## NISTIR 4572

NEW NIST PUBLICATION June/July 1991

First Meeting of the Standards Working Group of the Joint U.S.-U.S.S.R. Commercial Commission March 11-13, 1991

## **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



# First Meeting of the Standards Working Group of the Joint U.S.-U.S.S.R. Commercial Commission March 11-13, 1991

## Bert G. Simson

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

May 1991



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

## Table of Contents

I.	Executive Summary	1
II.	Background	2
III.	Working Group Meeting	2
IV.	Future Activities	5

## List of Appendixes

7

A.	Working group program 7		
в.	Agenda of the Working Group's first meeting 11		
C.	List c	of Working Group participants	19
D.	Preser	tations by U.S. Government representatives	25
	1. U.	S. Department of Agriculture	27
	2. 00	cupational Safety and Health Administration	32
	3. Co	onsumer Product Safety Commission	39
	4. De	epartment of State	48
	5. Na	tional Highway Traffic Safety Administration	57
	6. Ce	enter for Devices and Radiological Health	59
	7. Na	tional Institute of Standards and Technology	
	a.	Office of Weight and Measures	61
	þ.	Standards Code and Information Program	75
	c.	Standards Management	81
	d.	Building and Fire Research Laboratory	91
	e.	Malcolm Baldrige National Quality Award	99
E.	Preser	ntations by private sector representatives	111
	1. Na	ational Fire Protection Association	113

		Page
2.	The Institute of Electrical and Electronics Engineers, Inc.	140
3.	The American Society of Mechanical Engineers	154
4.	American Council of Independent Laboratories	164
5.	American National Standards Institute	166
6.	Electronic Industries Association	175
7.	Air Conditioning and Refrigeration Institute	177
8.	Aerospace Industries Association	179
9.	U.S. National Committee of the International Electrotechnical Commission	182
10.	National Electrical Manufacturers Association	198
11.	American Society for Testing and Materials	19 <b>9</b>
12.	Underwriters Laboratories	201
Mate	rials submitted by the Soviet delegation	207
1.	The U.S.S.R. Cabinet of Ministers draft decision on measures to prevent importing to the Soviet Union of products not conforming to safety requirements	209
2.	Draft law of the U.S.S.R. consumer rights protection	214
3.	Decision on the improvement of standardization activities in the Soviet Union	233
4.	Examples of U.S.S.R. marks of conformity	236

F.

### I. Executive Summary

In a September 1990 Chairman's meeting of the Joint U.S.-U.S.S.R. Commercial Commission (JCC) in Moscow, U.S. Department of Commerce Secretary Mosbacher and the U.S.S.R. Minister of Foreign Economic Relations Katushev established a Standards Working Group for the purpose of developing programs of mutual interest concerning standards development and conformity assessment.

The group held its first meeting in Washington, D.C., and Gaithersburg, Maryland, on March 11-13, 1991, to exchange information about the modes of operation in each country. Representatives from U.S. Government, trade and professional associations, and standards development associations addressed the six-person Soviet delegation. They provided the visitors with descriptions of U.S. standardization activities. The visitors in turn described Soviet legislative initiatives now under development. The Soviet delegation also toured selected National Institute of Standards and Technology (NIST) laboratories.

It was agreed that the Soviet Union should host a second meeting of the Standards Working Group.

#### II. Background

In a September 1990 Chairman's meeting of the Joint U.S.-U.S.S.R. Commercial Commission (JCC) in Moscow, U.S. Department of Commerce Secretary Mosbacher and the U.S.S.R. Minister of Foreign Economic Relations Katushev established a U.S.-U.S.S.R. Standards Working Group to develop programs of mutual interest. Subsequently, in December 1990, Under Secretary for International Trade J. Michael Farren, U.S.S.R. Deputy Minister of Foreign Economic Relations Yuri Chumakov, and their delegations held a two-day JCC working meeting in London.

During the December meeting, representatives of the National Institute of Standards and Technology (NIST) and Gosstandart (GOST) agreed on the program, agenda, and timing for the first meeting of the Standards Working Group. The purpose was to exchange information on standards development and conformity assessment (certification, testing, accreditation, quality registration, etc.) with the long-term goal of improving harmonization and international trade. The group, at the December meeting, was comprised of standards and conformity assessment Government executives, with support from other governmental and industry technical experts. Details of the program are in Appendix A.

#### III. Working Group Meeting

Representatives from the U.S. Government, trade and professional associations, and standards development associations met for the first time with a six-member Soviet delegation during March 11-13, 1991, in the U.S. Department of Commerce (DOC) Building, Washington, D.C., and at NIST, Gaithersburg, Maryland. The agenda of the meeting is in Appendix B and the list of participants is in Appendix C.

Dr. Thomas Duesterberg, Assistant Secretary for International Economic Policy, Intentional Trade Administration, U.S. Department of Commerce, welcomed the delegates. He noted that the basic goal of the group is to improve trade relations between the United States and the Soviet Union. As the two countries expand their economic cooperation, it becomes important to harmonize their respective standards and conformity assessment procedures. In addition to facilitating trade, harmonized standards and conformity assessment enhance opportunities for additional international trade. In concluding his remarks, Dr. Duesterberg congratulated Dr. Stanley I. Warshaw, Director, Office of Standards Services, NIST, and Dr. Valeriy Sychev, Chairman, State Committee for Products, Quality Control and Standards (GOST), for arranging this meeting and wished the group success.

Dr. Sychev responded to Dr. Duesterberg's remarks by stating that he had come to the United States to establish close relations. Enhancing communication between the two countries is becoming increasingly important, especially in view of the new U.S.S.R. law on consumer protection which becomes effective on April 1, 1991. U.S. products will have to pass certain tests in accredited laboratories before they will be accepted in the Soviet Union.

Dr. Sychev introduced Mr. Oleg Lipin, President, Gosstandart of the Americas (GOST), the first permanently assigned GOST representative in the United States. Mr. Lipin is responsible for accrediting U.S. laboratories that may be used by GOST to certify products for export to the Soviet Union. The Soviet efforts are designed to facilitate trade between the United States and the Soviet Union.

Dr. George Sinnott, Director for International and Academic Affairs, National Institute of Standards and Technology, U.S. Department of Commerce, welcomed the Soviet delegation on behalf of NIST. He stated that the visitors would hear from U.S. Government and private sector standards organizations. He wished the group success in their undertaking.

Representatives from Government, trade and professional associations, conformity assessment, and standards development organizations addressed the Soviet delegation and provided the visitors with insights into U.S. standardization operations. The speakers described their organizations and explained how standards are developed, promulgated and enforced. The presentations of Government and private sector representatives are in Appendix D and Appendix E, respectively.

Dr. Sychev addressed the Standards Working Group. He thanked the participants for providing him and his associates with information about the U.S. standards community. He added that GOST has an agreement with the American National Standards Institute (ANSI), but that it will have to be augmented with agreements with other organizations, such as the Department of Agriculture, the American Society for Testing and Materials (ASTM), the American Society of Mechanical Engineers (ASME), Underwriters Laboratories, etc. He then proceeded to describe the activities of GOST and the new Soviet consumer protection legislation (Appendix F2). GOST is responsible for standards, metrology, and quality control. It has a staff of more than 100,000. Four scientific and research institutes, located in Moscow, coordinate standards development, information acquisition accreditation, and quality control. For metrology, there are 14 institutes throughout the Soviet Union having responsibility for 146 primary state standards of measurement worth more than 10 million rubles (at the recently announced rate of exchange of twenty seven rubles to the U.S. dollar, this amounts to \$370,370.00). The reason for the large number of institutes is geographical. It alleviates the need to move expensive equipment over long distances for calibrations, etc.

GOST is attempting to harmonize its documents and procedures with international and regional efforts. It has more than 300 technical committees. The State finances all activities; 40 million rubles (about \$1.5 million) is expended annually to pay experts participating on the technical committees. GOST also conducts personnel training in quality control procedures.

The legislation for consumer protection rights is shown in Appendix F2. The Act states that products affecting health and safety require certificates of conformity to standards. GOST is developing rules that will apply to imports and domestic products. Gosstandart of the Americas is being established to facilitate product approvals. Similar facilities are to be established in Germany, China, and Japan. GOST also plans to accredit U.S. labs for safety and ecology testing.

Consumer organizations are active in large Soviet cities and are part of a world federation of consumer bodies. In addition to the new law that sets conditions for consumers' rights and protection, there are two centers for consumer product testing. A major function of these centers is to satisfy consumer demands for product information; for example, for information about drinking water which varies in quality throughout the country.

Dr. Sychev envisions the Soviet Union using standards of the British Standards Institute (BSI), DIN (German Standards Institute), the U.S. standards, et. al. Mr. Lipin and Mr. Luchina (Soviet Embassy) will be discussing this possibility with interested parties in the United States.

Certification in the Soviet Union is at a standstill due to a severe shortage of products in the marketplace. Industry has not asked to have its products certified. The industry releases virtually anything they manufacture or process, knowing that their products will sell anyway. One of two U.S.S.R. certification marks is for safety and ecology; the other is for all the product attributes characterized in a standard (Appendix F4). Neither mark has achieved international recognition. In responding to questions from members of the working group, Dr. Sychev stated:

GOST may accept self certification in certain instances depending on the level of safety requirements and the manufacturer's demonstrated competence; GOST certification actions are intended to protect Soviet citizens, not to be non-tariff trade barriers; GOST hopes to facilitate U.S.S.R. product acceptance in world markets; GOST is striving to enhance its testing laboratories to the International Organization for Standardization (ISO) standards of certification. However, as of today, a laboratory in Kiev, accredited by the International Electrotechnical Commission (IEC), has not issued a single product certification because no one has asked for one; GOST intends to increase its participation in IEC, ISO, and other international organizations. They were previously limited by the time it took to obtain exit visas and foreign currency.

### IV. Future Activities

On the morning of the third day the Soviet delegation met with NIST representatives at the NIST site in Gaithersburg, Maryland. Dr. Warshaw made the following points:

- In addition to ANSI, several other organizations have indicated an interest in signing formal business agreements with GOST. NIST will gladly assist GOST in its dealings with the U.S. standards and conformity assessment community.
- NIST suggests that the next meeting deal with conformity assessment. NIST will be pleased to assemble a U.S. delegation for the next meeting, which will be hosted by the Soviet Union.

A presentation was made by Kathryn O. Leedy on the Malcolm Baldrige National Quality Award Program (Appendix D). Afterwards, the Soviet delegation was escorted on a tour of selected NIST facilities (Appendix B).

Appendix A

Working Group Program

-\_\_

### Program for the Standards Working Group Joint U.S.-U.S.S.R. Commercial Commission

PURPOSE: To exchange information on standards development and conformity assessment (certification, testing, quality registration, etc.) with the goal of improving harmonization and international trade.

The Working Group will be comprised of responsible standards and conformity assessment executives and will employ technical experts from industry and government as required in the conduct of its work.

CO-CHAIRMEN: Dr. Oleg V. Kuratov (U.S.S.R.); Dr. Stanley I. Warshaw (U.S.)

The Working Group will have as its objectives, the following:

- 1. Exchange of information on setting up, conducting, procedure of work and the staff of technical committees on standardization in the U.S.S.R. and the U.S.A.
- 2. Exchange of information and normative acts on standardization. Exchange of the know-how on legislative regulations on standardization in the U.S.S.R. and the U.S.A.
- 3. Harmonization of national standards on mutual exchange of commodities.
- 4. Coordination of positions and technical policies on participation in the executive and technical bodies of ISO/IEC.
- 5. Exchange of the know-how on quality management including the use of quality systems standards, the ISO 9000 series.
- Harmonization of the main principles and methods of certification of quality systems of products with the aim of mutual recognition of certification results.
- 7. Exchange of information on standardization in the field of service.
- Exchange of information on methodology of quality characteristics choice in national standards and the estimation of technical level and quality of products in reference to different categories of consumers and products' using conditions.

The first meeting of the Working Group will take place on three days during March or April 1991 in Washington, D.C.

Senior managers of private sector standards organizations (e.g., ASTM, IEEE, NEMA, FEMA, ANSI, MVMA, etc.), Federal agencies (e.g., DOD, FCC, GSA, etc.), and private and Federal agency conformity assessment programs (e.g., UL, FM, OSHA, FDA, etc.) will be invited to this meeting.

ASTM = American Society for Testing and Materials IEEE = Institute of Electronics and Electrical Engineering

9

NEMA	=	Motor Vehicle Manufacturers Association
FEMA	=	Farm Equipment Manufacturers Association
ANSI	=	American National Standards Institute
MVMA		Motor Vehicle Manufacturers Association
DOD	=	Department of Defense
FCC	=	Federal Communications Commission
GSA	=	General Services Administration
UL	=	Underwriters Laboratories
FM	=	Factory Mutual Research Corporation
osha	=	Occupational Safety and Health Administration
FDA	=	Food and Drug Administration (Medical Devices)

.

,

## Appendix B

Agenda of the Working Group's First Meeting

## Agenda

### Standards Working Group Joint U.S.-U.S.S.R. Commercial Commission

### March 11-13, 1991

### Monday, March 11, 1991

U.S. Department of Commerce (DOC) Room 4830, Herbert Hoover Building 14th and Constitution Avenue N.W. Washington, D.C. 20230

9:30 Welcoming Remarks Dr. Thomas J. Duesterberg, Assistant Secretary for International Economic Policy, International Trade Administration (ITA), DOC

## 9:40 Introductions

Dr. Stanley I. Warshaw, Director, Office of Standards Services, National Institute of Standards and Technology (NIST)

Dr. Valeriy V. Sytchev, Chairman, State Committee for Quality Control and Standards (GOST)

- 9:50 Overview Dr. George A. Sinnott, Director for International and Academic Affairs, NIST
- 10:00 Dr. Richard N. Wright, Director, Building and Fire Research Laboratory, NIST; and U.S. Delegate to International Union of Testing and Research Laboratories for Materials and Structures
- 10:20 Albert D. Tholen, Chief, Weights and Measures, NIST; and Executive Director, National Conference on Weights and Measures
- 10:40 Dr. Samuel E. Chappell, Chief, Standards Management, NIST; and Representative of the International Organization of Legal Metrology
- 11:00 Coffee Break
- 11:20 Duane A. Perrin, Group Leader, Vehicle Dynamics Section, Office of Vehicle Safety, National Highway Traffic Safety Administration; and Representative to WP29 on the Construction of Vehicles, UN Economic Commission for Europe
- 11:40 Gary Fereno, Telecommunications and Information Standards, U.S. Department of State; and Vice Chairman of the U.S. International Telegraph and Telephone Consultive Committee (CCITT) National Committee

- 12:00 Chappel Pierce, Director, Office of Fire Protection Engineering and System Safety Standards, Occupational Safety and Health Administration
- 12:20 Lunch, hosted by ITA and NIST, Secretary's Dining Room, Room 5843 J. Michael Farren, Under Secretary for International Trade
- 2:00 Irwin Dubinsky, Food Safety and Inspection Service, U.S. Department of Agriculture
- 2:20 Eric C. Peterson, Executive Director, U.S. Consumer Product Safety Commission
- 2:40 Philip B. White, Director, Office of Standards and Regulations, Center for Devices and Radiological Health, U.S. Food and Drug Administration
- 3:00 John L. Donaldson, Chief, Standards Code and Information, NIST; and Head, U.S. Delegation to the International Laboratory Accreditation Conference
- 3:20 Barbara Boykin, Director of Standards, Aerospace Industries Association of America; and Chairman, Industry Functional Advisory Committee 2
- 3:40 Break/Beverage
- 4:00 George Willingmyre, Vice-President, Washington Office, American National Standards Institute
- 4:20 Ronald H. Reimer, Corporate Manager of Industry Standards, Allen-Bradley Company, Inc.; and Chairman, U.S. National Committee/International Electrotechnical Commission
- 4:40 John M. Kinn, Vice President, Engineering Department, Electronic Industries Association; and Secretary, Electronic Components Certification Board/International Electrotechnical Commission Quality Assessment System for Electronic Components
- 5:00 Donald Mackay, Manager of International Standards, Air Conditioning and Refrigeration Institute
- 6:00 Reception, cocktails and hors d'oeuvres Hosted by U.S. private sector participants Hotel Washington, Roof Suite

### Tuesday, March 12, 1991

Same Location as March 11

- 9:30 Joseph O'Grady, President, American Society for Testing and Materials
- 9:50 Melvin Green, Associate Executive Director, Codes and Standards, The American Society of Mechanical Engineers
- 10:10 Andrew Salem, Staff Director of Standards, Institute of Electrical and Electronics Engineers
- 10:30 Bernard Falk, President, National Electrical Manufacturers Association
- 10:50 Coffee Break
- 11:00 Arthur Cote, Assistant Vice President and Chief Engineer, National Fire Protection Association
- 11:20 Joe Bhatia, Vice President, Underwriters Laboratories, Inc.
- 11:40 Milton M. Bush, Director, Public Affairs, American Council of Independent Laboratories, Inc.
- 12:20 Working Lunch hosted by NIST Dr. George Sinnott Dr. Stanley Warshaw
- 1:30 Presentations by the Soviet Delegation
  - Dr. Valeriy V. Sytchev, Chairman, State Committee for Quality Control and Standards (GOST)
  - Mr. Eugenii M. Ignatiev, GOST Board Member and Director of the Personnel and Education Department
  - Mr. Vladimir N. Otrokhov, GOST Board Member and Director of the International Cooperation Department
  - Mr. Vladimir V. Luchina, Second Secretary, Soviet Embassy
  - Mr. Oleg F. Lipin, President, Gosstandart of the Americas

Wednesday, March 13, 1991

National Institute of Standards and Technology Gaithersburg, Maryland 20899

- 8:30 Pick up Soviet Delegation from their Hotel
- 9:30 Arrive at NIST 10th Floor Conference Room
- 12:00 Lunch, Dining Room C, hosted by NIST Dr. John W. Lyons, Director Dr. Donald R. Johnson, Director, Technology Services
- 1:00 Tour of NIST
- 4:00 Return Soviet Delegation to their hotel

Additional Attendees:

Franklin Vargo, Deputy Assistant Secretary for Europe, ITA Jack Brougher, Deputy Director, Office of Eastern Europe and Soviet Affairs, ITA Kenneth Gordon, Deputy Director for International Affairs, NIST Walter Leight, Deputy Director, Office of Standards Services, NIST Bert Simson, Senior Advisor, Office of Standards Services, NIST Lennard Kruger, Specialist in Sci. & Tech., Congressional Research Service

Interpreters:

U.S.: Mr. Michael Wasserman

U.S.S.R.: Mr. Leonid I. Pavlov

## TOUR AGENDA

USSR GOSSTANDART Dr. Valeriy Sytchev, Chairman Dr. E. M. Ignatiev Mr. V. N. Otrokhov Mr. Oleg F. Lipin Mr. Vladimir V. Luchina

## Wednesday, March 13, 1991

10:30AM - 11:30AM	Automated Manufacturing Research Facility
	Bill Rippey
	Manufacturing Engineering Laboratory
	Shops Building

## LUNCH

<ul> <li>1:20PM - 2:00PM Analytical Chemistry Skip Kingston</li> <li>2:00PM - 3:00PM Radiation Measurement Klaus Mielenz, Director Radiometric Physics Division Physics, Room B165</li> <li>3:00PM - 3:30PM Measurement Services Stanley Rasberry, Director Measurement Services Division Physics, Room B354</li> <li>3:30PM - 4:00PM Central Computer Facility Ray Shaver Computer Services Division</li> </ul>	1:00PM - 1:20PM	Discussion of Cooperative Mechanisms George Sinnott & Kenneth Gordon Office of International & Academic Affairs Dining Room C
<ul> <li>2:00PM - 3:00PM Radiation Measurement Klaus Mielenz, Director Radiometric Physics Division Physics, Room B165</li> <li>3:00PM - 3:30PM Measurement Services Stanley Rasberry, Director Measurement Services Division Physics, Room B354</li> <li>3:30PM - 4:00PM Central Computer Facility Ray Shaver Computer Services Division</li> </ul>	1:20PM - 2:00PM	Analytical Chemistry Skip Kingston
<ul> <li>3:00PM - 3:30PM Measurement Services Stanley Rasberry, Director Measurement Services Division Physics, Room B354</li> <li>3:30PM - 4:00PM Central Computer Facility Ray Shaver Computer Services Division</li> </ul>	2:00PM - 3:00PM	Radiation Measurement Klaus Mielenz, Director Radiometric Physics Division Physics, Room B165
3:30PM - 4:00PM Central Computer Facility Ray Shaver Computer Services Division	3:00PM - 3:30PM	Measurement Services Stanley Rasberry, Director Measurement Services Division Physics, Room B354
	3:30PM - 4:00PM	Central Computer Facility Ray Shaver Computer Services Division

## Appendix C

List of Working Group Participants

20

,

Mr. Joe Bhatia V.P., Government Affairs Underwriters Laboratories 818 18th Street NW, Suite 400 Washington, DC 20006

Ms. Barbara Boykin Dir., Standardization Programs Aerospace Industries Association of America 1250 Eye Street NW Washington, DC 20005

Mr. Jack Brougher Deputy Director, Office of Eastern Europe and Soviet Affairs International Trade Administration U.S. Department of Commerce Washington, DC 20230

Mr. Milton M. Bush Dir. of Public Affairs American Council of Independent Laboratories 1725 K Street NW Washington, DC 20006

Dr. Samuel Chappell Chief, Standards Management Program National Institute of Standards and Technology, DOC Gaithersburg, MD 20899

Mr. Arthur Cote Assistant V.P. & Chief Engineer National Fire Protection Association Batterymarch Park Quincy, MA 02269

Mr. John Donaldson Chief, Standards Code & Info. Program National Institute of Standards and Technology, DOC Gaithersburg, MD 20899 Mr. Irwin Dubinsky Food Safety and Inspection Service U.S. Department of Agriculture South Bldg., Room 2159 Washington, DC 20250

Dr. Thomas Duesterberg Assistant Secretary for International Economic Policy International Trade Administration U.S. Department of Commerce Washington, DC 20230

Mr. Bernard Falk President, National Electrical Manufacturers Association 2101 L Street, NW, Suite 300 Washington, DC 20037

Mr. J. Michael Farren Under Secretary for Intertnational Trade U.S. Department of Commerce Washington, DC 20230

Mr. Gary Fereno Telecommunications & Info. Stds. U.S. Department of State 2201 C Street NW, Rm. 6317 CIP Washington, DC 20520

Dr. Kenneth Gordon Deputy Director for International Affairs National Institute of Standards and Technology, DOC Gaithersburg, MD 20899

Mr. Meivin Green
Assoc. Exec. Dir., Codes & Standards
American Society of Mechanical
Engineers
345 East 47th Street
New York, NY 10017

Mr. Eugenii Ignatiev Director of the Personnal and Education Department USSR State Committee for Product Quality Control and Standards 9, Leninsky Prospekt 117049 Moscow, U.S.S.R.

Dr. Donald Johnson Director, Technology Services National Institute of Standards and Technology, DOC Gaithersburg, MD 20899

Mr. John M. Kinn Vice President, Engineering Electronic Industries Association 2001 Pennsylvania Avenue NW Washington, DC 20006

Mr. Lennard Kruger Congressional Research Service Library of Congress, Rm. 413 Washington, DC 20540

Mr. Walter Leight Deputy Dir., Off. of Stds. Services National Institute of Standards and Technology, DOC Gaithersburg, MD 20899

Mr. Oleg Lipin President, Gosstandart of the Americas One Marine Plaza North Bergen, NJ 07047

Mr. Vladimir Luchina Second Secretary Soviet Embassy 1125 16th Street NW Washington, DC 20036

Dr. John Lyons Director, National Institute of Standards and Technology, DOC Gaithersburg, MD 20899 Mr. Donald Mackay Manager of International Standards Air Conditioning & Refrigeration Inst. 1501 Wilson Boulevard Arlington, VA 22209-2403

Mr. Joseph O'Grady President, American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103

Mr. Vladimir Otrokhov Director of the International Cooperation Department USSR State Committee for Product Quality Control and Standards 9, Leninsky Prospekt 117049 Moscow, U.S.S.R.

Mr. Leonid Pavlov Interpreter USSR State Committee for Product Quality Control and Standards 9, Leninsky Prospekt 117049 Moscow, U.S.S.R.

