

Addressing the Consumer Interest in Standardization and Standards Education

remarks of Jim McCabe, ANSI

Association of Home Equipment Educators (AHEE)

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Claudia Sanders Dinner House

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Thank you, JoAnn. It's a pleasure to be here with AHEE, one of ANSI's newest members, and to talk to you about standards.

Before I do that, let me just say thank you for this pleasant evening here at Claudia Sanders Dinner House. As I'm sure you all know by now, it was here that Colonel Harland Sanders and his wife Claudia grew Kentucky Fried Chicken into a global business after humble beginnings in nearby Corbin, Kentucky. What you may not know, is that one of the ingredients for the Colonel's success was his use of pressure cooking, a process that the company continues to use to this day.

Invented more than 320 years ago in France, the first pressure cooker was a large cast iron vessel with a locking lid. The inventor, Denis Papin, found that he was able to significantly reduce cooking time by adjusting steam and temperature. Unfortunately, regulating these elements was a challenge and explosions were common.

Introduced in the U.S. in 1902, pressure cookers initially were industrial-size and primarily used for commercial canning and institutional use. Smaller sizes for home use were soon produced, and by 1923 Underwriters Laboratories had begun to review and certify the products.

At the start of World War II, small, cast aluminum pressure cookers enjoyed widespread popularity in American homes. But with aluminum required for the war effort, it wasn't long before production of aluminum pressure cookers came to a halt. When production resumed after the war, the demand resulted in manufacturers cutting corners on quality and the market was flooded with inferior products. Accidents became so common that the expression "in a pressure cooker" came to imply "imminent disaster."

Clearly, this was not a good thing for the home consumer . . . however, investments in research and development, improvements in design, and requirements for enhanced safety features steered manufacturers back in the right direction.

Now I'm going to guess that many of you could tell me a story or two about pressure cookers and a host of other kitchen and household appliances. But if I may I'd like to test your knowledge just a bit on standards relating to consumer products and the home environment. How many of you are familiar with the American National Standard UL 136? (Pause). Well, this is the Underwriters Laboratories safety standard for **household pressure cookers**. How about UL 923? (Pause.) This is the UL safety standard for **microwave cooking appliances**.

Let's try some other developers. Anybody know what ANSI/AHAM-DW-1 deals with? (Pause.) That's the Association of Home Appliance Manufacturers performance standard for **household electric dishwashers**. What about ANSI/AHAM AC-1? (Pause.) That's the American National Standard performance test method for **portable air cleaners**.

The list goes on. There's ANSI/ASHRAE 62.1, the standard for minimum ventilation rates and **indoor air quality** for residences; ANSI/ASHRAE 90.2 the standard for **energy-efficient design** for homes; and ANSI Z21.1, the standard for **household cooking gas appliances** developed by a committee administered by CSA America.

Joyce, I know you're familiar with this one: NFPA 70. That's the National Electrical Code, the standard for **safe electrical installation in buildings**, promulgated by the National Fire Protection Association, and adopted in virtually all fifty states and in many other jurisdictions around the world.

I could go on but I think you get the picture. There are literally thousands of American National Standards covering the safety, health, performance and environmental aspects of all sorts of consumer products and dwellings. Aside from the fact that all of these standards relate to the household environment, they have something else in common: They all were developed using a fair, open and transparent process, one that is based on due process and consensus, with numerous checks and balances.

Since 1918, that process has been administered and coordinated by ANSI. ANSI itself does not develop standards. Rather, we provide a forum where subject matter experts from the private and public sectors can work cooperatively toward the development of voluntary consensus standards to meet societal needs. The ANSI Federation includes representation from virtually every sector of the U.S. economy. Our diverse membership includes private industry, standards developing organizations (SDOs as we like to call them), trade associations, professional societies, government agencies, labor organizations, consumer advocacy groups, and members of the academic community.

Increasingly, the government is adopting consensus standards for mandatory use in regulation and procurement. There are a number of laws that direct federal agencies to use private sector standards but the most overarching of these is the National Technology Transfer and Advancement Act, signed into law in 1996. This law requires all Federal government agencies and departments to use consensus standards developed by the private sector, unless doing so would be inconsistent with applicable law or otherwise impractical. It also directs agency personnel to participate in the development of these standards.

So today, we see references to the National Electrical Code in the regulations of the U.S. Department of Energy, the Consumer Product Safety Commission, and the Occupational Health and Safety Administration, among others. The Z21.1 standard on household gas cooking appliances is referenced by the U.S. Department of Housing

and Urban Development. The International Code Council/ANSI A117.1 standard on accessible and usable buildings and facilities is referenced in the ICC's International Building Code which is widely adopted by the states. The IBC and the A117 standard also are recognized by HUD as a safe harbor for compliance with the Federal Fair Housing Act, and are referenced in the Americans With Disabilities Act Accessibility Guidelines. These are but a few examples.

At such a time, it is critical that consumers participate in standardization, both to ensure that consumer requirements are raised and addressed, and to enhance the integrity of the process. Consumers have the opportunity to influence the technical content of American National Standards, either through direct participation in standards writing committees or through public comment. ANSI's Standards Action is the Institute's web-based, weekly publication that invites public input on proposals for new standards, as well as revisions, reaffirmations and withdrawals of existing standards. Published every Friday, it also solicits comment on proposed revisions to ANSI's Procedures, accreditation applications, and proposed international standards.

