate holders and candidates. Information on all three certifications and online application forms are available at www.cchest.org. OHST and CHST application forms are offered in Microsoft Word and Adobe Acrobat PDF format.

There is much more information available online including CCHEST’s operating procedures, code of ethics, strategic plan, charter and history. You can also read past newsletters and news releases as well as access a directory of CCHEST certificate holders. This directory is updated daily and lists OHSTs, CHSTs and STSs by city and state. Information on members of the CCHEST Board of Directors are also found online along with CCHEST staff members.

**WRITE QUESTIONS FOR CM CREDIT**

OHSTs and CHSTs can earn Certification Maintenance (CM) points for writing questions or “items” for CCHEST. OHST, CHST and STS-Construction certifications are developed from the knowledge and experience of safety practitioners in practice. These practitioners are content experts for examinations.

CCHEST needs draft items in all subject and task areas and for all three examinations. OHSTs and CHSTs can earn 1 CM point for five acceptable stand-alone examination items. Examination item development is an efficient and inexpensive way to maintain certification. And there is no limit to the number of points you can obtain through item development.

Did you know that you can also earn CM points for writing items for other nationally accredited certifications? Earn 1 CM point for five stand-alone items.

The CCHEST Examination Item Writers Manual is designed to assist OHSTs and CHSTs develop items. It is available in PDF format on the web site (www.cchest.org) or obtainable...
NEW CM OPPORTUNITIES

At the March 2002 CCHEST Board Meeting, the Board approved the addition of several opportunities for certificate holders to gain CM credit.

The list of activities below are additions to those previously included in the CM Guide. Watch the CCHEST web site for an updated CM Guide that incorporates these changes.

CATEGORY 3 - PROFESSIONAL SERVICE
(All within the annual 2 point limit)

• Volunteer Fire Department Service, 0.5 point per year
• Emergency Medical Service, 0.5 point per year
• Making a presentation on CCHEST at a local safety and health society chapter or in-house conference or a training session that is at least one day in length, 0.5 point
• Making a presentation of at least 30 minutes in length to students, 0.5 point
• Service to a conference:
  - Conference chair or member of conference organizing committee
  - National conference, 1 point
  - Regional, local or internal conference, 0.5 point
• Session organizer or judge for blind reviews
  - National conference, 0.5 point
  - Regional, local or internal conference, 0.5 point
• Session moderator, No points
• Participation in a role delineation workshop, 2 points
• Completing a job analysis survey, 1 point
• Service as a question reviewer, 2 points per year
• Service on an examination committee or Angoff procedure panel, 2 points per year
• Participation in a question writing workshop (Note: if participation in a question writing workshop extends service credits beyond the 2 allowed per year, this activity can gain credit in Category 5)
  - Full day, 2 points
  - ½ day, 1 point

CATEGORY 4 - PUBLICATIONS

• Presentation at a professional conference
  - Session length of 15-60 minutes, 0.25 point
  - Presentation at a poster session (90-120 minutes), 0.5 point
  - Presentation at a roundtable session (90-120 minutes), 1 point
• Chairing a conference session (requires organizing session speakers and technical review of presentations), 0.5 point
• Safety-related paper or article of at least 1500 words published in a peer-reviewed journal
  - Single author, 2 points
  - Multiple authors, 1 point
* (Peer reviewed means that the journal has blind review procedures and at least two people review each proposal)
• Having a patent awarded that meets all three of the following requirements
  1. An original patent (Not a duplicate in a different country or jurisdiction)
  2. Awarded (Not pending)
  3. Must have one patentable feature that:
     a. Is safety, health, environmental, or ergonomics related, OR
     b. Reduces risks through the general function of the patented devise or method
• Published, safety-related book:
  - Single or multiple author or editor, 5 points
  - Author of a chapter, single author, 1 point
  - Author of a chapter, multiple authors, 0.5 point

CATEGORY 5 - WRITING EXAMINATION QUESTIONS

• Five stand-alone questions for CCHEST, 1 point
• Questions written for other nationally accredited certifications
  - Five stand-alone question for the other organization, 1 point
  - Three questions as a series, 1 point
  - Each additional question in a series, 2 points

