A View from the Crow's Nest: The Air-Conditioning and Refrigeration Institute (ARI) and a Strategic Perspective of Standardization

Thank you, Woody. Good afternoon everyone.

On January 1, 2004, your president – Woody Sutton – became one of the newest members of the American National Standards Institute's Board of Directors. When he approached me a short time later with the request to participate in today's meeting, I was eager to accept as this is my first opportunity to meet with the distinguished members of the Air-Conditioning and Refrigeration Institute.

Woody also asked if I would provide a "crow's nest" view of the global standards community. As he says, "to chart the right course, identify the shoals, and the best ports of call."

Well, Woody, I've never been in a "crow's nest," but I'll do my best to provide the insights of a heavy weapons infantryman.

(PAUSE – REMEMBER TO SLOW DOWN)

That is why my comments today will be direct and focus on a single point:

There has never been a more important time for your industry to assume a leadership role in domestic, regional and global standards and conformity assessment activities.

Conformity Assessment – which you know as certification – is a major component of both ARI and ANSI. ARI has more than 20 successful certification programs. ANSI accredits the organizations that are involved with certification of products in dozens of industries, as well as personnel and quality and environmental management systems. Today, however, my remarks will focus primarily on standards.

Let me begin with a bit of background that may help to put the U.S. standardization community into a better perspective for you.

The American National Standards Institute (ANSI) is the coordinator of the U.S. voluntary consensus standardization system. We are a private, 501(c)3 non-profit membership organization. We are not a government agency or a regulatory body. Nor are we a standards developer. Rather, ANSI provides a

forum where subject matter experts from the private and public sectors can work cooperatively toward the development of voluntary standards that ultimately benefit the nation.

The Institute itself is 86 years old. It was founded in 1918 by five engineering societies and three government agencies that recognized the need for a focal point for standards coordination, harmonization and information.

A formalized, private sector standardization system has existed in this country for well over 100 years. Two of the oldest standards setting organizations are ASTM International and Underwriters Laboratories.

ARI traces its own history back to 1903 when it started as the Ice Machine Builders of the United States. From the earliest days of the refrigeration industry, your forefathers were providing the technology and infrastructure that made the development and progression of countless other industries possible.

As we were preparing for today's presentation, Jim Walters, ARI's director of international standardization, directed us to the works of author and historian, Dr. Daniel Boorstin (pronounced as *Bore-sten*). Dr. Boorstin, who passed away on February 28, was appointed Librarian of Congress in 1974 by President Ford, and spent 12 years as director of the world's largest library. He often referred to America as "the republic of technology" and our nation's instinct to place our trust in technology.

In one particular reference in his Pulitzer-Prize winning book, "*The Americans: The Democratic Experience*," Dr. Boorstin explained the role of the refrigerated rail car in allowing for the transnational transport of fresh meat. An 1882 citation in *Harper's Weekly* called this the "Era of Cheap Beef."

Entrepreneurs of the era not only worked to standardize the dressing of beef and the refrigerated rail car, but they were also instrumental in standardizing rail gauges so that these rail cars could move seamlessly from the West to the fresh-meat markets in Eastern cities, without having to transfer the perishable cargo from one car to another.

It is this collaboration and connection between industries that is so essential to carry forward today. It is also the basis of the current U.S. standardization system.

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ANSI does not itself develop standards, but our members do. Today, there are some 200 ANSI-accredited standards developers across the spectrum of industry.

Since ARI was formed in 1953, it has become a major voice for the air conditioning and refrigeration industry. ARI has been a member of ANSI since 1970 and was accredited by the Institute as a standards developer in 1983. Your sister organization, the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE), was accredited in 1978.

Today there are more than 10,000 American National Standards (ANS), including 35 that have been developed by ARI, and dozens more projects in development. Nearly 200 more projects are either under development or have been published by ASHRAE. Other organizations, such as the Association of Home Appliance Manufacturers (AHAM) work on related "white" products and room air conditioners.

These examples address only domestic projects that may lead to the approval of an American National Standard. In addition to our efforts to coordinate the domestic standards system, ANSI is even more actively engaged in ensuring that American interests are well represented in the development of global standards.

As the country's official member body of the International Organization for Standardization (ISO) and, via the U.S. National Committee, to the International Electrotechnical Commission (IEC), ANSI gives interested U.S. parties immediate access to the standards development processes of these two organizations.