It is also becoming increasingly important for consumers and public interest representatives to participate in the development of international standards. International trade agreements have emerged that call for the harmonization of domestic regulations to international and regional standards in the area of health and safety. In addition, globalization and the rapid expansion of markets fueled by the Internet have created unprecedented opportunities for the cross-border trading of goods

and services. These developments have caused a dramatic evolution in international standardization work programmes beyond just the traditional concerns of product safety and interoperability.

ANSI is the U.S. representative to two international non-treaty organizations involved in standards development, the International Organization for Standardization (ISO) and, via the U.S. National Committee, the International Electrotechnical Commission (IEC). Whereas IEC's area of focus is on electrical and electrotechnical standardization, ISO covers virtually all other sectors, save telecommunications. While both organizations are based in Geneva, Switzerland, standards development meetings are held all over the world.

In terms of IEC, just last week, I had a request from a colleague at Consumers International, the global consumer advocacy group, urging a negative vote on a IEC proposal dealing with the temperature rise for the metallic sides of toasters. IEC is also considering establishing a new working group that would develop guidelines for the design of household appliances to ensure they are accessible for all, including the elderly and the disabled.

At ISO, there are standards projects underway or proposals that are being developed by the consumer policy committee addressing topics as diverse as:

- a standard to make it easier for consumers to read and understand their gas and electric utility bills
- standards or guides to address the health, safety, and environmental aspects of second hand goods (including used appliances) as well as recall procedures for consumer products
- guidance for businesses on how to enhance customer satisfaction by developing codes of conduct and customer dispute resolution systems
- guidelines for organizations in the area of corporate social responsibility

ANSI, its Consumer Interest Forum, and its U.S. technical advisory groups for ISO and IEC activities, provide a channel for consumers to get involved and to influence the development of these international standards.

Obviously, participation by consumers and other stakeholders can't happen without education and ANSI has been involved in a number of initiatives to raise awareness of the important role that standards play in our daily lives and to promote sustainability.

A major strategic goal called out in the U.S. National Standards Strategy is the need to educate public and private sector decision-makers about the value of standards. This includes the development of outreach strategies and actions to promote the integration of standards (and related conformity assessment activity) into university curricula. To date, this effort largely has been focused on schools of engineering since engineers make up a large segment of the standardization community and the pool of standards

volunteers is aging. In addition, college and university engineering schools are now required to cover standards in order to attain or retain their accreditation. Accordingly, ANSI has been sponsoring workshops and authoring papers in conjunction with meetings of the American Society of Engineering Educators.

More broadly, ANSI is moving forward with initiatives to educate the next generation of private and public sector business leaders of the strategic impact of standards and conformity assessment by introducing standards into fields of study such as science, technology, government and public policy, business, economics and law.

This fall ANSI launched a pilot university outreach project with a selected group of universities. Twelve schools, encompassing a range of disciplines, are involved, including the apparel, housing and resource management program at Virginia Tech with JoAnn Emmel being the point of contact. I should note that JoAnn is also one of the newest members of ANSI's Committee on Education which oversees all of the Institute's educational outreach initiatives.

As part of the pilot, ANSI was able to negotiate an agreement with ISO to provide free access to ISO standards for university faculty to use in the classroom. There have been some discussions among ANSI's standards developing organizations about their potentially providing access to standards from their own collections. Since each SDO owns the rights to its standards collection, this will largely be a decision of the individual

SDOs. A dialogue has begun among the SDOs on how to generate case studies, model tutorials, and other resources that professors can use in the classroom.

ANSI recently conducted a survey of its SDOs to ascertain what educational standards resources currently exist and what needs to be developed to support universities with the tools they need. Some 32 SDOs responded with the majority engaged in some form of educational activity. Most are involved in continuing education or professional development for their membership. Forty percent are involved in activities for students at the university level and younger, and had developed standards materials for use by universities. There was also interest expressed in developing both cross-discipline and discipline-specific education materials for use by universities.

For your information, a standards education database on ANSI Online contains links to SDOs, academic institutions and other ANSI members that provide standards education. ANSI itself—in addition to offering classroom instruction—delivers web-based training, including two free, introductory courses to the world of standards on the Institute's e-learning web portal, www.StandardsLearn.org.

ANSI also has partnered with the U.S. Environmental Protection Agency on its P3 project—a national student design competition to promote sustainability. For the nearly 70 university teams, ANSI provided an online Standards Resource Guide with links to standards information, training tools and SDO resources. Sample award projects included devising health and energy-efficient housing in hot and humid climates, and

facilitating informed consumer purchasing decisions through point-of-sale access to product sustainability information. ANSI also has worked with EPA on educational materials to get standards developers to incorporate environmentally-preferable purchasing provisions into standards, and with the Department of Energy's National Renewable Energy Laboratory on a portal for codes and standards relating to hydrogen fuel cell technology.

By becoming educated on the relationship between standards, technology and public policy, and by participating in standards development, consumers can serve as an influential voice in standardization, one which promotes consumer protection and health, safety and the environment.

ANSI will continue to work with key stakeholders to foster consumer education and consumer participation in standardization. The challenge is an exciting one and we welcome the opportunity to partner with groups such as AHEE and its members to help us achieve our goals.

I thank you for your time. I have some literature and some business cards here should you want further information. And I'd be happy to take any questions.

Thank you again.

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