

AIHA Florida Spring 2007 Conference

American National Standards Institute (ANSI) Standards Development

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Disclaimer

“The views expressed in this presentation are those of the author and do not reflect the official policy or position of the Department of Army, Department of Defense, or the U.S. Government”

Per Army Regulation (AR) 360-1, paragraph 6-8(2)

**I am representing the ANSI Z88 Secretariat as
Executive Committee Vice Chair**

- **BS / MS - CIH / CSP - 30 + years with DA**
- **Vice Chair, ANSI Z88 Accredited Standards Committee (ASC) on Respiratory Protection**
- **Vice Chair and Secretary, ANSI Z88.2 General Practices**
- **Member, ANSI Z88.10 2001, Fit Testing**
- **Member, AIHA Respirator Committee**
- **Member and past Treasurer, ISRP**
- **Army and DOD subject matter expert**

Ground Rules

- **Ask questions**
- **Enjoy yourself**

Agenda

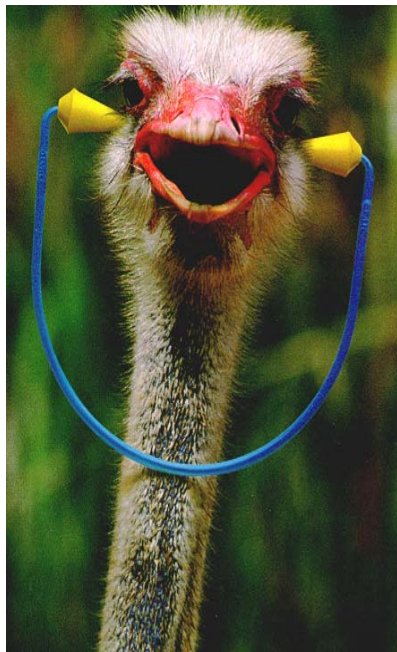
ANSI Standards Development

- Why do we need “Standards”
- Who uses “Standards”?
- ANSI and the ANSI Process
- ANSI Z88

Why Standards?

- **Provides a common baseline for dialog**
- **Sets an understanding of methods and ideals used in assessing old and new technology**
- **Gauges state-of-the-art**

Because – No matter what technology or service is proposed or employed –



-- It must first be assessed



By the manufacturer
By the relevant authority
(including funding source)
By the user

Assess to some criteria or standard

The “Whats”

- **What need exists for an item?**
- **What concept created the item?**
- **What criteria was used to develop item?**
- **What criteria was used to test the item?**
- **What technology was used?**
- **What standard(s) is/are available?**
- **What standard(s) is/are relevant?**

Steve's Fable & Moral-

- If the performance of new technology or service cannot be compared to some values or standard that the customer understands or thinks is relevant, then the technology or service will not be purchased or used.



Health and Safety Standards

- **Standards that carry weight of legal compliance**

**OSHA, NIOSH, FDA, DOT, ATF, NIST,
DOD Milstds & regs**

- **Standards that are incorporated by reference**

**Consensus organizations – ASTM,
ANSI, AWS, ACGIH, ASHRAE, NFPA,
NSF, JCAHO, SAE, ISEA**

Health and Safety Standards

- **Standards have different foci -**
 - Compliance – OSHA, EPA, DOE**
 - Programmatic – ANSI, AWS**
 - Equipment performance and testing – ASTM, NIOSH, NIST**
 - Organizational or professional - ACGIH**

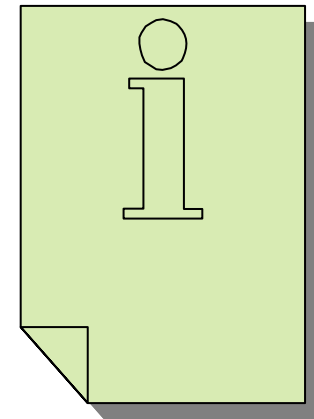
Standards are.....

- developed by humans
- prone to influence and bias
- based on current trends,
knowledge base, technology,
“culture”
- minimum level of “group” acceptance
- based on compromise
- rarely 100 percent optimum



When you have a “Standard” what do you have?

- **Industry Standard**
- **Minimum Standard**
- **Consensus Standard**
- **Compliance Standard**
- **Product Standard**
- **Performance Standard**
- **Specification Standard**



ANSI*

The organization –

- **Founded in 1918 by
5 engineering societies &
3 government agencies**
- **Private, nonprofit membership organization**

*<http://www.ansi.org>

ANSI

- **Primary goal –**

“...the enhancement of global competitiveness of U.S. business and the American quality of life by promoting and facilitating voluntary consensus standards and conformity assessment systems and promoting their integrity.”