Within your industry, ARI and ASHRAE have partnered for many years in the administration of U.S. standardization efforts in the global arena. In ISO, this includes the activities of Technical Committee 86, *Refrigeration and Air-Conditioning*. In the IEC, the relevant Technical Committee is 61D, *Appliances for Air-Conditioning for Household and Similar Purposes*.

ANSI's focus has always been to remain responsive to the evolving needs of its constituents. Our programs are constantly expanding and adapting to meet the changing needs of industry, government and other sectors.

We address standardization needs in such fields as nuclear energy, information technology, material handling and electronics. Alongside traditional engineering committees and design-based standards are new and innovative projects ranging from quality and environmental management, to standards for the service industry and most recently, for personnel certification programs.

Earlier this year, ANSI formed a cross-sectoral group to address homeland security and emergency preparedness. This Homeland Security Standards Panel is working with the U.S. Department of Homeland Security to develop solutions that will help to protect our national infrastructures, support emergency

preparedness and business continuity; protect our food and medical networks; enhance cargo security programs; and much more.

ARI standards are critical to nearly all industries. The efforts of the air-conditioning industry are essential to the systems that support our food supply with preservation techniques. Your equipment helps to maintain the integrity of sterile environments for manufacturing and medical purposes – not to mention the preservation of critical and very sensitive medical supplies. Your cooling systems make possible the global transport and trade of countless other products. And your own comfort cooling systems – with more than 90% of the central air conditioning systems produced for North America – are also traded globally. Many of you in the room today may even have global manufacturing facilities or rely upon parts that come from foreign-based suppliers.

Fundamentally, your industry provides a critical infrastructure that supports global trade and commerce.

That is why it is absolutely essential for ARI to strengthen its overall involvement in the standardization community.

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Because your industry and the standards that it develops impacts so many others involved in international standardization and global trade, there is a real need for your focused and integrated involvement in U.S. policy and strategy-setting activities. I invite you to participate – both as an organization and as a collection of individual representatives – in the long-range, U.S. strategic approach to standardization.

Each of you should have received copies of the National Standards Strategy for the United States. This document reaffirms that the U.S. is committed to a sector-based approach to voluntary standardization activities, both domestically and globally. Its focus is to improve U.S. competitiveness in the global marketplace while continuing to provide strong support for domestic markets and key quality-of-life issues such as the environment.

This standardization framework builds upon the traditional strengths of the U.S. system – such as consensus, openness and transparency – while giving additional emphasis to speed, relevance, and meeting the needs of public interest constituencies. These strategic and tactical initiatives can be used by diverse interests to meet their own national and individual organizational objectives.

ANSI recently launched a review of the Strategy with a view to updating the document to reflect current practices and initiatives. We welcome your participation and your perspectives.

The best attitude to take actually comes from your own organization's motto:

"An intense focus on today. An inquisitive eye on tomorrow."

Clearly, ARI is committed to serving as a global leader for your members and the industry. My reading of your blueprint for the future, ARI's "2020 Vision," also seems to support a commitment to global standardization.

In order to achieve your "world leadership position," you are working through such long-term goals as:

- Influencing scientific, public and policy debates affecting the industry,
- Facilitating and promoting the industry's growth in the marketplace, nationally and internationally, and
- Maintaining and broadening the public's confidence in the high standards of the industry

I believe that a well-founded standardization strategy directly supports ARI's endeavor as well as that of the U.S. standards system:

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- First, we each recognize that we provide an infrastructure that supports many different industries, but remain largely invisible to many of our users.
- Second, we are acutely aware of the growing need for the *global relevancy* and *interoperability* of products, processes, systems and personnel.
- Third, we are well aware of the impact of *market forces* such as global trade and competition and important *societal issues* such as health, safety and the environment.
- Fourth, we recognize that an industry's standards are an *essential element* of that industry's domestic and global competitiveness.

Historically, we have seen that companies that assume a leadership role in standardization gain a strategic advantage in the marketplace. A company that successfully introduces its technology to a standards-setting committee may gain a lead-time advantage that allows them to build a huge market for its products while their competitors are playing "catch-up." This company may also re-allocate resources to the development of "next generation" technologies, rather than to the re-tooling of an existing product line to encompass a

standard that was more heavily influenced by a competitor. Given that ARI is a trade association – the strategic aspects of participation are of real interest.

