VOL. 47, #33 August 12, 2016

American National Standards

Call for comment on proposals listed

This section solicits public comments on proposed draft new American National Standards, including the national adoption of ISO and IEC standards as American National Standards, and on proposals to revise, reaffirm or withdraw approval of existing American National Standards. A draft standard is listed in this section under the ANSI-accredited standards developer (ASD) that sponsors it and from whom a copy may be obtained. Comments in connection with a draft American National Standard must be submitted in writing to the ASD no later than the last day of the comment period specified herein. Such comments shall be specific to the section(s) of the standard under review and include sufficient detail so as to enable the reader to understand the commenter's position, concerns and suggested alternative language, if appropriate. Please note that the ANSI Executive Standards Council (ExSC) has determined that an ASD has the right to require that interested parties submit public review comments electronically, in accordance with the developer's procedures.

Ordering Instructions for "Call-for-Comment" Listings

- 1. Order from the organization indicated for the specific proposal.
- Use the full identification in your order, including the BSR prefix; for example, Electric Fuses BSR/SAE J554.
- 3. Include remittance with all orders.
- 4. BSR proposals will not be available after the deadline of call for comment.

Comments should be addressed to the organization indicated, with a copy to the Board of Standards Review, American National Standards Institute, 25 West 43rd Street, New York, NY 10036. Fax: 212-840-2298; e-mail: psa@ansi.org

^{*} Standard for consumer products

Call for Comment on Proposals Listed

Comment Deadline: September 11, 2016

MHI (Material Handling Industry) 30-Day Public Comment Period: Announcement of Limited Substantive Changes to an Approved American National Standard

BSR MH16.3-201x, Design, Testing and Utilization of Industrial Steel Cantilevered Storage Racks (revision of ANSI/MH16.3-2016)

This standard applies to free-standing and top-tied cantilevered storage racks made of cold-formed or hot-rolled steel members. It also provides guidance for the integrity of installations, loading and forces (including seismic), design procedures, design of columns and arms, bracing design, connections, and special design provisions.

Public review is limited to the revisions shown in the linked pages

Click here to view these changes in full

Send comments (with copy to <u>psa@ansi.org</u>) to: Patrick Davison, (704) 714-8755, pdavison@mhi.org

BSR MH30.3-201x, Vehicle Restraining Devices: Performance and Testing (revision of ANSI/MH30.3-2015)

This standard defines performance and testing requirements with regard to design, use and maintenance of vehicle restraining devices. It provides definitions of vehicle restraining device types and component parts. Requirements and owner/user responsibilities are outlined. Buyers and specifiers of such devices can use this standard to ensure equivalent comparison of devices pertaining to features and performance.

Public review is limited to the revisions shown in the linked pages

Click here to view these changes in full

Send comments (with copy to <u>psa@ansi.org</u>) to: Patrick Davison, (704) 714-8755, <u>pdavison@mhi.org</u>

Call for Comment on Proposals Listed PUBLIC REVIEW EXTENDED UNTIL AUGUST 20, 2016

ISA (ASC Z133) (International Society of Arboriculture)

BSR Z133-201x, Standard for Arboricultural Operations – Safety Requirements

BSR Z133-2016 was announced for public comment in the June 24, 2016 issue of Standards Action. At ISA's request, the comment end date is extended until August 20, 2016.

View draft revisions: http://www.isa-

arbor.com/resources/2012_ANSI_Z133_Standard_Second_Public_Review.pdf

Send comments to: Tricia Duzan, (217) 531-2836, tduzan@isa-arbor.com

Comment Deadline: September 11, 2016

ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)

Addenda

BSR/ASHRAE Addendum 161b-201x, Air Quality within Commercial Aircraft (addenda to ANSI/ASHRAE Standard 161-2013)

This proposed addendum updates the normative references and revises Section 8.10 (formerly titled "Pesticides") with more emphasis on non-chemical methods of insect control on aircraft.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Online Comment Database at http://www.ashrae.org/standards-research--technology/public-review-drafts

ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)

Addenda

BSR/ASHRAE Addendum 161c-201x, Air Quality within Commercial Aircraft (addenda to ANSI/ASHRAE Standard 161-2007)

The proposed addendum references a 2015 ICAO document regarding airline worker education/training relevant to onboard fume events, and revises Section 8.10 (formerly titled 'Pesticides") with more emphasis on non-chemical methods of insect control on aircraft.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Online Comment Database at http://www.ashrae.org/standards-research--technology/public-review-drafts

NSF (NSF International)

Revision

BSR/NSF 49-201x (i96r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2014)

This Standard applies to Class II (laminar flow) biosafety cabinetry designed to minimize hazards inherent in work with agents assigned to biosafety levels 1, 2, 3, or 4. It also defines the tests that shall be passed by such cabinetry to meet this Standard. This Standard includes basic requirements for the design, construction, and performance of biosafety cabinets that are intended to provide personnel, product, and environmental protection; reliable operation; durability and structural stability; cleanability; limitations on noise level; illumination; vibration; and motor/blower performance.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Allan Rose, (734) 827 -3817, arose@nsf.org

NSF (NSF International)

Revision

BSR/NSF 350-201x (i12r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2014)

This Standard contains minimum requirements for onsite residential and commercial water-treatment systems.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Lauren Panoff, (734) 769 -5197, lpanoff@nsf.org

UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 746A-201x, Standard for Safety for Polymeric Materials - Short Term Property Evaluations (revision of ANSI/UL 746A-2016)

This proposal for UL 746A involves a revision of Lab Environment Conditions for Ignition and HVTR Tests.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Derrick Martin, (510) 319 -4271, Derrick.L.Martin@ul.com

UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 1088-201X, Standard for Safety for Temporary Lighting Strings (revision of ANSI/UL 1088-2015)

The following changes in requirements to the Standard for Standard for Temporary Lighting Strings, UL 1088/ULC-S1088, are being proposed: (1) Revise standard to allow for temporary lighting strings for indoor use only.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Heather Sakellariou, (847) 664-2346. Heather.Sakellariou@ul.com

UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 2225-201X, Standard for Safety for Cables and Cable-Fittings for Use in Hazardous (Classified) (Proposal dated 08-12-16) (revision of ANSI/UL 2225-2016)

Revisions to add low ambient test requirements to section 24.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Vickie Hinton, (919) 549 -1851, Vickie.T.Hinton@ul.com

Comment Deadline: September 26, 2016

AAMI (Association for the Advancement of Medical Instrumentation)

Addenda

BSR/AAMI/IEC 60601-2-4/A1-201x, Medical electrical equipment - Part 2-4: Particular requirements for the basic safety and essential performance of cardiac defibrillators (addenda to ANSI/AAMI/IEC 60601-2-4-2010 (R2015))

This standard covers the basic safety and essential performance of medical electrical equipment intended to defibrillate the heart by an electrical pulse via electrodes applied either to the patient's skin (external electrodes) or to the exposed heart (internal electrodes). This amendment updates references as well as some testing requirements.

Single copy price: Free

Obtain an electronic copy from: https://standards.aami.

org/kws/public/document?view

Order from: www.aami.org

Send comments (with copy to psa@ansi.org) to: Hae Choe, hchoe@aami. org

ADA (American Dental Association)

Withdrawal

ANSI/ADA Specification No. 1001-2002 (R2011), Guidelines for the Design of Educational Software (withdrawal of ANSI/ADA Specification No. 1001 -2002 (R2011))

The purposed of the Guidelines is to promote quality in educational software. Developers can use them to ensure their products are of high instructional quality during development and evaluation of their products. End users can compare educational software programs with the Guidelines to recognize quality products.

Single copy price: Free

Obtain an electronic copy from: wardm@ada.org

Order from: Marilyn Ward, (312) 440-2506, wardm@ada.org

Send comments (with copy to psa@ansi.org) to: Paul Bralower, (312) 587

-4129, bralowerp@ada.org

AISI (American Iron and Steel Institute)

New Standard

BSR/AISI S917-201x, Test Standard for Determination of Local Translational Stiffness of Fastener-Sheathing Restraint (new standard)

This Standard applies to the determination of the local translational stiffness supplied by sheathing, fastened to cold-formed steel members.

Single copy price: Free

Obtain an electronic copy from: hchen@steel.org

Order from: Helen Chen, (202) 452-7100, Hchen@steel.org Send comments (with copy to psa@ansi.org) to: Same

AISI (American Iron and Steel Institute)

New Standard

BSR/AISI S918-201x, Test Standard for Determination of Fastener-Sheathing Rotational Stiffness (new standard)

This Standard applies to the determination of the rotational restraint supplied by sheathing, fastened to cold-formed steel members.

Single copy price: Free

Obtain an electronic copy from: hchen@steel.org

Order from: Helen Chen, (202) 452-7100, Hchen@steel.org Send comments (with copy to psa@ansi.org) to: Same

ANS (American Nuclear Society)

Reaffirmation

BSR/ANS 8.22-1997 (R201x), Nuclear Criticality Safety Based on Limiting and Controlling Moderators (reaffirmation of ANSI/ANS 8.22-1997 (R2011))

This standard applies to limiting and controlling moderators to achieve criticality safety in operations with fissionable materials in a moderator control area. This standard does not apply to concentration control of fissionable materials.

Single copy price: \$56.00

Obtain an electronic copy from: scook@ans.org

Order from: scook@ans.org

Send comments (with copy to psa@ansi.org) to: pschroeder@ans.org

ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)

Addenda

BSR/ASHRAE Addendum h to ANSI/ASHRAE Standard 15-2013, Safety Standard for Refrigeration Systems (addenda to ANSI/ASHRAE Standard 15-2013)

This addendum proposes to allow Group A2L refrigerants in applications requiring machinery rooms. This proposal does not change how ASHRAE Standard 15 deals with Group A2L refrigerants in high-probability systems for human comfort, industrial applications, or refrigerated rooms. Those topics are expected to be handled in separate addenda proposals

Single copy price: \$35.00

Obtain an electronic copy from: https://osr.ashrae.org/default.aspx

Order from: standards.section@ashrae.org

Send comments (with copy to psa@ansi.org) to: https://osr.ashrae.

org/default.aspx

ESTA (Entertainment Services and Technology Association)

New Standard

BSR E1.47-201x, Entertainment Technology - Recommended Guidelines for Entertainment Rigging System Inspections (new standard)

These guidelines include recommended inspector qualifications and responsibilities, scope and frequency of inspections, content of the rigging inspection report, and related information concerning the inspection process. Consensus on this document has been achieved, but one change is needed to bring clause 5.1.6 into compliance with the ANSI requirements for commercial terms and conditions in American National Standards.

Single copy price: Free

Obtain an electronic copy from: http://tsp.esta. org/tsp/documents/public_review_docs.php

Order from: Karl Ruling, (212) 244-1505, standards@esta.org

Send comments (with copy to psa@ansi.org) to: standards@esta.org

HPS (ASC N43) (Health Physics Society)

Reaffirmation

BSR N43.14-2011 (R201x), Radiation Safety for Active Interrogation Systems for Security Screening of Cargo, Energies up to 100 MeV (reaffirmation of ANSI N43.14-2011)

This standard establishes radiation safety guidelines, policies and procedures for the safe uses of Active Interrogation Systems so that the operators of these systems and members of the general public are protected from unnecessary exposure to neutron (and resulting gamma) radiation and bremsstrahlung (high-energy photons). The intent is to ensure that the exposures are well within the regulatory limits.

