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PUBLICATIONS

Conformity Assessment Workshop on Pressure Vessels

Bert G. Simson

**U.S. DEPARTMENT OF COMMERCE
National Institute of Standards
and Technology
Office of Standards Services
Gaithersburg, MD 20899**

**U.S. DEPARTMENT OF COMMERCE
Robert A. Mosbacher, Secretary
NATIONAL INSTITUTE OF STANDARDS
AND TECHNOLOGY
John W. Lyons, Director**

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**U.S. DEPARTMENT OF COMMERCE
National Institute of Standards
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Gaithersburg, MD 20899**

April 1991



**U.S. DEPARTMENT OF COMMERCE
Robert A. Mosbacher, Secretary
NATIONAL INSTITUTE OF STANDARDS
AND TECHNOLOGY
John W. Lyons, Director**

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A. Executive Summary

In an April 1990 hearing by the National Institute of Standards and Technology (NIST), a panel of Government experts explored possible Government roles to serve the needs of U.S. industry in international standards development and conformity assessment. One of the conclusions in the analysis of the April hearing record (NISTIR 4367) states that "The Government should sponsor or cosponsor with interested parties from the private sector a series of workshops with various industry sectors..."

The purpose of the pressure vessel workshop, cosponsored by The American Society of Mechanical Engineers (ASME) and the National Institute of Standards and Technology (NIST), was to explore how the U.S. Government can assist the pressure vessel industry in conformity assessment activities aimed at gaining acceptance of their products in such other markets as the European Community. The workshop was held on January 31, 1991, at the Department of Commerce auditorium in Washington D.C.

One hundred thirty two persons attended the workshop. Seven representatives of government and industry presented statements to a panel of private and public sector representatives. Government officials concentrated on developments in the European Community especially with respect to the status of EC regulations.

The following recommendations were reached by consensus of the private sector panelists:

1. The U.S. Government should promote U.S. national consensus standards and related conformity assessment programs for pressure vessels as a means of satisfying European Community directives.
2. The National Institute of Standards and Technology (NIST) should enhance its standard information capability to provide draft regional and international standards for the pressure vessel sector.
3. The U.S. Government should negotiate with the European Commission to provide an agreement making it possible for the U.S. Government to designate notified bodies for the pressure vessel sector in the United States.
4. The U.S. Government should establish a pressure vessel sectoral technical advisory organization to assist in the development of positions for use as a basis for negotiations with the European Community on matters relating to conformity assessment.

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B. Organization of the Report

This report describes the proceedings and results of the Conformity Assessment Workshop on Pressure Vessels, the first in a series of workshops aimed at obtaining private sector recommendations for government action. The following section (C) contains background information for the holding of these workshops, and is followed by summaries of presentations by panelists (Section D). The full texts of those presentations are provided in the appendixes.

Section E recapitulates an afternoon session at which written questions submitted by the audience were discussed by the workshop panel. Section F presents recommendations drawn up by the private sector participants, and Section G reports on anticipated future actions.

C. Background

In July 1989, the Department of Commerce (DOC) held two days of hearings to determine U.S. private sector interests in the European Community's standard development and conformity assessment efforts. In another hearing held in April 1990 by the National Institute of Standards and Technology (NIST), a panel of Government experts explored possible Government roles to serve the needs of U.S. industry in international standards development and conformity assessment. Sixty-five organizations and individuals made oral presentations at the April hearing, and 257 additional written comments were submitted for the record.

One of the conclusions in the analysis of the April hearing record (NISTIR 4367) states that "The Government should sponsor or cosponsor with interested parties from the private sector a series of workshops with various industry sectors to specify more precisely the needs for coordination and representation of U.S. conformity assessment interests abroad. Then, appropriate systems should be developed to meet those needs and promote effective application of these mechanisms in behalf of U.S. manufacturers and exporters. Particular consideration should be focussed on the division of responsibilities between Government and the private sector in a cooperative mode of operation."

The information obtained from the two hearings has been thoroughly reviewed by the U.S. Government's Working Group on Conformity Assessment (testing, certification, accreditation, quality assessment, etc.). Their suggestions have been embodied in the recommendations of the U.S. Government's Interagency Task Force on EC-92, the principal EC 92 trade policy development body of the U.S. Government. A section of the Task Force's Three Part Plan states that "...in association with the NIST workshops cosponsored with interested private sector groups on general issues of international interests in conformity assessment, the USG (U.S. Government) should take advantage of this opportunity to seek the potential needs of industry to EC 1992 'new approach' testing and certification."

In consultation with NIST officials, the ASME organized a workshop panel consisting of experts from manufacturers' trade associations, unions, the insurance industry, professional societies, users' associations, boiler and pressure vessel inspectors and government. (The reason for selecting pressure vessels for the first of these workshops was that the corresponding EC directive was implemented in July 1990. A list of the participants and their affiliations is at Appendix 2).

On December 14, 1990 NIST published a Federal Register Notice (Appendix 1) outlining the purpose and agenda for the workshop and inviting interested parties to attend and observe. Including the panel, the total attendance of the workshop was one hundred and thirty two.

The purpose of this first workshop was to determine how the U.S. Government can assist the pressure vessel industry in conformity assessment activities for the purpose of gaining acceptance of their products in other markets, such as the EC.

This report was prepared by NIST, circulated for comment to the panelists, and put in final form to accommodate appropriate comments. Copies will be mailed to those who so requested at the workshop.

D. Panel Presentation

Dr. John W. Lyons, Director, NIST, welcomed the participants. He described how this important first in a series of sectoral workshops with the private sector was an outcome of the April 1990 NIST hearings. He conveyed the Secretary of Commerce's view that EC 92 presents a top priority challenge to increase U.S. exports which, if successful, can be expected to diminish the current trade imbalance and economic recession. He cited the U.S.'s current export volume is seven percent of Gross National Product contrasted to nineteen percent of GNP exported by our trading partners; the U.S. figure needs to be increased.

Dr. Lyons added that he considers conformity assessment, the focus of this Pressure Vessel Workshop, more challenging than standards, which are only the first step in the process of assuring uniform production of high quality products. He urged the panel to examine (1) whether systems in place now may be threatened by EC regulations; (2) how we can work with the EC to remove any threat; (3) alternative procedures to systems proposed by the EC that appear vague or unclear; and (4) ways in which the pressure vessel sector can function within the framework of EC "Notified Bodies."

Mr. Charles Ludolph, Director, Office of European Community Affairs, International Trade Administration, Department of Commerce, next presented an overview of the European Community program for conformity assessment. He stated that three EC New Approach directives apply to pressure vessels, i.e., Construction Products, Simple Pressure Vessels and Large Pressure Vessels. Only the Simple Pressure Vessel directive and another directive on Toy Safety have as yet been implemented. Construction Products will be the next major New Approach directive, to be implemented in mid 1991, followed by Electromagnetic Compatibility in early 1992.

Appendix 3 presents the full text of Mr. Ludolph's remarks including: (1) conformity assessment; (2) who can certify; (3) product certification outside the EC; (4) developments outside of regulated sectors; and other topics.

Mr. Mark Z. Orr, Deputy Assistant U.S. Trade Representative for Europe and the Mediterranean, next stated that EC 92 represents a major commercial opportunity for U.S. exporters. Thus, securing adequate access for U.S. importers to EC testing and certification procedures is a top priority for the U.S. government. He stressed that EC 92 is a major undertaking which will take time to implement. U.S. exporters should

expect to encounter some problems during the transition period. Mr. Orr offered the following issues as possible topics for discussion:

- o Insufficient access to EC testing and certification procedures could deny U.S. firms and conformity assessment entities the commercial benefits of the single market.
- o Lack of EC provisions for third countries, such as the United States, to appoint notified bodies, as well as procedures for conducting testing and certification outside the EC could put U.S. firms at a competitive disadvantage.
- o Subcontracting of testing by an EC notified body to a third country entity is a potential partial solution. However, to date, the scope of permissible activities would appear to be too narrow with evaluative activities apparently excluded.
- o Mutual recognition agreements also may provide a potential solution provided the conditions attached by the Community can be adapted to meet the particular characteristics of the U.S. market and the interests of U.S. industries.

The full text of Mr. Orr's remarks is at Appendix 4.

Chairman Cooper called on the following four private sector representatives to present their prepared texts:

1. **Oscar J. Fisher, Senior Vice President, ASME Codes and Standards (Appendix 5)**

Mr. Fisher provided a brief history of the ASME. The ASME is managed by an elected Board of Governors which assigns the programs' supervision to five appointed Councils: Education, Member Affairs, Engineering, Public Affairs, and Codes and Standards. The Boiler and Pressure Vessel Committee is responsible for administrative and technical aspect of boilers and pressure vessels.

Mr. Fisher expressed belief that it may be desirable for ASME to seek notified body status so that the CE mark, the EC attestation of conformity to the requirements of a directive, can be administered in the U.S.

2. **Michael F. Sullivan, Manager of International Operations, National Board of Boiler and Pressure Vessel Inspectors (Appendix 6)**

The National Board of Boiler and Pressure Vessel Inspectors

(The National Board) is a non-profit, private sector organization whose members are responsible for the administration and enforcement of the boiler and pressure vessel safety laws of their jurisdictions. An elected Board of Trustees establishes the National Board's policies. The prime objective of the National Board is safety. The National Board interacts with the ASME Boiler and Pressure Vessel Code Committees and is represented on all of its principal subcommittees.

Mr. Sullivan proposed that:

- o The ASME Boiler and Pressure Vessel Committee compare the ASME quality control requirements to ISO 9000 criteria (ISO quality management and quality assurance standards) and bring ASME's requirements closer to ISO 9000 wording.
 - o All negotiations with the EC be made from a position of strength, especially the worldwide acceptance enjoyed by ASME.
 - o Negotiation with the EC be on a government to government basis with full utilization of the knowledge of the pressure vessel sector.
 - o All negotiations be held on a sector by sector basis.
3. **Robert J. Cepluch, Consulting Engineer, Pressure Vessel Manufacturing Association (Appendix 7)**

Mr. Cepluch, a consulting engineer retained by the Pressure Vessel Manufacturing Association has had experience with inspection, quality assurance and quality control, manufacturing and erection of pressure vessels for more than thirty five years. He directed his comments principally to the seven topics listed in the Federal Register (Appendix 1) and recommended the following for further consideration by the panel:

- o The U.S. Government must seek a provision to put U.S. manufacturers on an equal competitive basis with pressure vessel manufacturers elsewhere.
 - o The pressure vessel sector needs, without delay, U.S. Government acceptance and promotion of existing U.S. standards and U.S. accreditation as a means of satisfying EC directives.
4. **Russell Mosher, Executive Director, American Boiler Manufacturing Association (Appendix 8)**

Mr. Mosher described the American Boiler Manufacturers Association (ABMA), the only national association representing commercial, industrial and utility boiler, and fuel burning equipment manufacturers. The ABMA believes that the overall impact of the EC 92 program will be to encourage strong and

dynamic growth in an increasingly deregulated EC market. Mr. Mosher emphasized major issues that could enhance or reduce the opportunities for U.S. companies, including technical standards and certification, public procurement, social dimensions, competitive policy, monetary policy and other potential issues.