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I believe that the linkage between your stated goals and the work of the standardization community is not only strong and clear, but an obvious "win" for all involved.

That is why I am here to invite ARI and its members to *strengthen* their involvement in standardization activities.

ARI's Jim Walters is a member of each of the three ANSI Regional Standing Committees – the groups that coordinate and recommend U.S. positions on the Institute's relationships with regional standards bodies in the Americas, Europe, the Middle East, Africa, and the Pacific Rim and with other developed and emerging nations. Jim also sits on several of the Institute's international policy committees.

Henry Hwong, ARI director of product sections, participates on ANSI's Conformity Assessment Committee.

Woody Sutton sits on the ANSI National Policy Committee, the Homeland Security Standards Panel, and as I said in my opening remarks, he holds a seat on the Institute's Board of Directors. His predecessors, Arnold W. Braswell and Clifford H. (Ted) Rees, Jr. also held seats on the ANSI Board from 1990-1995 and 1997-2000, respectively.

And while Jim, Henry and Woody do an excellent job – they have encouraged me to tell you that you can ALSO have a voice in ANSI's governance and in our global outreach activities.

(TRANSITION - HUMOR??)

ANSI continues its advocacy for a flexible, sector-based structure and management within the ISO and IEC. The U.S. recognized long ago that the diverse needs of the global standards community cannot be addressed by a single, rigid, top-down system of standardization. This is why ANSI is fully committed to a system in which the market dictates the timing, content requirements, and number of standards that are to be developed under a voluntary, consensus-based, standards process.

Through our memberships in both ISO and IEC, and our relationships with other national standards bodies, we have been quite successful in advancing a concept that is being referred to as "global relevance." The

concept emphasizes the value of a single international standard that can be used and implemented as broadly as possible by affected industries in countries around the world.

In IEC, there now exists a new set of procedures that will help make a single standard applicable in every region of the world – even though there may be certain *essential differences* in *the mandatory requirements* of the standard.

(pause)

To some of you, that probably sounded like true "Standards Speak."

(pause)

Let me explain what this means with an example: The conditions for testing and rating ducted airconditioners in North America might be different from those needed in Asia. With the new IEC policy, both sets of conditions can now be identified in the same IEC standard. Both sets of conditions can also be identified as "equivalent." Now, the same standard can be referenced anywhere in the world, even though some requirements for implementation can differ depending upon location.

ISO approved its global relevance policy in 2003. Its policy recognizes both differing *technical* requirements as well differing *market* requirements. The goal of the ISO policy is to achieve the objective of "*one standard, one test, accepted worldwide.*"

One example of the way ISO's policy might be implemented is through "normative referencing." This procedure allows the technical experts sitting on an ISO committee to include in a standard a normative or "mandatory" reference to one or more existing standards that *already* meets the needs of global users.

Effectively, this means that an ISO standard could refer to an existing ARI standard – or an ASHRAE standard, or an ASTM or UL standard – or others. When this happens, industry saves both time and money by not having to transpose a standard that is already globally relevant into an ISO standard. There is no added value in transposing the documents, plus it enables the technical experts to decide which are the best standards to reference.

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A key element of the U.S. National Standards Strategy is providing leadership at the regional and international levels. Since January 1, 2003, an American – Mr. Oliver R. "Ollie" Smoot – has held the

position of ISO President. On January 1st of this year, another American – Mr. Frank Kitzantides of the National Electrical Manufacturers Association (NEMA) – was elected as IEC Vice President and Chairman of the Standardization Management Board.

ANSI's vice-president of international policy serves as chairman of the Pacific Area Standards Congress (PASC) "Standing Committee" on Standards and Conformance, and I serve on the Executive Board of the Pan American Standards Commission (COPANT).

ANSI's outreach to developing nations and regional partners, and our active participation in the work of the Pacific Area Standards Congress and the Pan American Standards Commission has been instrumental in the approval of the global relevance policies and the placement of U.S. individuals in global leadership positions.

ANSI's Agreements on Cooperation with numerous national standards bodies – including Argentina, China, Brazil and others – enable us to develop and share our respective national positions before addressing topics at the ISO and IEC tables. As a follow-up to a round of meetings held in 2002, an ANSI delegation will be meeting with our counterparts in Brazil to advance harmonization efforts; a similar meeting is being arranged with colleagues in Mexico.

