

# 1970

### January 15

Muammar al-Qaddafi is proclaimed premier of Libya.

### March 25

The Concorde makes its first supersonic flight.

The Ford Pinto is introduced.

### April 10

Paul McCartney announces that the Beatles have disbanded.

"Monday Night Football" debuts on ABC.

Top movies include M\*A\*S\*H, Patton, Love Story and Airport.

### March 5

A nuclear nonproliferation treaty goes into effect after ratification by 43 nations.

### April 1

President Richard Nixon signs the Public Health Cigarette Smoking Act into law, banning cigarette television advertisements in the U.S.

### April 11

Apollo 13 launches for the moon.

# The Need for Certification of the Safety Professional

By George L. Gorbell

Reprinted from July

# 1970

*At the time this article was published, George L. Gorbell was manager, safety and fire protection, for Monsanto Co., St. Louis. He was ASSE's president for 1960-61 and is credited with helping to establish the Board of Certified Safety Professionals in 1969. He was serving as one of its directors when he wrote this article. Gorbell earned a B.A. in Civil Engineering from Northwestern University, then became a safety engineer with Liberty Mutual Insurance Co. for 14 years. During his career, Gorbell held offices in many safety groups, including Missouri Safety Council, National Safety Council, Manufacturing Chemists Assn. and American Society of Safety Research. He was named an ASSE Fellow in 1964.*

OVER THE PAST 10 YEARS, ASSE has actively strived to upgrade the safety professional and enable him to attain a clear-cut professional status in the eyes of management, government and other professionals—all the time recognizing that nothing could evidence professional competence better than actual certification of those truly qualified. The author, a

prime mover in all this, traces the 10-year history of the certification movement and cites six important ways in which today's certification by the newly established Board of Certified Safety Professionals will benefit not only everyone in the safety profession, but also U.S. industry and the public at large.

The decade of the 1960s, now come to a close, will long be remembered by those in the safety field as the period that marshaled in what could almost be called "the renaissance of professional safety." The bringing to fruition through the diligence of many dedicated safety practitioners under the aegis of the American Society of Safety Engineers the dreams and plans which have culminated in establishing the safety professional's place in the sun.

Although it was the subject of frequent discussions and considerable thinking for many years, it was 1963 before ASSE conceived a logical approach to identifying the type of work safety personnel should be doing, and to establish a plan for their growth and development that would give them legitimate claim in the eyes of management and the

**April 13**

An oxygen tank on Apollo 13 explodes, forcing the crew to abort the mission. The crew returns to earth safely on April 17.

**June 10**

President Nixon signs a measure lowering the voting age to 18.

Garry Trudeau's "Doonesbury" comic strip debuts.

The Carpenters receive the Best New Artist Grammy Award.

**December 29**

Occupational Safety and Health Act is signed into law by President Nixon.

Median household income (in current dollars) reaches \$8,734.

**May 4**

Four students are killed and nine are wounded during an antiwar demonstration at Kent State University in Ohio.

**October 15**

35 construction workers are killed when a section of the new West Gate Bridge in Melbourne collapses.

**November 14**

75 people affiliated with the Marshall University football team die when their charter plane crashes on approach to Tri-State Airport.

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public, as practitioners of professional standing. The plan was called the Professional Development Project. It was decided that the project be undertaken in three distinct phases, separate in subject, but interrelated in purpose.

### The Professional Development Project

Phase I was directed to outlining the scope and functions of the professional safety position in an attempt to precipitate out of a mass of variable position titles and varying functions a common denominator that would best delineate the safety professional's job. This was no mean task, and the committee assigned to it labored long and arduously to complete its objective. The conclusions of the committee were published in December 1966 by ASSE in a four-page report entitled "Scope and Functions of the Professional Safety Position," which I recommend for your reading.

Briefly, it identifies four major areas comprising the principal functions of the safety professional, then furnishes a comprehensive analysis of each area. The areas are:

- 1) Identification and appraisal of accident- and loss-producing conditions and practices plus an evaluation of the severity of the accident problem.
- 2) Development of accident-prevention and loss-control methods, procedures and programs.
- 3) Communication of accident- and loss-control information to those directly involved.
- 4) Measurement and evaluation of the effectiveness of the accident and loss-control system and the modifications needed to achieve optimum results.

While we are considering the safety professional's functions, you may want to "try on for size" the definition of a safety professional that you will find in the bylaws of the Board of Certified Safety Professionals when you apply for certification as a certified safety professional. "An individual who utilizes the expertise derived from a knowledge of the various sciences and professional experience, to create or develop procedures, processes, standards, specifications and systems to achieve an optimal control or

reduction of the hazards and exposures which are detrimental to people and/or property by the utilization of analysis, synthesis, investigation, evaluation, research, planning, design and consultation."