The ABMA supports U.S. Government consultations with the EC and, where appropriate, negotiations on the above issues that are directly relevant to U.S. trade interests. Furthermore, the ABMA calls upon the U.S. Government to strengthen the support that it provides for U.S. trade, industrial, and commercial interests in Europe.

E. Questions from the Audience

Chairman Cooper devoted about ninety minutes of the afternoon session to panel discussion of questions submitted by the audience. During the lunch break, representatives from ASME and NIST worked to extract, and to group where possible, the most pertinent subjects. Some of the questions* discussed by panel members were the following:

1. What provisions are being included in ISO 9000 for materials that will be used by U.S. manufacturers as well as manufacturers in the EC?
2. Do U.S. companies who ship parts to companies in the EC for machining/assembly need to apply for EC conformity requirements, or is this the responsibility of the receiving European company?
3. Wouldn't the U.S. appear more reliable to the EC if we had one uniform code within our own boundaries? Why ASME, ASTM, MIL-STD, AWS, etc.?
4. What EC countries do not accept vessels built to the ASME code, Section VIII?
5. Can an ASME constructed pressure vessel be registered in the U.K., have a CE mark assigned, and then be sold in Germany, Italy, etc.?
6. Do we have an estimate of the annual dollar volume, or percentage of GNP, of the pressure vessel and boiler industry?
7. Is there any current indication that the full set of EN 2900/ISO 9000 quality requirements will be imposed by pressure vessel safety directives, or will only the design/fabrication requirements be referenced?
8. Will ASME become an authorized notified body for the EC?
9. Will member states or the central European body license the CE Mark?

*All questions submitted to the panel, at the workshop and subsequently, are being forwarded to ASME for appropriate follow-up by technical divisions and conferences.

10. The EC directive on simple pressure vessels enables European manufacturers to design vessels that weigh about 75% of those designed according to ASME codes. Does that imply that the EC vessels are less safe?

During the discussion period, Chairman Cooper directed questions to appropriate panel members. Some of the significant responses by panel members were the following:

- o The Department of Commerce Office of European Community Affairs can provide information on EC laws and the status of implementation by different countries. Another central source of information on international standards is NIST's National Center for Standards and Certification Information. NIST hopes to augment their database to include information on draft international standards.
- o Comments on the EC Green Paper, on how the European standards development process might be improved, could be submitted until the end of March.
- o Regarding a single U.S. Government position on standards, the panel felt that ASME boiler and pressure vessel standards were in reasonably good shape for reciprocity with the EC.
- o Even if a U.S. manufacturer meets ASME standards, products must nevertheless be examined by a notified body before the may be marketed in the EC. U.S. product would have to bear the CE mark independent of the presence of the ASME mark.
- o There is a need for the U.S. Government to represent the pressure vessel sector in negotiations with the EC to assure continued marketability of U.S. products in the EC.
- o All ASME standards should be reviewed vis-à-vis the standards currently under development in Europe.
- o Products bearing the ASME stamp may not necessarily be better than those produced in Europe. This is under study.
- o ASME and NIST are looking for input regarding the most appropriate roles for the industry and for government.
- o The U.S. Government must assure that imported pressure vessels bearing the "CE" mark meet or exceed the current U.S. safety requirements.
- o The ASME stamp, which enjoys world-wide acceptance, should be recognized as equivalent to the "CE" mark.

F. Recommendations

Based on the above discussion and recommendations extracted from the presentations of the four private sector panelists, Chairman Cooper presented a number of candidate statements to the panel for workshop adoption as the representative views of the pressure vessel sector. The private sector panelists reached agreement on the following recommendations:

1. The U.S. Government should promote U.S. national consensus standards and related conformity assessment programs for pressure vessels as a means of satisfying European Community directives.
2. The National Institute of Standards and Technology (NIST) should enhance its standard information capability to provide draft regional and international standards for the pressure vessel sector.
3. The U.S. Government should negotiate with the European Commission to provide an agreement making it possible for the U.S. Government to designate notified bodies for the pressure vessel sector in the United States.
4. The U.S. Government should establish a pressure vessel sectoral technical advisory organization to assist in the development of positions for use as a basis for negotiations with the European Community on matters relating to conformity assessment.

G. Future Actions

Based on the results of this and future workshops, NIST will collect and review recommendations to determine how the U.S. Government can best assist the private sector in gaining acceptance of U.S. products abroad. Information will be transmitted to cognizant agencies for selection of the most appropriate courses of action.

The next conformity assessment workshop, on Electromagnetic Compatibility, will be conducted in April, 1991. Other workshop topics under consideration are: Plywood, Softwood Lumber and other Wood Products; Wood Windows and Doors; Medical Devices; Machine Tools; and Personal Protective Devices.

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Appendix 1
Federal Register Notice

industry in gaining product acceptance within other markets such as the European Community (EC). Suggestions for future workshops are invited.

DATES: The Pressure Vessel workshop will be held at 9:30 a.m. on Thursday, January 31, 1991.

FOR FURTHER INFORMATION CONTACT: Dr. Stanley L. Warshaw, Director, Office of Standards Services, National Institute of Standards and Technology, Administration Building, room A-603, Gaithersburg, MD 20899 (301-975-4000).

Consistent with the growing importance of international standardization to the United States, NIST is cosponsoring a Pressure Vessel Workshop with The American Society of Mechanical Engineers to solicit views and recommendations on how the U.S. Government can assist this sector of U.S. industry in gaining product acceptance within international markets such as the EC.

Tentative topics for discussion at all workshops are listed below. Sponsors of individual workshops may identify specific issues focussed on their sectors.

1. Which EC requirements for conformity assessment are applicable to your sector?
2. Do the European regional standards (CEN/CENELEC/ETSI) or international standards (ISO, IEC, CCITT) that apply to your sector differ from U.S. standards?
3. To what extent do you feel that U.S. conformity assessment systems relating to your sector are adequate for acceptance of test data or other attestations of conformity by the EC member states?
4. Would your sector benefit from developing mutual recognition agreements between U.S. laboratories or product certifiers and their EC counterparts?
5. How can the U.S. Government better utilize private sector input when developing official positions with regard to possible negotiations with the EC for your sector for regulated products?
6. Should "CE" marks of conformity be made acceptable in the U.S. marketplace? What are the liability implications of such acceptance?
7. Does your sector need a recognizable mark of conformity? Is a U.S. mark needed?

The Pressure Vessel workshop will be held at 9:30 a.m. on January 31, 1991, in room 4830 at the U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230. To guarantee space, persons who wish to attend and observe the workshop should submit a notice in writing to Dr. Stanley L. Warshaw, Director, Office of

Standards Services, National Institute of Standards and Technology, Administration Building, room A-603, Gaithersburg, MD 20899. Requests should contain the person's name, address, telephone and facsimile numbers, and affiliations. Requests should be received by January 18, 1991

Dated: December 10, 1990.

John W. Lyons,
Director.

[FR Doc. 90-29367 Filed 12-13-90; 8:45 am]

BILLING CODE 3510-13-M

Improving Acceptance of U.S. Products in International Markets; Opportunity for Interested Parties to Attend and Observe

AGENCY: National Institute of Standards and Technology, Commerce.

ACTION: Notice of workshop.

SUMMARY: This is to advise the public that the National Institute of Standards and Technology (NIST) is cosponsoring a Pressure Vessel workshop with The American Society of Mechanical Engineers. This is the first of a series of workshops in various product sectors. The purpose is to gather information, insights, and comments to determine conformity assessment related activities (testing, certification, accreditation, quality assessment, etc.) in which the U.S. Government can assist U.S.

Appendix 2a
Panel Members

N I S T / A S M E
P R E S S U R E V E S S E L W O R K S H O P

January 31, 1991

PANEL MEMBERS

Chairman

William E. Cooper

Allen Bell	International Brotherhood of Boilermakers
Robert J. Cegluch	Pressure Vessel Manufacturers Association
Oscar J. Fisher	Senior Vice President, ASME Codes and Standards
Charles E. Ford	Chairman, ASME Board on Accreditation and Certification
Melvin R. Green	Associate Executive Director, ASME Codes and Standards
Stacy Hennessy	Associate Counsel, American Insurance Association
Charles M. Ludolph	Director, Office of European Community Affairs, ITA/DOC
John Lyons	Director, NIST
William Marx	President, Council of Industrial Board of Owners (CIBO)
Steven M. Matthews	Vice Chairman, ASME Board on Accreditation and Certification
Donald J. McDonald	Executive Director, National Board of Boiler and Pressure Vessel Inspectors
Walter R. Mikesell	Vice President, ASME Pressure Technology Codes and Standards
Russell N. Mosher	Executive Director, American Boiler Manufacturers Association
Mark Z. Orr	Deputy Asst USTR for Europe & the Mediterranean
Bert G. Simson	Senior Advisor, NIST
William J. Stuber	Chairman, ASME Board on International Standards
Harvey Stenger	Technical Director, The Hydronics Institute
Michael F. Sullivan	National Board of Boiler & Pressure Vessel Inspectors
Stanley Warshaw	Director, Office of Standards Services, NIST

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Appendix 2b

Attendees

NIST/ASME
CONFORMITY ASSESSMENT WORKSHOP
ON
PRESSURE VESSEL

January 31, 1991
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Appendix 3

Statement and Viewgraphs by Charles M. Ludolph

THE EUROPEAN COMMUNITY PROGRAM FOR
CONFORMITY ASSESSMENT

PRESENTATION BY
CHARLES M. LUDOLPH
INTERNATIONAL TRADE ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

THE ASME/NIST WORKSHOP ON PRESSURE VESSELS
"IMPROVING ACCEPTANCE OF U.S. PRODUCTS IN
INTERNATIONAL MARKETS"
WASHINGTON, D.C.