CATEGORY 6 - PROFESSIONAL DEVELOPMENT CONFERENCES

• Seminars and continuing education courses purchased separately, held in conjunction with a conference, and which are not included in the general conference registration receive separate credit under Category 7

CATEGORY 7 - CONTINUING EDUCATION COURSES AND SEMINARS

• Courses completed via the Internet, CD-ROM or video:
  - If offered for academic credit, see Category 8

CATEGORY 9 - ADVANCED DEGREES

• Post-baccalaureate certificate programs earn course credit only in Category 8

CATEGORY 10 - CERTIFICATION/REGISTRATION EXAMINATIONS

• CSP Specialty Examination (Ergonomics, System Safety, Construction Safety), 15 points
• Chartered Engineer (U.K.), 20 points
• Singapore Institute of Safety Officers, 20 points
• NEBOSH National Diploma, 20 points
• NEBOSH National Certificate, 20 points
• Certified Professional Ergonomist, 10 points
• Certificate Hazardous Materials Manager, 5 points
• Certified Fire Protection Specialist, 5 points
• Associate in Claims, 5 points
• Passing the Bar and receiving a legal license from any U.S. State, 5 points
• Commission Accredited Traffic Accident Reconstructionist, 5 points
• Certified Industrial Ergonomist, 2 points
• Associate in Risk Control Management, 2 points
• Certified Toxicologist, 20 points
• Licensed Pennsylvania Property and Casualty Underwriter, 2 points
• Chartered Property and Casualty Underwriter, 1 point
• Associate in Risk Management, 1 point
• Certified Insurance Counselor, 1 point
• Certified Risk Manager, 1 point
• Registered Environmental Professional, 1 point
• Certified Safety and Health Manager, 1 point
• Certified Electrical Inspector (ICBO), 1 point
• Certified Building Inspector (ICBO), 1 point

by contacting the CCHEST Examination Department. This manual contains complete instructions and the necessary forms for preparing draft examination items.
CERTIFICATE PROGRAMS EARNING OHST CREDIT CONTINUE TO EXPAND

A number of academic and private certificate training programs have applied to CCHEST for recognition for OHST waiver of experience credit. The list of programs continues to increase and includes:

**Auburn University, College of Engineering** - Occupational Safety and Ergonomics Certificate (1/4 yr)

**Central Maine Technical College** - Occupational Health and Safety Technologist Certification (1 1/4 yr)

**Eastern Michigan University** - Specialist Certificate in Industrial Health and Safety (1/4 yr) and Specialist Certificate in Construction Health and Safety (1/4 yr)

**Lakeshore Technical College** - Industrial Health and Safety, Advanced Technical Certificate (1/2 yr)

**Northern Illinois University** - Construction Safety Coordinator Certificate (1/4 yr) and Construction Safety Manager Certificate (1/2 yr)

**Safety Council of the Louisiana Capital Area** - Occupational Health and Safety Diploma, Career Path I (1/4 yr), Occupational Health and Safety Diploma, Career Path II (1/4 yr), Both Diplomas (1/2 yr)

**University of North Carolina, NC Occupational Safety and Health Education & Research Center** - Industrial Hygiene Technician (1/4 yr) and Safety Technician (1/4 yr)

**University of Washington, OSHA Region X Training Institute Education Center** - Safety and Health Specialist Certificate Program (1/4 yr)

EXAMINATIONS

Examination results and statistics for the OHST and CHST examinations during 2001 are summarized in the table below.