Single copy price: \$40.00

Obtain an electronic copy from: njohnson@burkinc.com

Order from: Nancy Johnson, (703) 790-1745, njohnson@burkinc.com

Send comments (with copy to psa@ansi.org) to: Same

NEMA (ASC C12) (National Electrical Manufacturers Association)

Reaffirmation

BSR C12.6-1987 (R201x), Phase-Shifting Devices Used In Metering, Marking and Arrangement of Terminals (reaffirmation of ANSI C12.6-1987 (R2011))

This specification applies to phase-shifting devices designed to provide the proper lagged voltages required for kvar and kVA measurement.

Single copy price: \$170.00

Order from: Paul Orr, (703) 841-3227, Pau_orr@nema.org Send comments (with copy to psa@ansi.org) to: Same

OPEI (Outdoor Power Equipment Institute)

Revision

BSR/OPEI B71.4-201x, Commercial Turf Care Equipment - Safety Specifications (revision of ANSI/OPEI B71.4-2012)

The safety specifications given in this standard are for powered (a) pedestrian-controlled machines, (b) ride-on machines, and (c) implements for use with pedestrian and ride-on machines intended for marketing as commercial turf care equipment and that are customarily used by hired operators.

Single copy price: \$180.00

Obtain an electronic copy from: dmustico@opei.org

Order from: Daniel Mustico, (703) 549-7600, dmustico@opei.org

Send comments (with copy to psa@ansi.org) to: Same

SCTE (Society of Cable Telecommunications Engineers)

Revision

BSR/SCTE 130-5-201x, Digital Program Insertion-Advertising Systems Interfaces - Part 5: Placement Opportunity Information Service (revision of ANSI/SCTE 130-5-2010)

This document defines the messaging protocol for the Placement Opportunity Information Service (POIS) consistent with other parts of the SCTE 130 standard. A POIS holds, maintains, and retains descriptions of content Placement Opportunities (typically for advertisements) and the interface supports query and notification operations for those opportunities.

Single copy price: \$50.00

Obtain an electronic copy from: standards@scte.org

Order from: Global Engineering Documents, (800) 854-7179, www.global.

ihs.com

Send comments (with copy to psa@ansi.org) to: standards@scte.org

TIA (Telecommunications Industry Association) Addenda

BSR/TIA 569-D-1-201x, Telecommunications Pathways and Spaces: Addendum 1 - Revised Temperature and Humidity Requirements for Telecommunications Spaces (addenda to ANSI/TIA 569-D-2015)

This Addendum specifies new temperature and humidity requirements and recommendations for telecommunications spaces to harmonize with the ASHRAE Thermal Guidelines for Data Processing Environments, 4th Edition published in 2015.

Single copy price: \$61.00

Obtain an electronic copy from: standards@tiaonline.org

Order from: TIA; standards@tiaonline.org

Send comments (with copy to psa@ansi.org) to: Same

TIA (Telecommunications Industry Association)

Revision

BSR/TIA 606-C-201x, Administration Standard for Telecommunications Infrastructure (revision and redesignation of ANSI/TIA 606-B-2012)

This Standard specifies administration systems for telecommunications infrastructure within buildings (including commercial, industrial, residential, and data center premises) and between buildings. This infrastructure may range in size from a building requiring a single telecommunications space (TS) and associated elements, to many TSs and associated elements in multiple campus locations. This Standard applies to administration of telecommunications infrastructure in existing, renovated, and new buildings.

Single copy price: \$200.00

Obtain an electronic copy from: standards@tiaonline.org

Order from: TIA; standards@tiaonline.org

Send comments (with copy to psa@ansi.org) to: Same

UL (Underwriters Laboratories, Inc.)

New National Adoption

BSR/UL 60079-2-201X, Standard for Safety for Explosive Atmospheres - Part 2: Equipment Protection by Pressurized Enclosure "p" (Proposal dated 08-12-16) (national adoption with modifications of IEC 60079-2)

□ Adoption of IEC 60079-2 - Explosive Atmospheres - Part 2: Equipment Protection by Pressurized Enclosure "p" as a new IEC-based UL standard, UL 60079-2 with US Differences.

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: http://www.comm-2000.com

Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Vickie Hinton, (919) 549

-1851, Vickie.T.Hinton@ul.com

UL (Underwriters Laboratories, Inc.)

Reaffirmation

BSR/UL 100-2012 (R201x), Standard for Safety for Sustainability for Gypsum Boards and Panels (reaffirmation of ANSI/UL 100-2012)

The criteria in this standard were developed based on the life cycle stages of gypsum boards and panels. Sustainability factors considered in this standard are: materials, energy, manufacturing and operations, health and environment, product performance, and product stewardship. Credit for innovations in these, or other factors not listed, is also addressed in this standard

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: http://www.comm-2000.com

Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Megan Monsen, (847) 664 -1292, megan.monsen@ul.com

Comment Deadline: October 11, 2016

ASME (American Society of Mechanical Engineers)

Revision

BSR/ASME B30.23-201x, Personnel Lifting Systems (revision of ANSI/ASME B30.23-2011)

ASME B30.23 may apply to hoisting and accessory equipment covered within certain volumes of the ASME B30 Standard, which is used to lift, lower, hold, or transport personnel in a platform, by wire rope or chain, from hoist equipment, or by a platform that is mounted on a boom of the hoist equipment. The lifting of personnel is not allowed using some ASME B30 Standard equipment. The ASME B30 Standard addressing the hoisting equipment to be used shall be consulted for the applicability of the ASME B30.23 volume.

Single copy price: Free

Order from: Mayra Santiago, (212) 591-8521, ansibox@asme.org

Send comments (with copy to psa@ansi.org) to: Kathryn Hyam, (212) 591

-8521, hyamk@asme.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 284-2011 [R201x], Information Technology - Identification Cards - Health Care Identification Cards (reaffirmation of INCITS 284-2011)

This Standard describes the parameters for identification cards for health care applications in the United States.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 381-2009/AM 1:2011 [R201x], Information technology - Finger Image Based Data Interchange Format - Amendment 1 (reaffirmation of INCITS 381-2009 Amendment 1-2011)

Amendment 1 to INCITS 381:2009.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 409.4-2006 [R201x], Information technology - Biometric Performance Testing and Reporting - Part 4: Operational Testing Methodologies (reaffirmation of INCITS 409.4:2006 [R2011])

This standard is Part 4 (Operational Testing Methodologies) of American National Standard for Information Technology Biometric Performance Testing and Reporting, INCITS 409. The objective of this standard is to establish requirements for operational performance-based biometric testing and reporting.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 409.5-2011 [R201x], Information Technology -Biometric Performance Testing and Reporting - Part 5: Framework for Testing and Evaluation of Biometric System(s) for Access Control (reaffirmation of INCITS 409.5-2011)

This standard is concerned solely with the scientific "technical performance testing" of biometric system(s) and subsystem(s) to be used for access control.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 418-2006 [R201x], Information technology - Switch Fabric - Generation 4 (FC-SW-4) (reaffirmation of INCITS 418:2006 [R2011])

This standard describes the requirements for an interconnecting fabric consisting of multiple Fabric Switch elements to support the INCITS Fibre Channel - Framing and Signaling (FC-FS) and INCITS Fibre Channel - Physical Interface (FC-PI) standards.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Reaffirmation

INCITS 458-2011 [R201x], Information technology - SCSI Object-Based Storage Device Commands-2 (OSD-2) (reaffirmation of INCITS 458-2011)

Defines the command set extensions to control operation of Object-Based Storage devices. The clause(s) of this standard pertaining to the SCSI Object-Based Storage Device class, implemented in conjunction with the applicable clauses of the ISO/IEC 14776-453, SCSI Primary Commands-4 (SPC-4), specify the standard command set for SCSI Object-Based Storage devices.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 459-2011 [R201x], Information Technology - Requirements for the Implementation and Interoperability of Role Based Access Control (reaffirmation of INCITS 459-2011)

Specifies the implementation of RBAC systems. It describes the packaging of features through the selection of functional components and feature options within a component, beginning with a core set of RBAC features that shall be included in all packages.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 460-2011 [R201x], Information technology - Fibre Channel - Physical Interface - 3 (FC-PI-3) (reaffirmation of INCITS 460-2011)

Describes the physical interface portions of a high-performance serial link based on the work of the XFP MSA. FC-PI-3 applies only to the variant described in FC-PI-3 and does not affect or supersede any requirements in any other FC standard or technical report. defines the electrical interfaces called XFI+ based on INF-8077(XFI) the XFP MSA for high-speed serial operation from 9.95-11.1 Gigabaud.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 466-2011 [R201x], Information Technology - Fibre Channel - Single Byte Command Code Sets Mapping Protocol - 4 (FC-SB-4) (reaffirmation of INCITS 466-2011)

This document describes a communication interface between a channel and I/O control units that utilize the Single-Byte Command Code Sets (SBCCS) as implemented in a wide range of data processing systems.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 467-2011 [R201x], Information technology - SCSI Stream Commands - 3 (SSC-3) (reaffirmation of INCITS 467-2011)

Defines the command set extensions to facilitate operation of the sequential-access device type. This standard, implemented in conjunction with the requirements of the SCSI Architecture Model - 4 standard and the applicable clauses of the SCSI Primary Commands - 4 standard, fully specify the standard command set for the sequential-access device type.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 470-2011 [R201x], Information technology - Fibre Channel - Framing and Signaling - 3 (FC-FS-3) (reaffirmation of INCITS 470-2011)

Describes the framing and signaling interface of a high-performance serial link for support of FC-4s associated with upper level protocols (e.g., SCSI, IP, SBCCS, VI). This standard is based on FC-FS-2 (ISO/IEC 14165-252) with subsequent modifications approved by the member body that originally authored and approved FC-FS-2.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 472-2011 [R201x], Information Technology - Automation/Drive Interface - Transport Protocol - 2 (ADT-2) (reaffirmation of INCITS 472-2011)

This standard defines the protocol requirements of the Automation/Drive Interface - Transport Protocol to allow conforming ADI SCSI devices to inter-operate.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Reaffirmation

INCITS 473-2011 [R201x], Information Technology - Conformance Testing Methodology Standard for Patron Formats Conforming to INCITS 3980 -2008, Information Technology - Common Biometric Exchange Formats Framework (CBEFF) (reaffirmation of INCITS 473-2011)

This standard specifies the concepts test types and a conformance testing methodology to test conformance of CBEFF Biometric Information Records BIR claiming to be conformant to patron formats A the BioAPI BIR or the NIST ITL Type 99 data record specified in INCITS 398 2008 annexes as well as the LDS patron format for applications other than MRTD and other ICAO applications.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 474-2011 [R201x], Information Technology - Biometric Application Programming Interface - Java (BioAPI Java) (reaffirmation of INCITS 474 -2011)