JANUARY 31, 1991

OVERVIEW

Safety and health is a primary focus in both EC directives and in standards and testing methods. The European Community intends to establish a system that harmonizes the national legal requirements for safety and health in sensitive product sectors through one set of harmonized product safety legislation, new European product standards, and a unified European mandatory conformity assessment program. In the safety and health area, sectors covered include automobiles, telecommunications, food, and the so-called "New Approach" directives.

Three of these EC New Approach directives could cover pressure vessels i.e., construction products, simple pressure vessels and large pressure vessels. All directives have been adopted by the EC Council with the exception of large pressure vessels.

Of these New Approach directives, only the simple pressure vessel and the toy safety directives have been implemented. In the case of pressure vessels, the standards required for implementation were not ready and the EC has placed that sector in a transition period of two years. There will be mutual recognition of member state approvals within the EC but not with third countries. Construction products is the next major New Approach directive to be implemented (mid-1991) followed by Electromagnetic Compatibility (early 1992).

In the case of toys, full implementation was achieved with the completion of standards. However, only 6 of the member states (Germany, France, UK, Portugal, Denmark, and Greece) have fully implemented the directive. There have been other problems with the toy safety directive--notably the acceptance of manufacturer's self-certification as one option to use to demonstrate conformity to essential safety requirements. The Italians, in particular, seem unwilling to accept self-certification for toys and potentially for other New Approach directives.

In the area of procurement, the EC has adopted several directives which provide for reference to European standards where available. The Commission asked CEN/CENELEC/ETSI to develop standards for the utilities sectors (transportation, energy, water, and telecommunications).

There is a Commission proposal on general product safety which was submitted to the Council for consideration in June 1990. This draft directive lays down provisions for the safety of marketed products, including manufactured, processed or agricultural products. The EC's product liability directive was implemented in July 1988; however, only 7 of the member states have fully implemented the directive.

CONFORMITY ASSESSMENT

EC Testing and Certification Procedures: How Will They Work?

The EC's Global Approach to testing and certification for product safety is intended to provide producers with one set of procedures for certifying product compliance with EC legal requirements. EC legislation sets minimum legal health, safety and environmental requirements for products ranging from toys to machinery to medical devices. The legislation specifies various means by which manufacturers can certify product conformance. Options include manufacturer self-declaration of conformity, third party testing, quality assurance audit and/or full type approval by a body authorized by an EC member state and recognized by the EC Commission. A "CE" mark on the product signifies that all legal requirements have been met.

Many manufacturers will have to meet the requirements of more than one directive in certifying product conformity. Take the situation for a manufacturer of commercial air-conditioning equipment, for example. Safety requirements for this equipment are covered under three separate directives - machine safety, pressure vessels, and construction products (which covers equipment installed in buildings as well as building materials themselves). Product certification would involve some combination of in-house safety testing, audit of the manufacturer's production quality assurance system, and type examination by a third party certifier (for the compressor component).

Reference to harmonized European standards relevant to EC legal safety requirements provides manufacturers the simplest route to product certification. These standards are now being developed by regional standards organizations, the European Committee for Standardization (CEN), the European Committee for Electrotechnical Standardization (CENELEC), and the European Telecommunications Standards Institute (ETSI). Manufacturers are free to refer to other standards in certifying compliance, but the certification process will be more complicated. The Community views European standards as critical to the effectiveness of their planned testing and certification system; so much so that implementation of at least one directive (pressure vessels) has been postponed for two years because standards have not yet been completed.

Who Can Certify?

All EC product safety directives provide for some third party role in testing or certification. For several - 6 of 9 directives already adopted - this is mandatory. EC member states are responsible for determining the competence of test labs and certification bodies that apply for recognition under the EC system. Approval is at the member state level, according to recognized accreditation procedures, based on the EN 45000 series of standards. Member states notify their selections - thus the term "notified" bodies - by task and by directive, to the EC Commission, which has the right to request information from member states on the competence of bodies and can require verification of qualifications.

On their own responsibility, notified bodies in the EC can subcontract specific activities to extend their ability to perform. Subcontracting entities can be located outside of the EC. Conditions and limits have not been fully specified yet, but subcontracting of testing activities has been specifically permitted by the EC Council of Ministers. The general guidelines for subcontracting indicated by the EC Commission are that notified bodies will only need to hold subcontractors to EN 45000 standards, including the requirements to maintain records; that subcontractors must test to the same standards as the notified body; and that notified bodies remain responsible for any certification activity. Still up in the air are important issues such as whether any or all aspects of quality assurance audits can be subcontracted, how widely EC notified bodies will exercise their subcontracting capabilities, and whether subcontracting arrangements will give U.S.-based manufacturers sufficient low-cost access to the EC market.

Product Certification Outside of the EC?

Under the EC system member states can only designate notified bodies from within the EC. No subsidiaries or related enterprises located in a third country can perform third party certification, accreditations or approvals, except under a mutual recognition agreement with government authorities of that country. According to EC Commission officials, any agreement would have to ensure that both parties obtain broadly equivalent opportunities to participate in each other's certification systems for the products concerned and thus similar opportunities for improved access to each other's markets. Agreements would have to include mechanisms for third country governments to guarantee that testing and certification bodies do their job properly and means for them to withdraw notification if they do not.

Developments Outside of Regulated Sectors

The EC is also promoting harmonization of testing and certification requirements in nonregulated areas, although the pace of this harmonization very much depends on initiatives in the European private sector. The Commission has created a new organization called the European Organization for Testing and Certification (EOTC), established under a memorandum of agreement with CEN/CENELEC and the European Free Trade Association (EFTA) countries. The EOTC is intended to promote mutual recognition of tests, test and certification procedures, and quality systems within the European private sector for product areas or characteristics not covered by EC legislative requirements.

Current Status

In the area of testing and certification, the EC will be finalizing its policy on third country access to its conformity assessment system, including the area of mutual recognition agreements conferring notified body status. Action is expected in early 1991. A common position has been made on the modules section of the EC's Global Approach to Testing and Certification. Adoption of this common position by the Council is expected by the end of December. This section contains information on subcontracting. To date, the EC will allow subcontracting of testing but is hesitant to permit subcontracting of so-called "evaluative" functions (including quality assurance audits).

Plans for the new European Organization for Testing and Certification (EOTC), were finalized in the summer of 1990, and a director has been named. The EOTC, designed to be the focal point for testing and certification in the nonregulated sector, will consist of various sectoral committees and agreements groups. The EOTC plans to meet in the spring to more clearly define functions, structures, and scope.

Another proposed new institution is the European Standardization System (ESS), discussed in the Commission Green Paper. The ESS, designed to better coordinate standards work, would consist of a European Standards Council and a Standards Board. The functions of these groups will be more clearly defined at a later date.

Remaining Areas of Significant Interest/Concern:

The USG has some serious concerns in the area of proposed mutual recognition agreements (MRA's) which would confer notified body status to parties in the U.S. Our concerns include such issues as who would be the responsible body in the U.S. to enter into MRA's (government or private sector bodies), whether or not the USG would be responsible for guaranteeing the performance of notified bodies, and ultimately whether MRA's are in the best interest of the U.S.

The degree of directive implementation at the member state level continues to be a problem. A July 1990 Single Market tally shows that only 19 Council adoptions have been implemented by all 12 member states. The one new approach directive which has been implemented, toys, has been implemented in only 6 states. Problems exist with the toy directive, notably different member state interpretation on the degree to which self-certification can be used to show conformity to essential requirements. The Italians have said that self-certification of toys would not be applied in Italy.

The USG continues to press for increased transparency and access to European standards bodies, primarily CEN/CENELEC. Though agreements between ISO/CEN and IEC/CENELEC have resulted in increased information-sharing, the USG will continue to press for observer status in CEN/CENELEC.

For Further Information call Office of European Community Affairs, International Trade Administration, Washington DC (202) 377 5276.

EC GLOBAL APPROACH
TO TESTING AND CERTIFICATION

- HARMONIZE NATIONAL LEGISLATION
- ESTABLISH MINIMUM LEGAL HEALTH, SAFETY AND ENVIRONMENTAL REQUIREMENTS
- DEVELOP HARMONIZED EUROPEAN STANDARDS
- PROVIDE MANUFACTURERS OPTIONS FOR CERTIFYING PRODUCT CONFORMITY TO LEGAL REQUIREMENTS
- IDENTIFY TEST AND/OR CERTIFICATION ORGANIZATIONS IN THE EC AUTHORIZED TO ATTEST TO LEGAL REQUIREMENTS
- CE MARK SYMBOLIZES COMPLETION OF THE LEGAL PROCESS

EC PRODUCT SAFETY DIRECTIVES

TOYS

CONSTRUCTION PRODUCTS

SIMPLE PRESSURE VESSELS

LARGE PRESSURE VESSELS

ELECTROMAGNETIC COMPATIBILITY

MACHINERY

PERSONAL PROTECTIVE EQUIPMENT

GAS APPLIANCES

NON-AUTOMATIC WEIGHING INSTRUMENTS

MEDICAL DEVICES (3)

TELECOMMUNICATIONS TERMINAL EQUIPMENT

FLAMMABILITY OF FURNITURE

ERGONOMICS FOR COMPUTER EQUIPMENT
(VISUAL DISPLAY TERMINALS)

CONFORMITY ASSESSMENT PROCEDURES - OPTIONS

1. MANUFACTURER SELF-DECLARATION BASED ON INTERNAL MANUFACTURING CHECK

- ** 2. EC TYPE EXAMINATION BY NOTIFIED BODY - TO BE USED IN COMBINATION WITH ANY OR ALL OF THE FOLLOWING:

 MANUFACTURER DECLARATION OF CONFORMITY TO TYPE

- ** QUALITY ASSURANCE AUDIT BY NOTIFIED BODY -
 PRODUCTION PROCESS (EN 29002)

- ** QUALITY ASSURANCE AUDIT BY NOTIFIED BODY - FINAL
 TESTING AND INSPECTION (EN 29003)

- ** PRODUCT VERIFICATION BY NOTIFIED BODY

- ** 3. UNIT VERIFICATION BY NOTIFIED BODY

- ** 4. FULL QUALITY ASSURANCE AUDIT BY NOTIFIED BODY - FOR
 PRODUCT DESIGN, PRODUCTION, FINAL TESTING AND
 INSPECTION (EN 29001)

CERTIFICATION OPTIONS, BY PRODUCT TYPE

TOYS - MANUFACTURER SELF-DECLARATION

CONSTRUCTION PRODUCTS - AT A MINIMUM, MANUFACTURER
REGISTRATION OF PRODUCTION QUALITY ASSURANCE SYSTEM

SIMPLE PRESSURE VESSELS - EC TYPE EXAMINATION

LARGE PRESSURE VESSELS - EC TYPE EXAMINATION AND
QUALITY ASSURANCE

ELECTROMAGNETIC COMPATIBILITY - MANUFACTURER
SELF-DECLARATION

MACHINERY - MANUFACTURER SELF-DECLARATION

PERSONAL PROTECTIVE EQUIPMENT - EC TYPE EXAMINATION,
WITH QUALITY CONTROL SYSTEM REGISTRATION FOR HIGHER
RISK EQUIPMENT

GAS APPLIANCES - EC TYPE EXAMINATION AND EITHER
QUALITY ASSURANCE SYSTEM REGISTRATION OR ON-SITE
CHECKS OR APPLIANCES

NON-AUTOMATIC WEIGHING INSTRUMENTS - EC TYPE
EXAMINATION AND QUALITY ASSURANCE REGISTRATION OR EC
VERIFICATION

MEDICAL DEVICES (3) - VARIOUS OPTIONS DEPENDING ON
RISK LEVEL, RANGING UP TO FULL QUALITY ASSURANCE OR
EC TYPE EXAMINATION AND PRODUCTION QUALITY ASSURANCE

TELECOMMUNICATIONS TERMINAL EQUIPMENT - EC TYPE
EXAMINATION OR DECLARATION OF CONFORMITY WITH FULL
QUALITY ASSURANCE

EC NOTIFIED BODIES

WHAT ARE THEY?