But I am getting ahead of myself. Let's look at Phase I of the Professional Development Project. This involved the study of current educational opportunities in safety and the development of a curriculum guide for a bachelor of science degree in occupational safety. Although Phase I has not been completed, it is very close to the final wrapup.

The committee assigned to this phase conducted a survey that contacted 1,250 four-year colleges and universities in the U.S. and Canada requesting information on degree programs and courses. It was found that 1,012 courses in safety and related fields are offered by 280 institutions. Undergraduate (four-year) degrees are offered by five institutions (two degrees in industrial safety, one in safety management and two in fire protection engineering). Graduate degrees are offered by 14 institutions and 196 institutions have no courses in safety.

ASSE published this survey in July 1969 as a "Status Report: Educational Opportunities." It is a most interesting reference for those who desire information on the institutions and available courses listed in the following categories: industrial safety/ industrial accident prevention, safety engineering, safety management/administration, safety education, general safety, accident prevention, driver safety/traffic safety, fire protection, and industrial hygiene/health and environmental health.

The growing list of institutions now offering or actually planning undergraduate-degree opportunities reflects not only the institutional interest, but also presents a challenge to every safety professional to continually advance his knowledge and capabilities. Further, it will raise the level of competence in the safety profession, and enhance possibilities of the eventual adoption by the states of legal registration for the safety professional. The Phase I Committee recently published a "Curriculum Guide for a Bach-

*ASSE began publishing a journal in 1956.*

*To celebrate 50 years of keeping SH&E professionals current in this dynamic field, each issue of Professional Safety in 2006 will feature an article from a past issue of the journal.*

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## W. Eugene Stuffing,

then director of safety for Carrier Corp., Syracuse, NY, received the honor of being designated the first certified safety professional. Stuffing was ASSE's president in 1967-68.

elor of Science Degree in Occupational Safety," which presents recommendations concerning the development of an educational program to provide the unique and diversified knowledge which will be required if future safety professionals are to meet the challenges of tomorrow, so apparently Phase I is just about complete.

We now come to Phase II, which concerns registration or certification of the safety professional. Actually, preliminary research was done on this project in 1960, three years before the adoption of the Professional Development Project. A special study was initiated to secure and analyze requirements for registration in 50 states. It was found that most state laws require graduation from an accredited engineering curriculum, followed by approximately four years of responsible engineering experience, plus the successful completion of an oral and/or written examination. Most state laws, however, permit the substitution of practical experience for formal education.

It was the conclusion of the Phase II Committee that legal registration was out of the question at this time since it would require specific legislation in each state for universal effectiveness. Also, to gain the recognition of the states, it would be necessary to have well-defined and accepted university curricula for individuals to become educated in this specialization. It was felt that the alternative, which could be a base from which to work for eventual legal registration, was the formation of a special corporation whose functions would be to determine the individual's qualifications by either written or oral examination, then issuing some identification that would indicate the requirements have been met.

In October 1968, the Executive Committee of ASSE decided to go ahead with a certification program; so an initial board of directors of the Board of Certified Safety Professionals, comprising nine persons, was appointed to draft bylaws, secure a charter for incorporation, prepare requisites for certification,

Today, there are more than 10,700 CSPs.

### CERTIFICATION FOR SAFETY PROFESSIONALS

- 1967** —ASSE ad hoc committee studies certification for safety professionals.
- October **1968** —ASSE committee recommends establishing a certification board.
- July **1969** —BCSP is incorporated in Illinois as a not-for-profit corporation independent of member organizations.
- January **1970** —First CSP applications accepted.
- January **1972** —Waiver of examination standards expire.
- October **1972** —First CSP examination offered.

Source: BCSP report, "A Brief History of the Board of Certified Safety Professionals: 1969-1999."

application forms, examinations, etc. I can personally attest to the diligence of the board in setting up the certification program, and predict that early in 1970 the board will be ready to accept applications.

### The Need for Certification

Now that you know that certification of the safety professional is already becoming a reality, it seems a bit late to discuss the need for certification. Maybe we should examine the values associated with certification—its immediate and future effects on the safety profession, the practitioners, industry and the public.

What will certification do for the safety profession, assuming that the certification system is accepted as a valid, reliable means for attesting to the qualifications and competence of an individual to be designated a safety professional?

1) It should raise the general level of competence in the profession by encouraging those who may lack the necessary qualifications for certification to persevere in the improvement of their knowledge, skills and capabilities to meet the requisites for certification.