Specifies an interface of a BioAPI Java framework and BioAPI Java BSP and BioAPI BFP that will mirror the corresponding components specified in ISO/IEC 19784-1.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 475-2011 [R201x], Information Technology - Fibre Channel - Inter-Fabric Routing (FC-IFR) (reaffirmation of INCITS 475-2011)

The Fibre Channel Inter-Fabric Routing (FC-IFR) standard defines the protocols, functions, and mappings for the routing of Fibre Channel frames between physically or logically separated Fabrics.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 477-2011 [R201x], Information Technology - Fibre Channel -Link Services - 2 (FC-LS-2) (reaffirmation of INCITS 477-2011)

This standard describes the Link Services requirements. The Physical Interface requirements are described in Fibre Channel-Physical Interfaces - 2 (FC-PI-2). The Framing and Signaling requirements are described in Fibre Channel-Physical Framing and Signaling - 3 (FC-FS-3). This standard is recommended for new implementations but does not obsolete the existing Fibre Channel standards.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 478-2011 [R201x], Information technology - Serial Attached SCSI - 2.1 (SAS-2.1) (reaffirmation of INCITS 478-2011)

The SCSI family of standards provides for many different transport protocols that define the rules for exchanging information between different SCSI devices. This standard specifies the functional requirements for the Serial Attached SCSI (SAS) physical interconnect, which is compatible with the Serial ATA physical interconnect. The SAS Protocol Layer (SPL) standard documents the SAS protocol layer corresponding to the Serial Attached SCSI - 2.1 (SAS-2.1) and beyond, defining the rules for exchanging information between SCSI devices using a serial interconnect. Other SCSI transport protocol standards define the rules for exchanging information between SCSI devices using other interconnects.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 479-2011 [R201x], Information Technology - Fibre Channel - Physical Interface-5 (FC-PI-5/AM1) (reaffirmation of INCITS 479-2011)

Describes the physical interface portions of high-performance electrical and optical link variants that support the higher level Fibre Channel protocols including FC-FS-2 and the higher Upper Level Protocols (ULPs) associated with HIPPI, SCSI, IP, and others.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Reaffirmation

INCITS 480-2011 [R201x], Information technology - BIOS Enhanced Disk Drive Services - 4 (EDD-4) (reaffirmation of INCITS 480-2011)

This document contains all the requirements specified in FC-PI, FC-PI-2, and SM-LL-V that are recommended for new designs, plus requirements for 800 MB/s.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS 481-2011 [R201x], Information technology - Fibre Channel Protocol for SCSI - 4 (FCP-4) (reaffirmation of INCITS 481-2011)

FCP-4 defines the fourth-generation Fibre Channel Protocol to be used to transport SCSI commands over the T11 Fibre Channel interface.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO 19142:2010 [R201x], Geographic information - Web Feature Service (reaffirmation of INCITS/ISO 19142:2010 [2011])

Specifies the behavior of a web feature service that provides transactions on and access to geographic features in a manner independent of the underlying data store. It specifies discovery operations, query operations, locking operations, transaction operations, and operations to manage stored parameterized query expressions.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO 19143:2010 [R201x], Geographic information - Filter encoding (reaffirmation of INCITS/ISO 19143:2010 [2011])

Describes an XML and KVP encoding of a system neutral syntax for expressing projections, selection and sorting clauses collectively called a query expression. These components are modular and intended to be used together or individually by other International Standards which reference ISO 19143:2010. ISO 19143:2010 defines an abstract component, named AbstractQueryExpression, from which other specifications can subclass concrete query elements to implement query operations.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO 19146:2010 [R201x], Geographic information - Cross-domain vocabularies (reaffirmation of INCITS/ISO 19146:2010 [2011])

Defines a methodology for cross-mapping technical vocabularies that have been adopted by industry-specific geospatial communities. It also specifies an implementation of ISO 19135 for the registration of geographic information concepts for the purpose of integrating multiple domain-based vocabularies.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO 9542:1988/AM 1:1999 [R201x], Information processing systems - Telecommunications and information exchange between systems - End System to Intermediate System Routeing Exchange Protocol for Use in Conjunction with the Protocol for Providing the Connectionless-Mode Network Service - Amendment 1: Addition of group composition information (reaffirmation of INCITS/ISO 9542-1988/AM1-1999 [R2011])

Specifies (a) procedures for transmission of multicast announcement, multicast address mapping, and group composition information between Network entities residing in End Systems and Network entities residing in Intermediate Systems; and (b) the encoding of the protocol data units used for multicast announcement, multicast address mapping, and group composition information.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 7816-15:2004/AM 1:2007 [R201x], Identification cards - Integrated circuit cards - Part 15: Cryptographic information application - Amendment 1: Examples of the use of the cryptographic information application (reaffirmation of INCITS/ISO/IEC 7816-15:2004/AM1:2007 [2011])

Amendment 1 to ISO/IEC 7816-15:2004.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Reaffirmation

INCITS/ISO/IEC 7816-15:2004/AM 2:2008 [R201x], Identification cards - Integrated circuit cards - Part 15: Cryptographic information application - Amendment 2: Error corrections and extensions for multi-application environments (reaffirmation of INCITS/ISO/IEC 7816-15:2004/AM2:2008 [2011])

Amendment 2 to ISO/IEC 7816-15:2004.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 10118-2:2010 [R201x], Information technology - Security techniques - Hash-functions - Part 2: Hash-functions using an n-bit block cipher (reaffirmation of INCITS/ISO/IEC 10118-2:2010 [2011])

Specifies hash-functions which make use of an n-bit block cipher algorithm. They are therefore suitable for an environment in which such an algorithm is already implemented.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 10373-1:2006 [R201x], Identification cards - Test methods - Part 1: General characteristics tests (reaffirmation of INCITS/ISO/IEC 10373 -1-2007 [R2011])

Defines test methods for characteristics of identification cards according to the definition given in ISO/IEC 7810. Each test method is cross-referenced to one or more base standards, which may be ISO/IEC 7810 or one or more of the supplementary standards that define the information storage technologies employed in identification cards applications. This part of ISO/IEC 10373 defines test methods that are common to one or more card technologies. Other parts of ISO/IEC 10373 define technology-specific test methods.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 10373-3:2010 [R201x], Identification cards - Test methods - Part 3: Integrated circuit cards with contacts and related interface devices (reaffirmation of INCITS/ISO/IEC 10373-3:2010 [2011])

Defines test methods for characteristics of integrated circuit cards with contacts and related interface devices according to the definition given in ISO/IEC 7816.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 10373-6:2011 [R201x], Identification cards - Test methods - Part 6: Proximity cards (reaffirmation of INCITS/ISO/IEC 10373-6:2011 [2011])

Defines test methods for characteristics of integrated circuit cards with contacts and related interface devices according to the definition given in ISO/IEC 7816.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 10373-7:2008 [R201x], Identification cards - Test methods - Part 7: Vicinity cards (reaffirmation of INCITS/ISO/IEC 10373-7:2008 [2011])

Defines test methods for characteristics of identification cards according to the definition given in ISO/IEC 7810. Each test method is cross-referenced to one or more base standards, which may be ISO/IEC 7810 or one or more of the supplementary standards that define the information storage technologies employed in identification card applications. This part of ISO/IEC 10373 deals with test methods, which are specific to contactless integrated circuit card (vicinity card) technology. ISO/IEC 10373-1 deals with test methods which are common to one or more ICC technologies and other parts deal with other technology-specific tests.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Reaffirmation

INCITS/ISO/IEC 11694-4:2008 [R201x], Identification cards - Optical memory cards - Linear recording method - Part 4: Logical data structures (reaffirmation of INCITS/ISO/IEC 11694-4:2008 [2011])

Defines the logical data structures for optical memory cards necessary to allow compatibility and interchange between systems using the linear recording method.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 11695-3:2008 [R201x], Identification cards - Optical memory cards - Holographic recording method - Part 3: Optical properties and characteristics (reaffirmation of INCITS/ISO/IEC 11695-3:2008 [2011])

Specifies the optical properties and characteristics of optical memory cards using the holographic recording method.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 13818-4:2004/AM3:2009 [R201x], Information technology - Generic coding of moving pictures and associated audio information - Part 4: Conformance testing - Amendment 3: Level for 1080@50p/60p conformance testing (reaffirmation of INCITS/ISO/IEC 13818-4:2004/AM3:2009 [2011])

Amendment 3 to ISO/IEC 13818-4:2004.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 13818-6:1998/AM 1:2000 [R201x], Information technology - Generic coding of moving pictures & associated audio info - Part 6: Extensions for DSM-CC - Amendment 1: Additions to support data broadcasting (reaffirmation of INCITS/ISO/IEC 13818-6-1998/AM1-2000 [R2011])

Amendment 1 to ISO/IEC 13818-6:1998.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14165-133:2010 [R201x], Information technology - Fibre Channel - Part 133: Switch Fabric-3 (FC-SW-3) (reaffirmation of INCITS/ISO/IEC 14165-133:2010 [2011])

This standard describes the operation and interaction of Fibre Channel Switches and includes: (a) EPort Operation and Fabric Configuration; (b) Path selection (FSPF and FSPF-Backbone); (c) Bridge Port (BPort) Operation; (d) distributed server interaction and communication; (e) exchange of information between Switches to support zoning; and (f) distribution of Event Notifications between Switches.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.ora

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14165-321:2009 [R201x], Information technology - Fibre Channel - Part 321: Audio-Video (FC-AV) (reaffirmation of INCITS/ISO/IEC 14165-321:2009 [2011])

Specifies the transport of digital Audio and Video formats over Fibre Channel. Specifications are included for a coherent framework (i.e., an FC-AV Container and Objects) for mapping current and future digital Audio and Video formats to Fibre Channel; mapping the formats defined by the ITU-R BT-601 and SMPTE family of standards to Fibre Channel; mapping the formats defined by the ISO/IEC 3818 family of standards (which include MPEG and related compression systems) to Fibre Channel; a profile (i.e., Simple Parametric Digital Video) that parametrically defines the characteristics of Audio and Video information for specific applications; and, data-packing guidelines recommended for AV data within the Fibre Channel transmission words.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14165-331:2007 [R201x], Information technology - Fibre Channel - Part 331: Virtual Interface (FC-VI) (reaffirmation of INCITS/ISO/IEC 14165-331:2007 [2011])

This standard defines the Fibre Channel mapping protocol for the Virtual Interface (VI) Architecture (FC-VI). FC-VI defines the Fibre Channel Information Units in accordance with the VI Architecture model. FC-VI additionally defines how Fibre Channel services are used to perform the services required by the VI Architecture model of its network transport.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Reaffirmation

INCITS/ISO/IEC 14495-1:2000 [R201x], Information technology - Lossless and near-lossless compression of continuous-tone still images: Baseline (reaffirmation of INCITS/ISO/IEC 14495-1-2000 [R2011])