WHO AUTHORIZES/RECOGNIZES?

WHAT IS THEIR ROLE?

ABILITY TO SUBCONTRACT?

RECOGNITION OF THIRD COUNTRY BODIES?

SUBCONTRACTING

- O WHO DECIDES?
- O UNDER WHAT CONDITIONS?
- O TESTING?
- O QUALITY ASSURANCE AUDITS?
- O MEMBER STATES DISAGREE

MUTUAL RECOGNITION AGREEMENTS

- COMPETENCE OF THIRD COUNTRY BODIES IS AND REMAINS ON PAR WITH EC COUNTERPARTS
- ARRANGEMENTS CONFINED TO REPORTS, CERTIFICATES AND MARKS DRAWN UP AND ISSUED DIRECTLY BY BODIES SPECIFIED IN AGREEMENTS
- AGREEMENTS ESTABLISH A "BALANCED SITUATION"

CE MARK

WHAT DOES IT MEAN?

WHAT SHOULD IT LOOK LIKE?

WHO IS RESPONSIBLE FOR AFFIXING IT TO A PRODUCT?

Appendix 4

Statement by Mark Z. Orr

MARK Z. ORR

PRESSURE VESSEL WORKSHOP

- Speaking Notes -

I. INTRODUCTION

Important role of workshops

- inform government of industry needs and concerns
- ensure that industry has adequate information on which to make informed decisions and provide advice

Key questions set out in Federal Register notice

- particularly interested in views on whether pressure vessel industry would benefit from mutual recognition agreements between U.S. laboratories or product certifiers and EC entities
- If so, what role should the U.S. government play?

Issue of standards, testing and certification in the single market is extremely important

- for many industries, will determine degree of access to the single market
- the top priority issue for the U.S. Government with regard to the single market in 1991 and possibly beyond

II. U.S. CONCERNS

Description of testing and certification system being created by the EC

- a major undertaking
- process is not proceeding as rapidly or as smoothly as originally envisioned by the EC Commission
- if constructed and implemented in an open, non-discriminatory manner, system should facilitate trade flows with the Community and between the Community and its trading partners
- if not done in this manner, could cause disruptions in trade flows, increased costs for U.S. exporters, and result in U.S.-EC trade disputes

System as presently proposed denies foreign manufacturers and conformity assessment entities adequate access

- proposed system requires that conformity assessment must be done by "notified bodies" within the EC
- costly, time consuming, and often duplicative

Potentially places U.S. manufacturers at a competitive disadvantage vis-a-vis European competitors

- must secure access to EC notified bodies
- may limit ability to be first to market with new products

Also prevents U.S. conformity assessment entities from participating in conformity assessment activities for the single market

Our objective:

- secure sufficient access (for both U.S. manufacturers and conformity assessment entities) on sufficiently flexible terms
- ensure that U.S. manufacturers and conformity assessment entities receive national treatment in the single market.

III. POSSIBLE SOLUTIONS

A. SELF CERTIFICATION

To the greatest extent possible, EC directives for the single market should provide for manufacturers self-declaration of conformity with single market standards

-- easiest, least disruptive, cost-efficient means

B. SUBCONTRACTING

EC currently contemplates subcontracting by notified bodies of certain activities to entities outside the Community

- potentially a partial solution to concerns of U.S. manufacturers and conformity assessment entities
- would reduce costs for manufacturers and provide a certain degree of access for conformity assessment entities

Scope of permissible subcontracting activities is unclear and must be clarified

- testing only? and only by bodies authorized to do more than just testing?
- evaluative functions?
- quality assessment?

Provisions defining permissible subcontracting activities should not be the subject of negotiations between the EC and its trading partners

- should be determined by regulation

Remains to be seen how much interest there will be in such arrangements on the part of notified bodies in the EC and entities in the United States

C. MUTUAL RECOGNITION AGREEMENTS

Possibility exists for the conclusion of mutual recognition agreements between the EC and its trading partners in various sectors

- a potential means for U.S. manufacturers to satisfy conformity assessment requirements for their products in the United States; and
- for U.S. entities to engage in the full range of conformity assessment activities for the single market

As presently contemplated by the EC, the terms and conditions for mutual recognition agreements present a number of serious problems

- involves the assumption of certain obligations by U.S. entities
- implies acceptance of results of activities conducted by EC notified bodies and marks conveyed by them
- meshing of different regulatory systems in which products may be regulated in the EC and not in the U.S. and vice-versa

Key question of role of government versus that of the private sector

- EC will require a "guarantor" of the competency of "notified bodies" in the United States -- the U.S. government;
- at present, this role is played by the private sector in most sectors
- recent indications seem to suggest that the EC may be willing to accept an "equivalent" guarantor -- i.e., accreditation systems run by the U.S. private sector

An insistence on reciprocity ("balanced situation")

- conditioning access to the single market on reciprocity requirements is unacceptable to the U.S.
- the U.S. market in general, and testing and certification schemes in particular, are open to EC products and firms
- no additional "benefits" exist to be gained by the EC through such agreements

These problems will need to be addressed before any determination can be made as to whether entering into mutual recognition agreements with the EC is desirable from the standpoint of the U.S.

IV. TRANSITION PROBLEMS

EC is falling behind in creating the standards required for the single market and constructing accompanying conformity assessment regime

- European standards-setting bodies (CEN and CENELEC) haven't been able to generate standards rapidly enough to keep up with EC directives
- as a result, deadlines for implementing EC directives have been postponed
- conformity assessment procedures have not yet been implemented on an EC-wide basis
- member states continue to demonstrate a great reluctance to accept each other's notified bodies

Requirements that will prevail during this interim period remain to be determined

- EC must take steps to deal with the potential confusion in order to ensure that trade is not disrupted; and
- to prevent certain member states from using confusion as an excuse to impose/retain protectionist measures

U.S. exporters should be prepared for a period of uncertainty until single market directives are fully implemented

V. NEXT STEPS

U.S. and EC Commission have initiated and maintained a useful dialogue on standards, testing and certification issues

- we plan to continue to use this dialogue to address the problems described above

We expect a Commission proposal on subcontracting soon

- We'll encourage the Commission and the Member States to provide for the maximum degree of flexibility in order to facilitate trade flows

Also expect the Commission to secure a mandate from the EC Council during the latter part of the year to begin negotiations on mutual recognition agreements

- prior to that time, the U.S. government will need to decide whether to negotiate such agreements; and
- if so, for which sectors and under what conditions
- Also need to weigh the alternatives, e.g., subcontracting, self-certification; and
- the interests of various U.S. industries

Finally, we must sort out the respective roles of the U.S. government and the private sector in this process

VI. CONCLUSION

- Issues before the workshop today are of great importance
- We'll need your advice -- and that of other industries -- in order to make informed decisions on these issues
- We look forward to working closely together in the coming months in order to address these issues satisfactorily

Appendix 5

Statement by Oscar J. Fisher

NIST/ASME WORKSHOP ON CONFORMITY ASSESMENT: PRESSURE VESSEL

JANUARY 31, 1991

I am Oscar J. Fisher, Senior Vice President, Codes and Standards. The Council on Codes and Standards requested that I express its appreciation for this opportunity for the ASME to co-sponsor this workshop with NIST. On June 19, 1990, Dr. Robert White, Undersecretary for Technology, Department of Commerce, addressed the House Subcommittee on Science and Technology. He stated it was the Department's intention to conduct a series of workshops with members of specific sectorial manufacturing parties. These workshops would be held to explore the possibility of developing a national laboratory accreditation scheme for conformity assessment that is consistent with internationally recognized and accepted technical as well as legal criteria.

The Council on Codes and Standards requested that I particularly thank NIST for the opportunity to be the first to explore with a sector, boiler and pressure vessel manufacturers and users, opportunities for United States industry to participate in a unified European Community. If there appears to be a role for ASME to serve industry, the public and government, we want to consider it; however, ASME Codes and Standards wants to provide only those services for which ASME is uniquely qualified. For instance, some sections of the Boiler and Pressure Vessel Code may be considered by the European Community as a means of satisfying a European directive. The Council on Codes and Standards will have the appropriate entities within Codes and Standards consider proposals regarding quality assurance and assessment in accordance with any European directive that may be forthcoming.

I intend to provide a brief history of The American Society of Mechanical Engineers and the Boiler and Pressure Vessel Code with emphasis on the expansion of the Code from the United States and Canada to the rest of the world.

The American Society of Mechanical Engineers (ASME) was organized in 1880 as an educational, scientific, charitable, not for profit organization. ASME has more than 118,000 individual members, most of whom are practicing engineers. ASME has no corporate, partnership or other business entity members. ASME has a wide variety of programs: Education, Member Affairs, Engineering, Public Affairs, and Codes and Standards. Because this audience is primarily interested in European integration, I will focus on Codes and Standards and the integration of international accreditation into the Boiler and Pressure Vessel Code.

The American Society of Mechanical Engineers is managed by an elected Board of Governors which, in turn, assigns the supervision of ASME's programs to five appointed Councils: Education, Member Affairs, Engineering, Public Affairs, and Codes and Standards. The Councils in turn, appoint members to boards that oversee the actions of committees, such as the Committee on Boiler and Pressure Vessels.