Mr. Duane A. Perrin Group Leader, Vehicle Dynamics Sec. Office of Vehicle Safety National Highway Traffic Safety Administration, DOT 400 7th Street SW, Rm. 5307, NRM-11 Washington, DC 20590

Mr. Eric Peterson Executive Director U.S. Consumer Product Safety Commission 5401 Westbard Avenue Washington, DC 20207

Mr. Chappel Pierce Dir., Off. of Fire Protec. Eng. & System Safety Stds. Occupational Safety and Health Administration, DOL 200 Constitution Ave. NW, Rm. N 3609 Washington, DC 20210 Mr. Ronald H. Reimer U.S. National Committee of the IEC Corp. Mgr. of Industry Standards Allen-Bradley Company, Inc. 1201 S. 2nd Street, MS 132 Milwaukee, WI 53204

Mr. Andrew Salem Staff Director of Standards Institute of Electrical and Electronic Engineers 445 Hoes Lane, P.O. Box 1331 Piscataway, NJ 08855-1331

Mr. Bert Simson Sr. Advisor, Off. of Stds. Services National Institute of Standards and Technology, DOC Gaithersburg, MD 20899

Dr. George Sinnott Dir. for International & Academic Affairs National Institute of Standards and Technology, DOC Gaithersburg, MD 20899

Dr. Valeriy Sytchev Chairman, USSR State Committee for Product Quality Control and Standards 9, Leninsky Prospekt 117049 Moscow, U.S.S.R.

Mr. Albert Tholen Chief, Office of Weights & Measures National Institute of Standards and Technology, DOC Gaithersburg, MD 20899

Mr. Franklin Vargo Deputy Assistant Secretary for Europe International Trade Administration U.S. Department of Commerce Washington, DC 20230

Dr. Stanley Warshaw Dir., Office of Standards Services National Institute of Standards and Technology, DOC Gaithersburg, MD 20899 Mr. Michael Wasserman U.S. Interpreter 1350 Greenleaf Chicago, IL 60626

Mr. Philip B. White Dir., Off. of Stds. & Regulations Ctr. for Devices & Radiological Health Food and Drug Administration, HFZ-80 5600 Fishers Lane Rockville, MD 20857

Mr. George Willingmyre Vice President, Washington Office American National Standards Institute 655 15th Street NW, Suite 300 Washington, DC 20005

Dr. Richard Wright Dir., Building and Fire Research Lab. National Institute of Standards and Technology, DOC Gaithersburg, MD 20899

## Appendix D

Presentations by U.S. Government Representatives

26

.

- -

Dl. U.S. Department of Agriculture

### FOOD SAFETY AND INSPECTION SERVICE U.S. DEPARTMENT OF AGRICULTURE

Presentation to the

JOINT U.S./U.S.S.R. COMMERCIAL COMMISSION (JCC)

March 11, 1991

Room 4830 Main Commerce Building U.S. Department of Commerce Washington D.C.

Presented by

Irwin Dubinsky Staff officer

Food Safety and Inspection Service, USDA, Washington D.C. 20250 Phone: (202) 447-2378 Fax: (202) 447-2682

### Introduction

The Food Safety and Inspection Service (FSIS) of the United States Department of Agriculture (USDA) is responsible for ensuring that meat, poultry and meat and poultry products in interstate and foreign commerce are safe, wholesome, not adulterated, and accurately labeled. The FSIS inspection program is the largest and most intense food regulatory program in the world. It employs over 1200 veterinarians, 7,400 food inspectors, and other employees such as microbiologists, label reviewers, and compliance officers.

### Scope of Activities

Each day these highly trained employees inspect some 6,500 meat and poultry slaughtering and processing plants before their products can enter interstate or foreign commerce.

When the U.S. Congress passed the Meat Inspection Act in 1906, most meat was slaughtered and used locally. Further processing was limited to simple operations such as grinding sausage. The picture is much different today. A wide variety of meat and poultry products are on the market ranging from fresh cuts to ready-to-heat-and-eat meals. Most of these products come from large sophisticated plants and are often shipped great distances to reach consumers.

Each year, USDA inspectors examine more than 34 million head of cattle, 83 million hogs, 6 billion birds, 5 million other animals such as sheep, goats, and horses, and almost 60 billion bounds of processed products.

### Public Health Focus on Prevention through HACCP

FSIS's focus is assuring the wholesome, unadulterated, and properly labeled production of meat and poultry products. FSIS is studying Hazard Analysis and Critical Control Point (HACCP), as a means of doing this. HACCP is an approach that evolved in the 1960's from our Space Program's effort to prepare microbiologically safe foods for our astronauts.

HACCP is a logical, specialized system for controling food safety. HACCP means contol over process, raw materials, and environment, starting as early in the food production system as possible. It also means allowing people to take responsibility for their actions as part of the food production system. Finally, it means demonstrating control over the process from production through consumption.

### Plant and Equipment Standards

Before a plant can begin operating, FSIS must approve its floor plan, lighting, water supply, waste disposal and equipment. In the plant, inspectors first check the facilities and equipment. If an unclean condition is found, operations are halted until the problem is corrected.

#### Slaughter Inspection Procedures and Standards

The Humane Methods Slaughter Act of 1978 requires that all livestock be humanely handled during the slaughter process. Before any slaughtering is done, live animals are examined. After slaughter, each carcass is checked for visible lesions or abnormalities. Internal organs are also checked for irregularities, such as discoloration, that might also indicate disease. Improvements in animal production have resulted in a healthier and more uniform animal population.

Inspectors routinely take tissue samples and send them to laboratories where they are tested for residues of animal drugs or other chemicals. Also, inspectors take samples for residue testing whenever they have reason to believe there may be a problem. Rapid tests, performed at the slaughter plant, are also used to check for animal drug residues. Improvements in science, combined with industry programs and strong enforcement, have helped reduce residue violations.

In recent years the average residue violation rate for all species has been less than one percent. If disease or illegal residues are present, unwholesome meat or poultry is tagged and condemned. Meat is decharacterized to show that it is not fit for human consumption. Only when meat and poultry fulfills FSIS standards for wholesomeness, is it given the USDA inspection legend. These USDA inspection legends are consumers' assurance that their meat and poultry products have passed Federal inspection.

#### Processing Inspection Procedures and Standards

FSIS has developed an automated system to schedule and track findings of inspection in processing plants. Formerly, scheduling of an inspector's time and tasks were done manually. Each year, 13 million inspection tasks are performed during daily visits to the 6,200 plants that process meat and poultry. The new Performance-Based Inspection System (PBIS) makes processing inspection more uniform nationwide and provides FSIS with its first easily accessible data bank on plant performance.

The PBIS system generates Management Information System (MIS ) reports for supervisors and managers. The reports summarize the data by plant, geographic region, and nationwide by number of tasks performed, and the number of acceptable as well as minor, major, or critical inspection findings.

FSIS has a Corrective Action System which provides specific guidelines for uniform progressive enforcement when inspectors document repeated deficiencies and plant management is unwilling or

unable to prevent problems. Through a series of escalating steps and regulatory actions, FSIS seeks to obtain improved plant and industry performance.

FSIS also encourages plant operators to adopt quality control programs, such as "Total Quality Control" or "Partial Quality Control". In this manner FSIS monitors the quality control of the operator.

U.S. Standards of Composition and Identity, and Labeling Requirements USDA's requirements ensure that products are properly labeled. Labels must accurately describe the product and include a list of ingredients, according to weight, with the most plentiful ingredient listed first. Some labels also include special handling instructions, nutritional labeling or other labeling claims that are reviewed for accuracy. FSIS also checks the safety of the packaging materials and reviews every product label before the product can be sold.

### Products Imported from Foreign Countries

FSIS is also responsible for ensuring that meat and poultry products imported from foreign countries are wholesome, unadulterated and accurately labeled. In order for other countries to be eligible to export their products to the United States, their inspection systems are evaluated to make sure they are "at least equal" to our own. When these products actually enter our borders, the shipments are routinely reinspected to verify that USDA standards have been maintained.

### Public Education Role

It is estimated that there are at least 7 million cases of food borne illness each year in the United States, most of which could have been prevented by safe food handling. FSIS has joined other public health authorities to decrease the number by educating food handlers at home and institutions such as schools and restaurants about their role in food safety. For consumers FSIS also operates a toll-free meat and poultry hotline. Experienced food safety experts are on hand to answer questions about meat and poultry safety and handling.

### Cost to the Public for Food Safety

The cost of meat and poultry inspection is only \$1.50 per person a year. This is small price to pay for a service that provides so much.

### Codex Role

The United States, and USDA, in particular, is an active participant and strong supporter of the Codex Code of Ethics for International Trade. The Codex commodity standards deal with end products and are roughly equivalent to FSIS standards of composition and identity. Also Codex codes and quidelines for food production and processing are generally equivalent to FSIS standards for in-plant equipment, facilities, sanitation, food handling and processing, storage and
distribution. That is, essentially, "good manufacturing processes" or GMP's. USDA also has limits on food additives and residues, an area in which Codex, too, is working.

The Administrator of FSIS, Dr. Lester Crawford, has said "Codex provides a forum for the world's leading experts to discuss, debate, and reach scientific consensus on the food safety issues that affect trade".

Conclusion It has been a pleasure to address the JCC today. We look forward to further contact in assisting your commission's work. Thank you.

## D2. Occupational Safety and Health Administration

### Standards Development Process

U.S. Department of Labor Occupational Safety and Health Administration

### I. <u>Overview</u>

OSHA's rulemaking process is complex, lengthy, and at times frustrating. However, it is a time-tested process which has produced many, very good standards for worker protection--for instance, the Hazard Communication Standard, the Hazardous Waste Operations and Emergency Response Standard, and just recently, the Excavation Standard in Construction.

Over the years the steps in the rulemaking process have become better defined and steps have been added to further insure that the views of all parties, both internal and external to the government, are considered during the process. Currently there are about a dozen steps or decisions in the process, most of which must be repeated as a proposed rule is processed to become a final rule. This means that nearly two dozen steps must be completed <u>before</u> a final rule can be promulgated.

Let me attempt to briefly cover the major steps involved without going into the great detail which some steps contain.

### II. OSHA's Rulemaking Process

First a project must be identified:

<u>Step 1</u>: <u>Indentification of Project</u>: Involves a review of the many available inputs to determine the need for and priority of a standards project.

> Inputs include: BLS, OSHA, NIOSH and other injury and fatality data available; compliance experience; variances, petitions and interpretations; Congressional and Court mandates; and new and existing national consensus standards including international standards such as ISO and the European Economic Community.

- <u>Step 2</u>: <u>OSHA Decision</u>: A decision is made by the Assistant Secretary to support the project and commit agency resources.
- Step 3: President's Regulatory Program: The decision to proceed is coordinated with the Secretary of Labor and the Administration. Once supported, the project is added to the President's Regulatory Program and to the Semi-Annual Agenda. Projected completion dates are established.

Technical Drafting of Standard: The technical Step 4: drafting of the proposed regulation begins and continues for several months. Many inputs are used during this stage such as industry or labor practices and standards, voluntary consensus standards, international standards, accident data, cost/benefit information, special studies, NIOSH Recommended Practices, and Federal and State standards. Often early drafts of the standard are circulated to industry, labor and other interested parties for informal comment and discussion. The preamble explaining the standard and supporting its provisions is prepared, as well as any Appendices to the standard which might include test methods, references, or methods of compliance.

Step 5: Regulatory Impact Analysis: During the previous step the regulatory impact analysis is begun based on the draft regulation. As the regulatory impact analysis is developed, the draft regulation is reviewed and adjusted so that it reflects the best cost/benefit approach and fully addresses the most prevalent hazards identified. The draft standard

and the preliminary regulatory impact analysis are completed.

- <u>Step 6</u>: <u>Legal Review</u>: The project is reviewed by the SOL and revised as necessary from a legal standpoint.
- <u>Step 7</u>: <u>Department of Labor Approval</u>: The Secretary of Labor's Office reviews the proposal and if acceptable, clears it to go to the Office of Management and Budget (OMB).
- Step 8: Office of Management and Budget Review: OMB reviews the project, focussing on the regulatory Analysis, and clears the project for publication as a proposed rule.
- Step 9: Final Clearances: A final package incorporating all comments is then prepared and cleared by the Assistant Secretary and the Secretary of Labor for publication in the Federal Register.
- Step 10: Federal Register Publication and Public Comment: Publication in the Federal Register with request for comments and hearings.

- Step 11: Public Hearings: If hearings are requested (and they usually are), a notice of the hearing issues, dates and locations is published followed by conduct of the informal hearings to receive testimony. Post hearing comments are allowed to be submitted by hearing participants.
- Step 12: Certification of Hearing Record: The hearing record is certified by the Administrative Law Judge and all material in the record is available for review and copying in the OSHA Docket Office.
- Step 13: Final Rule Drafting and Processing: A final rule is drafted based on the public record and steps 5 through 10 are repeated (legal review, preparation of regulatory impact statement, internal clearances, OMB review, and publication in the Federal Register).

As you can see, the steps involved in the standards writing process are very lengthy. This is perhaps the primary weakness of the process. Simply stated the process does not allow OSHA to promulgate standards quickly, or be rapidly responsive to new information. Once the project is midway in the process it is difficult to make significant changes

since to do so would recycle the project to earlier steps, thereby delaying a final rule.

On the other hand, the strength of the system is that it ensures that all information is fully considered by all players which would be affected by the rule, and that regulations to address hazards are not immediately put into place without careful evaluation of their impact on the nation.

### III. Proposals to Improve the Process.

From an Administration standpoint, OSHA is carefully looking at ways to speed up the process without eliminating any important steps. Responsibilities for certain steps are being more clearly defined. Accountability for actions in the process is being defined and assigned. Methods to better coordinate the various internal offices at both the management and staff levels are being initiated. Critical resources are being evaluated and sought out. These actions are improving the process, but more works need to be done.

# STANDARDS DEVELOPMENT PROCESS



Presentation by Eric C. Peterson, Executive Director United States Consumer Product Safety Commission before the Joint U.S. - U.S.S.R. Commercial Commission

March 11, 1991

Thank you for this opportunity to discuss the U.S. Consumer Product Safety Commission, its mandate, and the means by which it identifies and addresses product safety hazards through the use of national consensus voluntary standards, mandatory rulemaking, compliance and enforcement, and information and education.

The Commission's mission is to reduce or eliminate unreasonable risks of injury and death associated with consumer products.

The CPSC is the Federal agency responsible for consumer product safety.

More than 15,000 different types of consumer products fall within the Commission's jurisdiction.

Each year these products are involved in an estimated 30 million injuries and 22,000 deaths.

The Commission may develop and issue mandatory safety standards, ban or order the recall of products from the marketplace, keep the public informed about hazardous consumer products, participate in or monitor the development of consensus voluntary standards, and conduct its own product research.

The Commission maintains a quick and encompassing procedure to identify and quantify risks and hazards associated with consumer products.

At the core of this procedure is a computerized, multifaceted data system which collects injury data from emergency rooms of a statistically valid sample of the nation's hospitals.

Two hundred fifty thousand injury reports are received from the emergency rooms of hospitals alone each year.

Other data sources used by the Commission include complaints submitted to CPSC in writing or through its own toll-free telephone "Hotline."

petitions,

death certificates, and information obtained from coroners and medical examiners, and

newspaper clippings.

Data obtained through these sources are examined by the Commission staff to provide up-to-date estimates of their scope and magnitude.

The risks and hazards associated with specific products are analyzed to determine if further study is warranted.

The frequency and severity of injuries, number of deaths, the injury patterns and the potential for reoccurrence are among the criteria used in this analysis.

Based on this examination, product safety hazards are selected for follow-up through in-depth investigations.

These usually involve on-site visits with the victims of accidents conducted by investigators trained to determine the likely cause of the accident.

The result of these efforts is a report which identifies the hazards, and the various alternatives the Commission may consider for reducing or eliminating the hazards that have been identified.

These alternatives may include the development of a voluntary or mandatory product safety standard.

The Commission prefers national consensus voluntary standards.

These are product standards developed by private sector standards-setting organizations and complied to voluntarily by product manufacturers.

Standards-setting organizations may be domestic or multinational and include non-profit organizations, industry associations, professional and technical societies, institutes, or testing laboratories.

Developing a voluntary standard is complicated.

Normally there will be much interaction between the Commission staff and the standards developers.

The aspects of the problem and the most effective means to address the identified hazards will be extensively discussed and analyzed.

Frequently, the Commission staff is asked to provide technical support such as -

the collection and analysis of injury data,

additional engineering or chemical testing, and

an assessment of the impact of the new or revised standard on the health and safety of consumers, on production costs and product competitiveness.

Most consumer product voluntary standards are reviewed and revised at least every five years.

When necessary, the Commission promulgates national mandatory product safety standards.

Since its creation, the Commission has issued 35 mandatory standards.

When the Commission determines that mandatory requirements are needed to address consumer product risks, the procedures for developing safety standards and regulations require the participation of the public, including product manufacturers, importers, distributors, and retailers, through a rulemaking process.

In all such cases industry can submit written comments on the proposed rule before a decision is made.

Additionally, in many rulemaking proceedings, the Commission provides an opportunity for oral presentations concerning the regulatory proposal at a public hearing before issuing a final rule.

The Commission is required to respond to significant issues raised by public comments on the proposed rule.

Although the Commission has the authority to compel compliance with safety requirements, many of its compliancerelated activities are carried out with the cooperation of regulated firms.

For example, the Commission staff frequently participates in seminars and other educational activities designed to explain to firms which are subject to their provisions the provisions of applicable standards or regulations.

The Commission staff also responds to telephone calls and letters from regulated firms inquiring about the requirements of a particular law, standard, or regulation.

When a firm discovers that a product which it has made, imported, or sold presents a "substantial product hazard," provisions of the laws administered by the Commission require that firm to notify the Commission immediately.

The Commission has the legal authority to require the firm to recall or repair the product.

In almost all cases, firms which report "substantial product hazards" work with the Commission staff to develop voluntary corrective action programs. Because of the effectiveness of its rulemaking and compliance procedures – a partnership between government and industry – the Commission has taken legal action to correct a product hazard only a few times.

Finally, the Commission regards seriously its responsibility to inform the public about product safety issues. The Commission's national product safety information and public affairs program is maintained through close relations with a wide range of national groups such as consumer organizations, business groups, trade associations, and medical and scientific associations.

Annual news conferences on toy safety, poison prevention, and fireworks keep the public aware of the hazards associated with such products.

During FY 1990, the Commission received approximately 90,000 requests for information and distributed nearly 1.5 million copies of publications about product hazards and safety in the home.

One safety alert alone was distributed to 23,000 elementary schools warning that students should not use art materials labeled as hazardous.

The Commission also responded to nearly 159,000 calls received through its telephone Hotline.

Many of these calls are consumers complaining about potentially hazardous products.

In conclusion, the U.S. Consumer Product Safety Commission is a Federal agency with broad responsibilities to protect the health and safety of the public by reducing or eliminating unreasonable risks of injury and death associated with consumer products. The Commission's success over the years has been grounded in strong and appropriate partnerships between itself, industry, and America's consumers. The Commission will be happy to share its expertise with the Soviet Union.

### Consultative Committee for International Telegraph and Telephone

The Consultative Committee for International Telegraph and Telephone (CCITT) is the body that establishes the technical, operational and tariff recommendations (standards) for designing and interconnecting telecommunications and information systems throughout the world. In terms of meeting schedules, product output and direct impact on telecommunications, there is no more important and productive international organization.

Specifically, the general purpose of the CCITT is simply to attempt to promote and ensure the efficient operation of international telecommunications systems. This is done by establishing international telecommunications Recommendations (standards) for end-to-end performance, interconnection, and maintenance of the world networks for telephone, telegraph, high speed data, mobile services (maritime, land and aeronautical) and television communications services. Certain international tariff principles are established by the CCITT as well. The membership is concerned primarily with the harmonization of the systems from sender to receiver, the end-to-end users (person-to-person, person-to-machine, and machine-to-machine.)

### Study Groups

The Study Groups of the CCITT provide the working place for the development of the Recommendations. It is in the Study Groups that real decisions are made. The questions are examined in order to find the technically correct and, if necessary, the politically palatable Recommendation that will be issued as the basis for international standards.

The number of CCITT Study Groups is not fixed, but varies with the work being done in a given Plenary period. During the Plenary Assembly some groups are continued (the majority), some are merged to form a new group or a new form of an old group, some are discontinued, and new ones may even emerge.

In general terms, each Study Group, under the direction of a Chairman, deals with the questions assigned by the Plenary Assembly; usually the Study Group subdivides into smaller groups called Working Parties. These Working Parties normally are under the direction of the Study Group's Vice-Chairman. Further subdivisions may occur within the Working Party with a particular question, group of questions, or topic being directed by a Special Rapporteur whose duty it is to oversee, coordinate and communicate the results of the study in its various stages. Correspondence is used as much as possible. Usually the work of the Special Rapporteur is finished when agreement is reached concerning the particular assignment. The various Study Groups may use, however, the Special Rapporteur in slightly differing ways. The Special Rapporteur can also be the Chairman of a sub-group, but he remains the Special Rapporteur during the entire study period.

In addition to voluminous correspondence, several types of meetings are held by each Study Group. These meetings include: plenary meetings (the entire Study Group), Working Party meetings, meetings called by a Special Rapporteur, meetings of the Special Rapporteurs, etc. It is the expressed desire of the CCITT to keep meetings to a minimum.

### United States of America - US-CCITT

The US Organization for the CCITT (US-CCITT) advises the US Department of State on CCITT matters. Membership includes US Government agencies, Recognized Private Operating Agencies, scientific and industrial organizations which are engaged in the study or design of telecommunication equipment and services, and any party with an interest in telecommunications. Business users are encouraged to participate in all US-CCITT activities. Each member is expected to contribute to these activities. The US-CCITT prepares the US positions on matters under deliberation at the CCITT.

### U.S. CCITT Federal Advisory Committee

The scope and technical aspects of the work of the CCITT require the Department of State to depend on private industry expertise in preparing for the United States Government's involvement in CCITT meetings. U.S. industry is extensively involved in all of the Department's preparation for CCITT meetings, particularly in the development of U.S. contributions to the CCITT Recommendation setting process.

To most effectively, efficiently, and openly develop U.S. contribitions in this regard, the Department of State organized the Federal Advisory Group.



### **CCITT Contribution Approval Process**

Contributions to CCITT are of two types: individual-member contributions from recognized private operating agencies or scientific industrial organizations that have CCITT membership, or U.S. contributions that are typically submitted through national standards organizations or government agencies. This flow of contributions is illustrated in Figure Attachment 1

AND THEIR CCITT REFERENCE STUDY GROUPS U.S. CCITT STUDY GROUPS



EFFECTIVE DATE: MAY 1, 1989



dvisory committees have played an important role in shaping programs and policies of the Federal Governmentfrom the earliest days of the Republic Since President George Washington sought the advice of such a committee during the Whiskey Rebellion of 1794, the contributions made by these groups have been impressive and diverse.

Today, an average of 1,000 advisory committees with more than 20,000 members advise the President and the Executive Branch on such issues as the disposal of high-levelnuclear waste, the depletion of atmospheric ozone, the national fight against Acquired. Immune Deficiency Syndrome (AIDS), and on efforts to rid the Nation of illegal drugs or to improve our schools through developing national education goals.



hrough enactment of the Federal Advisory Committee Act (FACA) of 1972 (Public Law 92-463, October 6, 1972), the U.S. Congress formally recognized the merits of seeking the advice and assistance of our Nation's citizens. At the same time, the Congress also sought to assure that advisory committees:

- Provide advice that is relevant, objective, and open to the public;
- Act promptly to complete their work; and
- Comply with reasonable cost controls and recordkeeping requirements.

# Role of Federal Advisory Committees

With the expertise from advisory committee members, Federal officials and the Nation have access to information and advice on a broad range of issues affecting Federal policies and programs. The public, in return, is afforded an opportunity to participate actively in the Federal Government's decisionmaking process.

# Eederal Agency Responsibility

Each Federal agency that sponsors advisory committees must adhere to the requirements established by the FACA, as well as those administrative guidelines provided by the U.S. General Services Administration's (GSA) Committee Management Secretariat. GSA has had the responsibility for overseeing the FACA since 1977.

# GSA's Role Under the FACA

With approximately 1,000 advisory committees in existence at any given time, special attention is required to assure compliance with the FACA, the Freedom of Information Act, and related regulations, as well as to encourage effective and efficient use of committee resources.