ANSI

- ANSI does not develop standards
- ANSI accredits the procedures of standards development organizations (SDOs)
- Accreditation means the SDO uses procedures in developing American National Standards that meet the Institute's essential requirements for **openness, balance, consensus and due process.**

200 SDOs & 10,000 ANSI Standards

ANSI

ANSI accreditation = SDO consistently adhering to the set of requirements and procedures known as the:

ANSI ESSENTIAL REQUIREMENTS

ANSI

- **Due process** = key to ensuring standards are developed that are equitable, accessible and responsive
- **Open and fair** = participation by interested and affected parties
- **Public interest** = openness, balance, consensus, due process safeguards

ANSI

- **Requires standards be updated every 5 years**
- **A standard not updated after 10 years is no longer recognized by ANSI**

ANSI Z88

**ANSI Z88, Accredited Standard Committee (ASC)
on Respiratory Protection**

**SDO - called the Secretariat – American Industrial
Hygiene Association (AIHA)**

ANSI routinely audits SDOs for compliance
Reviews Business Plans
Meeting minutes and Records of Ballots
Membership and membership balance

ANSI Z88 Secretariat Historical Involvement

- **ANSI Z88 Secretariat and predecessor organization has been involved with respiratory protection programs since the 1930s**

American Standard Safety Code for the Protection of Heads, Eyes, and Respiratory Organs, ASA Z2-1938

American Standard Safety Code for Head, Eye, and Respiratory Protection, ASA Z2.1-1959

ANSI Z88 Secretariat Historical Involvement (con't)

American National Standard Practices for Respiratory Protection, ANSI Z88.2-1969

Incorporated by reference into the 1970 William Stiegers or OSH Act as 29 CFR 1910.134

- ANSI Z88.2-1980**
- ANSI Z88.2-1992**
- ANSI Z88.2-200x (currently under appeal)**

ANSI Z88 Standards

- **Z88.2 – General Practices for RP**
- **Z88.6 - Respirator Use - Physical Qualifications for Personnel**
- **Z88.7 - Color Coding of Air-Purifying Respirators**
- **Z88.8 – Test Methodologies for Air Purifying Respirators**
- **Z88.10 – Respirator Fit Testing Methods**
- **Z88.12 – Respiratory Protection for Infectious Aerosols**
- **Z88.14 – Respirator Use for Emergency Response and Operations Against Terrorism and Weapons of Mass Destruction**

ANSI Z88 Secretariat

- **American Industrial Hygiene Association operates the Secretariat for Z88 Accredited Standards Committee, following ANSI Essential Requirements: Due Process Requirements for American National Standards**

ANSI Z88 Secretariat (con't)

- **Accredited Standards Committee (ASC):** A committee formed under ANSI guidelines to develop an American National Standard. An ASC consists of non-voting staff representative(s) from AIHA (as the Secretariat) and the voting (and non-voting) membership of a committee and subcommittees

ANSI Z88 Secretariat (con't)

- **Voluntary Process: All Secretariat officers and and subcommittee members and participants are not paid for their activities. AIHA provides funding for the Secretariat Standards Coordinator**

ANSI Z88 Secretariat (con't)

- **Consensus Process: Consensus is achieved when interest sectors achieve substantial agreement according to the criteria defined by the Accredited Standards Committee and consistent with these guidelines and ANSI requirements. Consensus is more than a simple majority, but it does not require unanimity**

ANSI Z88 Secretariat (con't)

- **Committee is balanced. Balance: Representation by a broad range of interested parties with no dominance by any single interest sector**

ANSI Z88 Secretariat (con't)

- **The Z88 Secretariat is operated following an operating procedure prepared to meet ANSI requirements**
 - **This plan/procedure is available via the AIHA web site under ANSI Committees, along with other related Committee and Subcommittee documents**

How is a new Subcommittee started?

- **Someone proposes the need to the Secretariat**
 - **Scope and Purpose is prepared**
- **Reviewed by Executive Committee and approved**
- **Proposal is prepared and sent out to the Full Z88 Committee for a vote**

How is a new Subcommittee started? (con't)

- If approved, a Subcommittee Chair is chosen and submitted to the Full Committee for approval
- The new Subcommittee formation is advertised, looking for interested members

How is a new Subcommittee started? (con't)

- **Applications are collected and reviewed by the new Chair and Executive Committee**
- **Candidate members are selected and sent out to the Full Committee for approval. Subcommittee balance is considered informally in this process.**

How is a new Subcommittee started? (con't)

- Upon approval of new members, the Subcommittee is now functional
- The Subcommittee schedules meetings, prepares drafts, discusses issues, and comes to consensus

How is a new Subcommittee started? (con't)

- A formal subcommittee letter ballot is required to finalize the draft standard
- When approved by a simple majority vote, the final draft standard is turned over to the Secretariat
- It is now sent out for Full Committee letter ballot
 - Two-thirds of at least a majority voting required to pass

How is a new Subcommittee started? (con't)

- It is also advertised for public comment
- Any negative ballots are attempted to be resolved. If not, the negative ballot is circulated to the Full Committee to see if anyone wishes to change their vote

How is a new Subcommittee started? (con't)

- When two-thirds of at least a majority of the Full Committee is achieved, the standard is approved
- If a party disagrees, they can appeal the **process on administrative grounds**

How is a new Subcommittee started? (con't)

- **Three member panel selected**
- **Reviews appeal and the written record (minutes and other relevant documents)**
- **Panel provides a decision**
- **A final administrative appeal to ANSI is possible**

What makes a good standard?

Unbiased Chair and concerned members

Maintain communications and broad participation

Solid database to address technical issues

Research capability to address data voids

Take Home Message

- **Standards development is an ongoing process**
- **Question what a “standard” represents**
- **ANSI Z88 suite of standards is without a basic respirator program document**
- **Get involved**

Thank You