<table>
<thead>
<tr>
<th>Statistic</th>
<th>OHST</th>
<th>CHST</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. Questions</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Passing Score</td>
<td>60%</td>
<td>65.5%</td>
</tr>
<tr>
<td>Average Score</td>
<td>65%</td>
<td>73.7%</td>
</tr>
<tr>
<td>Std Deviation</td>
<td>22.7</td>
<td>12.52</td>
</tr>
<tr>
<td>No. Candidates</td>
<td>103</td>
<td>91</td>
</tr>
<tr>
<td>Percent Passing</td>
<td>66%</td>
<td>90.1%</td>
</tr>
<tr>
<td>Reliability (KR20)</td>
<td>0.945</td>
<td>0.936</td>
</tr>
<tr>
<td>Std Error of Measurement</td>
<td>5.932</td>
<td>5.1998</td>
</tr>
</tbody>
</table>

During 2001, CCHEST awarded new certifications in each program as follows:

<table>
<thead>
<tr>
<th>Certification</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>OHST</td>
<td>68</td>
</tr>
<tr>
<td>CHST</td>
<td>81</td>
</tr>
<tr>
<td>STS-Construction</td>
<td>183</td>
</tr>
</tbody>
</table>

SPONSORING ORGANIZATIONS RECEIVE PLAQUES

CCHEST awarded participation plaques to employers using the STS-Construction certification during 2001. The plaques recognize the number of people achieving the certification during the year. The following companies were recognized:

- **Rust Construction**, Birmingham, AL, 43 STS certificate holders
- **Veco Construction**, Anchorage, AK, 38 STS certificate holders
- **MK Ferguson**, St. Charles, MO, 14 STS certificate holders
- **BWXTO**, Miamisburg, OH, 8 STS certificate holders

FIRST CM CYCLE COMPLETED

The first Certification Maintenance cycle for those holding the Construction Health and Safety Technician certification ended on December 31, 2001. Those who received the CHST prior to January 1, 1997, needed to submit a report of activities completed and points claimed by March 31st of this year. As expected, most certificate holders did not have problems achieving the 20 points required per 5-year cycle.

If you have questions about the CM program, please contact Barbara Manolakes (phone: 217-359-2686 Ext. 115; fax: 217-359-0055; email: barbara@bcsp.org) who handles CCHEST programs.

CERTIFICATE HOLDERS

The table below lists the number of certificate holders in each CCHEST certification at the end of 2001.

<table>
<thead>
<tr>
<th>Certification</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>OHST</td>
<td>1,291</td>
</tr>
<tr>
<td>CHST</td>
<td>405</td>
</tr>
<tr>
<td>STS-Construction</td>
<td>413</td>
</tr>
</tbody>
</table>
RECERTIFICATION

During 2001, 249 individuals holding the OHST and CHST completed their five-year Certification Maintenance cycle and were required to complete a report of recertification activities in order to retain their certification. Of those, 222 submitted reports and a portion were selected for an audit to demonstrate proof that the points claimed were actually earned. Nearly all selected for audit were able to document their activities.

Based on a sample of submitted reports, the average person earned 29.3 points compared to the 20 required for a five year cycle.

Most of the points came from four categories:

- **Category 1:** Health and Safety Practice
- **Category 2:** Health and Safety Organization Memberships
- **Category 6:** Professional Development Conferences
- **Category 7:** Continuing Education Courses and Seminars

The average number of points gained from each category of activity and the percent of those participating are listed in the following table.

<table>
<thead>
<tr>
<th>Category</th>
<th>Points</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. H&amp;S Practice</td>
<td>9.0</td>
<td>90%</td>
</tr>
<tr>
<td>2. Memberships</td>
<td>4.0</td>
<td>70%</td>
</tr>
<tr>
<td>3. Committees &amp; Offices</td>
<td>1.0</td>
<td>28%</td>
</tr>
<tr>
<td>4. Publications &amp; Papers</td>
<td>.06</td>
<td>6%</td>
</tr>
<tr>
<td>5. Exam Questions</td>
<td>.02</td>
<td>0.2%</td>
</tr>
<tr>
<td>6. Conferences</td>
<td>2.3</td>
<td>62%</td>
</tr>
<tr>
<td>7. Cont Education</td>
<td>5.8</td>
<td>68%</td>
</tr>
<tr>
<td>8. College &amp; Univ Courses</td>
<td>1.0</td>
<td>1%</td>
</tr>
<tr>
<td>9. Advanced Degree</td>
<td>2.4</td>
<td>1.4%</td>
</tr>
<tr>
<td>10. Certifications &amp; Re-exam</td>
<td>6.8</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

AUDITED FINANCIAL REPORT

For the fifth consecutive year, CCHEST completed the year with a net revenue. The net revenue goes toward a reserve fund. The CCHEST goal is to have a reserve fund equal to at least one half of a year's operating budget. The reserve fund is also needed to pay for special projects, such as periodic validation studies.