While Executive Branch departments and agencies are responsible for continually reviewing committee performance in these areas, the General Services Administration was designated by the President in 1977 to monitor committee activities governmentwide. As part of this responsibility, GSA:

 Conducts annual reviews of advisory committee accomplishments:

 Responds to inquires from agencies on establishing new committees or the renewal of existing groups; and

Prepares an annual report for the President to send to Congress

covering a summary of committee activities.

Together, GSA and the Federal community work together to eliminate the overlap or duplication of advisory bodies, terminate unnecessary or inactive committees, and develop committee management regulations, guidelines, and training in response to requirements of the Executive Branch and Congress.

# Complying with FACA

Any advisory group, with limited exceptions, that is established or utilized by a Federal agency and that has at least one member who is not a Federal employee, must comply with the FACA. To find out if a group comes under the FACA, any individual may contact the sponsoring agency's Committee Management Officer, or the GSA Committee Management Secretariat at FTS 241-4884 or (202) 501-4884.

# Requirements for Establishing and Managing Advisory Committees

Under the Federal Advisory Committee Act, advisory committees can be created only when they are essential to the performance of a duty or responsibility conveyed upon the Executive Branch by law. Before committees can be set up, high-level officials within the sponsoring agency must review and approve the request. Once a committee is approved, a charter is prepared outlining the committee's mission and specific duties and the charter is then forwarded to GSA's Committee Management Secretariat for final review. Following a required public notification period, and the filing of the charter with Congress, the committee may begin operation.

# Committee Management Officer and Designated Federal Official

The Federal Advisory Committee Act also provides that each agency sponsoring a Federal advisory committee must appoint a Committee Management Officer to oversee the administration of the Act's requirements.

In addition, a Designated Federal Official must be assigned to each committee to:

- Call, attend, and adjourn committee meetings;
- Approve agendas;
- Maintain required records on costs and membership;
- Ensure efficient operations:
- Maintain records for availability to the public; and

• Provide copies of committee reports to the Committee Management Officer for forwarding to the Library of Congress.

Expiration of a Committee's Charter

Unless the renewal of a committee charter is justified under the FACA, the charter automatically expires after a two-year period (or as otherwise provided by law).

Advisory.Committee Members

Federal advisory committee members are drawn from nearly every occupational and industry group and geographical section of the United States and its territories. The FACA requires that committee memberships be "fairly balanced in terms of the points of view represented and the functions to be performed."

As a result, members of specific committees often have both the expertise and professional skills that parallel the program responsibilities of their sponsoring agencies. In balancing committee memberships, agencies are expected to assure that major--and sometimes strongly opposing--viewpoints are represented to provide a foundation for developing advice and recommendations that are fair and comprehensive.

Appointing Committee Members

Agency officials, Members of Congress, the general public, or professional societies or current and former committee members may nominate potential candidates for membership.

Selection of committee members is made based on the FACA's requirements and the potential member's background and qualifications. Final selection is made by the President or heads of agencies.

Prior to accepting an appointment with a Federal advisory committee, each prospective member should meet with the appropriate agency Committee Management Officer and Designated Agency Ethics Official, to discuss duties and obligations, allowable expenses and compensation limitations.

Federal Conflict of Interest Laws

Agency officials must provide prospective advisory committee members with information regarding any applicable standards of conduct--including those imposed by Federal conflict of interest statutes. In some instances, members may be subject to special limitations during the course of their service on an advisory committee. For some members, these restrictions also may apply (for limited periods) after their committee assignments have ended. Some agencies may impose additional administrative requirements as well. To avoid potential conflicts, each advisory committee member should assure that he or she receives adequate information from the sponsoring agency and completes any required appointment papers and disclosure forms prior to service on a committee.

Oral briefings and other explanatory material may be obtained through the sponsoring agency's Committee Management Officer. Designated Agency Ethics Official, or from the Office of Government Ethics, which has governmentwide jurisdiction on Federal ethics issues.

Limits on Membership Terms

Each agency sets limits on the lengths of terms for serving on advisory committees to allow for continually new membership.

Open Access to Committee Meetings and Operations

Under the provisions of the Federal Advisory Committee Act, Federal agencies sponsoring advisory committees must:

• Arrange meetings for reasonably accessible and convenient locations and times;

• Publish adequate advance notice of meetings in the Federal "Register;"

• Open advisory committee meetings to the public (with some exceptions--see the section on "Government in the Sunshine Act" below);

• Make available for public inspection, subject to the Freedom of Information Act, papers and records, including detailed minutes of meetings; and

Maintain records of expenditures.

- Government in the Sunshine Act

Advisory committee meetings may be closed or partially closed to the public based upon provisions of the "Government in the Sunshine Act" (Public Law 94-409, September 13, 1976). Examples of meetings that may be closed under the FACA are:

• Those including discussions of classified information;

• Reviews of proprietary data submitted in support of Federal grant applications; and

• Deliberations involving considerations of personal privacy.

# For More Information

For more information on the requirements of the Federal Advisory Committee Act, contact the General Services Administration's Committee Management Secretariat at FTS 241-4884 or (202) 501-4884.

Copies of the following information materials also may be obtained through the Committee Management Secretariat:

• Annual Report of the President on Federal Advisory Committees (for current fiscal year)

- Federal Advisory Committee Act (is in Annual Report)
- Government in the Sunshine Act (excerpt is in Annual Report)

• GSA Final Rule on Federal Committee Management (is in Annual Report)

- List of agency committee affiliations (is in Annual Report)
- The Federal Advisory Committee Act: An Overview

Other materials, such as samples of nominating letters and charters, are available from each sponsoring agency.

Cover engraving: *Washington Presiding in the Convention*, 1787, J. Rogers after Wageman. No date.

D5. National Highway Traffic Safety Administration

### REGULATION OF VEHICLE SAFETY IN THE UNITED STATES

Duane A. Perrin National Highway Traffic Safety Administration March 11, 1991

### Who Regulates Motor Vehicle Safety?

Vehicle safety is regulated by three separate groups. All three work together to coordinate their efforts.

 National Highway Traffic Safety Administration (DOT) Safety standards for new vehicle manufacturers. Safety defect investigations and recalls. Assistance to states for driver safety programs. Consumer information.

Federal Highway Administration (DOT)
 Roadway safety specifications.
 Operational and safety requirements for operators of
 vehicles involved in interstate commerce.
 National Commercial Driver License.
State Governments

Operational and safety requirements for all drivers.

### The U.S. (NHTSA) Regulatory System

Both U.S. law and Administration policy require that the Federal Motor Vehicle Safety Standards meet safety needs, be practicable (considering benefits and costs), and be objective (well-defined). As much as possible, we also try to make them performance oriented rather than design specific. Our rulemaking procedures require that all regulatory actions be announced to the public (published in the Federal Register). Anyone is allowed to comment on a proposed rule, and all comments must be considered before issuing a final rule. Foreign governments, international organizations, foreign manufacturers and associations are also encouraged to comment in our proceedings. We consider their views just as carefully as those of similar groups in the U.S.

Our regulatory system is more formal and more public than that of most countries. The rulemaking process sometimes takes longer because of these constraints. Our regulations also tend to be more explicit and less subjective than those of most other countries.

Once a safety standard is in effect, it applies to all new vehicles of the applicable type sold in the U.S., regardless of where the vehicle was produced. There are no differences in requirements for domestic versus imported vehicles. Also, there are no provisions for approval of special vehicles on an individual basis, as is the case in most other countries. Thus, our standards have to be written in terms that are general enough to accomodate any vehicle configuration that might be designed by a manufacturer. Revisions to existing standards must be made following the same procedures as for new rules.

### The U.S. (NHTSA) Certification System

There is also a difference in the way a vehicle manufacturer demonstrates compliance with our regulations. In the U.S. we have a self-certification system. A manufacturer of vehicles marketed in the U.S. must certify that every vehicle sold meets all applicable safety standards. This certification is the sole responsibility of the vehicle manufacturer, whether foreign or domestic. The U.S. government is not a party to the safety certification of a motor vehicle or an item of motor vehicle equipment. The manufacturer is free to use whatever product testing procedures or quality control measures he deems necessary to assure that the product meets the standards. The U.S. government periodically checks compliance with safety standards by buying new vehicles (as any consumer would) and testing them. If they do not comply, the manufacturer can be required to recall all vehicles of that type, and either bring them into compliance or refund the purchase price. The manufacturer is also subject to fines for noncompliance, up to \$1000 per vehicle.

Most other countries, including the U.S.S.R., have a typeapproval process for new vehicles. In the type-approval system, a prototype vehicle must be submitted to the government for approval prior to allowing it to be sold. In this case, the government becomes party to the certification process. The manufacturer then certifies that every vehicle of that type that is built will conform to the prototype, and the government has procedures for checking this conformity of production.

### International Harmonization of Safety Regulations

The goal of international harmonization of regulations is the removal of non-tariff barriers to trade. In the vehicle safety area, the primary forum for this work is the Economic Commission for Europe (ECE). Through the ECE, common regulations can be developed, which can be adopted and honored on a reciprocal basis by the member countries. The ECE has adopted a type-approval system, and type approvals granted in one country may be honored in other countries. The ECE also coordinates its regulations with those of the Common Market (EEC).

The U.S. is also represented in the ECE, but we cannot grant or honor type approvals because of the differences in our regulatory laws. That is not likely to change, although there have been some efforts made toward an arrangement whereby there could be reciprocal recognition of ECE type approvals and U.S. self-certification. In the meantime, we continue to try to achieve harmonization of the technical content of our standards with ECE regulations. This is often a difficult and timeconsuming task, as a result of the different ways in which our rulemaking process and the ECE regulatory process operate. Two initial areas of concentration where we have achieved some success are the regulation of brakes and headlighting systems. D6. Center for Devices and Radiological Mealth

OVERVIEW OF FDA MEDICAL DEVICE STANDARDS ACTIVITIES The Joint U.S. - U.S.S.R. Commerical Commission March 11, 1991 Herbert Hoover Building 14th and Constitution Avenue, N.W. Washington, D.C. 20203

- I. STATUTORY REQUIREMENTS
  - A. DEVICES ARE REGULATED WITHIN THREE CATEGORIES OR CLASSES -DEPENDENT UPON ASSOCIATED RISK
    - 1. CLASS I GENERAL CONTROLS (LEAST STRINGENT E.G. LABELING, GMP)
    - CLASS III PREMARKET APPROVAL (MOST STRINGENT REQUIREMENTS)
    - 3. CLASS II SPECIAL CONTROLS (APPLIES TO 800 OF 1600 TYPES OF DEVICES (E.G. - POST MARKET SURVEILLANCE, PATIENT REGISTRIES, GUIDELINES, OR MANDATORY PERFORMANCE STANDARDS)
- II. STANDARDS POLICY (1985)
  - A. MANDATORY STANDARDS ARE VERY COSTLY
    - RADIOLOGICAL PRODUCTS 28 MONTHS AND 40 FTE'S PER STANDARD FOR DEVELOPMENT; 23 FTE'S AND \$500,000 PER YEAR TO ENFORCE
    - 2. MEDICAL DEVICES (APNEA MONITOR NOT COMPLETED TO DATE: \$260,000 AND 7 FTE'S; EXPECTED TOTAL FOR COMPLETION -\$325,000 AND 10 FTE'S)
  - B. BEFORE MANDATORY STANDARDS ARE DEVELOPED, PRIORITIES ARE ESTABLISHED BY CONSIDERING A NUMBER OF FACTORS - ONE OF WHICH IS WHETHER THERE IS A GOOD VOLUNTARY STANDARD AVAILABLE THAT IS ADHERED TO INDUSTRY.

- III. VOLUNTARY STANDARDS ACTIVITIES.
  - A. PROVIDE LEADERSHIP/COORDINATION ANSI MEDICAL DEVICE STANDARDS BOARD AND ANSI BOARD OF DIRECTORS
  - B. PARTICIPATION 29 ORGANIZATIONS, 256 EFFORTS, 151 PEOPLE TOTAL: (INTERNATIONAL - 43 EFFORTS, 40 PEOPLE)
  - C. PRIORITY GENERIC OR HORIZONTAL CROSSCUTTING STANDARDS APPLICABLE TO A LARGE NUMBER OF DEVICES
    - 1. IEC 601-1 (INTERESTED IN HARMONIZING WITH THE U.S. STANDARD (APPLIES TO 600 DEVICES/ COVERS NEARLY ALL SAFETY ASPECTS OF ELECTROMEDICAL DEVICES
    - 2. DEVICE STERILITY (ISO TC 198) NEW INTERNATIONAL EFFORT -U.S. LEADERSHIP, CHAIRED BY CDRH SCIENTIST
    - 3. GMP (QUALITY ASSURANCE SYSTEMS WOULD LIKE TO HARMONIZE OUR CURRENT REQUIREMENTS WITH THE ISO 9000)
    - 4. BIOMATERIAL SAFETY USING TRIPARTITE EXPERIENCE

### IV. GOALS

- A. HARMONIZED STANDARDS THAT CAN PROVIDE THE BASIS OF FUTURE MEMORANDA OF UNDERSTANDING
  - 1. FOR BETTER WORLD WIDE PUBLIC HEALTH
  - 2. FACILITATE TRADE.

# WEIGHTS AND MEASURES

# IN THE UNITED STATES

Presented by

### **ALBERT D. THOLEN**

To The

# STANDARDS WORKING GROUP JOINT U.S.-U.S.S.R. COMMERCIAL COMMISSION

March 11, 1991

X:\DATA\WPSOSHAR\ADT\RUSSIAN.TLK

# WEIGHTS AND MEASURES IN THE UNITED STATES

### CHART 1 - WEIGHTS AND MEASURES IN THE UNITED STATES OF AMERICA

Weights and measures regulation in the United States is designed to provide a healthy, competitive marketplace that provides a wide choice of products at affordable prices for the consumers. The consumers, as we say, "drive" the market. If they buy the products provided, business prospers.

Therefore, industries (the private sector) develop, produce, and sell those products that they think will sell at prices that they believe will be attractive.

This commercial activity is regulated by each of the fifty States - the public sector.

The Office of Weights and Measures of the National Institute of Standards and Technology has played an important role in this diverse system of commerce for more that 150 years.

### CHART 2 - INDUSTRY, THE PRIVATE SECTOR

Regulation of weights and measures by the States in the U.S. is generally limited to regulation of retail trade. Unlike many other nations, U.S. weights and measures regulation does not extend to production quality or distribution facilities, nor to other areas such as medical and environmental devices. The industry involved in the United States includes:

All businesses manufacturing, selling, and servicing weighing and measuring devices and systems; and

All businesses processing, packaging, distributing, and selling commodities.

The weights and measures inspector considers that he or she is protecting both the consumer and the business owner. In fact, we often refer to the weights and measures inspector as the "third man". It is important to insure that all businesses obey the law equality so that the competition is kept fair for all of the businesses competing with each other.

### Chart 3 - THE FIFTY STATES

Regulation of weights and measures is the responsibility of each of the fifty States. Each state has its own weights and measures law and regulations. Each state has the legal right to organize for and conduct its program anyway it wants. Except for the operation of the state

X:\DATA\WP50SHAR\ADT\RUSSIAN.TLK

standards laboratory, which is discussed later, we at NIST have no authority over the States.

Since each State is independent in its regulation of weights and measures, the question is "how can we avoid confusion that would result from each state going its own way?"

Confusion is avoided through the leadership of the National Institute's Office of Weights and Measures in coordination of the development of standard laws and regulations, and the OWM management of the mechanisms for the adoption of these standards by the States.

### Chart 4 - THE OFFICE OF WEIGHTS AND MEASURES

The NIST role is carried out by the Office of Weights and Measures. In that role, the Office carries out the following activities:

Functions as the Secretariat for the National Conference on Weights and Measures;

Operates the National Type Evaluation Program;

Operates the National Training Program; and

Operates the State Standards Program.

The rest of this talk will be describing the organization and program of the National Conference on Weights and Measures. Before I do that, I want to briefly describe the other three activities listed on this chart.

### <u>Secretariat</u>

The secretariat manages the operations of the Conference including: (1) arranging and conducting meetings of the Conference and its committees, (2) development of agendas, programs, assignment of technical advisors, (3) printing committee reports, and (4) publication of archival documents.

### The National Type Evaluation Program

The National Type Evaluation Program is a cooperative activity involving the National Institute of Standards and Technology, the National Conference on Weights and Measures, the fifty States, and the industry. NIST manages the Program for the National Conference on Weights and Measures. The Program evaluates new design commercial devices such as electronic scales, gasoline dispensers, highway truck scales, railroad scales, and grain hopper scales, to determine if they meet the legal requirements as defined in NIST Handbook 44. The devices are evaluated in laboratories at NIST or in NIST accredited state laboratories. If a device meets the requirements, the NIST issues a Certificate of Conformance that is sent to the manufacturer of the device and all of the States. Most States require that a device have a Certificate of Conformance before it can be used in commerce in the state.

### The National Training Program

NIST, in cooperation with the National Conference on Weights and Measures, develops training courses that are used by all of the States in training and certifying their field inspectors. Twelve courses have been published; examples of the courses include:

Retail Electronic Computing Scales, Retail Motor-fuel Dispensers and Consoles.

NIST coordinates the training using these courses. The training is given by NIST staff, and accredited State or third party instructors. As of December 1990, 4520 state inspectors had been trained under this program.

### The State Standards Program

Each of the fifty States has a metrology laboratory used for support of its regulatory program as well as to provide calibration services for business and industry in the State. The NIST provided every State with mass, volume, and length standards as well as balances and other laboratory equipment needed for their operation.

NIST operates an quality control program of the State operations that includes conduct of round robins, measurement assurance programs, training of State metrologists, and laboratory visits. Each State must meet NIST established requirements in order to receive accreditation by NIST. This accreditation is annual, and is accompanied by a NIST issued Certificate that is posted in the State laboratory.

NIST publishes laboratory procedures, practices, and standards in a series of NIST handbooks and special technical publications.

### CHART 5 - THE NATIONAL CONFERENCE ON WEIGHTS AND MEASURES

Because regulation of weights and measures is a State function, it is necessary that some mechanism exist to bring the States together to develop their laws, regulations, and inspection procedures in a uniform manner. The NIST, working with the States established the National Conference on Weights and Measures in 1904. The Conference has operated since then as the national forum to develop uniform laws, regulations, and standards on a consensus basis. Membership in the Conference is completely voluntary; it is not mandated by the Federal Government. The goal is to provide uniformity of the legal basis for commerce in the Nation.

### CHART 6 - CONFERENCE MEMBERSHIP

X:\DATA\WP50SHAR\ADT\RUSSIAN.TLK

The Conference has over 3000 members who pay annual membership fees. Of the 3000 + members, about 50% are State weights and measures officials, and 50% are representatives of business and industry organizations.

The corresponding affiliates total over 8000, of which about 25% are State weights and measures officials and 75% are from business and industry. The affiliates receive newsletters reporting on the decisions of the National Conference.

The work of the Conference is ongoing through the activities of many committees. However, the Conference holds an Annual Meeting in July at which the issues are discussed by those in attendance. Issues that are proposed for changes to laws, regulations, and device requirements are voted on. Those that are passed, are incorporated into the various standards documents published by NIST, and become effective on January 1 of the next year. Discussion of the issues is open to all in attendance. However, only State representatives have the right to vote on the issues.

### CHART 7 - WHAT ARE THE STANDARDS?

The laws and regulations adopted by the Conference are published in NIST Handbook 130. They are subsequently adopted by the States, thereby becoming the legal requirements of the Nation. These standards include:

The Weights and Measures Law, and regulations for (1) the method of sale of commodities, (2) National Type Evaluation, (3) Packaging and Labeling, etc.

The specifications and tolerances for commercial devices are published in NIST Handbook 44. Included are specifications for scales, liquid-measuring devices, and other devices used in commerce.

Packaging regulations and testing procedures are published in NIST Handbook 133. The Handbook includes package contents requirements, testing procedures (sampling plans and protocols, testing equipment and specifications, and computational methods).

### CHART 8 - SUMMARY

Weights and measures regulation in the United States is a cooperative effort involving the consumers, the businesses and industry carrying on trade, the States as the regulators, and the NIST as the coordinator of the interests of all parties.

All of these activities are centered in the National Conference on Weights and Measures which is a voluntary association of all interested parties, and administered by the NIST.

The work of the Conference is geared to produce the legal and technical standards used throughout the United States for the continuation of a uniform and equitable marketplace.

X:\DATA\WPSOSHAR\ADT\RUSSIAN.TLK

These standards are developed in an open, consensus seeking forum. Uniform laws and regulations, and packaging standards are developed through the work of the Conference Committee on Laws and Regulations, published in NIST Handbooks 130 and 133.

Specifications and Tolerances for commercial devices are developed by the Conference Committee on Specifications and Tolerances, published in NIST Handbook 44.

The Training courses are developed under the direction of the Committee on Education.

The Committee on Liaison coordinates the work of the Conference with the various Federal agencies such as the Food and Drug Administration, and the Federal Trade Commission.

That briefly is an outline of the Weights and Measures System in the United States. I will be pleased to discuss any aspect of the system with you in detail during your visit with us this week.

Thankyou.






# WEIGHTS AND MEASURES IN THE STATE



AND STANDARDS LEADING TO NATIONAL UNIFORMITY

COORDINATES THE DEVELOPMENT OF STATE LAWS, REGULATIONS,



## THE NATIONAL CONFERENCE

## TYPE EVALUATION PROGRAM

### THE NATIONAL TRAINING PROGRAM

THE STATE STANDARDS PROGRAM



## **PROVIDE A NATIONAL FORUM**

# DEVELOP CONSENSUS STANDARDS

## **VOLUNTARY MECHANISMS**

# TO ACHIEVE NATIONAL UNIFORMITY

71





### LAWS AND REGULATIONS NIST HANDBOOK 130

### **DEVICE SPECIFICATIONS AND TOLERANCES** NIST HANDBOOK 44

### PACKAGING REGULATIONS AND TESTING PROCEDURES NIST HANDBOOK 133



# NIST STANDARDS CODE AND INFORMATION

### PROGRAM

o National Center for Standards and Certification

Information

- **Standards Reference Collection** 0
- o Publications
- **Standards Assistance Program** 0
- **Technical Analysis and Consultation** 0

### NATIONAL CENTER FOR STANDARDS AND **CERTIFICATION INFORMATION**

international standards, regulations and conformity o Information source on domestic, foreign and

assessment programs.

- o U.S. member body to ISONET.
- o U.S. inquiry point under the GATT Agreement on Technical Barriers to Trade (Standards Code).
  - o EC and GATT telephone 'hotlines.'

# STANDARDS REFERENCE COLLECTION

- o Microform and hard copy collection of U.S. industry standards, Federal and military specifications, and foreign national and international standards.
- technical and scientific dictionaries, and handbooks. Reference books including indexes, directories, 0

77

Standards-related periodicals, newsletters, reports and articles. 0

### **PUBLICATIONS**

- o Directories
- Certification and accreditation programs
- International and regional standards activities
- Standards activities of U.S. organizations
- o Special Reports
- U.S. participation in international activities
- EC1992 approach to standards development I
- Introductions to U.S. standards-related activities I

## STANDARDS ASSISTANCE PROGRAM

- o Coordinate U.S. input for draft Saudi Arabian standards.
- Provide short term expert visits to 3rd world nations. 0

79

- Participate in ISO DEVCO activities. 0
- Host orientation visits for foreign standards experts. 0

# **TECHNICAL ANALYSIS AND CONSULTATION**

- o Assist industry with standards-related trade problems.
- o Analyze standards issues and provide information for bilateral standards discussions.
- Participate in government and private standardsrelated advisory committees. 0

March 11, 1991

#### THE INTERNATIONAL ORGANIZATION OF LEGAL METROLOGY

By

Samuel E. Chappell, Chief Standards Management Program Office of Standards Services, NIST and U.S. Representative to OIML

The International Organization of Legal Metrology (OIML) is a treaty organization established in 1955. OIML evolved from the organization of the Convention of the Metre established in 1875 to define the units of measurement on an international basis and to ensure the uniformity of national measurement standards representing those units. Figure 1 summarizes the organizational structure and objectives of the Convention of the Metre.