Defines a set of lossless (bit-preserving) and nearly lossless (where the error for each reconstructed sample is bounded by a pre-defined value) compression methods for coding continuous-tone, gray-scale, or color digital still images. This standard specifies a process for converting source image data to compressed image data; specifies processes for converting compressed image data to reconstructed image data; specifies coded representations for compressed image data; and provides guidance on how to implement these processes in practice.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14496-4:2004 [R201x], Information technology - Coding of audio-visual objects - Part 4: Conformance testing (reaffirmation of INCITS/ISO/IEC 14496-4-2004 [R2011])

Specifies how tests can be designed to verify whether bitstreams and decoders meet requirements specified in parts 1, 2, and 3 of ISO/IEC 14496 and, for part 6 of ISO/IEC 14496, it specifies how tests can be designed for bitstream delivery over various delivery technologies in an interoperable transparent manner to parts 1, 2, and 3. In this part of ISO/IEC 14496, encoders are not addressed specifically. An encoder may be said to be an ISO/IEC 14496 encoder if it generates bitstreams compliant with the syntactic and semantic bitstream requirements specified in parts 1, 2, 3 of ISO/IEC 14496.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14496-6:2000 [R201x], Information technology - Coding of audio-visual objects - Part 6: Delivery Multimedia Integration Framework (DMIF) (reaffirmation of INCITS/ISO/IEC 14496-6-2000 [R2011])

Specifies the Delivery Layer of ISO/IEC 14496, which allows applications to transparently access and view multimedia streams, whether the source of the streams is located on an interactive remote end-system, the streams are available on broadcast media, or they are on storage media.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14496-20:2008AM1:2009 [R201x], Information technology - Coding of audio-visual objects - Part 4: Conformance testing (reaffirmation of INCITS/ISO/IEC 14496-20:2008/AM1:2009 [2011])

FC-PI-4 does not replace FC-PI-2 but is intended to carry forward the technical requirements specified in FC-PI-2 for the variants addressed in FC-PI-4

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14496-4:2004/AM 30:2009 [R201x], Information technology - Coding of audio-visual objects - Part 4: Conformance testing - Amendment 30: Conformance testing for new profiles for professional applications (reaffirmation of INCITS/ISO/IEC 14496-4:2004/AM30:2009 [2011])

Amendment 30 to ISO/IEC 14496-4:2004.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14496-4:2004/AM 31:2009 [R201x], Information technology - Coding of audio-visual objects - Part 4: Conformance testing - Amendment 31: Conformance testing for SVC profiles (reaffirmation of INCITS/ISO/IEC 14496-4:2004/AM31:2009 [2011])

Amendment 31 to ISO/IEC 14496-4:2004.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14496-4:2004/AM 35:2009 [R201x], Information technology - Coding of audio-visual objects - Part 4: Conformance testing - Amendment 35: Simple studio profile levels 5 and 6 conformance testing (reaffirmation of INCITS/ISO/IEC 14496-4:2004/AM35:2009 [2011])

Amendment 35 to ISO/IEC 14496-4:2004.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Reaffirmation

INCITS/ISO/IEC 14496-5:2001/AM 14:2009 [R201x], Information technology - Coding of audio-visual objects - Part 5: Reference software - Amendment 14: Open Font Format reference software (reaffirmation of INCITS/ISO/IEC 14496-5:2001/AM14:2009 [2011])

Amendment 14 to ISO/IEC 14496-5:2001.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14496-5:2001/AM 19:2009 [R201x], Information technology - Coding of audio-visual objects - Part 5: Reference software - Amendment 19: Reference software for Scalable Video Coding (reaffirmation of INCITS/ISO/IEC 14496-5:2001/AM19:2009 [2011])

Amendment 19 to ISO/IEC 14496-5:2001.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14496-5:2001/AM 20:2009 [R201x], Information technology - Coding of audio-visual objects - Part 5: Reference software - Amendment 20: MPEG-1 and -2 on MPEG-4 reference software (reaffirmation of INCITS/ISO/IEC 14496-5:2001/AM20:2009 [2011])

Amendment 20 to ISO/IEC 14496-5:2001.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14496-5:2001/AM 21:2009 [R201x], Information technology - Coding of audio-visual objects - Part 5: Reference software - Amendment 21: Frame-based Animated Mesh Compression reference software (reaffirmation of INCITS/ISO/IEC 14496-5:2001/AM21:2009 [2011])

Amendment 21 to ISO/IEC 14496-5:2001.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14776-453:2009 [R201x], Information technology - Small computer system interface (SCSI) - Part 453: Primary commands-3 (SPC-3) (reaffirmation of INCITS/ISO/IEC 14776-453:2009 [2011])

Defines the SCSI commands that are mandatory and optional for all SCSI devices. Support for any feature defined in this standard is optional unless otherwise stated. This standard also defines the SCSI commands that may apply to any device model.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 15444-8:2007/AM 1:2008 [R201x], Information technology - JPEG 2000 image coding system: Secure JPEG 2000 - Amendment 1: File format security (reaffirmation of INCITS/ISO/IEC 15444-8:2007/AM1:2008 [2011])

Specifies the framework, concepts, and methodology for securing JPEG 2000 codestreams. Defines a normative codestream syntax containing information for interpreting secure image data; a normative process for registering JPSEC tools with a registration authority delivering a unique identifier; informative examples of JPSEC tools in typical use cases; informative guidelines on how to implement security services and related metadata. It does not describe specific secure imaging applications or limit secure imaging to specific techniques, but creates a framework that enables future extensions as secure imaging techniques evolve.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 15457-1:2008 [R201x], Identification cards - Thin flexible cards - Part 1: Physical characteristics (reaffirmation of INCITS/ISO/IEC 15457-1:2008 [2011])

Thin flexible cards (TFC), the subject of ISO/IEC 15457, are used to automate the controls for access to goods or services such as mass transit, highway toll systems, car parks, vouchers, stored value, etc. For these applications, data can be written and/or read by machines using various recording techniques such as magnetic stripe, optical character recognition (OCR), bar code, contactless, etc. This standard specifies the physical characteristics of thin flexible cards at two points in the card life cycle: at the point of loading into the card-issuing equipment; at the point of issue to the public.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Reaffirmation

INCITS/ISO/IEC 15457-3:2008 [R201x], Identification cards - Thin flexible cards - Part 3: Test methods (reaffirmation of INCITS/ISO/IEC 15457-3:2008 [2011])

Thin flexible cards are used to automate the controls for access to goods or services such as mass transit, highway toll systems, car parks, vouchers, stored value, etc. For these applications, data can be written and/or read by machines using various recording techniques such as magnetic stripe, optical character recognition (OCR), bar code, etc. This standard specifies the test methods and procedures required to carry out measurements of the magnetic stripe and encoding characteristics of thin flexible cards.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 15693-1:2010 [R201x], Identification cards - Contactless integrated circuit cards - Vicinity cards - Part 1: Physical characteristics (reaffirmation of INCITS/ISO/IEC 15693-1:2010 [2010])

This part of ISO/IEC 15693 defines the physical characteristics of vicinity cards (VICCs). It is used in conjunction with other parts of ISO/IEC 15693.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 15693-2:2006 [R201x], Identification cards - Contactless integrated circuit cards - Vicinity cards - Part 2: Air interface and initialization (reaffirmation of INCITS/ISO/IEC 15693-2:2006 [2011])

ISO/IEC 15693 forms part of a series of International Standards that specify a contactless smart card. The card can be carried by members of the public in a purse or wallet and when presented nearby a terminal device give access to places, goods or services. In addition, the card can be attached to objects like bags and valuable items which can then be tracked whilst in the vicinity of a reading device. ISO/IEC 15693-2:2006 defines the power and communications interface between the vicinity card and the reading device. Other parts of ISO/IEC 15693 define the physical dimensions of the card and the commands interpreted by the card and reader.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 15693-3:2009 [R201x], Identification cards - Contactless integrated circuit cards - Vicinity cards - Part 3: Anticollision and transmission protocol (reaffirmation of INCITS/ISO/IEC 15693-3:2009 [2011])

Specifies protocol and commands, other parameters required to initialize communications between a vicinity integrated circuit card and a vicinity coupling device, methods to detect and communicate with one card among several cards ("anticollision"), and optional means to ease and speed up the selection of one among several cards based on application criteria. Defines the physical characteristics of vicinity cards (VICCs). It is used in conjunction with other parts of ISO/IEC 15693.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 15938-3:2002/AM 3:2009 [R201x], Information technology - Multimedia content description interface - Part 3: Visual - Amendment 3: Image Signature Tools (reaffirmation of INCITS/ISO/IEC 15938 -3:2002/AM3:2009 [2011])

Amendment 3 to ISO/IEC 15938-3:2002.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 18013-2:2008 [R201x], Information technology - Personal identification - ISO-compliant driving license - Part 2: Machine-readable technologies (reaffirmation of INCITS/ISO/IEC 18013-2:2008 [2011])

Establishes guidelines for the content and formatting of data stored on an ISO-compliant driving license (IDL) using machine-readable technologies. It creates a common basis for the international use of IDL data without restricting individual domestic or regional driver-licensing authorities from applying their specific data policies. Specifies the following items: Mandatory and optional machine-readable data. Machine-readable IDL data support the following functions (subject, in some cases, to the inclusion of appropriate optional data elements): confirming the driving privileges of a driver; etc.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Reaffirmation

INCITS/ISO/IEC 18013-3:2009 [R201x], Information technology - Personal identification - ISO-compliant driving license - Part 3: Access control, authentication and integrity validation (reaffirmation of INCITS/ISO/IEC 18013-3:2009 [2011])

Establishes guidelines for the design format and data content of an ISO-compliant driving license (IDL) with regard to human-readable features (ISO/IEC 18013-1); machine-readable technologies (ISO/IEC 18013-2); and access control, authentication, and integrity validation (ISO/IEC 18013-3). It creates a common basis for international use and mutual recognition of the IDL without impeding individual countries/states to apply their privacy rules and national/community/regional motor vehicle authorities in taking care of their specific needs.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 19763-3:2010 [R201x], Information technology - Metamodel framework for interoperability (MFI) - Part 3: Metamodel for ontology registration (reaffirmation of INCITS/ISO/IEC 19763-3:2010 [2011])

Specifies a metamodel framework for interoperability. This part of ISO/IEC 19763 specifies the metamodel that provides a facility to register administrative and evolution information related to ontologies. The metamodel specified is intended to promote interoperation among application systems, by providing administrative and evolution information related to ontologies, accompanied with standardized ontology repositories that register ontologies themselves in specific languages. It does not specify the metamodels of ontologies expressed in specific languages and the mappings among them. They are specified in other specifications such as the Ontology Definition Metamodel from the Object Management Group.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 19784-4:2011 [R201x], Information technology - Biometric application programming interface - Part 4: Biometric sensor function provider interface (reaffirmation of INCITS/ISO/IEC 19784-4:2011 [2011])

Specifies a biometric sensor interface for a Biometric Service Provider (BSP, see ISO/IEC 19784-1). The interface supports a BSP wishing to provide the BioAPI Service Provider Interface (SPI) functions, whilst removing device-handling activity from the BSP. Provides an interface that can be used by all types of biometric sensor, including inter alia image streaming sensors (infrared, face, iris, finger, etc.), voice-streaming sensors, and digital tablets providing dynamic signature data.