ANSI wants to partner with you so that your efforts and ours will complement one another.

I am aware of ARI's own efforts to harmonize standards with global partners. For example, your work with ABRAVA – the Brazilian association for the refrigeration, air-conditioning and ventilation industry – and your dialogues with Mexico through your participation in CANENA – the Council for Harmonization of Electrotechnical Standards of the Nations of the Americas.

We must continue fostering these positive relationships with our global partners if we are to be successful in our cooperative efforts to establish globally relevant IEC and ISO standards. Our ultimate goal is to achieve a level playing field in the international standards arena, and an assurance that the needs of all nations are taken into account in IEC and ISO standards development.

In some cases, these strategic alliances with partners in the Pacific Rim and in Latin America help to create an effective counterbalance to positions that are brought to the ISO and IEC tables by representatives of the European Union.

Relationships with our European counterparts are actually quite strong and in January of this year, ANSI participated in its 18th annual meeting with representatives of the European Standards Organizations, the

European Commission and the European Free Trade Association. These annual meetings provide an important venue for the discussion of key issues in standardization, and serve to promote access to global markets and eliminate barriers to trade. A broad result of this year's meeting was that it facilitated a better understanding between the U.S. and Europe on the development and definition of globally relevant standards.

We also see that benefits arise from an increasingly stronger partnership between U.S. industry and government. As examples, the Standards Attache at the U.S. Mission to the European Union works very effectively with ANSI in advancing issues of mutual interest, and the U.S. Foreign Commercial Service has been firmly committed to educating their officers around the globe on U.S. standardization practices and principles. All this is done with a view to advancing global trade.

In March 2003, the Department of Commerce announced a new initiative aimed at boosting U.S. exports by reducing technical barriers to trade. Included in the program is an eight-point plan intended to augment current DoC activities. Its goal is to create a more level playing field around the world. This is a welcome new project that will help to strengthen a widespread understanding of the important role that developing and using voluntary standards and conformity assessment play in the support of U.S. citizens and the competitiveness of our nation's industry in international trade.

ANSI was very pleased that the DoC solicited and relied on input from us in finalizing this initiative. We now understand that the Secretary may be ready within the next six weeks to announce their results.

(BEGIN CLOSING REMARKS)

As you can see, the standardization process itself is a long-term event. Those of us in the standards policy business know that patience, more than any other attribute, is essential. Open, ongoing communications between the U.S. and its global trading partners while sitting at the standardization table can be a critically important endeavor. Firing the big guns normally doesn't achieve the desired result.

But patience and persistence is worth the investment.

One example played itself out very recently when another ANSI member, the Water Quality Association, became recognized as an official liaison to CEN. In this case, there was no equivalent ISO committee and the WQA needed to get involved in the CEN technical committee. After more than 18 months of effort by ANSI, WQA, the U.S. Standards Attache to the EU, and CEN itself, a vote was taken and the direct liaison status was confirmed.

(PAUSE - REMEMBER TO SLOW DOWN)

These positive relationships – established over time – are critical for success. For economic reasons and others, the roles of ANSI... the roles of ARI... and the roles of other members of the U.S. voluntary consensus standards community in international standards setting are intimately linked.

Collectively, we support global industry and the worldwide sale of product. From a purely economic perspective, about 80 percent of global merchandise trade is affected by standards and by regulations that embody standards. In terms of the U.S.-European economic relationship, this means that standards influence an estimated \$200 billion in transatlantic trade. These numbers are already high and evidence shows that they continue to rise.

We support the protection of the environment. And we also support the improved comfort, safety and health of the world's citizens.

Are there other forces affecting the air-conditioning and refrigeration industry internationally?

What is the future of your standards work domestically and globally?

You may already know the answers to these questions. But by engaging in the processes and policy initiatives these questions address, you will certainly be able to affect the outcomes.

The success of our efforts is tied directly to the willingness of U.S. interests to commit the resources required to ensure a strong presence in the international standards process.

There has never been a more important time for your industry to assume a leadership role in domestic, regional and global standards and conformity assessment activities.

ANSI is ready to be your partner. It is a role in which we excel and we look forward to working with you.

(PAUSE - REMEMBER TO SLOW DOWN)

Thank you for your time and attention.

I welcome your questions.

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