OIML has the objectives of harmonizing national regulations for the performance requirements of legal measuring instruments, facilitating international commerce of measuring instruments as well as affected products, and ensuring the quality of measurements for public health and safety and the protection of the environment. The effect is to avoid or to minimize technical trade barriers in the international commerce of affected products and services. Currently, 50 nations are members of OIML, and 32 nations, most being characterized as developing nations, are corresponding members. Figure 2 summarizes the organizational structure and objectives of OIML.

The outputs of the organization are Recommendations and Documents, publications that address the technical preformance requirements and the legal applications and control of such instuments. Figure 3 lists the current number of OIML publications and indicates the major subjects covered. In general, Recommendations are model regulations that are presented in the form of a performance standard for a particular type or class of instrument. Figure 4 shows the typical contents of a Recommendation.

The Recommendations and Documents are developed in technical committees and subcommittees, called respectively Pilot Secretariats and Reporting Secretariats, that address instruments involved in various areas of measurement. There exists currently 27 Pilot Secretariats and 150 Reporting Secretariats. A member nation takes responsibility for a Secretariat which means having the obligation and opportunity to develop the initial draft Recommendation or Document for a measuring instrument being addressed. Work of the Secretariats is initiated in a national working group of the responsible nation, and it is further developed in an international working group of the Secretariat made up of representatives of collaborating member nations. A member nation may collaborate either as a participating (voting) member or as an observing (non-voting) member. Liaison is established with other relevant international organizations that may participate in the work in an observing status. Work approved at the Secretariat level is sent for final review and approval to the International Committee of Legal Metrology (CIML), which is made up of a representive of each member nation. If approved by CIML, the Recommendation may be sanctioned at a quadrennial Conference on Legal Metrology that has diplomatic participation by member nations. The decisions of the Conference commit member nations to have a moral obligation to implement sanctioned Recommendations in their national regulations of measuring instruments. This obligation applies to the development of any new regulation as well as the harmonization of any existing regulations.

The United States participates in a majority of the Secretariats and has responsibility for 6 of the 27 Pilot Secretariats and 20 of the 150 Reporting Secretariats. The major subject areas for which the United States is responsible are as follows:

- mass measuring instruments
- liquid-volume measuring instruments
- liquid- and gas-flow measuring instruments
- pollution measuring instruments
- package labeling
- principles of pattern approval and verification of instruments.

Positions on work in general and carrying out responsibilities for work in Secretariats in particular are conducted in U.S. national working groups. Participants on behalf of the United States include technical experts representing instrument manufacturers, instrument users, professional organizations, trade associations, and Federal and State governmental agencies.

In addition to harmonizing internationally the performance requirements for measuring instruments, a significant effort is made to influence the harmonization of the national metrological control of measuring instruments. When exercised, metrological control generally involves three phases of regulation: pattern approval, initial verification, and subsequent verification of measuring instruments. Ideally, OIML Recommendations provide the metrological and technical performance requirements and associated tests necessary for pattern, or type, approval of an instrument. Many nations require instrument manufacturers to obtain a Certificate of Conformity of an instrument's pattern before it can be sold for service in that country. Further, each instrument may be subjected to an initial verification examination for approval before being placed into service. After an instrument has been in service for a specified period of time, it may be subjected to reapproval by a subsequent verification examination.

OIML has implemented a voluntary OIML Certificate System that has the objective of providing an instrument manufacturer a Certificate of Conformance for the pattern of an instrument that meets the requirements of a relevant OIML Recommendation. Such a Certificate would be accompanied by a test report prepared according to provisions of that Recommendation. Each OIML member nation may voluntarily participate in the Certificate System. If a nation chooses to participate, an issuing authority and a recognized testing laboratory must be identified for each catagory of instrument to be covered. Figures 5, 6, and 7 summerize the requirements and responsibilities of participants in the System. Manufacturers that choose to participate in the System may use Certificates to provide evidence to responsible officals that their instruments meet the performance requirements of any nation and may subsequently use the information in advertizing and other marketing literature for the instrument. Responsible officals of OIML member nations are encouraged to recognize an OIML Certificate and its associated test report when carrying out their national type approval.

The United States is taking the lead to address a more efficient means of carrying out initial verification. An OIML Document is in preparation that addresses the subject of "Quality Assurance as Applied for Initial Verification of Measuring Instruments". This Document outlines the quality systems that a manufacturer must have in place in order to declare conformance of a newly manufactured instrument to the performance requirements of a relevant OIML Recommendation or other standard. Such a declaration by a manufacturer would be accepted by responsible officals instead of carrying out initial verification. The Document also provides the requirements by which responsible officals may authorize, or accredit, manufacturers to implement such quality systems as well as a means of providing periodic surveillance of their effectiveness.

## CONVENTION OF THE METRE

### Organization

- GCPM
- CIPM
- Consultative Committees
- BIPM

#### Objectives

- Harmonize national physical standards
- Establish units of measurements (SI)

#### OIML

### Organization

- Conference

- Pilot and Reporting Secretariats

- CIML
- BIML

#### Objectives

- Harmonize national regulations for performance requirements for legal measuring instruments 1
- Facilitate international commerce of measuring instruments as well as affected products E
- Ensure quality measurements for public health and safety and protection of the environment E

## **OIML PUBLICATIONS**

### **Recommendations: 97**

- Measuring instruments: 73
- Measurements: 24

### Documents: 20

### Major subjects:

- Mass r
- Volume .
- Fluid Flow .
  - Pressure E
- Temperature
- Electricity
  - Acoustics
- **Optics Pollution** 8
- 8
- Ionizing radiation Mechanical testing
- Medical instruments
  - Packaging

ന

Figure

#### RECOMMENDATIONS

**Title Page** 

Content

Introduction

- 1. Scope
- 2. Application
- 3. Terminology
- 4. Description of the instrument
- 5. Metrological requirements
- 6. Technical requirements
- 7. Practical instructions
- 8. Metrological controls

Annexes

References

## **OIML CERTIFICATE SYSTEM**

Voluntary

**Issuing authority** 

Manufacturer, importer, distributor

Nationally recognized testing laboratories

Test report according to OIML format

Registration and published list by BIML

Certificate used by owner

- Application for pattern approval
- Presentation for initial verification

### **OIML CERTIFICATE SYSTEM** RESPONSIBILITIES

### MEMBER NATION

- CIML member
- Issuing authority
- Testing laboratory
- Test report
- Certificate
- Appeals process
- Consider other Certificates and test reports to meet national requirements

### MANUFACTURER

- Application
- Submit samples
- Testing fee
- Registration fee
- May appeal decisions
- Submit Certificate and test report to meet national requirements

### **OIML CERTIFICATE SYSTEM** RESPONSIBILITIES

#### BIMIL

#### CIMI

- Administers System
- Supervises System
- Lists instrument categories and relevant Recommendations
- Registers Certificates
- Maintains and publishes list of approved Certificates

- Establishes instrument categories
- Approves relevant Recommendations
- Reviews and revises System, periodically
- Assists in appeals, if requested

D7d. Building and Fire Research Laboratory

Building Codes and Standards in the United States

by

#### Richard N. Wright Director, Building and Fire Research Laboratory National Institute of Standards and Technology

Historically, building regulations were created and enforced to satisfy the objectives of protecting the "health" and "safety" of building occupants and the public in general. The Constitution of the United States leaves the authority to regulate building design and construction to the states. In the past, this authority usually has been exercised by political jurisdictions at the local level, such as cities and counties. Recently, there has been a broad movement by the individual states, to reclaim authority for the development and implementation of statewide building codes. There are now 39 states that have statewide building codes, in various forms, which are implemented in different ways. Thirty-five are based upon one of three model codes, and four are state written.

Several national organizations have been formed to improve both the code content and the process for building code enforcement. Three of these organizations are associations of building officials; each promulgates a model building code (i.e., the Building Officials and Code Administrators International (BOCA), the National Building Code; the Southern Building Code Congress International (SBCCI), the Standard Building Code; and the International Conference of Building Officials (ICBO), the Uniform Building Code). These "model" codes are not, in a strict sense, a code. A code is a standard or other set of conditions and requirements which is made mandatory by government bodies, either through direct legislation or through administrative regulation, based on authority granted by a legislative body.

91

A model code is a standard or other set of conditions and requirements that is recommended for use as a code or regulation. It is developed and promulgated with the intent that it be adopted for regulatory application.

The model building codes cited above are gaining in acceptance and use by state and local governments. Of the 39 states with statewide building codes, 35 are based on either the National, Standard, or Uniform model codes. The major cities of the United States also appear to be moving toward the adoption and use of the three model codes. The Association of Major City Building Officials (AMCBO), made up of the 31 cities of over 500,000 population, reports that 80 percent of these cities now use the model codes as the basis for their regulations, although many of these cities amend the models.

Standards, which are referenced or incorporated, provide the bases for most of the technical requirements in building codes. While most of these standards are materials specifications or test methods, there are numerous design standards, particularly structural design standards, that are referenced in the codes. Many of these same standards are widely used as a basis for design contracts and construction specifications as well as building regulations. Because of this broad regulatory and contractual use, standards provide the principal vehicle for the transfer of advancements from research in building technology.

Most national standards in the United States are produced through a "voluntary system" made up of government and industry, producers and consumers, institutions and individuals. The system is called "voluntary," since participation of interested parties is on a voluntary basis; and the standards

92

produced are available for voluntary use in building regulations and in building contracts. When so used, compliance with the standard is mandatory. The voluntary standards are produced by two general processes, leading to "industry" standards and "consensus" standards. "Industry" standards are those promulgated by a given industry or industrial group. "Consensus" standards are most often developed by standards organizations devoted to standards writing. Some professional societies and industry trade associations also develop consensus standards as part of their activities and, in doing, ensure the opportunity for broad representation and participation.



#### STANDARDS DEVELOPMENT

- Voluntary participation
  - Voluntary application
- Regulatory requirement
  - Contract requirement
- Industry standards
- Limited participation
  - Industry controlled
- Consensus standards
   Unlimited participation
  - Process controlled

#### STANDARDS IN BUILDING CODES

- 2,000 referenced
  Typically 300 to 400
- Structural design highest usage - ACI 318
- AISC specifications
   ASTM ≈ 660
- ASCE-ANSI A58.1

#### MAJOR BUILDING STANDARDS ORGANIZATIONS

- ANSI American National Standards Institute
- ASTM American Society for Testing and Materials
  - ACI American Concrete Institute
- AISC American Institute of Steel Construction
- ASCE American Society of Civil Engineers
- ASHRAE American Society of Heating, Refrigerating, and Air Conditioning Engineers
  - ASME American Society of Mechanical Engineers
    - IES Illuminating Engineering Society
- NFPA National Fire Protection Association
- UL Underwriters Laboratory
- ISO International Standards Organization

## THE REGULATORY SYSTEM





# **BALDRIGE AWARD ORGANIZATION**



## PUBLIC LAW 100-107

#### Purposes

- Awareness
- Recognition
- Information Transfer

### Categories

- Manufacturing
- Service Companies
- Small Businesses

## Up to Two Awards Per Category

Malcolm Baldrige National Quality Award

### **BALDRIGE AWARD WINNERS** 1990

- Cadillac Motor Car Division (General Motors)
- (International Business Machines) **IBM Rochester**
- Federal Express Corporation
- Wallace Company, Inc.




# **BALDRIGE AWARD WINNERS**

- 1989 Milliken & Co.
- Xerox Business Products and Systems
- 1988 Motorola
- **Commercial Nuclear Fuel Division** (Westinghouse)
- Globe Metallurgical





# **BASIC PROGRAM DESIGN**

- National Value System for Quality
- Vehicle for Cooperation
- Basis for Information Transfer
- Evolution Through Consensus





# **RIGOROUS EVALUATION PROCESS**

- First Stage Review
- Consensus Review
- Site Visits
- Judges' Recommendations

## Final Contenders Receive More Than 400 Hours of Evaluation Each







Malcolm Baldrige National Quality Award

# **BOARD OF EXAMINERS**

- Judges
- Senior Examiners
- Examiners
- Selected According to Expertise, Experience, Peer Recognition
- Do Not Represent Companies or Organizations

# **EXAMINATION CATEGORIES**

(10%)	(%9)	(15%)	(14%)	(18%)	(30%)
Leadership	Strategic Quality Planning	<ul> <li>Human Resource Utilization</li> </ul>	<ul> <li>Quality Assurance of Products</li> </ul>	Quality Results	<ul> <li>Customer Satisfaction</li> </ul>

Malcolm Baldrige National Quality Award





### GENERAL FINDINGS Problems

- Lack of Clear Quality Definition
- Partial Quality System
- Lack of Quality Strategy
- Lack of Quality Measures
- Lack of Awareness of Best
- Reactive Customer Systems

Malcolm Baldrige National Quality Award



### GENERAL FINDINGS Strengths

Aggressive Quality Goals --

**Benchmarks, Response Time Drivers** 

- Use of All Customer "Listening Posts"
- Comprehensive Training and Education --**Evaluation/Reinforcement**
- Quality in All Operations -- Integration Across Functions

Malcolm Baldrige National Quality Award



### Appendix E

Presentations by Private Sector Representatives



### **NFPA: An Overview**

The National Fire Protection Association (NFPA), which was organized in 1896, has as its mission the safeguarding of people, their property, and the environment from destructive fire, using scientific and engineering techniques and education. The Association was incorporated in 1930 under laws of the Commonwealth of Massachusetts and has its headquarters in Quincy, Massachusetts.

NFPA is an independent, voluntary membership, nonprofit (taxexempt) organization. A 30-member Board of Directors has general charge of the affairs of the Association, which has a staff of some 150 professional men and women plus more than 178 support personnel.

NFPA is financed principally by sales of its publications and audiovisual materials, membership dues, income from seminars, research grants, and contributions. It operates on an annual budget of \$35 million.

Membership in NFPA totals more than 56,000 individuals and 115 national trade and professional organizations. The vast majority of the members are residents of the United States, but because of its international status, there are many members from Canada and 85 other nations. Members are drawn from fire departments (24%), health care facilities (11%), business and industry (20%), insurance (6%), federal, state, and local government (7%), architects and engineers (8%), fire equipment manufacturers and distributors (6%), trade and professional associations (2%), and other fields (16%).

There are six categories of Voting Members: Regular, Life, Senior, Organization, Sustaining, and Honorary. There are two categories of Nonvoting Members: Affiliate and Student.

There are 13 Sections within the Voting Membership. The Fire Marshals Association of North America is the oldest. It was founded in 1906 and reorganized in 1927 as the Fire Marshals Section of NFPA. The other Sections, in order of their founding, are Electrical (1948), Rail Transportation Systems (1963), Industrial Fire Protection (1963), Fire Service (1973), Health Care (1976), Fire Science and Technology Educators (1976), Architects, Engineers and Building Code Officials (1979), Aviation (1980), Education (1981), Research (1987), Wildland Fire Management (1988), and Lodging Industry (1988). (Further information on all Sections, including their officers, appears elsewhere in this Directory.)

The Member Advisory Council was established in 1975 to facilitate communication between Association members and management. Its members are geographically well diversified, and they represent the varied interests in the Association membership. It is managed on a local level by eight Regional Vice Chairmen, each of whom are Council members. The Council voluntarily serves to communicate to NFPA management the thoughts and suggestions of members of the Association. It meets once a year in November during the Fall Meeting.

The four-day NFPA Annual Meeting and Firesafety Exhibit takes place each May, with an average attendance of 5,000 persons and the largest firesafety exhibit of its kind in North America. The Fall Meeting, which lasts three or four days and attracts some 1,200 persons, occurs each November. To reach a larger segment of members, meetings are held in various locations throughout the United States. Some take place in Canada, and one, thus far, has been in Europe. Technical presentations on new developments and concepts, discussions, voting on Technical Committee standards actions, NFPA Section meetings, conduct of other Association business, and special events make up the Meeting programs. Registration is open to all who are interested, although only Voting Members may vote.

Since 1982 Regional Membership Meetings have taken place in various cities throughout the U.S. and Canada each year. These one-day events enable NFPA members in a region to meet each other; to meet and hear from NFPA Board of Directors, administration, and staff members; to discuss openly any problem of concern; and to learn first-hand about new developments in firesafety.

Activities of NFPA generally fall into two broad, interrelated areas: technical and educational.

The basic technical activity involves development, publication, and dissemination of timely consensus standards intended to minimize the possibility and effects of fire in all aspects of contemporary activity.

In addition, efforts continue to educate people of all ages from all regions in preventing the loss of life and property from fire. Key to this effort are the teaching of standards and the importance of firesafety as a way of life.

Standards and codes are developed by more than 225 NFPA Committees, each of which represents a balance of affected interests. More than 4,500 individuals serve voluntarily on the Association's Committees on an unpaid basis. Committees operate according to the detailed official Regulations Governing Committee Projects (printed elsewhere in this Directory) and are administered by the Standards Council, which reports to the Association's Board of Directors.

Built into the standards development and adoption process is the publication of calls for proposals to amend existing documents or to shape the content of new documents. These public proposals and the committee action on each proposal, as well as committee generated proposals, are published in the Technical Committee Reports (TCR) for public review and comment. Public comments and the committee action on each comment are then published in the Technical Committee Documentation (TCD). Only after this public review and comment cycle has been completed is the final committee report brought before the membership for action. This democratic legislative procedure allows proponents and opponents to be freely heard. Once adopted by the NFPA membership at either an Annual Meeting or a Fall Meeting, and issued by the Standards Council, standards are published and made available for voluntary adoption.

Tentative Interim Amendments and Formal Interpretations are issued from time to time. Notices of the issuance of Amendments and Interpretations are published in *Fire News* and other media.

Each official NFPA document is published in a pamphlet edition. All documents appear in the multivolume set of National Fire Codes.<sup>®</sup> Among the most widely used documents are the National Electrical Code<sup>®</sup> (NFPA 70); the Life Safety Code<sup>®</sup> (NFPA 101<sup>®</sup>); the Flammable and Combustible Liquids Code (NFPA 30); the Automatic Sprinkler Standard (NFPA 13); the Liquefied Petroleum Gases Standard (NFPA 58); and the Health Care Facilities Standard (NFPA 99).

NFPA standards and codes, which currently number about 275, have great influence because they are widely used as the basis of legislation and regulation at all levels of government, from local to national. Many are referenced by agencies of the federal government, such as in the regulations of the Occupational Safety and Health Administration (OSHA); the documents also are used by insurance authorities for risk evaluation and premium rating.

A National Fire Codes Subscription Service is offered, through which over 20,000 subscribers automatically receive the Fire Codes and all other standards-related information, such as Tentative Interim Amendments, Formal Interpretations, TCDs, and TCRs, in loose-leaf format.

The Engineering Services Division is responsible for providing advisory and liaison services to Technical Committees relative to fire protection standards dealing with fire protection equipment, occupancies, and equipment hazards. Technical advisory services regarding questions on and interpretations of NFPA Codes and Standards are provided on both a formal and informal basis. Five special Field Service groups were established to provide



guidance in the application of pertinent standards in specialized areas. The Field Services include Electrical, Life Safety, Gases, Flammable Liquids, and Marine. Through the Marine Chemist Qualification Board, the Association administers the NFPA Certificated Marine Chemist Program. Engineering staff perform the Executive Secretarial function for six NFPA Membership Sections: Architects', Engineers' and Building Officials' Section: Aviation Section; Electrical Section; Health Care Section; Industrial Fire Protection Section; and Rail Transportation Systems Section Engineering Division technical staff also serve as instructors, lecturers, and panelists in a variety of Association and non-Association fire protection-related programs throughout the world.

The Public Fire Protection Division responds to all inquiries related to the public fire services. Division staff—all with fire service experience—provide liaison services for all fire service-related Technical Committees and serve as Executive Secretaries for three NFPA Membership Sections: Fire Service, Fire Science and Technology Educators, and Wildfire Management. The National Fire Service Certification Program is administered by this Division. Division staff also are involved in the development and marketing of NFPA products for the fire service, and participate in training seminars and conferences throughout North America and abroad.

The Association's technical and general interest publications program ranges across the fire protection spectrum. In addition to codes and standards, it includes handbooks, reference books, fire service publications, textbooks, field guides, and training manuals. The *Fire Protection Handbook*, now in its 16th edition, is the "bible" in its field. The *National Electrical Code* is equally important to electricians, architects, building tradespeople, inspectors, and other municipal officials as well as others. NFPA's many handbooks include *Industrial Fire Hazards*, *Automatic Sprinkler Systems*, *National Electrical Code*, *Lie Salety Code*, *Health Care Facilities*, and a new publication, the *Hazardous Materials Response Handbook*. The *Fire Litigation Handbook* provides attorneys with legal and technical considerations in the handling of fire cases. A series of textbooks support fire science educational pro-

grams. The NFPA Inspection Manual and Conducting Fire Inspections, both detailing inspection procedures for all types of properties, are widely used. Fire Command textbooks and workbooks present an up-to-date system for managing fire emergencies. including staging and sectoring operations. Engine Company Fireground Operations and Truck Company Fireground Operations are books that provide overall basic fireground procedures required tor effective fire fighting activities. Fire Service and the Law includes important court cases that grant fire fighters more freedom of expression while imposing a high standard of competence in carrying out public duties. Additional practical information on fireground tactics, apparatus, and fire service administration is found in a variety of books and training aids geared to the needs of the fire service. Good arson investigation practices are included in the five-part Arson Mini-Guide series. The Fire Protection Systems: Test, Inspection and Maintenance Manual provides guidance to make sure fire protection systems are in a constant state of readiness.

The newly revised Automatic Sprinkler and Standpipe Systems book addresses the development and use of these lifesaving systems. Management in the Fire Service addresses the special challenges facing fire service leaders. The new edition of Principles of Fire Protection Chemistry discusses the fundamentals of chemistry needed by every fire fighter who is faced with handling hazardous materials incidents.

The Association also is a major distributor of film and videotape programs that cover a wide range of fire protection and fire prevention topics. Currently, nearfy 100 titles are distributed through NFPA's catalog, serving the training and information needs of the fire service, business, industry, education, and health care

Instructional programs providing details of important changes to major fire codes are the fastest growing segment of this product line. Programs such as *The NEC Today* and *Inside the Life Salety Code* enable users of the code to quickly get up-to-date information on significant committee actions and technical changes in new code editions. A new *Life Salety Code* changes video will be released with publication of the 1991 code edition Another new area is the introduction of captioned videotape programs for hearing-impaired audiences. Two popular public education programs, *Fire: Countdown to Disaster* and *Fire Extinguishers: Fight or Flight*? are presently available in this special, open-captioned format.

Other best-selling programs include: *Firepower*, a unique public education film depicting the devestating speed and power of a residential fire and the effectiveness of residential sprinklers; *Sparky's ABC's of Firesalety*, a colorful, animated elementary education film that introduces key lifesaving behaviors in an entertaining and memorable format; *Fire Extinguishers: Fight or Flight?*, which presents essential information on the proper operation of portable fire extinguishers, including recommendations on when not to attempt to use an extinguisher; and *Fire Command in Action*, which utilizes full-scale, live-fire training burns to illustrate the elements of an effective fire command system and fire attack strategies.

NFPA films consistently receive top honors in major film festivals throughout the country. Recent awards include the Gold Camera from the United States Industrial Film Festival, the Gold Medal from the International Film and Television Festival of New York, the Blue Ribbon from the American Film and Video Association, The Golden State from the International Television Association, and the Gold Cindy from the Association of Visual Communicators.

The newly redesigned NFPA Journal is the official journal of the NFPA, reaching to all its various firesafety professionals. Covering major topics in fire protection and suppression, the Journal carries investigation reports written by NFPA specialists; special NFPA statistical studies on large-loss fires, multiple deaths, fire fighter deaths and injuries, and others annually; articles on fire protection advances, public education; and information of interest to NFPA members. Timely articles on fire fighting techniques and fire department management are covered. Fire Technology, a quarterly, reaches some 5,000 international subscribers interested in receiving information about the scientific and technical aspects of fire, including reports on fire modeling, sprinklering, fire fighter safety, and test results from laboratory experimentation. Fire News is the bi-monthly member newsletter. Issues go to every NFPA member, providing Standards information and Association reports on events of interest to the entire membership. The Fire Protection Reference Directory is an annual NFPA member publication, and provides a guide to the names, offices, and products or services of all leading fire protection and fire service manufacturers. Noticiero Tecnico sobre Incendios is the NFPA's Spanishlanguage bulletin containing reports, articles, and meeting notices of interest to the international Spanish-speaking community. In addition, many NFPA Sections publish their own informational newsletters.