The supervisory boards oversee codes, standards and related accreditation and certification committees within their respective technical scopes. Their responsibilities include:

- 1) Assessment of the need for codes, standards or accreditation;
- 2) Structuring necessary committees;
- 3) Procedures for due process;

- 4) Approval of committee personnel;
- 5) Approval of codes or standards for ASME;
- 6) Appeals and
- 7) Disbanding unnecessary committees.

The Boiler and Pressure Vessel Committee is assigned to the Board on Pressure Technology Codes and Standards for administrative and technical aspects of boilers and pressure vessels. It also reports to the Board on Nuclear Codes and Standards for the nuclear aspects of committee activities.

From a historical perspective, the Boiler and Pressure Vessel Committee was created to satisfy a need. During the 1800's and early 1900's, there were thousands of boiler explosions. There is one instance in which a boiler accident killed about 1100 persons; in another accident, 58 were killed and 117 wounded.

As more incidents such as these took place, the general public became concerned and various city and state governments started to enact their own individual standards for boiler construction. Boiler manufacturers were faced with an increasing maze of various, and often conflicting specifications established in different parts of the United States of America.

In 1911, ASME formed a Boiler Code Committee to obtain the cooperation of all groups concerned to formulate one overall set of codes and standards for construction of boilers. Since then, the scope of the committee has been expanded to include pressure vessels and nuclear components and systems.

In 1952, ANSI, then known as the American Standards Association, stated, "Probably no other standard in America has done more for national safety."

The first Code included the requirements for affixing an ASME Code symbol to boilers that had been designed, fabricated, and inspected in accordance with the Code. It also included rules for the certificate of authorization to use the Code symbol stamp. The symbol is used by the manufacturer to certify that he has constructed the equipment in accordance with Code rules.

Before 1968, ASME depended entirely on the jurisdictional authorities and/or the authorized inspection agencies for recommendations relative to the qualification of the applicant for accreditation to use an ASME Code symbol stamp; then, on July 1, 1968, more comprehensive Code requirements were effected regarding applicants for nuclear accreditation.

These requirements introduced quality assurance on a more formal basis and also initiated ASME survey teams. Since then, the requirements in the other vessel sections of the Code evolved to require a review team; the revisions have maintained the principle that an authorized inspection agency must have a potential regulatory or insurance interest in the finished product to be stamped with the ASME symbol. The inspector must assure himself that the manufacturer conformed to the Code rules.

These new requirements built upon a history of success, while recognizing the complexity of advancing technology and changing interests in public safety.

In part, these advances and changes warranted rules requiring quality assurance programs of the applicant to be reviewed by an ASME survey or review team. From the information developed by the survey or review team, ASME determines the appropriate action regarding the applicant's request for accreditation. The team provides the information and an ASME accreditation committee makes the determination.

To reiterate, it's the role of the team to provide adequate data for ASME to make this determination, but ASME must decide. It is ASME that must protect the integrity of its registered trademarks - this cannot be delegated. Accordingly, ASME must be assured that the applicant can and will conform to Code rules.

With these new requirements and a survey/review team approach, ASME had a way to address manufacturers located outside the United States and Canada. However, internationalization involved more than ASME because the infrastructure of ASME accreditation also includes authorized inspection agencies, The National Board of Boiler and Pressure Vessel Inspectors, states and provinces. In fact, because the states, even prior to 1968, had provided for "state specials" for manufacturers located outside the United States and Canada, ASME felt that there was an equivalent means for foreign manufacturers to sell their products in the United States.

However, others felt that the "state special" was more onerous than ASME accreditation. During the Kennedy rounds of tariff discussions, it was alleged by representatives of other governments that the United States had a non-tariff barrier

because of the ASME accreditation and the National Board's boiler and pressure vessel registration programs. The United States government brought suit against ASME and the National Board in 1970 and, with the assistance of many individuals, including federal and private lawyers, by 1972 procedures were developed to permit the Society to extend to the rest of the world the use of its accreditation, and for the National Board to extend its registration of boilers and pressure vessels to the world. Such a program could hardly be organized without direct interaction with the host government.

Since October 1, 1972, ASME and NB have administered their respective activities uniformly throughout the world. As a result, the Boiler and Pressure Vessel Code provisions for quality programs including nondestructive examination have become de facto international standards and an integral dimension of ASME's accreditation program.

ASME's Council on Codes and Standards position relative to the need for government leadership in negotiations and accreditation of certifying organizations is well known. Mel Green and I represented the Council on Codes and Standards at the National Institute on Standards and Technology hearing on April 3, 1990 and at the House Subcommittee on Science, Research and Technology hearing of June 19, 1990. At these hearings we recommended that an institute be established by the federal government with policy makers from industry, public institutions, and governments (federal and state). This body, consisting of directors from these sectors of the United States would promote U.S. positions and interact with European Commission and other regional and national bodies on matters relating to standards and

certification. ASME recognizes that its position was reported as being in the minority; however, when one recognizes that most of those testifying were addressing standards development and not certification, the resulting reports are understandable; however, the role for government for certification that ASME recommended is consistent with reports going back to the LaQue report of 1965 and is consistent with the European Commission's desire for government to take responsibility for the certifying bodies within their respective geographic areas.

Since that time, Secretary of Commerce Mosbacher, has established a Federal Advisory Committee that has representatives from government, industry, standards and certifying bodies. This Advisory Committee will recommend to the secretary, means of establishing the necessary structures for a new world order for standards and certification.

In recognition of the European Commission's position that the host government must have a prominent role in accrediting "Conformity Assessment" organizations, if such are provided for outside the European Community, it seems that any organization or sector (i.e. pressure vessel) must be prepared to meet United States government criteria and permit government overview of administration of the relevant roles associated with "Conformity Assessment."

As I have stated, ASME's accreditation program has expanded from boilers to pressure vessels to nuclear systems; it has also expanded geographically from limited international to international. For several years, representatives of government agencies have participated in audit teams that audit ASME accreditation, including its infrastructure.

This NIST/ASME Workshop is an opportunity for the participants to advise ASME and the government on what should be done for the pressure vessel sector to enhance the United States' position in the marketplace. There may be questions that you feel should be answered. ASME and NIST intends to consider these questions and suggestions from their respective viewpoints.

Although ASME prefers that the European Commission accept ASME as a means of satisfying an EC Directive, we recognize that some of you might want ASME to seek notified body status in order that we may administer the "CE" mark. We fully recognize that the Society may need to make significant changes to better serve industry and the public in this rapidly changing environment.

With me are officers, chairman of boards and committees and staff from ASME Codes and Standards who are in positions to provide leadership and support in determining potential roles in "European Commission" Conformity Assessment." I particularly want to introduce Walter Mikesell, Vice Chairman, Council on Codes and Standards and Vice President, Pressure Technology, Codes and Standards.

Thank you!

Appendix 6
Statement by Michael F. Sullivan

STATEMENT

ASME - NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY WORKSHOP

Washington, D. C.

January 31, 1991

My name is Michael F. Sullivan, I am Manager of International Operations for The National Board of Boiler and Pressure Vessel Inspectors.

My 35 years of experience in the boiler and pressure vessel field includes Director of Inspections for the National Board, affiliation with various authorized inspection agencies, architect engineers, nuclear utilities and nuclear consulting. I have taught various courses regarding ASME requirements and have conducted many seminars throughout the world.

Through my career I have participated in over 50 ASME nuclear surveys and in excess of 500 boiler and pressure vessel joint reviews. In addition, I have acted as nuclear team leader on NRC requested audits performed at various sites within the U.S.

Throughout the years I have served on many ASME subcommittees, subgroups or accreditation committees and as a member of the Main Committee of NQA-1.

The Executive Director of the National Board and the Chairman of the Board of Trustees have requested that I convey their appreciation to the National Institute of Technology and ASME for inviting us to speak and participate in this workshop.

The National Board of Boiler and Pressure Vessel Inspectors is a non-profit, non-governmental organization whose members are the chief boiler and pressure vessel inspectors who are responsible for the administration and enforcement of the boiler and pressure vessel safety laws of their jurisdictions.

A Board of Trustees elected by the National Board membership, and an Advisory Committee composed of representatives from the welding industry, authorized (insurance company) inspection agencies, boiler and pressure vessel users and manufacturers, meet throughout the year to establish the National Board's policies. To meet the needs of our membership and conduct day-to-day business, a permanent staff headed by an executive director is maintained at the National Board's central headquarters on Columbus, Ohio.

The prime objective of the National Board is safety. Specifically, those objectives are:

- uniform administration and enforcement of boiler and pressure vessel safety laws, rules and regulations;
- uniform standards of approval for specific designs and structural details of vessels, appurtenances and devices instrumental in the safe operation of boilers and pressure vessels;
- one uniform Code of rules and one standard stamp designating compliance with that Code;
- one standard of qualification and examination for the Commissioned Inspectors who enforce the requirements of the Code;
- compilation and distribution of information vital to its members, its more than 3600 active Commissioned Inspectors, and other interested parties such as technical societies, manufacturers, installers, owners/users, and jurisdictional officials responsible for the public safety; and
- promotion of testing facilities for safety relief valves or other vessel appurtenances and the dissemination of such results.

The National Board is probably best known for the commissioning of inspectors and the registration of manufacturers' data reports. Since 1921, more than 12,000 applicants have been qualified as Commissioned Inspectors; more than 3500 are active today. The National Board's minimum requirements for experience and education, as well as the examination itself, satisfy the basic requirements of all jurisdictions in the United States and the Canadian provinces. Over the years, 21,000,000 manufacturers' data reports have been permanently registered with the National Board.

Because of a common interest in boiler and pressure vessel safety, the National Board, although a separate organization has, since its beginning in 1921, acted as a partner with The American Society of Mechanical Engineers. We have been partners in the writing, promulgation and enforcement of ASME requirements. We have been partners in the development and maintenance of the ASME Quality Assurance and Quality Control programs. We were together when the U.S. government brought suit against us in 1970, and we have been partners in the extension of the ASME accreditation programs throughout the world.

The National Board interacts with the ASME Boiler and Pressure Vessel Code Committee and has representation on all of its principal subcommittees. The Executive Director and the Chairman of the Board of Trustees are permanent members of the ASME Boiler and Pressure Vessel Main Committee. At this time, the National Board is ASME's designee for conducting ASME joint reviews for

non-nuclear pressure vessel accreditation throughout the U.S., Canada and the world.