Single copy price: \$90.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 19784-1:2006/AM 3:2010 [R201x], Information technology - Biometric application programming interface - Part 1: BioAPI specification - Amendment 3: Support for interchange of certificates and security assertions, and other security aspects (reaffirmation of INCITS/ISO/IEC 19784-1:2006/AM3:2010 [2011])

Amendment 3 to ISO/IEC 19784-1:2006.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 19795-5:2011 [R201x], Information technology - Biometric performance testing and reporting - Part 5: Access control scenario and grading scheme (reaffirmation of INCITS/ISO/IEC 19795-5:2011 [2011])

Applicable to performance testing of biometric systems without detailed knowledge of the comparison algorithms or of the underlying distribution of biometric characteristics in the population of interest. It defines a common biometric access control scenario for use in scenario evaluation of biometric verification systems; provides a grading scheme for expressing quantitative biometric system requirements and performance levels; provides a common basis for conducting scenario evaluations to demonstrate that specified performance grades are being achieved which is adaptable to particular testing facilities and to specific biometric systems.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 19795-7:2011 [R201x], Information technology - Biometric performance testing and reporting - Part 7: Testing of on-card biometric comparison algorithms (reaffirmation of INCITS/ISO/IEC 19795-7:2011 [2011])

Establishes a mechanism for measuring the core algorithmic capabilities of biometric comparison algorithms running on ISO/IEC 7816 integrated circuit cards. Specifically, the standard instantiates a mechanism for on-card biometric comparison testing; standardizes procedures for the measurement of the accuracy of on-card biometric comparison implementations running on object-based, test-specific sample cards; standardizes procedures for the measurement of durations of the various operations; and gives examples for matching ISO/IEC 19794-2:2005 compact card minutiae templates.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Reaffirmation

INCITS/ISO/IEC 21000-8:2008/AM 1:2009 [R201x], Information technology - Multimedia framework (MPEG-21) - Part 8: Reference software - Amendment 1: Extract reference software (reaffirmation of INCITS/ISO/IEC 21000-8:2008/AM1:2009 [2011])

Amendment 1 to ISO/IEC 21000-8:2008.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 23000-4:2009 [R201x], Information technology - Multimedia application format (MPEG-A) - Part 4: Musical slide show application format (reaffirmation of INCITS/ISO/IEC 23000-4:2009 [2011])

Specifies signaling of content governance and protection of musical slide show application format based on MPEG-21 Part 4: Intellectual Property Management and Protection (IPMP) Components Base Profile and MPEG-21

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 23000-6:2009 [R201x], Information technology - Multimedia application format (MPEG-A) - Part 6: Professional archival application format (reaffirmation of INCITS/ISO/IEC 23000-6:2009 [2011])

The purpose of the PA-AF is to provide a standardized packaging format for digital files. This packaging format can also serve as an implementation of the information package specified by the reference model of the open archival information system (OAIS). The OAIS reference model is a framework for understanding and applying concepts necessary for long-term digital information preservation (where long-term is long enough to be concerned about changing technologies). In addition, PA-AF can also be used as an intermediate or exchange packaging format for any kind of multimedia content.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 23000-10:2009 [R201x], Information technology - Multimedia application format (MPEG-A) - Part 10: Video surveillance application format (reaffirmation of INCITS/ISO/IEC 23000-10:2009 [2011])

Specifies a file format designed to provide for a first level of interoperability for video-based surveillance systems. The file format provides the overall structure for storing video content and associated metadata in a single file.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 23000-3:2007/AM1:2009 [R201x], Information technology - Multimedia application format (MPEG-A) - Part 3: MPEG photo player application format - Amendment 1: Reference software for photo player MAF (reaffirmation of INCITS/ISO/IEC 23000-3:2007/AM1:2009 [2011])

Amendment 1 to ISO/IEC 23000-3:2007.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 23000-4:2009/AM 1:2009 [R201x], Information technology - Multimedia application format (MPEG-A) - Part 4: Musical slide show application format - Amendment 1: Conformance and reference software for musical slide show application format (reaffirmation of INCITS/ISO/IEC 23000-4:2009/AM1:2009 [2011])

Amendment 1 to ISO/IEC 23000-4:2009.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 23000-7:2008/AM 1:2009 [R201x], Information technology - Multimedia application format (MPEG-A) - Part 7: Open access application format - Amendment 1: Conformance and reference software for open access application format (reaffirmation of INCITS/ISO/IEC 23000 -7:2008/AM1:2009 [2011])

Amendment 1 to ISO/IEC 23000-7:2008.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Reaffirmation

INCITS/ISO/IEC 23004-8:2009 [R201x], Information technology - Multimedia Middleware - Part 8: Reference software (reaffirmation of INCITS/ISO/IEC 23004-8:2009 [2011])

This standard explains the organization of the reference software for ISO/IEC 23004, Parts 1 to 7 (Multimedia Middleware). The electronic attachment to ISO/IEC 23004-8:2009 provides the source code of the actual software.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 24709-3:2011 [R201x], Information technology - Conformance testing for the biometric application programming interface (BioAPI) - Part 3: Test assertions for BioAPI frameworks (reaffirmation of INCITS/ISO/IEC 24709-3:2011 [2011])

Defines a number of test assertions written in the assertion language specified in ISO/IEC 24709-1:2007. Specifies all the test assertions that are to be executed for conformance testing of BioAPI frameworks claiming conformance to ISO/IEC 19784-1 (BioAPI 2.0). Test assertions specified in this part of ISO/IEC 24709 are not claimed to be exhaustive (see also ISO/IEC 24709-1:2007, Clause 6). Implementations of BioAPI 2.0 that are tested according to the methodology specified in ISO/IEC 24709-1:2007 and with test assertions specified in this part can (only) claim conformance to those aspects of ISO/IEC 19784-1 that are covered by these test assertions.

Single copy price: \$157.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 29109-10:2010 [R201x], Information technology - Conformance testing methodology for biometric data interchange formats defined in ISO/IEC 19794 - Part 10: Hand geometry silhouette data actions (reaffirmation of INCITS/ISO/IEC 29109-10:2010 [2011])

Specifies elements of conformance testing methodology, test assertions, and test procedures as applicable to ISO/IEC 19794-10. This part of the standard establishes test assertions of the structure of the hand geometry silhouette data format; test assertions of internal consistency by checking the types of values that may be contained within each field; and informative guidance for testing the consistency of selected encoded data fields with the input biometric data.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 29159-1:2010 [R201x], Information technology - Biometric calibration, augmentation and fusion data - Part 1: Fusion information format (reaffirmation of INCITS/ISO/IEC 29159-1:2010 [2011])

Specifies a biometric fusion information format that establishes machinereadable data formats to describe the statistics of comparison score inputs to a fusion process. Does not standardize comparison-score normalization processes, nor standardize or define fusion processes.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 4909:2006 [R201x], Identification cards - Financial transaction cards - Magnetic stripe data content for track 3 (reaffirmation of ISO/IEC 4909:2006)

This International Standard establishes specifications for financial transaction cards using track 3 and is intended to permit interchange based on the use of magnetic-stripe-encoded information. It specifies the data content and physical location of read/write information on track 3 and is to be used in conjunction with the relevant parts of ISO/IEC 7811 and ISO/IEC 7812

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14750:1999 [R201x], Information Technology - Open Distributed Processing - Interface Definition Language (reaffirmation of INCITS/ISO/IEC 14750-1999 [R2011])

Provides the ODP Reference Model (see ITU-T Rec. X.902 | ISO/IEC 10746-2 and ITU-T Rec. X.903 | ISO/IEC 10746-3) with a language- and environment-neutral notation to describe computational operation interface signatures. Use of this notation does not imply use of specific supporting mechanisms and protocols.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Reaffirmation

INCITS/ISO/IEC 14752:2000 [R201x], Information Technology - Open Distributed Processing - Protocol Support for Computational Interactions (reaffirmation of INCITS/ISO/IEC 14752-2000 [R2011])

Defines how interactions between computational objects in a computational specification of a system relate to protocol support for those interactions in an engineering specification of that system.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14753:1999 [R201x], Information Technology - Open Distributed Processing - Interface References and Binding (reaffirmation of INCITS/ISO/IEC 14753-1999 [R2011])

Interface references are crucial to interworking between ODP systems and federation of groups of ODP systems. An interface reference embodies the information needed to establish bindings, including binding to objects at nodes that support several different communication protocols and binding to objects in different management domains.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14769:2001 [R201x], Information Technology - Open Distributed Processing - Type Repository Function (reaffirmation of INCITS/ISO/IEC 14769-2001 [R2011])

Defines a framework for describing types of interest in ODP systems by determining what entities need to be typed and what needs to be said about the identified types.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 14771:1999 [R201x], Information Technology - Open Distributed Processing - Naming Framework (reaffirmation of INCITS/ISO/IEC 14771-1999 [R2011])

Defines a general framework for context-relative naming, refining, and elaborating on the naming concepts defined in Part 2 of the ODP-RM; Identifies and characterizes functions necessary to handle names in the context of a federation of different naming systems; and clarifies the relationship between the concepts of name management (i.e., federation and naming) in distributed computing systems.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.ora

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 16485:2000 [R201x], Information technology - Mixed Raster Content (MRC) (reaffirmation of INCITS/ISO/IEC 16485-2000 [R2011])

Defines a means to efficiently represent raster-oriented pages that contain a mixture of multi-level and bi-level images. Any of the many ITU-T recommended encoding schemes, such as T.81 (JPEG) for the encoding of multi-level images and T.6 (MMR) for the encoding of bi-level images, may be combined within the context of this Recommendation.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 19105:2000 [R201x], Geographic information - Conformance and testing (reaffirmation of INCITS/ISO/IEC 19105:2000 [R2011])

Specifies the framework, concepts and methodology for testing and criteria to be achieved to claim conformance to the family of ISO geographic information standards. It provides a framework for specifying abstract test suites (ATS) and for defining the procedures to be followed during conformance testing. Conformance may be claimed for data or software products or services or by specifications including any profile or functional standard.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Reaffirmation

INCITS/ISO/IEC 19123:2005 [R201x], Geographic information - Schema for coverage geometry and functions (reaffirmation of INCITS/ISO/IEC 19123:2005 [R2011])

Defines a conceptual schema for the spatial characteristics of coverages. Coverages support mapping from a spatial, temporal or spatiotemporal domain to feature attribute values where feature attribute types are common to all geographic positions within the domain. A coverage domain consists of a collection of direct positions in a coordinate space that may be defined in terms of up to three spatial dimensions as well as a temporal dimension.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 19133:2005 [R201x], Geographic information - Location Based Services - Tracking and navigation (reaffirmation of INCITS/ISO/IEC 19133:2005 [R2011])

Describes the data types, and operations associated with those types, for the implementation of tracking and navigation services. It is designed to specify web services that can be made available to wireless devices through web-resident proxy applications, but is not restricted to that environment.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 19135:2005 [R201x], Geographic information - Procedures for registration of geographical information items (reaffirmation of INCITS/ISO/IEC 19135:2005 [R2011])