The accounting firm of McGladrey & Pullen, LLP, issued an unqualified opinion on the financial statements of CCHEST. Condensed financial statements appear as follows.

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COUNCIL ON CERTIFICATION OF HEALTH
ENVIRONMENTAL AND SAFETY TECHNOLOGISTS
(A JOINT VENTURE)
STATEMENTS OF REVENUE AND EXPENSES AND CHANGES IN NET ASSETS
Years Ended December 31, 2001 and 2000

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renewal fees</td>
<td>$123,542</td>
<td>$121,820</td>
</tr>
<tr>
<td>Examination fees</td>
<td>79,222</td>
<td>54,205</td>
</tr>
<tr>
<td>Application fees</td>
<td>48,618</td>
<td>27,235</td>
</tr>
<tr>
<td>Interest</td>
<td>9,402</td>
<td>4,337</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td><strong>250,885</strong></td>
<td><strong>203,597</strong></td>
</tr>
<tr>
<td>Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management fee - BCSP</td>
<td>97,872</td>
<td>80,430</td>
</tr>
<tr>
<td>Examination expense</td>
<td>38,712</td>
<td>29,512</td>
</tr>
<tr>
<td>Printing supplies</td>
<td>15,123</td>
<td>14,878</td>
</tr>
<tr>
<td>Travel</td>
<td>15,087</td>
<td>26,752</td>
</tr>
<tr>
<td>Postage</td>
<td>9,772</td>
<td>7,728</td>
</tr>
<tr>
<td>Legal and accounting</td>
<td>7,296</td>
<td>4,170</td>
</tr>
<tr>
<td>Data processing</td>
<td>7,018</td>
<td>7,516</td>
</tr>
<tr>
<td>Marketing</td>
<td>6,294</td>
<td>1,710</td>
</tr>
<tr>
<td>Bank charge</td>
<td>5,778</td>
<td>4,968</td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>5,359</td>
<td>7,723</td>
</tr>
<tr>
<td>Exam maintenance</td>
<td>4,750</td>
<td>-</td>
</tr>
<tr>
<td>Insurance</td>
<td>2,996</td>
<td>2,758</td>
</tr>
<tr>
<td>Office supplies</td>
<td>191</td>
<td>334</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>61 (262)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>213,171</strong></td>
<td><strong>188,217</strong></td>
</tr>
<tr>
<td>Increase in unrestricted net assets</td>
<td>42,510</td>
<td>19,380</td>
</tr>
<tr>
<td>Net unrestricted assets at beginning of year</td>
<td>64,878</td>
<td>45,198</td>
</tr>
<tr>
<td>Net unrestricted assets at end of year</td>
<td><strong>107,388</strong></td>
<td><strong>64,578</strong></td>
</tr>
</tbody>
</table>

See Notes to Financial Statements.

COUNCIL ON CERTIFICATION OF HEALTH
ENVIRONMENTAL AND SAFETY TECHNOLOGISTS
(A JOINT VENTURE)
STATEMENTS OF CASH FLOWS
Years Ended December 31, 2001 and 2000