The National Board cooperates and works closely with various U.S. government agencies including the U.S. NRC, NASA, OSHA, the Department of Transportation, the U.S. Bureau of Mines, the U.S. Post Office, the U.S. Coast Guard and others.

The ASME mark, symbol, bug, stamp or whatever one may choose to call it, is easily the most recognized logo in the boiler and pressure vessel sector throughout the world. Currently there are 583 non-nuclear ASME certificate holders¹ located outside the U.S. and Canada. Of these, 307 are located in EEC and EFTA countries and another 18 are located throughout the remainder of Europe. All but three of the EEC and EFTA countries have ASME accredited certificate holders. Since the fall of the Berlin Wall in November of 1989, six certificates have been issued to companies located in Czechoslovakia, Hungary and Poland. Our information indicates that there are approximately ten more eastern European companies in various stages of preparing for ASME accreditation. In addition, two companies in Czechoslovakia are contemplating obtaining ASME nuclear accreditation.

In just the past two years, while the so-called EEC Express has been gaining steam, there have been 79 new applications for ASME accreditation in Europe and there are nine applicants for new issues in January and February of 1991.

Last month we received an inquiry from a U.S. consultant who had recently signed a contract with the Russian Ministry of Machinery. His contract is to provide consultant services to prepare certain Soviet shops for ASME nuclear and non-nuclear accreditation. According to this individual, there is a possibility that 500 shops in Russia may eventually be ASME accredited. Whether or not this will come to pass is unknown, but we do know that when certain German material manufacturers were thinking of giving up their ASME accreditation, the Soviets advised them that they would not purchase materials unless they were manufactured, certified and supplied under an ASME 3800 program.

Today ASME construction is accepted in 81 countries throughout the world and there are organizations accredited to the ASME Boiler and Pressure Vessel Code in 36 countries excluding U.S. and Canada. After a country's established boiler and pressure vessel code, the ASME Boiler and Pressure Vessel Code is the most used code within EEC and EFTA countries.

Speaking from my own perspective, I do not foresee the events of Europe having any immediate impact on the U.S. boiler and pressure vessel industry. But I am not so positive about the long range impact.

¹including nuclear, there are 681 ASME certificate holders who hold 1326 certificates of accreditation outside of U.S. and Canada as of April, 1990

At present, each EEC member state is allowed to set its own safety standards and make its own judgement on acceptance of boilers and pressure vessels. As a result, ASME is accepted in most European states and not accepted in others, notably France and Germany. It is anticipated that in the future, with a harmonized approach, problems of acceptance could increase for U.S. manufacturers.

While many may argue that ASME construction will still be required for the U.S. market, today only 35-40% of ASME boilers or pressure vessels constructed in Europe are for the U.S. market. With harmonized standards, it may well come to pass that the only boilers and pressure vessels constructed in Europe to ASME code will be for the U.S. market. This could cause a ripple effect to other non-EEC countries who today routinely require ASME construction.

As Mr. Fisher pointed out, ASME has managed an accreditation program since 1968. This program has been worldwide since 1972 and is respected and envied throughout the world. In fact, many of the Europeans involved in managing accreditation schemes willingly admit that the ASME review and survey process is the model they attempted to follow. And many of the organizations who have been accredited as certification bodies are engineering insurance companies who also are ASME Authorized Inspection Agencies. They, too, use the ASME format as their guide.

There have been suggestions that, as a help to the U.S. boiler and pressure vessel manufacturers who desire to compete in the European market, either ASME or the National Board become an accredited certification body under the provisions of EN 45012. This type of assistance to U.S. boiler and pressure vessel manufacturers seems logical on the surface, but it presents many troubling aspects.

For example, the certification process under EN 45012 is not performed by an independent third party. The certifying organization either solicits the business or is solicited by the body wishing to be certified. The organization desiring certification indeed becomes a client of the assessment entity, and the issuance of a certification becomes a matter between the audited organization and the auditing organization.

While EN 45012 requires that there be a vehicle for appeals, the appeal procedure is limited to the decision of the certifying organization and there is no real system of due process afforded the audited organization, which may cause U.S. anti-trust legal constraints.

The most troubling aspect of this entire system, however, is the great potential for conflict of interest. For example, there is nothing to prevent the same organization from certifying the Quality Assurance System, be the organization that performs product certification and be the inspection body if inspection is required.

Manufacturers who wish to obtain a European Quality System accreditation may be required to develop and maintain a quality assurance program which meets the requirements of ISO 9000 (EN 29000).

It is anticipated that the pressure system directive (in the process of being developed) will mandate which modules of the (COM (89) 209)² will be used in the construction of boilers and pressure vessels. While the modular approach will allow the manufacturer some choices, you can rest assured that self-certification will not be one of them. All modules will require the service of a notified body.

ISO 9000 is rapidly becoming a market necessity for any organization who wishes to do business in the EEC. As the ISO 9000 series is intended to be generic, organizations may now obtain a certificate which allows for Quality Systems Certification that will cover all activities of a business from buttons to boilers.

The Europeans are finding out, however, that ISO 9000 can not and will not cover all products and services. Presently there are at least three separate supplements to ISO 9000 being drafted for the areas of medical products, computer software and military use. These are necessary because it has been proven that the system is not the panacea it was first thought to be.

I propose that the ASME Boiler and Pressure Vessel Committee compare the ASME Quality Control requirements to ISO 9000 criteria and bring ASME's requirements closer to ISO 9000 wording. With this effort, I firmly believe a strong argument could be presented which would prove that, with the ASME current accreditation system, the use of independent third party inspectors and the revised quality requirement, our system is equivalent to any in Europe and should be accepted.

A revision to the current quality control requirements would not, in my opinion, cause undue burden on boiler and pressure vessel manufacturers and would certainly add credence to the position that the ASME quality control is compatible with the ISO 9000 system.

One of the purposes of this workshop is to give recommendations as to how the U.S. government can assist the pressure vessel sector in gaining product acceptance within the international market.

Our view is that all negotiations should be made from a position of strength, the greatest of which is the worldwide acceptance enjoyed by ASME. Other strengths lie in that the ASME system establishes a criteria for inspection bodies; there is no equivalent requirement in Europe. The ASME system specifies minimum qualification of inspectors; the European system does

²A Global Approach to Certification and Testing, July, 1989

not. The ASME system requires that all auditors attend semi-annual seminars to maintain proficiency while the European system has no compatible requisites.

It is our opinion that any negotiations performed by the U.S. Department of Commerce must utilize the knowledge of individuals from the pressure vessel sector, including representatives from U.S. jurisdictions who have adopted ASME boiler and pressure vessel construction as law. It should, however, be understood that negotiations with the EEC must be government to government.

It should be recognized that there are some fundamental institutional differences between U.S. manufacturers and their European counterparts regarding the involvement of government in day-to-day operations. Europeans tend to look at the government as a partner, while U.S. businesses seem to maintain an adversarial relationship with government. European governments are more open to providing financial assistance to industry for the development of export programs or standards development than is the U.S. government.

We believe the U.S. government and the boiler and pressure vessel sector must act as partners in this endeavor. Where accreditation is concerned, all negotiations should be held on a sector-by-sector basis only.

I have tried to address this most pressing subject as adequately as time has allowed. Considering the depth of this concern, I am prepared to discuss individual points and would welcome the opportunity to do so.

A final comment: I hope that all concerned with this issue do not become so blinded by what's happening in the EEC that they forget the bigger picture which includes the rest of the world. Even as we speak here today, there are organizations in such places as China, Russia and Romania that are preparing for ASME accreditation for construction of boilers and pressure vessels for installation and use in their own countries, and that speaks of the greatest strength of all.

Appendix 7

Statement by Robert J. Cepluch

**NIST/ASME WORKSHOP
AUDITORIUM
DEPARTMENT OF COMMERCE**

JANUARY 31,1991

The Order of Business for this workshop states that I am a Consulting Engineer and that I am retained by the Pressure Vessel Manufacturers Association. That is a fact; however, for the record I have a contract with my past employer, ABB/Combustion Engineering, and both organizations support me in my ASME Boiler and Pressure Vessel Code Committee activities and my participation in this workshop. That being the case when I use the terminology "pressure vessels" my comments are directed to boilers as well as all types of unfired pressure vessels.

My work experience and background have been associated with inspection, quality assurance, and quality control, manufacturing and erection of pressure vessels used in industry and utilities (fossil and nuclear). I have participated in the volunteer Codes and Standards activities for over thirty-five years and presently serve as Chairman ASME Boiler and Pressure Code Main Committee. Any comments that I offer related to the ASME Boiler and Pressure Code or ASME Boiler and Pressure Committee activities will reflect my personal position and not necessarily the consensus of the Committee.

My comments will be directed to the seven topics in the Federal Register/Volume 55, No. 241; selected items in the 7/16/90 DRAFT 3 by Simson, and what I see as the challenges facing pressure vessel manufacturers in the U.S. to be able to compete in the global market.

FEDERAL REGISTER / VOL. 55, NO. 241

1. Which EC requirements for conformity assessment are applicable to your sector?

Codes/standards can be expected to be developed covering boilers, pressure vessels, and I assume eventually nuclear components. At the present time I have only reviewed the January, 1989 draft copy of EC Simple Pressure Vessel Code (CEN/TC 54) directed at air receivers and nitrogen storage tanks. This code was to be effective July, 1990; however, the last that I have heard is that it is deferred for at least five years. All pressure vessel manufacturers have an interest in that document, in particular members of the Pressure Vessel Manufacturers Association. While this document is directed at pressure vessels for limited service it can be expected that it will establish principles that will apply to future EC documents.

2. Do the European regional standards or International standards that apply to your sector differ from the U.S. standards?

Yes. Accreditation; quality assurance/control; third party inspection; auditing/monitoring; design responsibility; materials; allowable design stresses; NDT; flexibility of the regulatory bodies; to name a few. These differences, and others, can be discussed in more detail in the open session.

3. To what extent do you feel that U.S. conformity assessment systems relating to your sector are adequate for acceptance of test data or other attestations of conformity by the EC member states?

If I understand the question it is my opinion that U.S. conformity assessment systems not only meets but exceeds the efforts of EC member states that are known to me to date. The volunteer consensus system in the U.S. has a proven track record of providing rules to produce at reasonable cost safe and serviceable pressure vessels and more important the structure in the volunteer consensus system is responsive to the changing needs of regulatory bodies, users, inspection authorities, manufacturers, and the general public. The volunteers are experts in their fields of interest. I am not aware of any other code or standard writing group in the world that can match the performance of the ASME Boiler and Pressure Vessel Code Committee.