Specifies procedures to be followed in establishing, maintaining and publishing registers of unique, unambiguous and permanent identifiers, and meanings that are assigned to items of geographic information. In order to accomplish this purpose, this standard specifies elements of information that are necessary to provide identification and meaning to the registered items and to manage the registration of these items.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Reaffirmation

INCITS/ISO/IEC 29183:2010 [R201x], Information technology - Office equipment - Method for measuring digital copying productivity of a single one-sided original (reaffirmation of INCITS/ISO/IEC 29183-2010 [2011])

Specifies a method for measuring productivity of digital copying devices and multifunctional devices with various copying modes and a single one-sided original. It is applicable to digital copying devices and multifunctional devices. It is intended to be used for black-and-white and color digital copying devices and multifunctional devices of any underlying marking technology. This International Standard includes instructions for the creation of test charts, test setup procedure, test procedure, and the reporting requirements for the digital copying productivity measurements.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS 48-1986/COR 1:1995 [S201x], Information Systems - Magnetic Tape Cassette for Information Interchange (3.81 mm, 01.50 inch) Tape at 32 bpmm (800 BPI), Phase Enclosed - Technical Corrigendum 1 (stabilized maintenance of INCITS 48:1986/TC-1:1995 [R2006])

This American National Standard for unrecorded and recorded cassettes containing 3.81-mm (0.150-in)-wide magnetic tape presents the minimum requirements for mechanical and magnetic interchangeability of the cassette and for data interchange between information processing systems, which are capable of utilizing a standard code for information interchange as agreed upon by the interchange parties, using a data density of 32 bpmm (800 bpi).

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS 162-1988/TC1-1995 [S200x], Information Systems - Two-Sided, High Density, Unformatted, 5.25 in, 96-tpi, Flexible Disk Cartridge for 13 262 BPR Use - General, Physical and Magnetic Requirements - Technical Corrigendum 1 (stabilized maintenance of INCITS 162-1988 [S2009])

Technical Corrigendum 1 to INCITS 162-1988.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Stabilized Maintenance

INCITS 183-1991 [S201x], Information technology - High-Performance Parallel Interface (HIPPI) - Mechanical, Electrical, and Signalling Protocol Specification (HIPPI-PH) (stabilized maintenance of INCITS 183:1991 [R2011])

Provides the mechanical, electrical and signaling protocol specifications for an efficient simplex high-performance point-to-point interface between pieces of data-processing equipment. The interface described in this document can be operated at peak data rates of 800 or 1600 Mbit/s, over distances of up to 25m by means of copper cabling. A distance-independent signaling protocol allows the average data rates to approach the peak data rates, even over distances longer than specified for the HIPPI-PH.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS 323-1998/AM 1-2001 [S201x], Information Technology - High-Performance Parallel Interface - 6400 Mbit/s Physical Layer (HIPPI-6400-PH) - Amendment 1 (stabilized maintenance of INCITS 323:1998/AM1:2001 [R2011])

Specifies a physical-level, point-to-point, full-duplex, link interface for reliable, flow-controlled transmission of user data at 6400 Mbit/s, per direction, across distances of up to 1 km. A parallel copper cable interface for distances of up to 40 m is specified. Connections to a separate longer-distance optical interface are provided. Small fixed-size micropackets provide an efficient, low-latency, structure for small transfers, and a component for large transfers.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS 332-1999/AM 2-2006 [S2011], Information technology - Fibre Channel Arbitrated Loop 2nd Generation (FC-AL-2) - Amendment 2 (stabilized maintenance of INCITS 332:1999, AM 2:2006 [R2011])

Amendment 2 to INCITS 332-1999.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS 404-2006 [S201x], Information technology - Fibre Channel Physical Interfaces - 2 (FC-PI-2) (stabilized maintenance of INCITS 404:2006 [R2011])

This standard describes the point-to-point physical interface portions of Fibre Channel high-performance electrical and optical link variants that support the higher-level Fiber Channel protocols including FC-FS, HIPPI, IPI, SCSI, and others. This standard is recommended for new implementations but does not obsolete the existing Fibre Channel standards.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS 412-2006 [S201x], Information technology - SNIA Multipath Management API Specification, Version 1.0.1 (stabilized maintenance of INCITS 412:2006 [R2011])

This API provides management interfaces to standard capabilities defined in INCITS 408-2005 (SPC-3) and common vendor-specific extensions to the standard capabilities. The intended audience is vendors that deliver drivers that provide these capabilities. This standard relates to SCSI multipathing features and excludes multipathing between interconnect devices (such as Fibre Channel switches) and transport specific multipathing (such as iSCSI multiple connections per session).

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS 414-2006 [S201x], Information technology - Fibre Channel Backbone - Generation 3 (FC-BB-3) (stabilized maintenance of INCITS 414:2006 [R2011])

This standard defines the functions and mappings necessary to tunnel Fibre Channel links, or bridge Fibre Channel networks, across Wide Area Networks.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Stabilized Maintenance

INCITS 417-2006 [S201x], Information technology - Serial Attached SCSI-2 (SAS-1.1) (stabilized maintenance of INCITS 417:2006 [R2011])

This standard specifies the functional requirements for the Serial Attached SCSI (SAS) physical interconnect, which is compatible with the Serial ATA physical interconnect. It also specifies three transport protocols, one to transport SCSI commands, another to transport Serial ATA commands to multiple SATA devices, and a third to support interface management. This standard is intended to be used in conjunction with SCSI and ATA command set standards.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS 215:1994 [S201x], Information Systems - Programming Languages - Forth (stabilized maintenance of INCITS 215:1994 [R2011])

Specifies an interface between a Forth System and a Forth Program by defining the words provided by a Standard System.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS/ISO/IEC 11581-6:1999 [S201x], Information technology - User system interfaces and symbols - Icon symbols and functions - Part 6: Action Icons (stabilized maintenance of INCITS/ISO/IEC 11581-6-1999 [R2011])

Applies to icons that are shown on a screen, that users can manipulate and interact with, and that represent data- or computer-system functions. Addresses only action icons. Action icons represent actions by association with objects that prompt the user to recall the intended actions. Describes user interaction with and appearance of action icons on the screen. Other types of icons are covered in other parts of the standard, listed in the Foreword.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS/ISO/IEC 13211-2:2000 [S201x], Information technology - Programming languages - Prolog - Part 2: Modules (stabilized maintenance of INCITS/ISO/IEC 13211-2-2000 [R2011])

Designed to promote the applicability and portability of Prolog modules that contain Prolog text complying with the requirements of the Programming Language Prolog, as specified in this part of ISO/IEC 13211.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS/ISO/IEC 13249-2:2003 [S201x], Information technology - Database languages - SQL multimedia and application packages - Part 2: Full-Text (stabilized maintenance of INCITS/ISO/IEC 13249-2-2003 [R2011])

Introduces the full-text part of ISO/IEC 13249 (all parts); gives the references necessary for this part of ISO/IEC 13249; defines notations and conventions specific to this part of ISO/IEC 13249; defines concepts specific to this part of ISO/IEC 13249; and defines the full-text user-defined types and their associated routines.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS/ISO/IEC 13249-5:2003 [S201x], Information technology - Database languages - SQL multimedia and application packages - Part 5: Still image (stabilized maintenance of INCITS/ISO/IEC 13249-5:2003 [R2011])

Introduces the still image part of ISO/IEC 13249 (all parts); gives the references necessary for this part of ISO/IEC 13249; defines notations and conventions specific to this part of ISO/IEC 13249; defines concepts specific to this part of ISO/IEC 13249; and defines the still image user-defined types and their associated routines.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Stabilized Maintenance

INCITS/ISO/IEC 14776-115:2004 [S201x], Information technology - Small Computer System Interface (SCSI) - Part 115: Parallel Interface-5 (SPI-5) (stabilized maintenance of INCITS/ISO/IEC 14776-115:2004 [2011])

The SCSI parallel interface (SPI) is designed to provide an efficient peer-topeer I/O bus with the maximum number of hosts and peripherals determined by the bus width (i.e., 8 or 16). Data may be transferred asynchronously or synchronously at rates that depend on implementation.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS/ISO/IEC 14776-151:2010 [S201x], Information technology - Small Computer System Interface (SCSI) - Part 151: Serial Attached SCSI - 1.1 (SAS-1.1) (stabilized maintenance of INCITS/ISO/IEC 14776-151:2010 [2011])

Defines the rules for exchanging information between SCSI devices using a serial interconnect. It defines the rules for exchanging information between ATA hosts and ATA devices using the same serial interconnect. It is a functional description. Conforming implementations may employ any design technique that does not violate interoperability.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS/ISO/IEC 14776-342:2000 [S201x], Information technology - Small Computer System Interface - Part 342: Controller Commands - 2 (SCC-2) (stabilized maintenance of INCITS/ISO/IEC 14776-342:2000 [2011])

Defines the command set extensions for SCSI storage array devices; commonly known as RAID devices. This standard is principally intended to be used in conjunction with, not as an alternate to, any of the SCSI command standards nor to the SCSI-3 Architecture Model (ISO/IEC 14776-411) standard. This international standard is intended as an alternate to the SCSI-3 Controller Command (ISO/IEC 14776-341) standard.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS/ISO/IEC 14776-452:2005 [S201x], Information technology - Small Computer System Interface (SCSI) - Part 452: SCSI Primary Commands - 2 (SPC-2) (stabilized maintenance of INCITS/ISO/IEC 14776-452-2005 [R2011])

The SCSI protocol is designed to provide an efficient peer-to-peer I/O bus with the maximum number of hosts and peripherals determined by the bus width (8 or 16). Data may be transferred asynchronously or synchronously at rates that depend primarily on device implementation and cable length. SCSI is an I/O interface that may be operated over a wide range of media and transfer rates.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS/ISO/IEC 18809-2000 [S201x], Information technology - 8 mm wide magnetic tape cartridge for information interchange - Helical scan recording - AIT-1 with MIC Format (stabilized maintenance of INCITS/ISO/IEC 18809 -2000 [R2011])

Specifies the physical and magnetic characteristics of an 8-mm-wide magnetic tape cartridge containing a memory chip to enable physical interchange of such cartridges between drives. It also specifies the quality of the recorded signals, the recording method, and the recorded format - called Advanced Intelligent Tape No. 1 with Memory In Cartridge (AIT-1 with MIC) - thereby allowing data interchange between drives by means of such magnetic tape cartridges.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Stabilized Maintenance

INCITS/ISO/IEC 18810-2001 [S201x], Information technology - 8 mm wide magnetic tape cartridge for information interchange - Helical scan recording - AIT-2 with MIC Format (stabilized maintenance of INCITS/ISO/IEC 18810 -2001 [R2011])

Specifies the physical and magnetic characteristics of an 8-mm-wide magnetic tape cartridge containing a memory chip to enable physical interchange of such cartridges between drives. It also specifies the quality of the recorded signals, the recording method and the recorded format - called Advanced Intelligent Tape No. 2 with Memory In Cartridge (AIT-2 with MIC) - thereby allowing data interchange between drives by means of such magnetic tape cartridges. The System Logs are recorded in the MIC.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Stabilized Maintenance