<table>
<thead>
<tr>
<th>Cash Flows from Operating Activities</th>
<th>2001</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in unrestricted net assets</td>
<td>$42,510</td>
<td>$19,380</td>
</tr>
<tr>
<td>Adjustments to reconcile increase in unrestricted net assets to net cash provided by operating activities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>5,269</td>
<td>7,223</td>
</tr>
<tr>
<td>Change in assets and liabilities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Increase) decrease in:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>5,914</td>
<td>(1,590)</td>
</tr>
<tr>
<td>Other</td>
<td>374</td>
<td>(1,227)</td>
</tr>
<tr>
<td>Increase in:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>23,236</td>
<td>25,312</td>
</tr>
<tr>
<td>Unearned renewal and exam fees</td>
<td>29,197</td>
<td>13,533</td>
</tr>
<tr>
<td><strong>Net cash provided by operating activities</strong></td>
<td><strong>106,490</strong></td>
<td><strong>65,131</strong></td>
</tr>
<tr>
<td>Cash Flows from Investing Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exam development costs</td>
<td>- (611)</td>
<td>- (611)</td>
</tr>
<tr>
<td><strong>Net cash used in investment activities</strong></td>
<td><strong>-</strong></td>
<td><strong>-</strong></td>
</tr>
<tr>
<td><strong>Increase in cash</strong></td>
<td><strong>106,490</strong></td>
<td><strong>62,520</strong></td>
</tr>
<tr>
<td>Cash:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning</td>
<td>207,299</td>
<td>144,779</td>
</tr>
<tr>
<td>Ending</td>
<td><strong>313,789</strong></td>
<td><strong>207,399</strong></td>
</tr>
</tbody>
</table>

See Note to Financial Statements.

COUNCIL ON CERTIFICATION OF HEALTH
ENVIRONMENTAL AND SAFETY TECHNOLOGISTS
(A JOINT VENTURE)
NOTES TO FINANCIAL STATEMENTS

Note 1. Nature of Organization and Significant Accounting Policies

Nature of organization:
The Council on Certification of Health, Environmental and Safety Technologists (CCHEST) is a joint venture between American Board of Industrial Hygiene, Inc. (ABHI) and Board of Certified Safety Professionals (BCSP). CCHEST is a nonprofit joint venture organized to provide certification of health, environmental and safety technologists.

Significant accounting policies:

- Renewal, exam and application fees: Revenue from renewal fees is recognized in the calendar year to which it applies. Unearned renewal and exam fees represent revenue applicable to future periods.
- Revenue from examination fees is recognized when the examinations are given, or when the time allowed to take the exam expires.
- Revenue from application fees is recognized as received.

Development costs: Examination development costs are capitalized when incurred and amortized over three years.

Use of estimates in the preparation of financial statements: The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Note 2. Concentrations of Credit Risk

The Council maintains its cash in bank deposit accounts which, at times, may exceed federally insured limits. The Council has not experienced any losses in such accounts, and believes it is not exposed to any significant credit risk on cash.

Note 3. Transactions with Related Parties

BCSP performs administrative duties related to the CCHEST’s operations and receives a management fee for these services. This fee is based on the number of applications received by CCHEST, the number of examinations administered and the number of certifications of occupational health and safety technologists, construction health and safety technologists and safety trained supervisors in construction. BCSP charged the CCHEST $97,872 and $80,436, to cover direct staff support and overhead for the years ended December 31, 2001 and 2000, respectively. CCHEST owed BCSP $98,200 (including $328 of other miscellaneous expenses) and $80,930 as of December 31, 2001 and 2000, respectively, which is included in accounts payable in the accompanying statement of financial position.
In the production of the 2002 *CCHEST Directory*, some STS-Construction candidate holder names were mistakenly omitted. They are included below. We apologize for the exclusion and the inconvenience.

If your name was omitted from the *Directory* and not listed here, please contact Heather Murphy (phone: 217-359-9263 Ext. 118; fax: 217-359-0055; email: heather@bcsp.org). Those achieving certification after November 1, 2001 will be included in the 2004 *CCHEST* Directory.