2) The certified safety professional will be recognized as one who has demonstrated initiative, drive and determination by his voluntary subjection to the examination of his knowledge and abilities as a safety practitioner. His opportunities to advance in the field will be enhanced because prospective employers will recognize his CSP as a stamp of approval, indicative of a high degree of competence. One does not have to be a seer to predict with confidence that the 1970s and years beyond will open new and greater horizons for the qualified safety professional. The tremendous increase in scientific knowledge and technological advancement in all aspects of industry, government and transportation introduce complexities in safety that will require the professional trained to use scientific principles and methods to achieve adequate results.

Imminent, and undoubtedly inevitable, federal legislation in occupational safety and health, mining, transportation, the recently passed Construction Safety Act, the Highway Safety Act, air and stream pollution acts, and the increasing interest in product safety as evidenced by the formation by the government of a National Commission for Consumer Safety, are bound to demand the services of thousands of safety and health professionals. Those with certifications in their professions will be barraged with offers from the federal and state agencies that are woefully undermanned, and industry that will be required by law to improve its safety and health programs to meet government standards.

ASSE conducted a survey in 1968 of large industrial employers to determine the need for professional safety personnel in the coming years. The total needs were estimated close to 1,000 safety professionals annually. It is estimated that the combined needs of

the federal and state governments will be about 12,000 professionals to cope with the inspection needs if all of the legislation now pending becomes law.

3) As the number of certified safety professionals grows and the educational institutions observe the expanding needs of government and industry for qualified professionals, they are certain to establish

## The First Safety Fundamentals Examination

**The first examination leading to the CSP was offered in October 1972. At that time, candidates had to pass one 300-question exam. In 1978, the originally planned examination model was achieved. Under this model, one exam covered basic safety information and a second exam covered applied safety information. The first exam was initially called the Core Examination. Its title was changed in 1991 to Safety Fundamentals Examination.**

Source: BCSP report, "A Brief History of the Board of Certified Safety Professionals: 1969-1999."

curricula in occupational safety. Eventually, the states will recognize the safety profession as one which merits legal registration based on the fact that accredited curricula will be available in colleges and universities.

It may be of interest to know that planning, designing and changing processes wherein the safeguarding of life, health or property is concerned are presently designated as "professional engineering" by the laws in New York State and other states. "Safety engineers" are presently licensed as such by 12 states.

4) Certification is a morale-builder, bringing justifiable pride to the individual who has proven his competence in the field of safety by his ability to meet the requirements for certification as a safety professional. His professional designation will identify him with his work and encourage him to assume full responsibility for the quality of his work.

5) Certification will promote high standards of professional conduct and ethical practices. It will foster top-quality job performance and integrity.

6) If an individual has the drive and ambition which motivates him voluntarily to seek certification, is it not logical that management will furnish him an opportunity to demonstrate this quality of determination in the performance of responsible tasks?

### Conclusion

Over the past 50 years, the safety profession has had a long, hard pull to attain its present tenuous status in the professional community. It is poised on

The OSH Act was signed into law in late December 1970.

## WORK ACCIDENT COSTS



**Total Cost in 1970**

**\$9,100,000,000**



**Visible Costs**

**\$4,000,000,000**



**Other Costs**

**\$4,000,000,000**



**Fire Losses**

**\$1,100,000,000**



**Cost Per Worker to Industry**

**\$110**

*\*Visible costs include wage losses of \$1,800,000,000, insurance administrative costs of \$1,300,000,000 and medical costs of \$900,000,000.*

*\*Other costs include the money value of time lost by workers other than those with disabling injuries who are directly or indirectly involved in accidents. Also included is time required to investigate accidents and generate related reports.*

Source: National Safety Council, *Accident Facts*, 1971 edition.

the threshold of opportunity to take a significant step toward acceptance as a peer among professions.

In the 1960s, the safety profession achieved its objectives. Through a planned approach by ASSE, it worked to define the scope and functions of the professional safety position; it developed courses and curricula for use by educational institutions in considering the establishment of a bachelor of science degree in occupational safety; and, as the last phase in its Professional Development Project, it was instrumental in creating a special corporation whose functions are to determine an individual's qualifications by education, experience and examinations for designation as a certified safety professional.

The benefits of certification of the safety professional to the practitioner, the profession, the employer and the public are obvious. The evidence of competency in safety furnished by certification will improve the individual, raise the general level of competency in the safety profession, promote high standards of professional conduct, assure management that it will receive top-quality job performance, and last, but definitely not least, it will enhance the safety profession's chance to take its rightful place in the sun. ■

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Names of the first group of CSPs was published in the August 1970 issue of *Professional Safety*. Today, there are more than 10,700 CSPs.

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