INCITS/ISO/IEC 9293:1994 [S201x]. Diskette Labels and File Structure for Information Interchange (stabilized maintenance of INCITS/ISO/IEC 9293 -1994 [R2011])

Specifies the volume and file structure of disk cartridges for the interchange of information between users of information processing systems. It also specifies an optional record structure.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information **Technology Standards**)

Stabilized Maintenance

INCITS/ISO/IEC 10561:1999 [S201x], Information technology - Office Equipment - Printing Devices Method for measuring printer throughput -Class 1 and Class 2 printers (stabilized maintenance of INCITS/ISO/IEC 10561-1999 [R2011])

Specifies a method for measuring the throughput of class 1 and class 2 printers, as defined in ISO/IEC 11160-1. Specifies three different test patterns: (1) a standard business letter; (2) a spreadsheet; or (3) a graphic pattern.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information **Technology Standards)**

Stabilized Maintenance

INCITS/ISO/IEC 11319:1993 [S201x], Information Technology - 8mm Wide Magnetic Tape Cartridges for Information Interchange - Helical Scan Recording (stabilized maintenance of INCITS/ISO/IEC 11319:1993 [R2008])

Specifies the physical and magnetic characteristics of an 8-mm-wide magnetic tape cartridge to enable interchangeability of such cartridges. It also provides a format and recording method, thus allowing, together with ISO 1001 for Magnetic Tape Labelling, full data interchange by means of such magnetic tape cartridges

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information **Technology Standards)**

Stabilized Maintenance

INCITS/ISO/IEC 11571:1998 [S201x], Information technology -Telecommunications and Information Exchange Between Systems - Private Integrated Services Networks - Addressing (stabilized maintenance of INCITS/ISO/IEC 11571-1998 [R2011])

Defines the requirements for the handling of network addresses for the identification of entities that use or provide telecommunication services offered by Private Integrated Services Networks (PISNs). Covers numbering, including the requirements for the support of a Private Numbering Plan, the addressing of network service access points for open systems interconnection (OSI NSAP addressing), and the support of sub-addressing.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information **Technology Standards)**

Stabilized Maintenance

INCITS/ISO/IEC 22051:2002 [S201x], Information technology - Data interchange on 12,7 mm, 448-track magnetic tape cartridges - SDLT1 format (stabilized maintenance of INCITS/ISO/IEC 22051:2002 [R2008])

Specifies the physical and magnetic characteristics of a 12,7-mm-wide, 448track magnetic tape cartridge, to enable physical interchangeability of such cartridges between drives. It also specifies the quality of the recorded signals, a format - called Super Digital Linear Tape 1 (SDLT 1) - and a recording method, thereby allowing data interchange between drives. Together with a labeling standard (for instance, ISO 1001 for Magnetic Tape Labelling), it allows full data interchange by means of such magnetic tape cartridges.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information **Technology Standards)**

Withdrawal

INCITS 388-2011, Information technology - Storage management (withdrawal of INCITS 388-2011)

Defines an interface for the secure, extensible, and interoperable management of a distributed and heterogeneous storage system. This interface uses an object-oriented, XML-based, messaging-based protocol designed to support the specific requirements of managing devices and subsystems in this storage environment. Using this protocol, this Technical Specification describes the information available to a WBEM Client from an SMI-S compliant CIM WBEM Server.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

Withdrawal

INCITS 416-2006 [R2011], Information technology - SCSI Fibre Channel Protocol - 3 (FCP-3) (withdrawal of INCITS 416:2006 [R2011])

This standard specifies the functional requirements for the Serial Attached SCSI (SAS) physical interconnect, which is compatible with the Serial ATA physical interconnect. It also specifies three transport protocols: one to transport SCSI commands, another to transport Serial ATA commands to multiple SATA devices, and a third to support interface management. This standard is intended to be used in conjunction with SCSI and ATA command set standards.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Withdrawal

INCITS 476-2011, Information Technology SAS Protocol Layer (SPL) (withdrawal of INCITS 476-2011)

The SCSI family of standards provides for many different transport protocols that define the rules for exchanging information between different SCSI devices. This standard defines the rules for exchanging information between SCSI devices using a serial interconnect. Other SCSI transport protocol standards define the rules for exchanging information between SCSI devices using other interconnects. This standard also defines the rules for exchanging information between ATA hosts and ATA devices using the same serial interconnect. Other ATA transport protocol standards define the rules for exchanging information between ATA hosts and ATA devices using other interconnects.

Single copy price: \$60.00

Order from: http://webstore.ansi.org/

Send comments (with copy to psa@ansi.org) to: comments@standards.

incits.org

Technical Reports Registered with ANSI

Technical Reports Registered with ANSI are not consensus documents. Rather, all material contained in Technical Reports Registered with ANSI is informational in nature. Technical reports may include, for example, reports of technical research, tutorials, factual data obtained from a survey carried out among standards developers and/or national bodies, or information on the "state of the art" in relation to standards of national or international bodies on a particular subject.

Immediately following the end of a 30-day announcement period in Standards Action, the Technical Report will be registered by ANSI. Please submit any comments regarding this registration to the organization indicated, with a copy to the PSA Center, American National Standards Institute, 25 West 43rd Street, New York, NY 10036 or E-Mail to psa@ansi.org.

AAMI (Association for the Advancement of Medical Instrumentation)

AAMI TIR 80002-3-2016, Medical device software - Part 3: Process reference model of medical device software life cycle processes (IEC 62304) (TECHNICAL REPORT) (technical report)

IEC TIR 80002-3:2014, which is a technical report (TR), provides the description of software life cycle processes for medical devices. The medical device software life cycle processes are derived from IEC 62304:2006, with corresponding safety classes. They have been aligned with the software development life cycle processes of ISO/IEC 12207:2008 and are presented herein in full compliance with ISO/IEC 24774:2010. The content of these three standards provides the foundation of this TR. This TR does not:

- address areas already covered by existing related standards, e.g., the international standards that relate to the four standards used to build this TR (see Bibliography);
- FDA guidance documents; or
- software development tools.

This TR describes the process reference model for medical device software development and is limited in scope to the life cycle processes described in IEC 62304:2006. The process names correspond to those of IEC 62304:2006. The mappings provided in Annex B are essential for the alignment between IEC 62304:2006 (which is based on ISO/IEC 12207:1995) and ISO/IEC 12207:2008, developed to address the detailed normative relationship between the two standards. This technical report is not intended to be used as the basis of regulatory inspection or certification assessment activities.

Single copy price: \$104.00 (AAMI members); \$173.00 (non-members)

Order from: Will Vargas, (703) 647-2779, wvargas@aami.org Send comments (with copy to psa@ansi.org) to: Same

30 Day Notice of Withdrawal: ANS 5 to 10 years past approval date

In accordance with clause 4.7.1 Periodic Maintenance of American National Standards of the ANSI Essential Requirements, the following American National Standards have not been reaffirmed or revised within the five-year period following approval as an ANS. Thus, they shall be withdrawn at the close of this 30-day public review notice in Standards Action

ACCA (Air Conditioning Contractors of America)

ANSI/ACCA Man J 2-2004, Addendum C, Duct Gain/Loss Revisions to MJ8

ACCA (Air Conditioning Contractors of America)

ANSI/ACCA Man J 2-2004 Addendum B, AED Protocol Revisions to MJ8

ADA (American Dental Association)

ANSI/ADA 6-1987 (R2005). Dental Mercury

AHAM (Association of Home Appliance Manufacturers)

ANSI/AHAM HU-1-2006, Portable Household Humidifiers

AHAM (Association of Home Appliance Manufacturers)

ANSI/AHAM I-1-2005, Household Electric Irons

AHAM (Association of Home Appliance Manufacturers)

ANSI/AHAM OV-1-2006, Procedures for the Determination and Expression of the Volume of Household Microwave and Conventional Ovens

ANS (American Nuclear Society)

ANSI/ANS 57.5-1996 (R2006), Light Water Reactors Fuel Assembly Mechanical Design and Evaluation

ASME (American Society of Mechanical Engineers)

ANSI/ASME QHO-1-2004, Qualification and Certification of Hazardous Waste Incinerator Operators

ASQ (American Society for Quality)

ANSI/IEC/ASQ D1070-1997, Compliance Test Procedures for Steady State Reliability

ASQ (American Society for Quality)

ANSI/IEC/ASQ D1123-1997, Reliability Testing - Compliance Test Plans for Success Ratio

ASQ (ASC Z1) (American Society for Quality)

ANSI/ASQ Z1.13-1998, Quality Systems Guidelines for Research

AWS (American Welding Society)

ANSI/AWS A5.18/A5.18M-2005, Specification for Carbon Steel Electrodes and Rods for Gas Shielded Arc Welding

AWS (American Welding Society)

ANSI/AWS B2.1-1-001-2006, Standard Welding Procedure Specification (WPS) Shielded Metal Arc Welding of Carbon Steel, (M-1/P-1, Group 1 or 2), 3/16 through 3/4 inch, in the As-Welded Condition, With Backing

AWS (American Welding Society)

ANSI/AWS B2.1-1-002-2006, Standard Welding Procedure Specification (WPS) Gas Tungsten Arc Welding of Carbon Steel, (M-1/P-1, Group 1 or 2), 3/16 through 7/8 inch, in the As-Welded Condition, With or Without Backing

AWS (American Welding Society)

ANSI/AWS B2.1-1-232-2006, Standard Welding Procedure Specification (SWPS) for Argon Plus 25% Carbon Dioxide Shielded Gas Metal Arc Welding (Short Circuiting Transfer Mode) followed by Argon Plus 25% Carbon Dioxide Shielded Flux Cored Arc Welding of Carbon Steel (M-1/P-1/S-1) Groups 1 and 2, 1/8 through 1-1/2 inch thick, ER70S-3 and E7XT-X, Flat Position Only, As-Welded or PWHT Condition, Primarily Pipe Applications

AWS (American Welding Society)

ANSI/AWS B2.1-1-233-2006, Standard Welding Procedure Specification (SWPS) for Argon Plus 25% Carbon Dioxide Shielded Gas Metal Arc Welding (Short Circuiting Transfer Mode) followed by Argon Plus 2% Oxygen Shielded Gas Metal Arc Welding (Spray Transfer Mode) of Carbon Steel (M-1/P-1/S-1), Groups 1 and 2, 1/8 through 1-1/2 inch thick, ER70S-3, Flat Position Only, As-Welded or PWHT Condition, Primarily Pipe Appllications

AWS (American Welding Society)

ANSI/AWS B2.1-1-234-2006, Standard Welding Procedure Specification (SWPS) for Argon plus 25% Carbon Dioxide Shielded Flux Cored Arc Welding of Carbon Steel (M-1/P-1/S-1) Groups 1 and 2, 1/8 through 1-1/2 inch thick, E7XT-X, As-Welded or PWHT Condition, Primarily Pipe Applications