The NFPA Journal and the *Fire Protection and Fire Service Ref*erence Directory are supported, in part, through the sale of product and service advertisements. The Association solicits paid ads through traditional avenues, such as direct selling by representatives, promotional materials, and attendance at several trade shows. The Association has formulated an advertising standards policy that is widely known throughout the industries served by the publications. The Association also maintains a standing Advertising Review Board that checks every ad submitted for compliance with the published standards policy.

The Association maintains one of the world's most extensive fire experience data bases. NFPA's annual survey of fire departments and its Fire Incident Data Organization (FIDO) file on large fires and other fires of major technical interest are used along with special studies and other major data bases, most notably the Federal Emergency Management Agency's (FEMA) National Fire Incident Reporting System (NFIRS). The Fire Analysis and Research Division produces more than a dozen annual reports and many special studies on aspects of the nation's fire problem; responds to thousands of individual data requests; supports the information needs of NFPA's committees, membership sections, and technical programs; and provides analysis and data services for government agencies and private sector organizations. The Division also provides the Executive Secretary for the NFPA Research Section and maintains liaisons and activities in several areas of research, notably fire risk assessment.

Reports and packages on a wide range of topics are available through the Division's One-Stop Data Shop program. Special analyses and summaries of sample incidents relating to specific interests can be obtained, with great flexibility in meeting the needs of requesters. Members receive discounts on fees assessed for special data base research and analyses.

The Fire Investigations Division conducts investigations of major fires of technical or educational interest. Important lessons learned from the fires provide input to NFPA Technical Committees and technical programs and are distributed to various NFPA networks and to the fire community. In addition, the Fire Investigations Division issues special firesafety alert bulletins, and regularly coordinates with fire marshals, metropolitan fire chiefs, building code groups, and allied organizations on fire investigations and fire hazard studies.

NFPA also maintains the Charles S. Morgan Technical Library, which was founded in 1945. The library, which covers all facets of the fire problem, houses the largest fire protection collection in the United States and is one of the world's finest English-language resources in its field. The technical and reference data contained in this continually expanding collection numbers approximately 5,000 books, 250 periodical titles, 12,500 technical reports, 13,000 pieces of microform, 275 film reels, 350 audiocassette tapes, 45 feet of shelf of voluntary industrial standards, and 200 feet of shelf of NFPA published archives dating back to 1896.

NFPA's Research Foundation was established in 1982 to provide a catalyst for conducting independent research on fire risk and new technologies and strategies. Broad-based technical advisory committees guide each project, and the Foundation collaborates with laboratories throughout the world.

The Association frequently is called upon to present expert testimony before congressional committees and at other federal hearings. Consequently, NFPA maintains offices in Washington, D.C., for close liaison with Congress as well as with departments and agencies of the federal government. In addition the NFPA Washington Office has the responsibility of working with the Association's Washington-based members and with members who may be visiting in the area.

The Association's international operations also are based in the NFPA Washington Office. NFPA provides liaison and a wide vanety of support services to its overseas members located in more than 85 countries.

NFPA has established regional representation by creating a western office and appointing a southern and central states representative to better serve members in these areas. The Western Regional Office is located in Ontario, California, and the southern and central states representative operates out of Gainesville, Florida. The northeastern U.S. and Canada are served by representatives based at the headquarters office in Quincy, Massachusetts.

Learn Not to Burn® is the theme and focus of NFPA's comprehensive firesafety education initiatives, which were reorganized in 1988 within the new Public Education Division. Assisted by a regional team of Firesafety Education Representatives located throughout the U.S. and Canada, NFPA helps fire departments and communities promote awareness of the fire/burn problem and implements effective educational programs to address this problem. Through the Education Section, NFPA supports an expanding national network of individuals committed to applying innovative educational methods to reduce the loss of life and property Irom lire.



One of NFPA's most important commitments is to developing future generations of firesafe adults. Children in kindergarten through eighth grade continue to receive critical life safety skills through the comprehensive Learn Not to Burn Curriculum. Since its release in 1979 the Curriculum, now in its third edition, has been credited with saving well over 175 people from fire injury or death. Material in the Curriculum is structured around 22 key firesafety behaviors and is organized into three learning levels. The program provides lesson plans and suggested activities to allow the teacher to integrate firesafety lessons into regular classroom subject areas. More than 50,000 units of the Learn Not to Burn Curriculum have been distributed throughout the United States and Canada.

Since 1922 NFPA has served as the national sponsor of Fire Prevention Week each October. The Association produces posters, booklets, flyers, and children's items that teach personal, home, and on-the-job firesafety. The NFPA produces over 30 brochures covering a broad range of firesafety topics, such as match and lighter firesafety, exit drills, school fire drills, cooking firesafety, and firesafety in health care facilities, high rises, and hotels and motels. Sparky's Coloring Book, Little Folks Firesafety Fun, Sparky's Team, and Sparky's Membership Kit are some of the educational and fun products designed to teach children important firesafety lessons. The National Firesafety Poster contest, conducted each year in conjunction with Fire Prevention Week, attracts more than 5,000 entries from school children learning important firesafety behaviors in their classrooms.

NFPA established the Learn Not to Burn Foundation<sup>©</sup> in 1986 to secure funding for targeted educational programs that address special problems and audiences. The mission of the Foundation is "to reduce deaths, injuries, and loss of property from fires and burns among people shown to be at highest risk to fires." The Foundation is particularly interested in reaching young children, older adults, and low income populations in urban and rural areas. Some projects for 1991 include the development of an animated television public service announcement addressed to young children on the subject of matches and lighters. The PSA, aimed at 3-to 6-year-old children will teach preschoolers to "tell a grown-up when you find matches and lighters." This project was funded by the Lighter Association, which also funded a television public service announcement in 1988 starring "Sesame Street's" Alaina Reed. It urged parents to keep matches and lighters away from young children. Under a generous grant from the Continental Corporation Foundation, the Foundation has developed a preschool module of the Learn Not to Burn Curriculum that includes a musical tape featuring songs and words specifically written for preschoolers by a nationally recognized folk singer. "Learn Not to Burn: The Preschool Program" focuses on seven key firesafety behaviors adapted for the very vulnerable age group of 3- to 5-year-old children. In addition, the Foundation is beginning to formulate fundraising ideas to support projects that will address the firesafety needs of the rural and urban poor.

The Learn Not to Burn Foundation also supports the work of the Technical Advisory Council (TAC), a group of leading scientific and educational experts who meet regularly to apply the findings of new research to firesafety messages. Since 1987 the TAC has reviewed and made recommendations on important issues, such as the proper placement of hands during the Stop, Drop and Roll technique; where and how to feel a door before exiting a room during a fire; firesafety needs of the hearing impaired; and fabric flammability standards for adult sleepwear.

In other educational activities NFPA disseminates knowledge and methodology on fire-related problems and solutions through NFPA-sponsored and contracted seminars and workshops. These programs involve discussion and application of codes and standards, plus application of state-of-the-art fire protection technology. Current programs support the various NFPA codes and standards, such as the *Life Safety Code* (NFPA 101), the *National Electrical Code* (NFPA 70), the *Fire Alarms and Signaling Seminars* (NFPA 72 series), and *Automatic Sprinklers* (NFPA 13). Other programs are directed toward special audiences, such as health care and correctional officials. All the Division's programs are available for on-site, contracted training.

Yet another form of educational activity is carried on by NFPA through its public information program. The Association is recognized by the electronic and print media as the nation's authoritative source of technical background, data, and consumer advice on the fire problem and firesafety. Staff specialists frequently are interviewed by international, national, and local media. The Association continues to supply timely material on a regular basis to specialized periodicals in virtually every field.

The Marketing and Sales Division serves the broad needs of members and customers, providing NFPA products and membership services on an efficient and limely basis. To make the nation-wide ordering of products easier, an 800 number (1-800-344-3555) operates from 8:30 AM to 8 PM Eastern Time. Division staff market products through direct response marketing methods. The Director of Sales markets products such as the *National Electrical Code* through a small group of distributors.

In the spring of 1981 the Association moved from downtown Boston, where it rented office space for some 80 years, to Quincy, about 10 miles to the south. There, at Batterymarch Park, NFPA occupies its first permanent headquarters, situated on a 52-acre hilltop site.

### THE NFPA STANDARDS SYSTEM: FOCUS ON PROCEDURAL FAIRNESS

### PICTURE

### TEXT

1. NFPA Logo

One of the major functions of NFPA is the development of codes and standards for firesafety.

Firesafety standards set the minimum requirements for firesafety in the United States and throughout the World.

2. NFPA Standards System Today, I'd like to give you an overview of NFPA Standards Making System, which is a voluntary CONSENSUS process that focuses on procedural fairness. Voluntary CONSENSUS standards writing is unique to the United States.

3. Structure of Volunteers NFPA developes some 270 codes and standards that are written by over 4000 volunteer experts serving on over 175 comittees. This effort is overseen by a 13 member Standards Council, representative of the NFPA membership. They are appointed by a Board of Directors, who are elected by NFPA's membership (over 50,000 at this time)

### TEXT

4. Several Codes Here are a few of the most widely used Codes and Standards. The Life Safety Code. NFPA 101, which covers EXIT SIGNS--the location, size of lettering, visibility. etc. It also specifies things like corridor length, and the direction of the door swing.

> NFPA also writes the Sprinkler Standard--NFPA 13. that tells us the location of sprinklers. NFPA 70, the National Electrical Code, covers electrical installations throughout the United States.

5. US Mail (box) Anyone can propose a new standards project. NFPA is responsive to requests within the field of fire protection and related areas.

> Upon receipt of request for a new standard, NFPA issues public notice in Fire News of its intent to consider the request and solicits input on the need for the project, information on resources on the subject matter, those interested in participating, if established, and an indication of other organizations actively involved in the subject.

6. Fire News

### TEXT

- 7. Standards Council Based on results, NFPA's Standards (Considers Request) Council considers the request and public input received and determines whether or not there is a need for the new project.
- Technical Committee With need and technical feasibility
   Established (Scale) established, a technical committee reflecting a fair balance of all concerned interests is organized.
- 9. Balance No more than one third of Committee Members can represent same <u>interest</u>.

10. Interests There are eight interest categories utilized by NFPA.

FROM HERE THE STEPS ARE THE SAME WHETHER WRITING A NEW DOCUMENT OR REVISING AN EXISTING DOCUMENT 11. Fed Register, Fire News

The first step is to call for proposals. This notice is published in the Federal Register and Fire News...

We are the only private standards writing organization permitted to publish notices in the Federal Register because so many of our documents are adopted by Federal Agencies such as HHS, and the Veterans Administration.

12. Mail Box (Proposal) Anyone can send in a Proposal. NFPA solicits Proposals for new text or to revise existing text.

13. Sample Proposal Form We have special forms for people to send in suggested changes.

14. Technical Committee Meeting

The Technical Committee meets to act on each Proposal, gives reasons for its action and prepares its own proposals and draft standard.

15. Technical Committee Meeting The Committee action on the Proposals and (2/3) (Color Coded) any draft standard must be approved by at least two-thirds of the Committee by letter ballot.

120

IEXT

16. TCR

TEXI

reasons, plus any draft standard, is distributed for public comment in NFPA's Technical Committee Reports and is available to anyone who requests one.

17. TCR

18. Fed Reg, Fire News, ANSI

Availability of TCR announced in Federal Register, ANSI Reporter and Fire News. (ANSI is the American National Standards Institute which is the organization that coordinates all voluntary CONSENSUS standards development activities in the United States and coordinates the United States position in International standards development.)

The Proposals, the Committee action and

Here's what a TCR actually looks like.

19. Mail Box (Comment)

20. Comment form

Anyone can send in a comment.

This is what a comment form actually looks like....At this point, you are commenting on the proposed changes in the TCR.

21. Technical Committee Meeting

Technical committee meets and acts on each comment received.

### TEXT

22. Technical Committee Meeting Technical Committee action approved by(2/3) (Color Coded) 2/3 majority of committee via letter ballot.

23. TCD All comments, committee action on comments and reasons for the committee's action, are published in NFPA's Technical Committee Documentation, ... and again is made available to anyone.

24. TCD Here's what a TCD actually looks like

- 25. Fed Reg, ANSI Reporter, Availability of TCD published in the Fire News Federal Register, ANSI Reporter and Fire News.
- 26. Open Debate at Meeting The Committee Report (TCR/TCD) is then presented for open debate at an NFPA Annual or Fall Meeting. (i.e., the Existing Document, if any, as amended by TCR and TCD). This meeting is similar to a New England Town Meeting.

27. Association Meeting Photo While only members can vote, anyone, regardless of membership in NFPA, can present views at these meetings.

### 

28. Association Meeting Voting With all views known, an informed NFPA Membership votes to approve, amend or reject the proposed new or revised standard.

29. Standards Council Standards Council meets and, based on all evidence, acts on issuance of Annual or Fall Meeting documents, and hears complaints. Standards Council hears between 35-50 complaints per year.

30. Picture of Board--Appeals The Board of Directors hears appeals on Standards Council actions. The Board hears an average of two appeals per year. The Board charges a \$2500 fee for appeals which discourages frivolous complaints--Board may waive fee.

31. Overview The sequence you have just seen is a streamlined version of what actually takes place. It applies to writing new standards or revising existing standards. (Repeat steps, if desired)

### TEXT

32. Pie Chart The entire process takes 100 weeks - nearly 2 years.

33. NFPA Standards These steps result in NFPA voluntary consensus Codes and Standards that are....

34. Reasonable, Acceptable Etc. Reasonable, Acceptable, Authoritative, Low Cost, Up-to-date, Effective and Technically Accurate.

35. Consensus Consensus means substantial agreement by much more than a simple majority, but not necessarily unanimity.

36. Adopted Into Law Many jurisdictions then adopt these codes and standards into Law

37. Map NFPA codes and standards referenced by three model building code groups -- BOCA, ICBO & SBCCI.

38. Looseleaf Fire Codes NFPA makes its Standards available to its users in several different formats; first, in a loose-leaf subscription version.

TEXT

39. Bound Fire Codes In a bound version of the National Fire Codes.

40. Pamphlets and, in separate Pamphlet form.

41. Handbooks NFPA also publishes Handbooks to assist the user in understanding and using the Codes.

42. Logo - The End I'd be pleased to answer any questions you may have!.

(1936S)

(7/89)



### The NFPA Standards System:

# The Voluntary Consensus Process

### Structure of Volunteers NFPA Standards Making System





All Concerned Interests

### No more than 1/3 from the same interest BALANCE

## Concerned Interests

- Users
- Manufacturers
- Enforcers
- Testing/Research
  - Special Experts
- Insurance
- Installer/Maintainer
- Consumer
- Labor

2360-040.IMG 02/26/90.MED



## NFPA Standards

### consensus codes and standards These steps result in voluntary that are..

### Reasonable Acceptable Authoritative Low Cost Up-to-Date

## Standards Making Process



### 100 weeks total

CONSENSE NSUS	CONSENSUS	CONSENSUS	CONSENSUS	CONSENSUS	<b>JSONSENSUS</b>	CONSENSUS	CONSENSUS	CONSENSUS	CONSENSUS	CONSENSUS
CONSENSUS	CONSENSUS	CONSENSUS	CONSENSUS	CONSENSUS	CONSENSI	CONSENSUS	CONSENSUS	CONSENSUS	CONSENSUS	CONSENSUS
CONSENSUS	CONSENSUS	CONSENSUS	CONSENSUS	CONSENSUS	CONSENSU	<b>CONSENSUS</b>	CONSENSUS	CONSENSUS	CONSENSUS	CONSENSUS

.



### Basic Building Code (BOCA) **Referenced In Model Building Codes** Standard Building Code (SBCCI) Uniform Building Code (ICBO)




## "THE END"



===

STANDARDS DEPARTMENT THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC. 445 HOES LANE, P.O. BOX 1331, PISCATAWAY, NJ 08855-1331, U.S.A. TELEX 833233, FAX (908) 562-1571

### Standards Working Group if the U.S.S.R. & U.S. Joint Commercial Commission Washington, DC March 11-13, 1991

### Introduction of the IEEE Standards Program as presented by Andrew Salem, Staff Director of Standards Activities

Good morning. I am Andy Salem, Staff Director of Standards Activities for the Institute of Electrical and Electronics Engineers (IEEE). The IEEE is a technical engineering organization with members throughout the world.

One thing that you will find as you investigate US standards activity is that each voluntary standards organization is unique. So, you need to know just a little about each organization to understand its standards program. Therefore, I will tell you a little about the IEEE before I get into the standards program. IEEE is the largest engineering organization of its kind in the world. Currently, there is a membership of 320,000 worldwide and we are growing at a rate that could make it reach 500,000 soon after the turn of the century.

What is interesting is that the growth outside of US borders is much greater than in the US, and by the year 2000 we could have as many non-US as US members. Currently, there are 87 IEEE members in the USSR.

The IEEE maintains a liaison activity with the Popov Society in the Soviet Union and the IEEE President meets with the Popov Society each year to exchange technical information.

There were 285 major meetings of IEEE in 1990 with 480,000 attendees.

IEEE publishes 180,000 pages of technical information each year, which is approximately 25% of the world's literature on electrotechnology and computer science. We also combine our publishing activities with the IEE of the UK to make a total of 30% of the world literature available from one source.

We operate on an annual budget of 88 million dollars with 550 staff professionals located in New York, New Jersey, Washington, DC, and regional offices in Brussels, Toronto, Mexico City, and Tokyo.

That is the environment in which we operate the IEEE standards program. Much of this technical activity forms a background for the standards program. We have 600 active standards at the present time. There are approximately 60 new and revised standards published each year, about 8000 pages of text and graphics. Approximately 1000 new and revised standards under development at the present

FORMATION	ADMINI
308) 562-3800	(908) 56

SEMINARS

time by 800 groups of engineers working on standards. There are approximately 20,000 individuals involved in the program, all of which are volunteers.

We publish 75% of all standards approved by the IEEE Standards Board within 3 months of approval and 100% within 6 months. That is a very good publishing record for any standards organization. We also provide both technical and editorial support to our standards developing committees.

The IEEE Standards Program is a transnational program. IEEE is a transnational organization. Therefore, the Standards Program emulates the architecture of the Institute. What this means is that IEEE is a US based organization that does its business across borders. That is the dictionary definition of transnational. To IEEE there is another meaning attached to the word transnational. It means non-national. Technology is not national and the profession of electrical engineering is not national. Therefore, the IEEE considers itself to be non-national.

What this means is that the IEEE Standards Committees have access to engineers and scientists worldwide. They, as IEEE members, have access to IEEE standards activity.

25-30% of participants in our information technology standards development activity are from outside US borders, and we are taking steps towards increasing access to our standards activity worldwide through electronic means.

Standards developed in this environment have greater acceptance throughout the world.

Finally, I would like to point our that the IEEE is dedicated to international standards.

In 1987, the Executive Committee of the IEEE directed its standards Board to promote the establishment of international standards over any commercial interest it had in standards.

In response, the IEEE Standards Board removed all commercial impediments from the adoption or use of its standards by national, regional, or international standards bodies when aimed at advancing their standards toward international recognition.

Thank you.

## THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC

2.0

CICICI

Institute of Electrical and Electronics Engineers, Inc.

LARGEST ENGINEERING INSTITUTE OF ITS KIND IN THE WORLD 320,000 MEMBERS WORLDWIDE \*87 IN THE USSR

285 MAJOR MEETINGS EACH YEAR •480,000 attendees annually

180,000 Pages of Text Printed Each Year

•25% of the worlds literature on electrotechnology and Computer Science

 \$88,000,000 Annual Operating Budget
 550 Staff Professionals

 Locations include New York City Piscataway, NJ Washington, D.C. Brussels Toronto Mexico City Tokyo







SCIENTIFIC/EDUCATIONAI PROGRAMS





### IEEE DEDICATED TO

INTERNATIONAL STANDARDS

IN 1987, THE IEEE EXECUTIVE COMMITTEE DIRECTED ITS STANDARDS BOARD TO PROMOTE THE ESTABLISHMENT OF INTERNATIONAL STANDARDS OVER ANNY COMMERCIAL INTEREST IT HAD IN A STANDARD.

IN RESPONSE, THE IEEE STANDARDS BOARD REMOVED ALL COMMERCIAL IMPEDIMENTS FROM THE ADOPTION OR USE OF ITS STANDARDS BY NATIONAL, REGIONAL, OR INTERNATIONAL STANDARDS BODIES AIMED AT ADVANCING THESE TOWARD INTERNATIONAL RECOGNITION.

### IEEE TRANSNATIONAL STANDARDS PROGRAM

- IEEE IS A TRANSNATIONAL ORGANIZATION (IEEE IS A US BASED ORGANIZATION THAT DOES ITS BUSINESS ACROSS BORDERS)
- ☞ IEEE STANDARDS PROGRAM EMULATES THE ARCHITECTURE OF THE INSTITUTE
- STANDARDS COMMITTEES HAVE ACCESS TO ENGINEERS & SCIENTISTS WORLDWIDE
- 25-30% OF PARTICIPANTS IN INFORMATION TECHNOLOGY STANDARDS DEVELOPMENT ARE OUTSIDE US BORDERS
- STANDARDS DEVELOPED IN THIS INTERNATIONAL ENVIRONMENT HAVE GREATER ACCEPTANCE WITH OTHER NATIONAL STANDARDS BODIES (BSI,CSA, JSA, SA), REGIONAL STANDARDS BODIES (CEN / CENELEC / EC), AND INTERNATIONAL STANDARDS BODIES (ISO, IEC)

### **UDDD New Directions** B ELECTRONIC MEDIA HYPERTEXT ☞ ELECTRONIC ACCESS **ON LINE STANDARDS** B ELECTRONIC AIDED STDS DEVELOPMENT STDS IN SOFTWARE FORMAT CERTIFICATION, ACCREDITATION, and VERIFICATION RESEARCH

STANDARDS BOARD 26 MEMBERS ELECTED BY THE IEEE BOARD OF DIRECTORS







Codes and Standards

Fax 212-705-7533

M.R. GREEN, P.E. Associate Managing Director Codes and Standards 212 705-7822

U.S. - U.S.S.R. COMMERCIAL COMMISSION

### **Standards Work Group Meeting**

### U.S. Department of Commerce - Herbert Hoover Building

Washington, D.C. - March 12, 1991

ASME is a technical Society with a membership of 118,000. These are individual members; there are no organization members. ASME is an educational, scientific and charitable organization.

A Board of Governors, elected by the membership, manages the Society. The Board of Governors has five councils reporting to it:

> Education (University Curiculum Accreditation; Professional Development)

Engineering (Technical Division [36] - Nuclear, Environmental, etc.)

Membership (Student and Member Affairs, Regional Meetings) The American Society of Mechanical Engineers

345 East 47th Street New York, NY 10017 Public Affairs (Legislative, Public Information, International)

Codes and Standards (Codes, Standards, Accreditation, Certification)

The Board of Governors has assigned the duties associated with the operations of codes, standards, accreditation and certification to the Council on Codes and Standards.

Reporting to the Council on Codes and Standards are five supervisory boards and five advisory boards; the supervisory boards are responsible for specific codes and standards:

Performance Test Codes (Equipment Performance)

Standardization (Dimensional, Drafting)

Pressure Technology Codes and Standards (Boilers, Valves, Pressure Vessels, Piping)

Nuclear Codes and Standards (Construction, Inservice Operation, Maintenance)

Safety Codes and Standards

(Elevators, Cranes, Conveyers, Environmental)

Reporting to these boards are 122 committees with 4,000 volunteers who are employed by industry, government, academe. ASME has no fee for participation.

The advisory boards are:

Metrication (Policy on Metrication)

Accreditation and Certification (Manufacturer Accreditation; Individual Certification

Hearings and Appeals (due process)

International Standards (IEC - ISO)

Council Operations (Legal, Budgets, Consultants, Designees)

The supervisory boards are chaired by vice presidents elected by the Society's membership and the advisory committees are chaired by individuals appointed by the Council on Codes and Standards.

ASME began developing codes and standards in 1884 and you have seen the number of codes and standards accredited to ASME. Because international standards are of interest to us, I will address that subject: ASME serves as administrative scretariat to ISO and IEC technical committees when ASME develops national codes or standards with the same scope as the international (TAG). ASME attempts to use the same individuals on the technical advisory groups (TAG) as ASME uses on its national consensus committees. This is an attempt to provide compatibility between national and international through participation on national and international standards.