4. Would your sector benefit from developing mutual recognition agreements between U.S. laboratories and their EC counterparts?

Yes. The U.S. should exercise every effort to encourage EC to reference the ASME Boiler and Pressure Vessel Code. Repeating what has already been said this Code has a proven track record for safe and serviceable pressure vessels at reasonable costs and most important the Code operating under the volunteer consensus system is responsive to the needs of regulatory people, inspection authorities, manufacturers, users, and the general public. I am here today speaking for pressure vessel manufacturers and the ASME Boiler and Pressure Vessel Code is the principal interest of those manufacturers. It goes without saying the U.S. needs to encourage EC reference to many other U.S. existing codes and standards.

5. How can the U.S. Government better utilize private sector input when developing official positions with regard to possible negotiations with the EC for your sector for regulated products?

I support the thought that the U.S. Government establish a focal point. This should be a standing committee made of representatives of federal and state governments, manufacturers, users, inspection agencies, and the general public to review and approve long standing existing code and standards. Further this committee should be empowered to acknowledge as agents of the U.S. organizations, such as the American Society of Mechanical Engineers to accredit and to maintain volunteer consensus groups such as the ASME Boiler and Pressure Vessel Committee for rules for pressure vessels. The committee should be empowered to commit all U.S. jurisdictions to accept such codes and standards and further encourage the global acceptance of codes and standards approved by the committee.

6. Should "EC" marks of conformity be made acceptable in the U.S. marketplace? What are the liability implications of such acceptance ?

Yes. It bears noting that manufacturers around the world presently have a means of producing pressure vessel and installing them in the U.S. where pressure vessel laws exist. U.S. pressure vessel manufacturers do not have a provision to produce pressure vessels for the global market. I assume that the "EC" mark is

available to a U.S. manufacturer if he can obtain the services a "Notified Body" to accredit his company, review and accept designs, audit/monitor his activities, and provide inspection if determined necessary. Needless to say the U.S. manufacturer prefers acceptance of the ASME mark in the EC communities and thereby avoid the duplication of accreditation, auditing/monitoring, inspection, etc.

Regarding liabilities it is my opinion that a manufacturer operating under the "EC" mark will have less exposure than operating under the "ASME" mark in the U.S. With present conditions of the Simple Pressure Vessel Code the accrediting organization must approve designs, material manufacturers must have third party overview of tests, and in the event of law suits bringing in other parties to share responsibilities.

7. Does your sector need a recognizable mark of conformity? Is a U.S. mark needed?

The U.S. has the "ASME" mark for pressure vessels, what is needed, as already stated, is global acceptance of pressure vessels with the "ASME" mark by U.S. manufacturers for installation in other countries without petitioning each authority for acceptance. If that is not possible, U.S. manufacturers will need to be able to obtain the "EC" mark to compete within the member countries. What seems to me to be important is for the U.S. to be a participant in EC 92 and to designate an agent in the U.S. to accredit manufacturers, Needless to say I favor the American Society of Mechanical Engineers as the agent to accredit pressure vessel manufacturer. U.S. manufacturer accreditation by a foreign organization, is in my opinion unlikely, but even if possible will put the U.S. manufacturer at a disadvantage. I support the ASME petitioning to be a notified body or a contractor of a notified body; regardless, ASME will have to have U.S. Government participation to obtain any recognition by foreign countries.

DRAFT 3, Simson 7/16/90

I will only comment on selected items of interest. Comments on the Federal Register topics have addressed some of the topics in the draft.

2. Is your sector affected by standards which are voluntary in the U.S. and mandatory in the EC?

Yes. I am hearing that to do business in the EC countries that quality assurance programs to ISO 9000 will be necessary. If invoked literally that document covers from the womb to the tomb and is contrary to quality assurance/control systems in the U.S. for pressure vessels constructed to the ASME Boiler and Pressure Code that relate to the design, manufacturing, inspection, testing, and certification of pressure vessels. If it is true that compliance with ISO 9000 will be required to do business in the EC countries it will be necessary that there be an accrediting authority available to U.S. manufacturers. The ASME Boiler and Pressure Vessel Code Committee is presently studying this subject but I personally don't ever see the ASME Boiler and Pressure Vessel Code adopting the full scope of ISO 9000 or the comparable ANSI document. Discussions of this subject have offered the thought that the ASME could be a designated agent/notified body

and be accredited to certify pressure vessel manufacturers to the ISO 9000 or ANSI if requested by manufacturers interested in the global market and indicate degree of approval by an endorsement to the existing ASME Certificates of Authorization or by the issuance of separate certificates. I don't visualize any manufacturer in the U.S. that will be willing to extend QA into the domestic after market let alone the global market. It may be feasible for large industrial or utility boiler, or an engineered pressure vessel in a defined controlled service; however, think of the multiple produced pressure vessels for general service where the manufacturer has no control over the service or operating conditions.

6. Several witnesses stated during the NIST hearings that the U.S. System is dominated by a few large U.S. organizations. Do members of your sector believe that the system should be made more accessible and transparent?

It is true that several large U.S. organizations support representatives to participate in the ASME Boiler and Pressure Vessel Code Committee and it is questionable where the ASME Boiler and Pressure Vessel Code would be today without that support over the past years; however, the requirement in the operating procedures for balance in committee structure prevents such organizations from controlling. The ASME Boiler and Pressure Code Committee is accessible and transparent and open to participation to individuals not only in the U.S. but around the world. It is true that some small companies find it hard to support representatives; however, this can be overcome by representatives supported by trade organizations. The Pressure Vessel Manufacturers Association, with me as a consultant, is an example of how small and medium size manufacturers can participate and provide input and serve a part in developing codes and standards. The organization was developed for just that purpose. A control of substance is that all proposed revisions to the ASME Boiler and Pressure Code are published in Mechanical Engineering and the ANSI Reporter for public comment and a negative response to any proposed revision by any interested party requires reconsideration by the Committee. It is not uncommon for such a response to kill a proposed revision and provide the background for a new action. All technical meetings are open to all interested parties and all attendees are encouraged to participate in the open discussions. The ASME Boiler and Pressure Vessel Code Committee answers thousands of inquiries each year, a large number of inquiries come from outside the U.S. Code Interpretations are issued to address urgent matters and the Code is updated each year with addenda with a reprinting every three years. I am not aware of any other code or standard in the world that provides for such participation and control and such response and service to Code users.

7. Is there any interest in your sector for a U.S. Certification mark?

U.S. pressure vessel manufacturers have the "ASME" mark. What is needed is, as already stated, global acceptance of the mark or U.S. participation in EC 92 with designated agents by the U.S. Government to accredit U.S. manufacturers and designated agents operating under a volunteer consensus committee system to serve and have input into EC pending codes and standards. The U.S. Government should support ASME's accreditation program as being accepted as a means of satisfying

European Accreditation Directives.

8. Would the establishment of a commission, or an Ad Hoc committee to study the subject be beneficial to your sector?

Yes. The committee will need the support of the U.S. Government, but should not be dictated or controlled by the U.S. government. It should consist of volunteers support by their interest with the freedom to operate as the ASME Boiler and Pressure Code consensus committee has through the years to reach conclusions that are not in the interest of any one group but a consensus that is in the best interest possible of regulatory bodies, users, inspection authorities, manufacturers, and the general public. Safety, serviceability, and cost need to be the consideration in reaching conclusions recognizing that compromises are a way of life.

GENERAL COMMENTS

I acknowledged the EC 92 Code (CEN/TC 54)-Simple Pressure Vessel Code for the construction of air receivers and nitrogen storage tanks. This Code provides for organizations within a member country to be accredited and known as notified bodies and these organizations will establish quality system requirements, approve manufacturers of pressure vessels, accept designs, determine the need for overview during construction, and accredit representatives to audit, monitor, and/or make established inspections. The pressure vessels produced to be acceptable for use in any of the member countries. Without U.S. participation, commitment, and acceptance in the EC 92 effort it is unlikely that any EC 92 approved organization is going to recognize a U.S. pressure vessel manufacture to permit competing in the EC92 member countries.

Earlier I commented that the "ASME" mark is available to any manufacturer in the world permitting global manufacturers to construct pressure vessel for installation in any jurisdiction in the U.S. that has a pressure vessel law. There is no provision at this time that permits a U.S. manufacturer to construct pressure vessels for automatic acceptance in any foreign country having a pressure vessel law. The U.S. Government must seek a provision to put U.S. manufacturers on an equal competitive basis with global manufacturers.

It is obvious that the world is moving toward a global economy which will change the market place demand for recognized codes and standards for the construction of pressure vessels. The European Community movement is only a part of what will develop throughout the world in the years to come; however, it is the most visible movement at this time and in my opinion the U.S. needs to react and participate. The days of we don't need them they need us are gone. I am not aware that at the present time that U.S. manufacturers of pressure vessels are experiencing economic hardships because of the present structure in Europe or for that matter in the world. That is what frightens me because U.S. manufacturers, in my opinion, don't look into the future. The tendency is to wait until faced with a problem and then react. The world and the industrial strengths and markets are changing and we need to be changing and thinking of the future, not next year but ten years or twenty years ahead.

Hopefully the U.S. Government can participate in the EC 92 movement and still salvage the pressure vessel voluntary consensus codes and standards system that has worked so successfully in the U.S. since the development of the first documents. It is my thought that it can continue by

the U.S. taking a position in the global efforts and recognizing agents that will continue to function with volunteers supported by their areas of interest. The U.S. Government should have representatives serve on the volunteer committees but private interest will resist control of the documents by the U.S. Government. I am opposed to government financial support of codes and standards and control of paid participants to develop codes and standards.

The ASME Boiler and Pressure Vessel Code Committee has a proven record of developing rules to produce pressure vessels that are safe and serviceable with due consideration of the cost. This goal is achieved by participation by regulatory bodies, inspection authorities, users, manufacturers, and general interest. We have enjoyed volunteer consensus codes and standards in the U.S. since the beginning. I believe it can continue if the U.S. Government will support the long proven track record and acknowledge the volunteer consensus writing groups to the world as the U.S. Government codes and standards writing bodies.

CONCLUSION

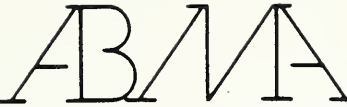
Global acceptance of U.S. produced pressure vessels is a challenge that must be addressed but most important is at this time is recognition by the European Communities EC92 movement. What we need without delay is U.S. Government acceptance and promotion of existing U.S. Standards and U.S. Accreditation as a means of satisfying EC Directives.