ECKLES, JONATHAN
1808 EASTON CT
NASHVILLE, TN 37214

GALARIADA, JIM F
84-604 WIDEMANN STREET
WAIAEAE, HI 96792

GURLEY, MARSHALL L
PO BOX 91357
RALEIGH, NC 27675-1357

KEISS, ALFRED W
532 MIDVALE RD
UPPER DARBY, PA 19082

MEHLENBACHER, RICHARD P
10405 TALLEYRAN DRIVE
AUSTIN, TX 78750

PENDY, GARY D
2100 EASTWOOD AVE
AKRON, OH 44305

RYAN, THOMAS F
PO BOX 1445
AUBURN, ME 04211

STROMBERG, MICHAEL M
4078 SHADOWLEAF DRIVE
BELLBROOK, OH 45305

VESS, MICHAEL T
7950 W 46TH AVE
WHEAT RIDGE, CO 80033

VETROMILE, JULIA B
WASHINGTON GROUP
353 SACRAMENTO ST
SUITE 1500
SAN FRANCISCO, CA 94222-3604

VIRANI, ASIF
4934 WOODSTONE DRIVE
APT 705
SAN ANTONIO, TX 78230

WALKER, JAMES M
2640 W 33 N
IDAHO FALLS, ID 83402

WARNock, Stephen D
2090 ASHLAND AVENUE
OKemos, MI 48864

WARREN, STEVEN D
714 SCARLET OAK DRIVE
LAKE ST LOUIS, MO 63367-2140

WEAMIRE, GARTH
735 WEST 45TH APT #1
ANCHORAGE, AK 99503

WELCH, WILLIAM H
2814 PARK NEW YORK DRIVE
FLORISSANT, MO 63031

WESTER, TY C
2738 CHRYSLER
CHEYENNE, WY 82007

WESTON, CHRIS S
5981 MERGENTHAL COURT
ST CHARLES, MO 63304

WHITE, JOHN T
11337 CLEAR POINT DR
KNOXVILLE, TN 37932

WHITE, REXFORD G
1432 S SNEED
SEDALIA, MO 65301

WHITSON, RICK L
107 CEDAR BROOK LN
KINGSTON, TN 37763-4130

WILKE, RANDY T
7911 CASEY CIRCLE
ANCHORAGE, AK 99507-3083

WILKerson, RICHARD B
1508 RANDALL PARK DRIVE
KNOXVILLE, TN 37922

WILLIAMS, DANA E
990 ALAMO ROAD
LAOS ALAMOS, NM 87554

WILLIAMS, TIMOTHY A
10453 INDEPENDENCE CIR
WESTMINSTER, CO 80021

WILSON, COREY S
12125 BLACK ANGUS
AUSTIN, TX 78727

WILSON, DANIEL C
3204 BURNING TREE DRIVE
HOOVER, AL 35226

WILSON, JEFFREY C
3010 HORIZON STREET
ANCHORAGE, AK 99517

WILSON, JOANNA M
6081 FOURTH AVENUE
MIAMISBURG, OH 45342

WILSON, RHONDA G
6080 DEFRAME CT
ARVADA, CO 80004

WINSHIP, BRUCE G
5518 KIRKWOOD DRIVE
CONCORD, CA 94521

WINTER, JEFFREY O
10468 ROBB CT
WESTMINSTER, CO 80226

WISENOR, MITCH B
26 BLUFF SPRING CT
ST CHARLES, MO 63303

WOLF, CHARLES H
3207 GREENSBOROUGH DR
HIGHLANDS RANCH, CO 80129

WOLF, KATHLEEN Z
3207 GREENSBOROUGH DR
HIGHLANDS RANCH, CO 80129

WOOD, MARK
28969 MARSHALL LANE
EVERGREEN, CO 80439

WOOD, WILLIAM O
833 PINTAIL RD
KNOXVILLE, TN 37922

WOODARD, JESS C
16902 VILLAGE OAK LOOP
AUSTIN, TX 78717

WOODS, DIANA K
17615 W 16TH AVE 1-307
GOLDEN, CO 80401

YAUCH, RONALD J
13120 BROWNFERRY ROAD
ATHENS, AL 35611

ZACHARY, MARK S
3270 NORTH MADISON AVE
LOVELAND, CO 80538

ZANE, JAMES L
53-836 KAM HIGHWAY
PO BOX 528
HAUULA, HI 96717-0528

ZARATE, ROBERT J
11022 MELODY DRIVE
NORTHGLENN, CO 80234

ZUSHIN, JAMES E
3500 E STATE ROAD
BARBERTON, OH 44203