In regard to ASME published consensus standards being used by regulatory bodies, the ASME Council on Codes and Standards policy is:

- To encourage the referencing of voluntarily developed consensus standards in regulations as a means of complying with the intent of the regulatory requirements and
- b) To encourage the participation of federal, state and other government employees on voluntary codes, standards and related accreditation and certification committees and
- c) To enhance public health, safety and welfare through voluntary standards.

In addition to developing consensus standards and codes, ASME administers accreditation programs and one certification program.

The accreditation programs include:

Boilers Pressure Vessel Piping

 Nuclear Components
 Nuclear Materials
 Pressure Vessels for Human Occupancy
 Thermoset Reinforced Plastic Vessels
 Fastener Manufacturer and Distributers
 Manufacturers of Safety and Pollution

 Prevention Equipment for Offshore Oil

 and Gas Operation.

The certification program is:

Qualification of Resource Facility Operators (Waste to Energy Plant Operators).

ASME accreditation is based upon ASME published codes or standards. An ASME accredited organization has a quality assurance program which it has demonstrated its implementation to an ASME survey or review team. The structure of the organization is such to assure that the person responsible for quality can cause production to cease when production strays from the acceptable as described in the organizations quality assurance program manual. From ASME survey team reports, accreditation committees judge the acceptability of the applicant for accreditation.

ASME was challenged by the United States government relative to the potential for non-tariff trade barrier associated with accreditation. ASME, the National Board, and U.S.A. came to agreement which provided a means for ASME to expand its accreditation and the National Board of Boiler and Pressure Vessel Inspectors, to expand its

registration of pressure equipment from the U.S.A. and Canada to the rest of the world.

Since October 1, 1972, ASME has administered its accreditation on a uniform basis about the world. Today, ASME accredits manufacturers in 35 countries and its marks are recognized in 80 countries for procurement.

States and municipalities of the United States reference ASME codes, standards and related accreditation programs as a means of satisfying their regulatory requirements, Also, U.S.A. federal agencies such as Nuclear Regulatory Commission, United States Coast Guard, Minerals Management Service reference the documents and accreditation as a means of satisfying their regulations. Also, the Environmental Protection Agency has referenced ASME's Qualification Resource Recovery Facility Operators as a means of satisfying its regulation. The Defense Department and others referenced ASME codes and standards for procurement.

In conclusion, ASME has developed each of its codes and standards to satisfy a need highlighted by industry, public or regulators. Likewise, ASME accreditation and certification are administered to address: public health, safety and welfare. We soon expect to receive applications from manufacturers in Soviet Union. Many manufacturers in Eastern, Western Europe and Pacific Rim Nations are accredited.

I have learned much from you during these meetings and look forward to your visit with ASME at United Engineering Center in New York. As the result of Dr. Sytchev's request, the ASME codes and standards accreditation marks are attached.

### **CODES & STANDARDS**

### **Accreditation Packages**

CODE

SYMBOL

STAMPS

SECTION I

Power Boilers

CODE

SYMBOL

SECTION IV

**Heating Boilers** 

CODE

SYMBOL

SECTION II

CODE

SYMBOL

STAMPS

SECTION II

CODE

SYMBOL

SECTION I

SECTION II

Power Boilers

Material Specifications

and Filler Metals

STAMP

Material Specifications

Material Specifications

STAMP

STAMP

Material Specifications

SECTION II



ORDER NO. BPUV1 (includes Section VIII, Div. 1 and Addenda) \$1,230.00 ORDER NO. BPUV2 (includes Section VIII, Div. 2 and Addenda) \$1,230.00

**Power Piping** 





### MINIATURE BOILERS

SECTION IX

**Power Piping** 

B31.1-1986 EDITION

Welding & Brazing Qualifications

### CODE BOOKS REQUIRED

SECTION I **Power Boilers** 

SECTION II

Material Specifications

PART A Ferrous Materials

PART B Nonferrous Materials PART C Welding Rods, Electrodes

and Filler Metals

ORDER NO. BPVCM (includes Addenda) \$1,170.00



### HEATING BOILER SAFETY VALVES

### CODE BOOKS REQUIRED

SECTION II Material Specifications

PART A Ferrous Materials PART B Nonferrous Materials PART C Welding Rods, Electrodes

and Filler Metals

SECTION IV Heating Boilers SECTION IX Welding & Brazing Qualifications PTC 25.3-1976 Safety and Relief Valves (& 1977 Addenda)

ORDER NO. BPVHV (includes Addenda) \$1,075.00



### **BOILER SAFETY VALVES**

### CODE BOOKS REQUIRED

SECTION IX Welding & Brazing Qualifications PTC 25.3-1976 Safety and Relief Valves (& 1977 Addenda)

CODE SYMBOL STAMP

N-TYPE CERTIFICATES OF AUTHORIZATION AND CERTIFICATES OF ACCREDITATION

### CODE BOOKS REQUIRED

SECTION III

Rules for Construction of Nuclear Power Plant Components Subsection NCA-General Requirements for Division 1 and Division 2 and Appendices

SECTION V Nondestructive Examination

SECTION IX

Welding & Brazing Qualifications

NQA-1-1986

Quality Assurance Program Requirements for Nuclear Facilities

ORDER NO. BPNPT\* (includes Addenda) \$779.00 Applicants should note that they may need one or more of the following Parts of Section II and Subsections of Section III depending on the scope of their work to appear on the certificate.

	Order No.	Price	
PART A-Ferrous Materials	TX002A	\$310.00	
PART B-Nonferrous Materials	TX002B	280.00	
PART C-Welding Rods, Electrodes and Filler Metals	TX002C	160.00	
Subsection NB-Class 1 Components	TX003B	185.00	
Subsection NC-Class 3 Components	TX003C	185.00	
Subsection ND-Class 3 Components	TX003D	185.00	
Subsection NE-Class MC Components	TX003E	185.00	
Subsection NF-Component Supports	TX003F	135.00	
Subsection NG-Core Support Structures	TX003G	135.00	
Division 2: Code for Concrete Reactor Vessels and Containments	TX0032	235.00	



### NUCLEAR SAFETY AND PRESSURE RELIEF VALVES

### CODE BOOKS REQUIRED

### SECTION III

Rules for Construction of Nuclear Power Plant Components Subsection NCA-General Requirements for Division 1 and Division 2 and Appendices

SECTION II Material Specifications (Select applicable parts) +PART A-Ferrous Materials. + PART B-Nonferrous Materials

SECTION V Nondestructive Examination

SECTION IX Welding & Brazing Qualifications

PTC-25.3-1976 (& 1977 Addenda) Safety and Relief Valves

NOA-1-1986

Quality Assurance Program Requirements for Nuclear Facilities

+ORDER NO. BPNVA\* (includes Addenda) \$1,104.00 (with Section II, Part A) #ORDER NO. BPNVB (includes Addenda) \$1,1074.00 (with Section II, Part B)

0.1

Urder No.	Price
TX003B	\$185.00
TX003C	185.00
TX003D	185.00
TX003E	185.00
	DX003B TX003C TX003D TX003E

\*Indicate additional subsections required on the order form.

To order Accreditation Packages, use order form on p. 40.

SECTION I

Power Boilers

- SECTION II
- Material Specifications

PART A Ferrous Materials

PART B Nonferrous Materials

PART C Welding Rods, Electrodes and Filler Metals

ORDER NO. BPVCV (includes Addenda) \$1,080.00

### QUALITY SYSTEM CERTIFICATES MATERIAL MANUFACTURERS, MATERIAL SUPPLIERS

### CODE BOOKS REQUIRED

SECTION III

Rules for Construction of Nuclear Power Plant Components Subsection NCA-General Requirements for Division 1 and Division 2 and Appendices SECTION II

Material Specifications (Select applicable parts) PART A-Ferrous Materials, PART 8-Nonferrous Materials PART C-Welding Rods, Electrodes and Filler Metals

ORDER NO. BPVMS\* (includes Addenda) \$1,150.00

Applicants should note that they may need one or more of the following subsections of Section III depending on the scope of their work to appear on the certificate. In addition, these subsections contain material requirements on Section 2000 which reference Section V and Section IX.

	<u>Order No.</u>	Price
Subsection NB-Class 1 Components	TX003B	\$185.00
Subsection NC-Class 3 Components	TX003C	185.00
Subsection ND-Class 3 Components	TX003D	185.00
Subsection NE-Class MC Components	TX003E	185.00
Subsection NF-Component Supports	TX003F	135.00
Subsection NG-Core Support Structures	TX003G	135.00
SECTION V-Nondestructive Examination	TX0050	155.00
SECTION IX-Welding and Brazing Qualifications	TX0090	155.00

### OTHER ACCREDITATION PROGRAMS



- SPPE-1 Quality Assurance and Certification of Safety and Pollution Prevention Equipment Used on Offshore Oil and Gas Operations
- SPPE-2 Accreditation of Testing Laboratories for Safety and Pollution Prevention Equipment Used on Offshore Oil and Gas Operations



PVH0-1 Safety Standard for Pressure Vessels for Human Occupancy

Accreditation available for window fabricators of pressure vessels for human occupancy.



QEI-1 Standard for the Qualification of Elevator Inspectors

Accreditation program to accredit organizations to certify qualifications of inspectors and/or inspection supervisors.

- FAP-1 Quality Assurance Program Requirements for Fastener Manufacturers and Distributors
- MCS-1 Management Control System

Accredits adequacy of management control systems.

Good morning. My name is Milton Bush and I am a lawyer and Director of Public Affairs for the American Council of Independent Laboratories (also known as ACIL). I am pleased to have the opportunity to participate in the first meeting of the Standards Working Group under the Joint U.S.S.R. Commercial Commission.

ACIL is the trade association that represents independent, commercial laboratories engaged in testing, certification, analysis, investigation, sampling, research, development and/or consultation for the public in the fields of engineering and the sciences. ACIL's membership is broad-based representing all laboratory testing disciplines, with the exception of clinical. ACIL represents an industry of over 4000 laboratories contributing an estimated \$11 billion annually to the United States annually a number that is growing as American consumers demand a safer and greater quality of life. ACIL also has ongoing relationships and affiliations with a number of sister societies, many of which are represented in this Standards Working Group. And while the name of this working group is standards, the issues that will be addressed include issues associated with what is commonly called conformity assessment.

This first meeting of a Standards Working Group is timely and will contribute to efforts already underway within the United States to examine the current U.S. conformity assessment structure and how it will relate to global economic developments in order to assure openness and transparency in trade flows.

As economic reforms continue in the Soviet Union and efforts to replace government administration of imports with market mechanisms progress, issues of conformity assessment will play a greater role. Conformity of products to standards in market economies is driven by governmental and non-governmental interest groups concerned about product safety, performance, and quality. How differing national conformity systems interact with minimum economic disruption will be a major undertaking. An existing model that is worthy of study is a recent joint venture agreement concluded by one of ACIL's member companies, Amador Corporation located in Taylors Falls, Minnesota, with Goostandardt Scientific Research Institute. The President of Amador, Mr. James Johnson, recently met with President Gorbachev and Premier Yeltsin in Taylors Falls, has been visited by representatives of Goostandardt and has been "preliminarily accredited" to perform electromagnetic compatibility testing for the Soviet Union. To our knowledge, this is the only such agreement with the Soviet Union in the world.

ACIL encourages the Soviet Union to enter into more of the types of agreements with other members of ACIL. The Amador joint venture should be a "model" on which to base future agreements and our members would be willing to work with Goodstandardt in such endeavors.

Thank you for the opportunity to speak to you today and I would be happy to answer any questions you may have.

Institute
Standards
National
American
Е5.

# U.S. VOLUNTARY STANDARDIZATION ACTIVITIES

## **ANSI FUNCTIONS**

- approving and Improving standards based on a consensus of all interested parties; Serving as the national body for voluntary standards activities in the United States, through which standards developing groups may cooperate in establishing,
- national economy, benefitting the public health, safety and welfare, and facilitating Promoting the voluntary standardization system as a means of advancing the domestic and international trade and commerce;
- Establishing, promulgating and administering procedures and criteria for the recognition and approval of American National Standards;
- Encouraging existing organizations to develop and submit standards for approval and harmonization at the national and international level;
- Representing the interests of the U.S. voluntary system in both international and regional non-treaty standardization organizations.

ANSI ORGANIZATION



## U.S. VOLUNTARY STANDARDIZATION ACTIVITIES Typically member bodies to non treaty organizations from developed market INTERNATIONAL OVERVIEW

- oriented countries are private sector ...
- ANSI (USNC) is U.S. member body to ISO/IEC and U.S. speaks with one voice on both technical and policy matters...
- Since 70's, U.S. technical leadership in ISO/IEC has expanded significantly and Institute holds some of most important secretariats ...
- Overall, U.S. is in a leadership position with:
- U.S. held secretariats (12%) producing over 23% of standards ...
- 30% of best schedule performing ISO secretariats are U.S. held ...
- U.S. holds largest secretariat that sets a bench mark performance ... 0
  - National "Usage" of international standards in range of 20-25% ... 8

## EUROPEAN STANDARDIZATION ACTIVITIES

### STANDARDS

## INTERNATIONAL

European utilization of "First Call" opportunity for non treaty international standards organizations to develop standards INTERNATIONALLY Provides transparent access plus mutual benefits ...

### REGIONAL

- For standards developed REGIONALLY by European organizations available access mechanisms include:
- Multinational ..
- International ...
- . Bilateral ...

	<b>EUROPEAN STANDARDIZATION ACTIVITIES</b>
	CONFORMITY ASSESSMENT
٠	Conducting periodic meetings to improve communications and provide input on issues of concern next roundEOTC April 11-12 and Commission April 15
•	Encouraging E.C. to maximize manufacturers self declaration and adopt flexible approach that would allow U.S. organizations to:
	<ul> <li>Perform product testing and quality assurance under subcontracting arrangements with EC notified bodies</li> </ul>
	- Be recognized to carry out testing and certification activities fully acceptable in Europe
•	Responding to constituency needs, Institute's Board has decided to:
	<ul> <li>Expand conformity assessment activities of third party certifiers</li> <li>Establish sectorally driven structure for U.S. interaction with EOTC</li> <li>Evaluate "value added" role in area of quality systems</li> </ul>

Memorandum of Agreement of Cooperation Between The American National Standards Institute and The USSR State Committee for Product Quality Control and Standards

The American National Standards Institute (ANSI) and the USSR State Committee for Product Quality Control and Standards (GOST), hereafter referred to as the parties in this agreement, have hereby agreed on cooperation concerning matters of standards, certification/testing and quality assurance and the mutual exchange taking into account the interest and benefits between the parties as follows:

### Article I

- (I) Current catalogues of national standards and individual national standards and procedures published by the respective organizations.
- (2) General information and publications concerning, certification/testing, accreditation and quality assurance published by the respective organizations.
- (3) Materials for training courses in standards, certification testing and quality assurance published by the respective organizations.
- (4) Periodic publication and other relevent information published by the respective organizations.

### Article II

The parties agree to exchange experts in various areas of standards, certification/testing and quality assurance as mutually determined by special arrangements between the parties.

### Article III

The parties agree to periodically exchange views on the activities and operations of various international and regional standards and certification/testing organizations such as the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC-), the Pacific Area Standards Congress (PASC), and for European Standardization Organizations (CEN, CENELEC and EOTC).

### Article 4

The parties agree to work closely in the international standardization community to reinforce and enhance relevency of ISO, IEC, etc., in advancing global standardization activities.

### Article 5

This agreement shall enter into force upon signature of the parties. The agreement may be amended at any time as agreed upon by both parties. The agreement may be terminated by either party via transmitting a written notice of termination and followed by a six months period of transition.

Representative of Gosstandart of the MSSR

1990

Representative of the American National standards

institute

1990

ANSI American National Standards Institute 1430 Broadway, New York, New York 10018



### FOR IMMEDIATE RELEASE:

March 11, 1991

### U.S. AND SOVIET STANDARDIZATION LEADERS MEET; CONTINUE COOPERATIVE EFFORTS

**NEW YORK, NY** – In a meeting held March 8 in Washington, D.C. between standardization leaders from the Soviet Union and leading representatives from the U.S. voluntary standardization community, a delegation from the USSR State Committee for Product Quality Control and Standards (GOST) continued its cooperative discussions with Its U.S. Ilaison, the American National Standards Institute (ANSI). During the meeting, hosted by ANSI in cooperation with the National Association of Manufacturers (NAM), the Soviets expressed an interest in strengthening relations with their American colleagues.

The meeting was an extension of cooperative efforts between the U.S. voluntary standardization community, via ANSI, and the Soviet Union which began more than a year ago. In May of 1990, GOST and ANSI signed a cooperative agreement to promote closer ties and an open exchange of information between the two countries during a visit to the Soviet Union by ANSI President Manuel Peralta.

During the meeting, Dr. Valeriy V. Sytchev, GOST President, expressed support for the ANSI-led delegation's cooperative standardization efforts with the Soviet Union and announced that GOST will soon be opening an American office to strengthen this relationship. The Soviet office, to be located in North Bergen, New Jersey, is being opened to facilitate the export of U.S. products into the Soviet Union and to help exporters meet standardization requirements to be set in a Soviet consumer safety law that is expected to be in place by January.

ANSI Chairman James N. Pearse, Group Vice President of Engineering with the Leviton Manufacturing Co., and Peralta will attend the groundbreaking ceremony for the Soviet office, which is expected to be opened in June. Furthermore, the Soviet and ANSI delegations announced Intentions to hold a program later this year to follow-up

-MORE-

Bepartment Fax: 212 - 398 - 0023	Contact Public Relations Department	212 • 354 • 3300. <b>Fax : 2</b> 12 • 398 = 0023
----------------------------------	---	---

on standardization issues of mutual concern.

Dr. Sytchev and members of the USSR delegation presented an overview of the role of standards and conformity assessment. In the Soviet Union, particularly as they relate to "opening up" of the Soviet market to U.S. Investments and exports. The Soviet delegation also expressed an interest in promoting International and American standards which will be mutually acceptable to the standardization communities of both nations.

"We are very pleased that our cooperative efforts with the Soviets have progressed so well," Peralta commented. Dr. Sytchev and Pearse agreed that it was in the best interests of both the U.S. and the Soviet Union to continue to assume leadership positions within the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). As the U.S. counterpart to the Soviet organization in the international arena, the ANSI federation will continue to promote an open exchange of information and mutually acceptable standards and methods of conformity assessment. In this area, Dr. Sytchev announced his support for the U.S. candidate for the ISO presidency, John Hinds, President of AT&T International. Elections for the three-year term for the ISO presidency beginning in 1992 will be held in April.

The American National Standards Institute is the coordinator of the United States private-sector administered voluntary standardization system, with a membership of more than 1200 companies, 250 professional, technical, trade, labor and consumer organizations, as well as 20 government agencies. Based in New York City with offices in Washington, D.C. and Brussels, Belgium, ANSI is the official U.S. representative to the major non-treaty standardizing bodies – the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), via the United States National Committee (USNC).
## REMARKS BY

## J. M. Kinn, Vice President/Engineering ELECTRONIC INDUSTRIES ASSOCIATION

At the Joint US - USSR Commercial Commission meeting

Thank you for the opportunity to discuss with you the implications of the formation and operation of the IECQ System.

First, however, let me briefly describe the parent organization, IEC:

The International Electrotechnical Commission (IEC), founded in 1906, is a non-governmental international standardizing organization with 41 member countries that provides world standards for the electrical and electronic industries. Standards make it possible for electrical and electronic equipment, systems, and subsystems to work together no matter where they are designed, manufactured, assembled, or used. IEC standards are used as the basis of national rules and standards in 100 countries.

The IECQ-System was created in 1970 as a direct result of U.S. efforts to ensure that all countries in the world would be able to compete on an equal footing in at least one aspect of international trade -- Quality of the product.

The "Q" in IECQ stands for Quality, which is the basis upon which this worldwide system operates, providing electronic component manufacturers with a true third-party system for the evaluation and certification of the Quality of their products. The key to the effectiveness of the system lies in the acceptance by all participating countries of each others certifications, thus providing true reciprocity among nations, and equality among competing manufacturers.

Currently, there are 25 participating countries of which 19 are certifying countries. The participating countries are represented by delegates to the primary governing body for the System, the Certification Management Committee (CMC). This committee is responsible for all policy, rules of procedures, and fiscal operation of the System.

Reporting to the CMC, is an Inspectorate Coordinating Committee (ICC), made up of delegates from the certifying countries. Its responsibilities are to ensure that each countries' National Supervising Inspectorate (NSI) is competent to perform all the requirements set forth in the Basic Rules and Rules of Procedure. This is accomplished through a comprehensive visit by an International Team of Experts who evaluate the NSI and report to the ICC on their findings and recommendations. In the U.S. Underwriters Laboratories fulfill this function.

Underlying all of this activity is a comprehensive set of expanding standards and specifications encompassing all major electronic component areas. Each certifying country has a National Standards Organization (NSO), responsible for ensuring that any standard or specification not only meets the requirements of the Systems' rules, but also the requirements in the specification hierarchy that describes the specific product or family of products being evaluated for certification. In the U.S., the Electronic Industries Association fulfills this function.

The net result of all the Systems activity is the publication of an international Qualified Products List (QPL) that denotes the manufacturer, location of the production line, type of product for which approval was given, and whether the approval is for the facility (first indication that the manufacturer has the capability to produce the product), or that the products themselves are being certified. In addition, the QPL also shows approved distributors and approved test Laboratories.

Currently, there are 123 manufacturers with facilities approved worldwide, 113 with certified products worldwide, 34 approved distributors, and 21 approved testing laboratories.

Of these, the United States has 35 approved manufacturers, 38 certified products, 0 approved distributors, and 3 approved testing laboratories.

The System needs more participation by both producers and susers, hence current emphasis is being placed on promoting it to the worldwide electronic manufacturing community. A Short Guide, the QPL, and a general brochure are available to all interested parties. E7. Air Conditioning and Refrigeration Institute

ARI Statement on International Standards Activities for the Standards Working Group of the Joint U.S. - U.S.S.R. Commercial Commission March 11, 1991

The Air Conditioning and Refrigeration Institute (ARI) is a national trade association representing manufacturers of air-conditioning, refrigeration and heating products. More than ninety percent of the air-conditioning and the industrial/commercial refrigeration machinery and components manufactured in the United States are produced by members of ARI.

ARI promotes public confidence in the quality and performance of the industry's products through voluntary programs that include the development of standards for testing and rating of product performance and the management of a product certification program to assure the integrity of the product performance ratings. ARI has established some sixty voluntary standards for the products made by ARI members and has seventeen certification programs for products tested under ARI standards.

ARI has been involved in the development of international standards for air-conditioning products for a number of years, both in the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). ARI participates through the American National Standards Institute (ANSI) in the activities of ISO Technical Committee TC86, "Refrigeration" for which the U.S.S.R. maintains the Secretariat. Mr. Herbert Phillips, ARI's Vice President - Engineering, is the Chief U.S. Delegate to meetings of ISO TC86 and its several subcommittees. Mr. Phillips is also Chairman of the U.S. Technical Advisory Group for ISO TC86.

ARI has taken a proactive role in the development of ISO standards in recent years, providing assistance to the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE), the U.S. Secretariat for three subcommittees of TC86: SCl on Safety, SC6 on Testing of Factory-Made Air-Conditioning and Heat Pump Units, and SC8 on Refrigerants and Lubricants for Use in the Refrigeration Industry.

At the meeting of ISO TC86 held in Moscow in September of 1989, the United States proposed the initiation of twenty-nine new standards for refrigeration and air-conditioning products. Twelve of these new projects were identified as having priority status and the United States agreed to provide initial drafts of each of these standards in order to expedite the development of these international standards. Subsequently, twenty of the twenty-nine projects were approved by members of TC86 and proposed drafts have been prepared by ARI for the twelve priority projects. The U.S.S.R. supported all twelve of the priority projects.

ISO TC86 is taking action to address the environmental concerns about chloroflurocarbons (CFC's) in the atmosphere by initiating a new project in SC1 to promote refrigerant recovery and reduce refrigerant leakage. SC8 is developing a standard on technical characteristics and methods of testing refrigerants in order to facilitate the introduction of new refrigerants including those which will replace the CFC refrigerants. The U.S.S.R. supports all these activities wholeheartedly. The United States was pleased to support the nomination of Dr. A. V. Bykov of the U.S.S.R. to continue as Chairman of TC86 for the next four years.