Robert J. Cepluch

January 11, 1991

Updated February 1, 1991 to incorporate presentation made January 31, 1991

Appendix 8
Statement by Russell Mosher



american boiler
manufacturers
association
PRESSURE VESSEL WORKSHOP
OF
AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)
AND
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)

U.S. Department of Commerce
January 31, 1991

Good Morning:

I am Russell Mosher, Executive Director of the American Boiler Manufacturers Association (ABMA).

The ABMA is a non-profit trade association founded in 1888 with headquarters in Arlington, Virginia. It is the only national association representing commercial, industrial and utility boiler and fuel burning equipment manufacturers and auxiliary equipment. The ABMA serves to provide a common working forum for the boiler industry to improve technology, to establish voluntary guidelines, to develop safety programs, to enhance product and service quality and to conduct research.

We congratulate you for holding this workshop as the topic has vital importance to our industry. We also thank you for inviting the ABMA to participate.

The plan to complete implementation of the European Community internal market by 1992, referred to as EC-92, will have major effects on U.S. industrial companies.

Both U.S. exports to the European Community and the operations of U.S. companies with investments in the E.C. will be affected.

ABMA believes that the overall impact of the EC-92 program will be to encourage strong and dynamic growth, in an increasingly deregulated E.C. market. The results, we believe, will be beneficial for industry in Europe, and for European workers and consumers. We also believe that if this program is successful, it will provide a positive stimulus to world trade growth. U.S. industry has a series of specific concerns regarding the outcome of specific issues in the EC-92 process.

Decisions on these issues could either enhance or reduce the opportunities for U.S. companies' trade and investment in the E.C. These major issues for U.S. companies are:

- . Technical Standards and Certification
- . Public Procurement
- . Social Dimensions
- . Competitive Policy
- . Monetary Policy
- . Other Potential Issues .

Technical Standards and Certification

U.S. industry is encouraged by the "new approach" being taken to develop Europe-wide technical standards.

Consonant with E.C. obligations under the GATT Standards Code, we expect that any new standards developed on a Europe-wide basis will be transparent and compatible with international standards. New Europe-wide standards should not create de facto trade barriers. Similarly, the establishment of an E.C. regime for product testing and certification should not lead to any discrimination against products made outside Europe.

Please bear with me for a moment to review how important and necessary codes, standards, and certifications are to the boiler industry. Considerable work has been accomplished to provide public safety.

Steam was a magic word a hundred years ago. But steam needed a boiler, it still does. Many boiler designs and configurations were being manufactured at that time. To help guide and control these dynamic activities, and the increasing complexity of industrial growth, the American Society of Mechanical Engineers (ASME) was founded in 1880. It was later to become a significant influence in improving the quality and safety of boiler products through the ASME Boiler and Pressure Vessel Code.

The 1880's were also a time in which boiler explosions were common. There were a number of boiler manufacturers who were concerned about this explosion situation, so they decided to act.

The first public reference was brief and cryptic. It read, "A convention of boiler makers will be held in Pittsburgh this month." At that two-day meeting - April 16 and 17, 1888, the ABMA was founded and a constitution adopted.

Working with the ASME, members of the ABMA, through the efforts of a Col. E.D. Meier, serving as president of the ABMA and the ASME, agreed to "confirm the appointment of a committee to formulate standard specifications for the construction of steam boilers and pressure vessels, and for the care of same in service." As a result, on March 12, 1915 the "Rules for the Construction of Stationary Boilers and for Allowable Working Pressures" was adopted.

This was only part of the battle. Unless legally adopted the ASME code lacked the full force and effect of law, and in 1916 it had not been legally adopted anywhere. To foster the adoption of uniform, ASME-based, state laws and multiple ordinances, another association, the present day Uniform Boiler and Pressure Vessel Laws Society was formed.

The final battle was to assure that these adopted laws would be adhered to. In this regard, in 1919, the National Board of Boiler and Pressure Vessel Inspectors was created.

This organization is dedicated to the preservation of public safety through the promotion of uniformity and interchangeability of boilers between jurisdictions utilizing the ASME code.

Now why did I bring all this up? Well, governments become involved in standards for two reasons - the procurement of goods and services for government use, and to protect the public. In many countries, government regulations are based on standards developed by private organizations such as the ASME. In the U.S., this long-standing code has served both the private and public sectors, probably like no other of its kind. We believe that there is a compelling need for government to have oversight and provide a clear objective level of "due process" that goes beyond the private sector requirements and is supportable in the courts. We strongly believe that the U.S. government must take this initiative or U.S. interests in international commerce are in jeopardy. It is essential that the U.S. government assure all Americans that they are properly and equally represented. This applies to large manufacturers with staff to look out for its needs and small manufacturers who rely on the consensus system to look out for them. If standards negotiations involve government interfaces, it is essential the U.S. government provide leadership.

The U.S. government recognizes the role and operation (workings) of consensus oriented standard organizations within the U.S. manufacturing community (the ASME code is a prime example). Perhaps the suggested establishment of a federal standards, accreditation and certification institute would suffice.

Public Procurement

U.S. industry is encouraged by the strengthening of existing E.C. rules on the opening of member government procurement and by the proposed extension of E.C. rules to the sectors presently excluded from GATT or E.C. discipline. We are concerned about the possible world trade impact of several provisions in the excluded sectors directive, including the local content rule, use of transitional measures and treatment for non-E.C. suppliers based on "equal access."

Social Dimension

ABMA members with investment in the E.C. are strongly interested in the issue as to whether EC-92 should be accompanied by new initiatives in employment and social affairs, and what type of initiatives would be most effective under the EC-92 program.

Competition Policy

ABMA members believe that establishment of E.C. - level control over mergers and acquisitions, particularly large-scale multinational combinations, can expedite the development of improved cross-border efficiencies and economies of scale within the E.C. Such an E.C. - wide policy, however, should replace existing national approval authority for such mergers within the E.C., and not merely add an extra approval procedure to existing national competition policy controls.

Monetary Policy

ABMA members with business operations and transactions in the E.C. are encouraged by the decision to eliminate all controls on capital movements within the E.C., and by consideration of other measures designed to reduce the cost and difficulties of intra- E.C. financial transactions.

Potential Issues

ABMA members are especially interested in future proposals which may be developed regarding establishment of an E.C. system of export controls of strategic products and technology, and reduction of defense procurement barriers within the E.C.

The ABMA supports U.S. government consultations with the E.C. and, where appropriate, negotiation, on the issues above that are directly relevant to U.S. trade interest. Such discussions could be on a direct bilateral basis or in the GATT. In particular, the ABMA reaffirms its support for U.S. participation in the GATT Rounds, as well as for the strengthening and expansion of GATT codes and non-tariff measures.

Furthermore, the ABMA calls upon the U.S. government to strengthen the support that it provides U.S. trade, industrial and commercial interests in Europe.

The Department of Commerce, the Office of the U.S. Trade Representative and the State Department have so far done a commendable job in identifying and disseminating information on EC-92 issues. It is our view, however, that more resources need to be devoted to this task, especially by strengthening the U.S. and Foreign Commercial Service.

The ABMA is ready to participate in efforts to enhance the National Welfare, for our customers, ourselves, and our government. Please call upon us for the development of or in kind expertise in this endeavor.

Again, thank you for this opportunity to discuss our interest in this very important and vital topic.



NIST-114A (REV. 3-89)		U.S. DEPARTMENT OF COMMERCE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY		1. PUBLICATION OR REPORT NUMBER NISTIR 4542
BIBLIOGRAPHIC DATA SHEET				2. PERFORMING ORGANIZATION REPORT NUMBER
				3. PUBLICATION DATE APRIL 1991
4. TITLE AND SUBTITLE <p style="text-align: center;">Conformity Assessment Workshop on Pressure Vessels</p>				
5. AUTHOR(S) <p style="text-align: center;">Bert G. Simson</p>				
6. PERFORMING ORGANIZATION (IF JOINT OR OTHER THAN NIST, SEE INSTRUCTIONS) U.S. DEPARTMENT OF COMMERCE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY GAITHERSBURG, MD 20899			7. CONTRACT/GRANT NUMBER	
			8. TYPE OF REPORT AND PERIOD COVERED NISTIR 4542	
9. SPONSORING ORGANIZATION NAME AND COMPLETE ADDRESS (STREET, CITY, STATE, ZIP)				
Natl. Inst. of Stds. and Tech. Gaithersburg, MD 20899		Am. Society of Mech. Engineers 345 East 47th Street New York, NY 10017		
10. SUPPLEMENTARY NOTES				
<input type="checkbox"/> DOCUMENT DESCRIBES A COMPUTER PROGRAM; SF-185, FIPS SOFTWARE SUMMARY, IS ATTACHED.				
11. ABSTRACT (A 200-WORD OR LESS FACTUAL SUMMARY OF MOST SIGNIFICANT INFORMATION. IF DOCUMENT INCLUDES A SIGNIFICANT BIBLIOGRAPHY OR LITERATURE SURVEY, MENTION IT HERE.)				
<p>On January 31, 1991, The American Society of Mechanical Engineers (ASME) and the National Institute of Standards and Technology (NIST) cosponsored a workshop on pressure vessels at the Department of Commerce auditorium in Washington D.C. The purpose of the workshop, attended by one hundred and thirty two persons, was to explore how the U.S. Government can assist the pressure vessel industry in conformity assessment activities aimed at gaining acceptance of their products in such other markets as the European Community. The following recommendations were reached by the private sector panelists: (1) U.S. Government promotion of national consensus standards; (2) enhancing NIST'S standard information capability; (3) U.S. Government negotiation with the European Commission for establishing notified bodies for pressure vessels in the United States; and (4) U.S. Government establishment of a sectoral technical advisory organization.</p>				
12. KEY WORDS (6 TO 12 ENTRIES; ALPHABETICAL ORDER; CAPITALIZE ONLY PROPER NAMES; AND SEPARATE KEY WORDS BY SEMICOLONS)				
Conformity Assessment, EC 92, Pressure Vessels				
13. AVAILABILITY			14. NUMBER OF PRINTED PAGES	
<input checked="" type="checkbox"/> UNLIMITED <input type="checkbox"/> FOR OFFICIAL DISTRIBUTION. DO NOT RELEASE TO NATIONAL TECHNICAL INFORMATION SERVICE (NTIS). <input type="checkbox"/> ORDER FROM SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, DC 20402.			103	
<input checked="" type="checkbox"/> ORDER FROM NATIONAL TECHNICAL INFORMATION SERVICE (NTIS), SPRINGFIELD, VA 22161.			15. PRICE A06	