The United States is assisting GOST, the Secretariat for SC3, by preparing work programs and draft standards for four types of refrigeration products including unit coolers and three types of water-chilling equipment. This work is being accomplished to expedite the development of international standards within ISO TC86.

ARI has also been actively involved in the development of international electrical safety requirements within IEC SC61D, "Appliances for Air-Conditioning for Household and Similar Products". Mr. Herb Phillips serves as the Chairman of SC 61D and the Secretariat is held by Mr. Paul Kolb of ETL Testing Laboratories. During the last two years, the U.S. has successfully expedited the development of a revision of the IEC standard on heat pumps, air-conditioners and dehumidifiers. After convening a working group in June of last year, the U.S. was able to harmonize the requirements of a CENELEC draft document with the requirements of a new U.S. - Canada standard. At a meeting in Frankfurt last November, the Subcommittee approved a document for balloting as a new IEC standard. CENELEC has agreed to adopt this IEC standard.

ARI is committed to not only the development of international standards, but also the implementation of international standards for air-conditioning and refrigeration equipment. The ARI Board of Directors approved a policy last year that requires our Product Sections to review and recommend for adoption new international standards within one year of publication or otherwise establish justification for not adopting such standards.

DRM/dw

Presentation by Barbara Boykin Assistant Vice President, Standardization Aerospace Industries Association to Joint U.S.-U.S.S.R. Standards Working Group March 11, 1991

The Aerospace Industries Association of America, located in Washington, D.C., is the national trade association representing U.S. manufacturers of commercial, military and business aircraft, helicopters, aircraft engines, missiles, spacecraft, and related components and equipment. The industry AIA represents is one of the nation's largest, and a foremost positive contributor to the U.S. balance of trade. Last year (1990), industry sales of aerospace products and services totaled \$131 billion. A list of AIA member companies is attached.

Since 1940, AIA has developed and published over 3,000 National Aerospace Standards (NAS), making it the third largest U.S. private sector standards developer. NAS standards are best known for state-of-the-art, high strength, precision fasteners. In addition to all types of screws, nuts and rivets, NAS's define high pressure hose, electrical connectors, splices and terminations, rod end bearings, and many other types of hardware and components. Another group of NAS's specify requirements for manufacturing equipment used by aerospace and other industries, including numerically controlled, computer-aided manufacturing machine tools, and NC welding and fabrication equipment. One of the first standards for an industrial robot, NAS 875, was released in 1982.

NAS standards are used in aircraft raging from DC-3's to the 767; the Space Shuttle and all types of spacecraft; in communications satellites, weapon systems, and ground and airborne electronics systems. Virtually all commercial and military aircraft designed and built in the United States, and many produced in other countries, incorporate parts and components made to NAS standards.

NAS standards also are used in non-aerospace products wherever critical applications require high performance and reliability; for example: rapid transit rail cars, nuclear reactors, high speed diesel engines and racing cars.

The aerospace industry makes extensive use of standards in its products. For example, in the design of a typical Air Force fighter plane, 1,360 standards are used. Nearly 70% of the airframe consists of standard parts and materials. (This figure does not include the engine or ground equipment.) Each of these standards may be "called out" hundreds of thousands of times in specific applications. Another aircraft currently in production, the world's largest military transport, has callouts for 4.25 million standard parts, materials and processes. Of these, 1/2 million are NAS standard parts.

As the aerospace market has become more internationalized, AIA has responded by developing metric standards. To date, AIA has prepared some 180 standards for metric aerospace parts, which are designated as "NA" to differentiate them from those of inch measure. AIA's metric standards comply with design parameters established by the international organization for standardization (ISO).

The U.S. aerospace industry is committed to international standardization, and plays an active role in the ISO committee on aircraft and space vehicles, ISO/TC 20. TC 20 is one of the oldest ISO committees, and ranks among the top ten in productivity. Ten subcommittees and numerous working groups cover a very large work program which ranges from terminology to hydraulic parts, from space applications to cargo containers.

AIA administers the international secretariat of the technical committee, on behalf of ANSI, and other U.S. organizations hold the secretariats of three of the subcommittees. The U.S.S.R. is an important participataing member of ISO/TC 20, and GOST is the administrator of two subcommittee secretariats. Through ISO/TC 20, the aerospace industries of the U.S. and the U.S.S.R. continue to work together, with the rest of the world, toward the international harmonization of aerospace standards.



Aerospace Industries Association



# MEMBERSHIP

Aerojet, A Segment of GenCorp Aeronca, Inc., A Fleet Acrospace Company Allied-Signal Aerospace Company Aluminum Company of America **Argo-Tech Corporation BASF Structural Materials, Inc.** Bechtel National, Inc. Best Foam Fabricators, Inc. The BFGoodrich Company B.H. Aircraft Company, Inc. The Boeing Company Chrysler Technologies Corporation **Coltec Industries Inc** Chandler Evans Menasco Acrosystems **Dowty Aerospace Los Angeles** E-Systems, Inc. Fairchild Industries, Inc. Fairchild Space and Defense Corporation Ferranti Defense & Space Inc. Marquardt FMC Corporation **General Dynamics Corporation General Electric Company General Motors Corporation General Motors Hughes Electronics Delco** Electronics Hughes Aircraft Company Allison Gas Turbine Division **Grumman** Corporation Gulfstream Aerospace Corporation Harris Corporation Heath Tecna Aerospace Company **HEICO** Corporation Hercules Incorporated **Hexcel Corporation** Honeywell Inc.

**IBM** Corporation Federal Scctor Division **ITT** Defense, Inc. Kaman Aerospace Corporation Lockheed Corporation Lord Corporation The LTV Corporation Lucas Aerospace Inc. Martin Marietta Corporation **McDonnell Douglas Corporation** Northrop Corporation **Ontario** Corporation Parker Hannifin Corporation **Precision Castparts Corp. Raytheon** Company **Rockwell International Corporation** Rohr Industries, Inc. Smiths Industries Aerospace & Defense Systems, Inc. Sundstrand Corporation Teledyne, Inc. Teledyne Brown Engineering Teledync Controls **Texas Instruments Incorporated** Defense Systems & Electronics Group **Textron Inc. Thickol Corporation** TRW Inc. **United Technologies Corporation** Aerospace/Defense: Pratt & Whitney Sikorsky Hamilton Standard Norden Westinghouse Electric Corporation Electronic Systems Group Williams International

E9. U.S. National Committee of the International Electrotechnical Commission



# United States National Committee

# of the

# International Electrotechnical Commission

NIST - March 1991, R.H.Reimer









Participation in IEC for from five to eight committees. The Group Manager is concerned with administrative affairs effecting the TCs and SCs, and with the conduct of U.S. operations.

NIST - March 1991, R.H.Reimer

nittee Membership – USNC ExCo	Allen-Bradley	s NEMA AMP Univ of Penn	ANSI	C.R.Luebke L.A.Morgan E. Nesvig E. Nesvig R.L.Pritchard R.H.Reimer J.Rennie R.M.Showers S.L.Warshaw J.T.Weizeorick AHAM
utive Comn	R.H. Reimer	F.K. Kitzantide E.R. Kelly R.M. Showers	C.T.Zegers	UL NCR T.I. MicroSwitch CBEMA AMP EIA NEMA HIMA
USNC Exec	President:	Vice Presidents:	Secretary:	Group Managers M.E.Cox, A.R.Daniels F.Finnegan R.C.Geiseman W.F.Hanrahan E.R.Kelly J.M.Kinn F.K.Kitzantides B.Liebler

NIST - March 1991, R.H.Reimer

U.S.N.C. Statistics -Participation

USNC Participation		1	Observe
Advisor Positions for IEC TCs Advisor Positions for IEC SCs s	74	178	12
ts in Advisory Groups		3200 +	
ipants as TC Secretariats ipants as SC Secretariats ernational Secretariats	11 21	32	
ipants as TC Chairs ipants as SC Chairs ernational Chairs	51	23	
onal Members		23	
Total Participation		3400+	

NIST - March 1991, R.H.Reimer

U.S.N.C. Statistics - Standards - on of IEC Standards In the U.S.	egal requirement nor national market nor international market It IEC Standards into some sort of U.S. Standards.	market system facilitates <u>direct commercial use of IEC</u> ithout any adoption by a U.S. standards developing The corollary is that there is nothing stopping such itistics on such adoption follows).	/ Progress Partial Report (Incomplete Data): 58% of the IEC /aluated (1,309 out of the 2,237 IEC Standards):	Of the IEC Standards have U.S. Standards which are Identical or Technically Equivalent	Of the IEC Standards have U.S. Standards which are Partially Equivalent or Relate (National Deviations)	Of the IEC Standards are "adopted" in the U.S.	NIST - March 1991, R.H.Reimer B
Adoptic	here is <u>no le</u> leed to adopt	he U.S. free <u>standards</u> , wi rganization. doption (sta	JSNC Survey standards Ev	10.9%	40.3%	51.2%	
	FC						

# Public Standards

# Significance of

Significance of Standards

 Discretionary Preferential Mandatory - • Obligatory Mandatory Category as defined by: Law of the Land • Legislative Law • Contract Law • **Company Preference** • (none) • Significance of standards

10

NIST - March 1991, R.H.Reimer



NIST - March 1991, R.H.Reimer

-











# Bernard H. Falk

# Summary of Points Covered

# at Joint U.S.-U.S.S.R. Standards Meeting

## March 12, 1991

o NEMA is a trade association whose membership consists of 650 companies that manufacture products in the U.S. and within NEMA's scope;

o Some of NEMA's members are very well known i.e., GE, Westinghouse, IBM, Siemens, Philips, Toshiba, but the vast majority of members are "small businesses" i.e., less than 500 employees;

o NEMA has 70 product sections, some representing very mature electrical technology, some representing latest high technology breakthroughs;

o While NEMA engages in many non-technical activities typical of a trade association, e.g. market analysis, industry promition, government relations, its major activity is participation and development of standards and safety codes;

o NEMA has developed over 160 standards publications, 40% of which have become American National Standards. In addition, NEMA participates most actively in standards of other organizations that affect electrical products, e.g. UL, NFPA, ASTM, etc;

o NEMA's primary participation in international standards is involvement with the International Electrotechnical Commission (IEC) actively involved in over 50 IEC committees;

o With globalization of world-wide markets and world-wide manufacturing, the growing importance of international standards is obvious. The marketplace determines the standards and the marketplace is going global;

o NEMA has set up elaborate detailed procedures for harmonization of NEMA standards with international standards. Again, the degree of harmonization will depend largely on market forces. Ell. American Society for Testing and Materials

The following is a summary of the remarks made by Mr. J. G. O'Grady, President of ASTM, before the Standards Working Group of the USSR and the United States Joint Commercial Commission Meeting held in Washington during the period March 11 through the 13, 1991.

ASTM is a membership organization headquartered in Philadelphia that produces full voluntary consensus standards that are used both nationally and internationally. There are more than 8,500 standards that cover a wide variety of subjects that can be generally categorized as standard specifications, test methods, recommended practices and other types of full consensus documents. ASTM is unique in that there are more than 1,000 special technical publications that underpin the work of the 135 technical committees that produce the full consensus standards. Of the 34,000 members more than 4,000 of these are global.

There are no restrictions to membership in ASTM. They come from all over the world, and they include government officials, university professors, representatives of manufacturers, consumers, and a broadly based category known as general interest. Because there are no restrictions to membership in ASTM, because there are no restrictions to anyone participating in the process, because ASTM standards are developed with a considerable amount of international participation, and because ASTM standards are used nationally and internationally, there are

many who consider the ASTM full consensus standard to be a de facto international standard.

In addition, the ASTM technical committees participate extensively in the activities of ISO and IEC and there are approximately 70 committees who have Technical Advisory Groups that work within the international standards community. ASTM exists on the basis of fees charged for membership and from the sale of publications. It was pointed out that in the event that an individual is unable to pay the membership fee, there is a procedure available which will allow the waiving of the fee so that technical experts have the opportunity to participate even if they cannot afford to do so on their own. Since ASTM takes no money from the federal government, the Society is considered to be both pluralistic and very private.

Mr. O'Grady also explained the activities of the subsidiary organization known as the Institute for Standards Research, which conducts research on subjects of interest to the technical committees of the Society.

# E12. Underwriters Laboratories

March 12, 1991

- To: Bert Simson NIST
- From: Joe Bhatia Underwriters Laboratories

The famous UL in a circle is probably familiar to most of you as the Mark of Underwriters Laboratories Inc. --- or UL.

Today, I would like to provide a little background on what UL is all about.

UL is a not-for-profit organization. Its mission of testing for public safety has not changed over the past century, but the scope and breadth of its work in product safety certainly has.

Today, UL has grown to more than 38 hundred employees, more than 1.2 million square feet of laboratory facilities, and a network of more than 200 inspection centers throughout the world - in U.S. and 72 countries. Last year along, the UL Mark appeared on more than 9 billion products.

UL's laboratory operations are spread out among four major locations -- in New York, California, North Carolina and the Northbrook, Illinois headquarters.

Within the engineering division, there are six major departments that conduct about 80,000 safety evaluations each year -- in about 13,000 different product categories.

The largest engineering department is the Electrical department, which investigates electrical products ranging from toasters to hair dryers, and from computers to power tools. The second largest engineering group is UL's Fire Protection department, which investigates building structures, building materials, firefighting equipment, as well as the fire resistance of many other products. Some products tested in this department include fire extinguishers, upholstered furniture, modular homes, and solid fuel-burning appliances.

UL also has a Burglary Protection and Signaling department, which investigates products such as burglar alarams and smoke detectors.

A Heating, Air Conditioning and Refrigeration department at UL evaluates air conditioning equipment and heating appliances for homes and businesses. Some of the products tested include gas furnaces, electric space heaters, swimming pool heaters and solar hearing equipment.

The Casualty and Chemical Hazards department investigates a wide range of products -- from step ladders to floor coating materials to automotive products.

And finally, UL has a Marine department in North Carolina that works in cooperation with the Coast Guard and others to evaluate boats, life saving equipment, and other marine products for both recreational and commercial use.

One of the things that sets UL apart from any other laboratory is a unique program for counterchecking manufacturers' compliance with safety requirements. It's called Follow-Up Services. And it's one of the ways UL maintains the integrity of the UL Mark.

Follow-Up at UL means just that -- UL field representatives periodically "follow up" at the factory to check products on the assembly line for continued compliance with UL requirements. These factory visits are unannounced and are made at least four times a year at every factory -- in some cases, field representatives visit as often as once a day.

By observing and counterchecking production controls, UL's field representatives provide a valuable back-up to the manufacturer's own quality control program.

Follow-Up Services go where the clients are -- wherever they choose to manufacture their products. UL has over 200 inspection centers; located in the U.S. and in 72 other countries.

And UL just opened two new international subsidiaries, now operating in Taiwan and Hong Kong, to provide more direct service to manufacturers in the Far East.

Another function of UL that makes it different from commercial testing laboratories is its development of Safety Standards. UL has been developing Standards since 1903 and they've become an important part of the voluntary safety system in the U.S.

There are now 625 UL Standards, and most of those are recognized by ANSI -- the American National Standards Institute.

While UL isn't the only organization developing safety standards, UL's development process is unique.

It's designed to address the interests of all constituents by soliciting input from government organizations, manufacturers, inspection authorities, retailers, consumer groups, academicians and, of course, the insurance industry.

UL continually revises it Standards to reflect new technologies and information from the field. UL also plays a very active role in international committees to harmonize standards used around the world.

Over nearly a century of growth, UL has assumed an increasingly important role in many aspects of national and international safety.

For example:

1) UL conducts research for many federal, state and local government agencies and shares information with them. In 1988, UL conducted more than 50 major public safety projects on subjects ranging from overheating in electrical plugs to smoke detectors for hearing impaired people.

UL also works with government authorities and other agencies in the development of the National Electrical Code, model codes, local building codes and other safety requirements.

UL staff members make significant contributions to many policy-making organizations dedicated to product safety in the United States. In 1990, staff members assumed more than 500 national, state and local committee assignments.

Because of UL's Standards expertise, and high profile in U.S. safety, the organization has had some significant international recognition.

In recognition and support of the objective of manufacturers to reduce the cost and delays in achieving product safety certifications in different countries, UL has pursued and established bilateral reciprocal arrangements with a number of organizations in Europe, Japan, Canada, China, Israel, Australia, and Sweden. Also, ISO 9000 arrangements have been signed with the UK, Israel, Australia, Canada and Japan. These arrangements have been methodically established in specific product categories, with cross-training, roundrobin testing, mutual witnessing of tests, and other measures to assure duplication of results. It is expensive and is undertaken only for industries that establish and document the need for such reciprocal arrangements.

Additionally, via our International Compliance Service, ICS, we help our clients understand the complex technical requirements and procedures of other nations.

Materials Submitted by the Soviet Delegation



# Appendix F1 THE USSR CABINET OF MINISTERS

DRAFT DECISION

N\_\_\_\_ dated \_\_\_\_\_1991

Moscow, the Kremlin

ON MEASURES TO PREVENT IMPORTING TO THE USSR OF PRODUCTS NOT CONFORMING TO SAFETY REQUIRE-MENTS

To prevent importing to the USSR of products not conforming to safety requirements specified for human life, health, property and environment the Cabinet of Ministers of the USSR resolves that:

1. Safety control of products imported to the USSR including products imported temporarily and transferred through the USSR territory as transit ones shall be introduced from \_\_\_\_\_\_199\_\_\_\_ according to the attached list.

Safety control of products imported to the USSR shall include:

certification of imported products to confirm their safety for human life and health, property and environment;

consideration of precontract and other documents on products to be imported to the USSR in respect to their ecological and fire safety;,

preshipment inspection of some types of products imported to the USSR;

customs control of documents confirming safety of products imported to the USSR.

Products given in the attached list shall not be imported to the USSR without their safety control.

2. The USSR State Committee for product quality control and standards, the USSR State Committee for environmental protection, the USSR Ministry of internal affairs and the Main Department for state customs control under the USSR Cabinet of Ministers shall be responsible for safety control of products imported to the USSR.

3. The USSR State Committee for product quality control and standards, the USSR State Committee for environmental protection and the USSR Ministry of internal affairs shall develop with participation of concerned ministries and agencies and approve within 3 months the Provision on safety control of products imported to the USSR specifying in it that documents confirming safety of products are certificates of products conformity to standards requirements as well as conclusions on products conformity to requirements of ecological and fire safety issued as a result of state expertizes by the State Committee of the USSR for environmental protection and the USSR Ministry of internal affairs.

4. Customer of imported products shall be responsible for importing of products not conforming to safety requirements as well as for their sale and application.

In case products not conforming to safety requirements are imported, it is not allowed to sell and use them on the territory of the USSR.

The USSR State Committee for product quality control and standards shall be entitled to prohibit sale and application of products not conforming to safety requirements specified in standards, the USSR State Committee for environmental protection shall be entitled to prohibit sale and application of products not conforming to requirements of ecological safety and the USSR Ministry of internal affairs shall be entitled to prohibit sale and application of products not conforming to fire requirements.

5. The USSR State Committee for product quality control and standards, the USSR State Committee for environmental protection and the USSR Ministry of internal affairs shall be entitled to introduce, if need be, amendments and additions in the list of products subject to safety control as well as determine specific nomenclature of these products.

6. The Main Department for state customs control under the USSR Cabinet of Ministers shall pass imported products
subject to safety control only with documents confirming their safety.

7. The USSR State Committee for product quality control and standards, the USSR State Committee for environmental protection and the USSR Ministry of internal affairs shall submit annually a specific nomenclature of products with an indication of the type of document confirming their safety to the Main Department for state customs control under the USSR Cabinet of Ministers.

8. Applicant (customer, supplier or other concerned individuals) shall pay for certification and expertize services including payments in foreign currency as specified in contracts and agreements.

9. The USSR State Committee for environmental protection shall conduct the state ecological expertize of products to be imported to the USSR through its self-sufficient body and other authorized organizations.

10. The USSR Ministry of foreign economic relations shall introduce within three months provisions on safety control of products to be imported to the USSR in normative acts specifying procedure for concluding, meeting and denouncing of international agreements in accordance with this Decision.

11. The USSR Ministry of foreign affairs shall correspondingly inform foreign countries about the introduction of safety control of products to be imported to the USSR.

### APPENDIX

to the Decision of the USSR Cabinet of Ministers

N \_\_\_\_\_ dated \_\_\_\_\_\_ 1991

### LIST

of imported products subject to safety control

### Machines and equipment

- 1. Power equipment
- 2. Electrotechnical equipment
- 3. Coke equipment and equipment for gas industry
- 4. Metallurgical equipment
- 5. Equipment for oil processing industry
- 6. Machines, equipment and installations for drilling, operation of wells and geological survey
- 7. Cooling and air-conditioning equipment
- 8. Equipment for chemical industry
- 9. Equipment for timber, pulp and paper and wood processing industry
- 10.Equipment for industry of construction materials
- 11.Equipment for public utilities, shop and fire-fighting equipment
- 12. Manual electric tools for wood and metal
- 13.Hardware and office equipment
- 14.Trucks
- 15.Ships, ship, ship-lifting and diving equipment, equipment for ports
- 16.Cars, motor cycles, scooters
- 17.Standard houses, barracks, construction parts
- 18.Household electrical appliances
- 19. Stoves, heating stoves, gas boilers
- 20.Household electronic equipment
- 21.Electronic equipment
- 22. Containers for transportation of radioactive substances

### Raw materials, materials, substances\*

- 23.Ores of ferrous metals
  - \* Subject to preshipment inspection

- 24. Ores of non-ferrous metals
- 25. Concentrates of non-ferrous metals
- 26. Other metallic ores
- 27. Non-ore minerals
- 28. Non-metallic ores
- 29. Products of coke and petrolium and chemical industry
- 30. Plastic masses and materials for production of plastic masses
- 31. Product of timber and chemical industry
- 32. Preparations for pest fighting in agriculture
- 33. Construction materials and parts
- 34. Grain
- 35. Oil seed and fruits, tobacco(raw), other food raw
- 36. Meat and milk products, animal fats, eggs
- 37. Fish and fish products
- 38. Flour production products and beans
- 39. Vegetables, fruits, berries
- 40. Sugar, vegetable oil, other food-taste products
- 41. Drinks and tobacco products
- 42. Fabrics from synthetic fibres
- 43. Carpets
- 44. Fabrics from staple fibre
- 45. Soap and perfumes and cosmetics

Appendix F2

### DRAFT LAW OF THE USSR CONSUMER RIGHTS PROTECTION

This Law specifies general legal, economic and social bases for consumer rights protection.

For the purposes of this Law the following concepts are used:

"products" - goods, work, services;

"consumer" - individual which uses, buyes, orders or intends to buy or order products for his own needs;

"manufacturer" - enterprise, organization, body or individual which manufacture products for selling;

"doer" - enterprise, organization, body or individual which do the work or provide services;

"vendor" - enterprise, organization, body or individual which sell products on the basis of buying and selling agreement;

"agreement" - verbal or written agreement between consumer and vendor (doer) on quality, period, price and other :onditions on the basis of which buying and selling, work and services are dealt with.

Agreement can be accompanied with a receipt, cheque or other written documents. Agreement conditions are either given in the above documents or in product information as specified in article 12 of this Law;

"state standard" - a state standard of the USSR, republican standard, construction norms and rules, state pharmacopoeia and provisional pharmacopoeia articles for medicines;

"normative documents" - a state standard, company standard, specifications, technical descriptions, recipes and other documents specifying requirements to products quality.

SECTION I GENERAL

Article I Legislation on consumer rights protection

Legislation on consumer rights protection shall contain this Law and other legislative acts of the USSR and Republics issued in its pursuance.

Consumer rights and a tool for their realization can be regulated by decisions of the Cabinet of Ministers of the "SSR and the Councils of Ministers of Republics only in cases di rectly indicated in this Law and other legislative acts.

Legislative acts of the USSR and Republics on consumer rights protection shall not restrict consumer rights or reduce guarantee of consumer protection as compared with rights specified by this Law.

## <u>Article 2</u> Application of legislation on consumer rights protection of one Republic in another Republic

1. Legislation on consumer rights protection of one Republic shall be applied in another Republic according to the following rules:

if not otherwise specified by legislation or agreement of the parties, the law of location of products shall be applied to relations resulting from consumer rights to information, products quality, replacement of appropriate quality products, as well as consumer rights in case a consumer buys a product of undue quality or agreement conditions

specifying the work to be done or services to be provided are violated;

the law of the place of argument or at the consumer request - the law of the place of damage shall be applied to relations resulting from consumer rights to safety of life and health as well as to obligations originating from damage caused by products of undue quality.

2. The rules of interrepublican agreement (contract) shall be applied if other rules for application of legislation of one Republic in another Republic are specified by interrepublican agreement (contract).

### Article 3 International agreements

The rules of international agreement shall be applied, if this agreement, in which the USSR participates, specifies other rules differing from those contained in the USSR legislation on consumer rights protection.

SECTION II RIGHTS OF CONSUMERSAND THEIR PROTECTION

Article 4 Rights of consumers Any consumer has a right to: guaranteed level of consumption; appropriate quality of products; safety of products; complete and authentic information on products; appropriate quality of sales and other types of servicing;

appeal to the court and other authorized governmental bodies;

uniting into public consumer organizations.

Article 5 Guaranteed level of consumption

1. All consumers of the USSR irrespective of their incomes have a right to obtain material wealth and services in variety and amounts as scientifically justified for minimum level of consumption (guaranteed level of consumption).

Guaranteed level of consumption and corresponding minimum level of incomes, procedure and dates of their revision as well as measures for their provision shall be specified by legislative acts of the USSR and Republics annually, when corresponding state budget are approved.

2. The Councils of Ministers of Republics, the Executive Committees of the local Councils of People's Deputies shall make it possible for all consumers:

to buy products and services in amounts corresponding to guaranteed level of consumption at prices on the basis of which the minimum level of incomes was determined;

to provide reimbursement to consumers, which have lower money incomes than specified for minimum level.

3. Rights protection of consumers as specified in clause 2 of this article shall be exercised in court, if a consumer or public consumer organization submit an application.

If an application for products and services to be bought according to the guaranteed level of consumption is satisfied, the court takes a decision on pursuance of this obligation in kind, and if it is impossible to pursue obligation in kind,

on reimbursement in amount allowing to buy a specified quantity of products and services at free prices.

If obligations resulting from clause 2 of this article are not pursued or pursued improperly, officials responsible for this shall be subjected to penalty amounting to 2000roubles imposed by the court.

In case of evidences of crime in actions of officials, the court shall inform the procurator's office or initiate a case.

Article 6 Appropriate quality of products

1. It is the right of a consumer to demand that quality of products he bought or ordered be in conformity to mandatory requirements specified in state standards, agreement conditions and information on their consumer properties given by a vendor (manufacturer, doer).

2. It is the duty of a manufacturer to provide possibility for the usage of products (including components) within their life time (serviceable life) specified by normative documents or an agreement.

For this purpose a manufacturer shall ensure production and supply of spare parts as required, maintenance and repair of products within the whole period of production as well as after removal of products from production within their life time and, if the latter is not specified, within 10 years.

Vendor shall also ensure availability of spare parts for a consumer within above mentioned periods.

3. Losses caused to a consumer as a result of nonpursuance or improper pursuance of obligations by a manufacturer or sales organization, shall be covered to the full extent.

# <u>Article 7</u> Consequences from selling improper quality products

1. If defects in products are revealed within the guaranteed period or serviceable life and, if they are not specified, within periods specified by legislative acts of Republics or agreement, a consumer shall be entitled to demand that his product be replaced with a similar one of proper quality or with another product from available variety with corresponding recalculation, or to demand that the buying price be appropriatly reduced, or defects in product be removed free of charge, or removal of defects for his own account be covered or an agreement be cancelled with reimbursement of losses.

Guaranteed periods shall be specified in normative documents or in an agreement and become valid from the date of purchase and serviceable life-from the date of manufacturing.

2. Requirements resulting from clause 1 of this article can be used by a consumer on his own against a vendor or his representative.

According to the type of products to be sold the state sales organizations or sales organizations of consumer cooperation, which are not vendors, shall perform functions of representatives of sales organizations-vendors of corresponding sales systems.

Representatives of sales organizations-vendors, based on other forms of property, shall be sales organizations set up by them, which sell products of corresponding type. A consumer has also a right to demand from the manufacturer or organizations set up to provide maintenance and repair of his products or responsible for the maintenance and repair on the basis of agreement with a manufacturer that his product be replaced with or defects be removed free of charge, or expenses be covered.

3. Vendor (his representative, manufacturer) is obliged to take a product back from a consumer.

Consumer requirements resulting from clause 1 of this article shall not be met, if a vendor (his representative, manufacturer) proves that product defects are due to the violation of usage and shelf life by a consumer. A consumer has a right to participate in product quality examination either in person or through his representative.

4. Vendor (his representative, manufacturer) shall deliver products and return them back on his own.

In case this obligation is not pursued, of if a vendor (his representative, manufacturer) is not available in the location of a consumer, products can be delivered and returned by a consumer at their expense.

5. If a product is available, consumer requirement for its replacement shall be immediately met and if need be to examine quality - within period, specified by legislative acts of Republics (but not more than 14 days) or agreement of the parties.

If a product is not available, consumer requirement for replacement shall be met within 2-month period from the date of appropriate application.

For each day of violation of periods mentioned in this clause a vendor (his representative, manufacturer) shall pay a penalty amounting to 1% of product cost.

If a product is replaced, the guarantee period shall start ...anew from the day of replacement.

6. If a consumer demanded that product defects be removed free of charge, they shall be removed within a period specified by legislative acts of Republics (but not more than 14 days) or agreement of the parties.

At the consumer request he shall be given (with delivery) a similar product (grade, type) to be used for the period of repair.

For each day of delay in fulfillment of requirement to provide a similar product (grade, type) for the period of repair and for each day of delay in removal of defects after periods specified a consumer shall receive a penalty amounting to 1% of product's retail price.

If it is required to remove product defects, guarantee periods specified for the usage of this product shall be prolonged for the period, during which a product could not be used by a consumer. This period starts from the day of consumer application for the removal of defects.

7. If periods specified in clauses 5 and 6 of this article are violated, a consumer has a right to resort at his discretion to other requirements resulting from clause 1 of this article.

In this case a paid penalty (fine) shall not be included in losses to be reimbursed or other consumer payments as specified by this article.

# <u>Article 8</u> Consumer right for the replacement of appropriate quality products

1. A consumer has a right to replace a nonfood product of good quality with a similar one in sales organization, where it was purchased, if it can not be used by a consumer due to its form, dimensions, style, colouring, size or for other reasons.

Periods, during which a consumer can exercise his right for product replacement, shall be specified by legislative acts of Republics.

A product of good quality shall be replaced, if it was not used, his appearance, consumer properties, seals, labels as well as a check given to a consumer by a vendor together with a sold product are preserved.

A list of products not subject to replacement for reasons mentioned in this article shall be approved by the Councils of Ministers of Republics.

2. If a similar product is not at the moment available in sales organization, a consumer has a right to buy at his discretion other products from the available variety with corresponding recalculation, or to receive back money equalling to product cost, or replace a product for a similar one as soon as it is on sale. Vendor shall inform a consumer applied for product replacement, when this product is on sale.

<u>Article 9</u> Consequences from violation of agreement conditions specifying the work to be done and services to be provided

1. A consumer has a right to break an agreement on the work to be done and services to be provided and demand that his losses be reimbursed, if a doer does not begin to fulfill his commitments in time or does the work so slowly that its completion at target date is becoming vividly impossible.

2. If at the time of work being done or services being provided it becomes evident that they will not be fulfilled as specified in agreement conditions, a consumer has a right to set an appropriate date for the removal of defects and, if this requirement is not met by the target date, break an agreement, or demand that his losses be reimbursed, or entrust removal of defects to a thirt party at the doer expense.

3. If a doer allowed deviations from agreement conditions, which impaired work (service), or allowed other defects in work (service), a consumer has a right to demand at his discretion that these defects be removed free of charge within an appropriate period, or expenses be reimbursed in case he himself removed defects in work (service), or remuneration for work (service) be correspondingly reduced.

4. If defects, mentioned in clauses 2, 3 of this article, are not removed at target date, a doer pays a penalty (fine) to a consumer as specified by legislation of Republics or an agreement.

A payed penalty (fine) shall not be included in losses to be reimbursed.

A doer shall not be free from pursuance of obligation in kind if he paid a penalty (fine) specified in case of delay or other nonpursuance, or improper pursuance of his obligation.

5. If there are substantial deviations or other substantial defects in the work (services) from the agreement conditions, a consumer has a right to demand that the agreement be cancelled and losses be reimbursed.

If substantial deviations from the agreement or other substantial defects were revealed in products, manufactured from the material of a consumer, the latter has a right to demand at his discretion that other products from similar material of the same quality be manufactured or the agreement be cancelled and losses reimbursed.

6. A doer shall not be responsible for defects in the work done or services provided, if he proves that they are due to the fault of consumer himself.

7. Consumer requirements specified by this article shall be met, if defects are revealed within the guarantee period (serviceable life) as specified by legislation of the USSR and normative documents, and if they are not available within periods specified by legislative acts of Republics or an agreement.

Guarantee period for the work and service start from the day of their acceptance by a consumer and serviceable life from the moment of performance.

A consumer shall immediately inform the doer about deviations from agreement conditions or other defects found in the work, which could not be revealed through usual acceptance.

8. If a product, taken from a consumer for the work to be done or services to be provided, is lost or damaged, the doer shall reimburse losses. The doer shall not be free from responsibility, even if the level of scientific and technological knowledge did not allow reveal special properties of a product.

Product cost, accepted by a doer for the work to be done or services to be provided shall be determined by a consumer when an agreement is concluded.

9. The doer shall be responsible for damage caused to the life, health or consumer property as a result of usage of material, equipment, devices, instruments and other means, required for the work to be done or services to be provided irrespective of his knowledge of their properties.

10. Consequences from violation of agreement conditions specifying the work to be done and services to be provided, which do not fall under this article, shall be determined by legislative acts of the USSR and Republics.

### Article 10 Safety of products

1. Consumers have a right for the usage and storage of products without any risk to their life, health and property within specified life time or serviceable life.

Requirements to products ensuring their safety for the life, health and property of consumers shall be mandatory and specified in state standards.

If it is required to follow special rules for the safe usage of products, their transportation and storage, the manufacturer (doer) shall develop such rules and a vendor (doer) shall inform a consumer.

2. Products, for which state standards specify requirements to safety of human life, health and property as well as means ensuring safety for human life and health shall be certified as specified. It is not allowed to, sell and use such products

in the USSR and import them without a certificate proving products conformity to above mentioned requirements.

If the usage and storage of products is proved to be detrimental for human life, health or property, the manufacturer (vendor) shall stop their production (selling) until the causes of damage are eliminated.

If it is impossible to eliminate causes of damage, the Cabinet of Ministers of the USSR, the Councils of Ministers of the Union and Autonomous Republics (for products, manufactured by Republican enterprises and local industrial enterprises and for products sold on the republican territory) take a decision to immediately remove such products from production, withdraw them from turnover and, if need be, recall from consumers.

If requirements specified in this clause are violated, the manufacturer (vendor) pays a penalty to the state budget, which amounts to the cost of sold products as instructed by bodies responsible for the state control of products quality.

4. Life time (serviceable life) shall be specified for products, the usage of which over certain periods is detrimental to human life and health or environment. This requirement is valid for the whole product and its specific parts.

Consumer shall be warned about the life time (serviceable life) of a product or its parts, required instructions when it comes and possible consequences if specified instructions are not followed.

5. If requirements specified to the safety of products for human life, health and property are not followed, the manufacturer, doer and vendor shall be responsible irrespective of

whether the level of scientific and technological knowledge allowed to reveal properties of products that were detrimental to human life, health or property.

## <u>Article 11</u> Material responsibility for damage caused by improper quality products

1. Damage, caused to human life, health or property by products having structural, production, recipe or other defects, shall be reimbursed to the full extent, if higher level of responsibility is not specified by legislation of the USSR and Republics.

2. Any consumer has a right to demand that his losses be:-reimbursed for the damage caused by products of improper quality irrespective of whether he was or was not in agreement relations with the manufacturer or vendor.

Damage, caused to a consumer or his property, shall be reimbursed, if it is done within the life time specified by normative documents and, if it is not available, within 10 years from the date of manufacturing.

3. Vendor and (or manufacturer, which is not a vendor, and a doer of the work and services) shall be responsible for damage indicated in clause 1 of this article. They shall not be responsible, if they prove that damage was due to the violation of usage and shelf life rules by a consumer.

4. Withdrawl from turnover and measures to be taken by the manufacturer and vendor to stop selling the whole lot of products, to which a product that caused damage belongs, shall be also considered, if the court decides to reimburse damage caused by a product as specified in clause 1 of this article.

### Article 12 Information on products

1. A consumer has a right to obtain required and authentic information on the price, consumer properties of products he is interested in, purchase conditions, guarantee obligations as well as on ways and rules specifying their usage, storage and submission of claims.

2. Information specified in clause 1 of this article shall be brought to the consumer attention by a vendor (manufacturer, doer) in technical documents attached to products as well as by labelling, indication of manufacturing and sale dates or by another way accepted in some servicing areas.

3. Products produced by an enterprise shall have a manufacture mark with exception of cases specified by legislation. A manufacture mark shall include a manufacturer name, his location, designation of normative documents, to which manufactured products should conform.

On food products, medicines, cosmetics and other products (their package), consumer properties of which can be impaired with time, serviceable life (selling life) shall be indicated as specified by requirements.

Products, produced as a result of individual labour activity, shall have a label indicating patent's number (permission for manufacturing) and the name of body which issued it as well as normative documents used for such products.

4. If nonauthentic or insufficiently complete information on products resulted in:

purchase of products, which do not have required consumer properties, a consumer has a right to cancel an agreement and demand that his losses be reimbursed:

impossibility to use purchased products as specified, a consumer has a right to demand that the above information be provided in a reasonably short time. If information is not provided within the specified time, a consumer has a right to cancel an agreement and demand that his losses be reimbursed;

damage to human life, health and property a consumer has a right to submit requirements to a vendor (manufacturer, doer) as specified by articles 10, 11 of this Law.

5. Losses caused by products purchased as a result of unfair advertising shall be reimbursed to the full extent.

6. When considering consumer requirements for the reimbursement of losses caused by nonauthentic or insufficiently complete information on products, or unfair advertising, it is necessary to proceed from the assumption that a consumer does not have special knowledge on properties and characteristics of products being purchased.

# Article 13 Consumer rights in sales and other types of servicing

1. All consumers are equally recognized to have a right for meeting their needs in sales and other types of servicing. Consumer rights are not allowed to be directly or indirectly resticted.

Specific categories of consumers can have privileges and advantages in sales and other types of servicing as specified by legislative acts of the USSR and Republics.

2. A consumer has a right to freely select products and services.

Vendor (doer) shall render all possible assistance to a consumer in free selection of products and services.

It is not allowed to make a consumer buy products of improper quality or not required variety.

3. Vendor (doer) shall provide a consumer with authentic and visual information on his enterprise name and subordination.

4. A consumer has a right to examine purchased products for workability; completeness, measure, weight and price, to see them in operation and aquaint himself with safe and proper usage. In such cases a vendor (doer) shall provide control and measuring instruments, price lists and, if need be, assist in product expertize.

5. If consumer rights are violated at enterprises of sales and other types of servicing, a vendor (doer) shall be responsible as specified by this Law and other legislative acts of the USSR and Republics.

## <u>Article 14</u> Invalidity of agreement conditions impairing consumer rights

Agreement conditions impairing consumer rights as compact to rights specified in legislation on consumer rights protection are recognized to be invalid.

If damage is caused to a consumer as a result of agreement conditions impairing consumer rights, this damage shall be reimbursed by the manufacturer (doer, vendor) to the full extent.

Article 15 Defence of consumer rights

If consumer requirements specified by articles 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14 of this Law are not met, arguments shall be brought to the court.

In such cases claims shall be raised to the court of plaintiff residence, or defendant location or place of damage.

If consumer requirements are met, the court takes also a decision on additional monetary reimbursement for moral damage caused.

#### SECION III PUBLIC CONSUMER ORGANIZATIONS

Article 16 Rights of public consumer organizations

1. Consumers have a right to unite of their own free will into public consumer organizations which function as specified by legislation of the USSR and Republics.

2. Public consumer organizations have a right to:

participate in the development of state standards specifying requirements to product quality;

perform independent expertize of products, prices and tariffs;

examine observance of consumer rights and rules specifying sales, household and other types of servicing;

participate together with appropriate governmental bodies in inspection of application of centrally determined and regulated prices;

make proposals to control bodies, enterprises and organizations on measures to be taken to improve products quality, observe pricing rules, discontinue production and sale of

products, which do not correspond to specified requirements, remove products from production, withdraw products from sale, if they are determental to human life, health and property, discontinue sale of products at higher prices and cancel prices if they are in conflict with the valid legislation;

provide procurator's office and control bodies with documents to make answerable those who are guilty for production and sale of products at higher prices or if such products do not comply with specified quality requirements;

raise claims in favour of consumers which are not members of public consumer organizations in case their rights specified by legislation of the USSR and Republics on consumer rights protection are violated.

# <u>Article 17</u> Consumer rights protection by public consumer organizations

As entrusted by consumers or on their own initiative public consumer organizations have a right to raise claims to a manufacturer (doer, vendor) of products demanding that violations be eliminated and damage caused through such violations be voluntarily reimbursed.

If within ten days a manufacturer (doer, vendor) does not respond to the claim or refuses to remove violations and voluntarily reimburse damage caused, public consumer organizations have a right to initiate a case.

If requirements are met, the court takes a decision to impose a penalty on the manufacturer (doer, vendor) in favour of the budget equalling to the claim cost and reimburse expenses incurred by public consumer organizations.

### DECISION

### N 134C dated Decembre 25, 1990 Moscow, the Kremlin

### ON THE IMPROVEMENT OF STANDARDIZATION ACTIVITIES IN THE USSR

To organize standardization activities under the conditions of economy transfer of the country to become market-oriented the Council of Ministers of the USSR resolves that:

1. State and republican standards shall contain mandatory and recommended requirements to products quality.

Mandatory requirements are the ones ensuring safety of products quality for the life and health of people, environmental protection, compatibility and interchangeability of products.

Recommended requirements are the ones specifying consumer and other properties of products. Their application shall be determined by manufacturer and consumer (customer) when the agreement is being concluded.

Mandatory requirements specified in state and republican standards are a must for all state, cooperative, leasing, joint and other enterprises and organizations independent of their subordination and forms of property as well as for individuals involved in enterprising on the territory of the USSR or a Union Republic respectivily. Mandatory requirements specified in republican standards shall not be in conflict with mandatory requirements specified in state standards.

Control over the fullfillment of mandatory requirements specified in standards shall be exercised by the USSR State Committee for product quality control and other governmental control bodies withhin their competence.

Officials, if they allowed violation of mandatory requirements specified in standards, shall be responsible according to valid legislation.

2. Enterprises, organizations, concerns, associations and other amalgamations shall be entitled to develop and approve company standards intended for their products if requirements in such standards

surpass quality indicators specified in state and republican standards used for these products.

3. The USSR State Committee for product quality control and standards, the USSR State Committee for civil engineering and the USSR State Committee for environmental protection shall ensure direct implementation of international regional and national standards of foreign countries as state standards on the basis of international and cooperation agreements if requirements specified in such standards satisfy needs of the national economy. In justified cases it is allowed to apply international, regional and national standards of foreign countries as republican, branch or company standards and specifications.

4. The USSR State Committee for product quality control and standards, the USSR State Committee for civil engineering, the USSR State Committee for environmental protection and the USSR Ministry of Health shall (within the variety of products assigned to them) request for the development of state standards specifying basic and general technical requirements, mandatory requirements ensuring safety of products for the life and health of people, environmental protection, compatibility and interchargeability of products as well as for the work related to direct implementation of international, regional and national standards of foreign countries as state standards.

The USSR Ministry of Finance shall earmark budget means to finance the above developments and activities (including the ones for defense products) when an annual budget is being prepared.

Requests for the development of state standards can be also made by ministries, agencies, enterprises, organizations, concerns, associations and other amalgamations. In such cases state standards as well as branch and company standards and specifications shall be developed at the expense of ministries, agencies, enterprises, organizations and above amalgamations including also means centralized on the basis of agreement.

5. The proposal of the USSR State Committee for product quality control and standards on the transfer starting from 1991 to the development of state standards through, as a rule, technical standardi zation committees, that is, by groups of specialists authorized by concerned enterprises and organizations shall be accepted.

Representatives of standards writers, manufacturers, consumers (customers) of products, societies (unions) and consumer federations, scientific and technical and engineering societies shall be involved in the work of such committees. Leading scientists and specialists shall be also involved in the work of technical standardization committees.

The USSR State Committee for product quality control and standards, the USSR State Committee for civil engineering and the USSR State Committee for environmental protection shall be allowed to pay for the actual work of specialists involved in technical standardization committees with salaries envisaged for the personnel of the USSR State Committee for product quality control and standards throug means intended to finance standardization activities.

6. The USSR State Committee for product quality control and standards, the USSR State Committee for civil engineering and the USSR State Committee for environmental protection shall be entrusted:

to determine and endorse prices for the to-be-published state standards starting from 1991;

to define together with the USSR State Committee for prices, the USSR Ministry of Finance and the USSR State Committee for press the procedure for determination of these prices.

Means obtained from sale of state standards after deduction of sums to the state budget as specified by the valid legislation shall be used for target-oriented financing of state standardization activities.

7. The USSR State Committee for product quality control and stan dards with participation of governments of Union Republics, concerned ministries and agencies shall review the state standardization system valid in the USSR to bring it into conformity with provisions of this Decision and ensure stage-by-stage implementation of the new state standardization system within 1991.

8. The USSR State Committee for product quality control and standards and the USSR Ministry of Justice shall prepare and submit within a three-month period proposals to the Council of Ministers of the USSR on introducing amendments resulting from this Decision to the valid legislation.





NIST-114A (REV 3-89)	U.S. DEPARTMENT OF COMMERCE	1. PUBLICAT	NISTIR 4572				
(121.5.55)		2. PERFORM	ING ORGANIZATION REPORT NUMBER				
BIBLIOGRAPHIC DATA SHEET		3. PUBLICAT					
		l I	MAY 1991				
4. TITLE AND SUBTITLE							
First Meeting of the Standards Working Group of the Joint U.SU.S.S.R. Commercial Commission, March 11-13, 1991							
5. AUTHOR(S)							
Bert G. Simson							
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. CONTRAC	CT/GRANT NUMBER				
		8. TYPE OF	REPORT AND PERIOD COVERED				
9. SPONSORING OF	GANIZATION NAME AND COMPLETE ADDRESS (STREET, CITY, STATE, ZIP)	<u>NISTI</u>	R				
National Institute of Standards and Technology Gaithersburg, MD 20899							
10. SUPPLEMENTARY NOTES							
DOCUMENT DESCRIBES A COMPUTER PROGRAM; SF-185, FIPS SOFTWARE SUMMARY, IS ATTACHED.							
LITERATURE SURVEY, MENTION IT HERE.)							
In a September 1990 Chairman's meeting of the Joint U.SU.S.S.R. Commercial Commission (JCC) in Moscow, senior officials from the U.S. Department of Commerce and the U.S.S.R. Ministry of Foreign Economic Relations established a Standards Working Group for the purpose of							
developing programs of mutual interest concerning standards development and							
conformity assessment. During its first meeting in Washington, D.C., and Gaithersburg, Maryland, on March 11-13, 1991, representatives from U.S. Government, trade and professional associations, and standard development associations provided the a Soviet delegation with insights into U.S.							
				standardization. The visitors described Soviet legislative initiatives now			
				under development.			
-							
12. KEY WORDS (6 T	0 12 ENTRIES; ALPHABETICAL ORDER; CAPITALIZE ONLY PROPER NAMES; AND SEPAR		DS BY SEMICOLONS)				
Conformity Assessment, Standardization, U.SU.S.S.R. Standards Working Group.							
13. AVAILABILITY			14. NUMBER OF PRINTED PAGES				
			232				
FOR OFFIC	TAL DISTRIBUTION. DO NOT RELEASE TO NATIONAL TECHNICAL INFORMATION SERVIC	JE (NTIS).	15. PRICE				
WASHINGT	JM SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, ON, DC 20402.		A11				
ORDER FROM NATIONAL TECHNICAL INFORMATION SERVICE (NTIS), SPRINGFIELD, VA 22161.							