AWS (American Welding Society)

ANSI/AWS B2.1-1-235-2006, Standard Welding Procedure Specification (SWPS) for Argon plus 2% Oxygen Shielded Gas Metal Arc Welding (Spray Transfer Mode) of Carbon Steel (M-1/P-1/S-1) Groups 1 and 2, 1/8 through 1-1/2 inch thick, ER70S-3, Flat Position Only, As-Welded or PWHT Condition, Primarily Pipe Applications

AWS (American Welding Society)

ANSI/AWS B5.4-2005, Specification for the Qualification of Welder Test Facilities

AWS (American Welding Society)

ANSI/AWS B5.9-2006, Specification for the Qualification of Welding Supervisors

AWS (American Welding Society)

ANSI/AWS B5.16-2006, Specification for the Qualification of Welding Engineers

AWS (American Welding Society)

ANSI/AWS C5.10/C5.10M-2003, Recommended Practices for Shielding Gases for Welding and Cutting

AWS (American Welding Society)

ANSI/AWS C6.2/C6.2M-2006, Specification for Qualification of Friction Welding of Metals

AWS (American Welding Society)

ANSI/AWS D3.7-2004. Guide for Aluminum Hull Welding

AWS (American Welding Society)

ANSI/AWS D8.7-2004, Recommended Practice for Automotive Weld Quality - Resistance Spot Welding

AWS (American Welding Society)

ANSI/AWS D8.6/D8.6M-2005, Specification for Automatic Resistance Spot Welding Electrodes

AWS (American Welding Society)

ANSI/AWS D11.2-2006, Guide for Welding Iron Castings

AWS (American Welding Society)

ANSI/AWS D14.1/D14.1M-2005, Specification for Welding of Industrial and Mill Cranes and Other Handling Equipment

AWS (American Welding Society)

ANSI/AWS D14.7/D14.7M-2005, Recommended Practices for Surfacing and Reconditioning of Industrial Mill Rolls

AWS (American Welding Society)

ANSI/AWS D16.2M/D16.2-2007, Guide for Components of Robotic and Automatic Arc Welding Installations

AWS (American Welding Society)

ANSI/AWS F1.1M-2006, Method for Sampling Airborne Particulates Generated by Welding and Allied Processes

AWS (American Welding Society)

ANSI/AWS F1.3M-2006, A Sampling Strategy Guide for Evaluating Contaminants in the Welding Environment

AWS (American Welding Society)

ANSI/AWS G1.1M/G1.1-2006, Guide to Ultrasonic Assembly of Thermoplastics

TIA (Telecommunications Industry Association)

ANSI/TIA 334-C-2000 (R2005), Signal Quality at Interface Between Data Terminal Equipment and Synchronous Data Circuit-Terminating Equipment for Serial Data Transmission

TIA (Telecommunications Industry Association)

ANSI/TIA 422-B-1994 (R2005), Electrical Characteristics of Balanced Voltage Digital Interface Circuits

TIA (Telecommunications Industry Association)

ANSI/TIA 455-78B-2002, Optical Fibres - Part 1-40: Measurement Methods and Test Procedures Attenuation

TIA (Telecommunications Industry Association)

ANSI/TIA 455-206-2000, FOTP206 - IEC 61290-1-1 - Optical Fiber Amplifiers - Basic Specification Part 1-1: Test Methods for Gain Parameters - Optical Spectrum Analyzer

TIA (Telecommunications Industry Association)

ANSI/TIA 455-207-2000, FOTP207 - IEC 61290-1-2- Optical Fiber Amplifiers - Basic Specification Part 1-2: Test Methods for Gain Parameters - Electrical Spectrum Analyzer

TIA (Telecommunications Industry Association)

ANSI/TIA 455-208-2000, FOTP208 - IEC 61290-1-3 - Optical Fibre Amplifiers - Basic Specification - Part 1-3: Test Methods for Gain Parameters - Optical Power Meter

TIA (Telecommunications Industry Association)

ANSI/TIA 455-209-2000, FOTP209 - IEC 61290-2-1 - Optical Fibre Amplifiers - Basic Specification - Part 2-1: Test Methods for Optical Power Parameters - Optical Spectrum Analyzer

TIA (Telecommunications Industry Association)

ANSI/TIA 455-210-2000, FOTP210 - IEC 61290-2-2 - Optical Fibre Amplifiers - Basic Specification - Part 2-2: Test Methods for Optical Power Parameters - Electrical Spectrum Analyzer

TIA (Telecommunications Industry Association)

ANSI/TIA 455-211-2000, FOTP211 - IEC 61290-2-3 - Optical Fibre Amplifiers - Basic Specification - Part 2-3: Test Methods for Optical Power Parameters - Optical Power Meter demultiplexer

TIA (Telecommunications Industry Association)

ANSI/TIA 455-213-2000, FOTP213 - IEC 61290-7-1 - Optical Fibre Amplifiers -Basic Specification - Part 7-1: Test Methods for Out-of-Band Insertion Losses - Filtered Optical Power Meter

TIA (Telecommunications Industry Association)

ANSI/TIA 455-214-2000, FOTP214 - IEC 61290-1 - Optical Fibre Amplifiers - Part 1: Generic Specification

TIA (Telecommunications Industry Association)

ANSI/TIA 455-224-2002, FOTP224 - Calibration of Fibre Optic Chromatic Dispersion Test Sets

TIA (Telecommunications Industry Association)

ANSI/TIA 455-226-2002, FOTP226 - Calibration of Optical Time-Domain Reflectometers (OTDR's)

TIA (Telecommunications Industry Association)

ANSI/TIA 455-227-2002, FOTP-227 - IEC 61300- Fiber Optic Devices and Passive Components - Basic Test and Measurement Procedures - Part 3-24: Examinations and Measurements - Keying Accuracy of Optical Connectors for Polarization Maintaining Fibre

TIA (Telecommunications Industry Association)

ANSI/TIA 455-28-C-1999 (R2005), Measuring Dynamic Strength and Fatigue Parameters of Optical Fibers by Tension

TIA (Telecommunications Industry Association)

ANSI/TIA 455-48B-1990 (R2005), Measurement of Optical Fiber Cladding Diameter Using Laser-Based Instruments

TIA (Telecommunications Industry Association)

ANSI/TIA 455-95A-2000 (R2005), Absolute Optical Power Test for Optical Fibers and Cables

TIA (Telecommunications Industry Association)

ANSI/TIA 472E000-2005, Standard for Indoor-Outdoor Optical Fiber Cable

TIA (Telecommunications Industry Association)

ANSI/TIA 492CAAB-2000 (R2005), Detail Specification for Class IVa Dispersion-Unshifted Single-Mode Optical Fibers with Low Water Peak

TIA (Telecommunications Industry Association)

ANSI/TIA 578-B-2000 (R2005), Facsimile Digital Interfaces - Asynchronous Facsimile DCE Control Standard, Service Class 1

TIA (Telecommunications Industry Association)

ANSI/TIA 592-A-1998 (R2005), Asynchronous Facsimile DCE Control Standard - Service Class 2

TIA (Telecommunications Industry Association)

ANSI/TIA 602-A-2000 (R2005), Data Transmission Systems and Equipment, Serial Asynchronous Automatic Dialing and Control

TIA (Telecommunications Industry Association)

ANSI/TIA 604-2-B-2004, FOCIS2 - Fiber Optic Connector Intermateability Standard, Type ST $\,$

TIA (Telecommunications Industry Association)

ANSI/TIA 604-3-B-2004, FOCIS3 - Fiber Optic Connector Intermateability Standard, Type SC and SC-APC

TIA (Telecommunications Industry Association)

ANSI/TIA 604-4-B-2004, FOCIS4 - Fiber Optic Connector Intermateability Standard, Type FC and Type FC-APC

TIA (Telecommunications Industry Association)

ANSI/TIA 604-13-A-2004, FOCIS13 - Fiber Optic Connector Intermateability Standard, Type SFOC 1.25

TIA (Telecommunications Industry Association)

ANSI/TIA 604-16-B-2005, Fiber Optic Connector Intermateability Standard, Type LSH

TIA (Telecommunications Industry Association)

ANSI/TIA 604-17-2004, FOCIS17 - Fiber Optic Connector Intermateability Standard, Type MU

TIA (Telecommunications Industry Association)

ANSI/TIA 612-1993 (R2005), Electrical Characteristics for an Interface at Data Signaling Rates Up to 52 Mbit/s

TIA (Telecommunications Industry Association)

ANSI/TIA 613-1993 (R2005), High Speed Serial Interface for Data Terminal Equipment and Data Circuit-Terminating Equipment

TIA (Telecommunications Industry Association)

ANSI/TIA 668-A-1998 (R2003), High Frequency Radio Facsimile

TIA (Telecommunications Industry Association)

ANSI/TIA 472C000-B-2005, Standard for Optical Fiber Premises Distribution Cable

Call for Members (ANS Consensus Bodies)

Directly and materially affected parties who are interested in participating as a member of an ANS consensus body for the standards listed below are requested to contact the sponsoring standards developer directly and in a timely manner.

AAMI (Association for the Advancement of Medical Instrumentation)

Office: 4301 N Fairfax Drive

Suite 301

Arlington, VA 22203-1633

Contact: Hae Choe
Phone: (703) 253-8268
Fax: (703) 276-0793

E-mail: HChoe@aami.org; customerservice@aami.org

BSR/AAMI/IEC 60601-2-4/A1-201x, Medical electrical equipment - Part 2-4: Particular requirements for the basic safety and essential performance of cardiac defibrillators (addenda to ANSI/AAMI/IEC 60601-2-4-2010 (R2015))

Obtain an electronic copy from: https://standards.aami. org/kws/public/document?view

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Office: 1101 K Street NW

Suite 610

Washington, DC 20005-3922

Contact: Lynn Barra

Phone: (202) 626-5739

Fax: (202) 638-4922

E-mail: comments@itic.org

- INCITS 48-1986/COR 1:1995 [S200x], Information Systems Magnetic Tape Cassette for Information Interchange (3.81 mm, 01.50 inch) Tape at 32 bpmm (800 BPI), Phase Enclosed Technical Corrigendum 1 (stabilized maintenance of INCITS 48:1986/TC-1:1995 [R2006])
- INCITS 162-1988/TC1-1995 [S201x], Information Systems Two-Sided, High Density, Unformatted, 5.25 in, 96-tpi, Flexible Disk Cartridge for 13 262 BPR Use General, Physical and Magnetic Requirements Technical Corrigendum 1 (stabilized maintenance of INCITS 162 -1988 [S2009])
- INCITS 183-1991 [S201x], Information technology High-Performance Parallel Interface (HIPPI) - Mechanical, Electrical, and Signalling Protocol Specification (HIPPI-PH) (stabilized maintenance of INCITS 183:1991 [R2011])
- INCITS 284-2011 [R201x], Information Technology Identification Cards Health Care Identification Cards (reaffirmation of INCITS 284-2011)
- INCITS 323-1998/AM 1-2001 [S201x], Information Technology High-Performance Parallel Interface - 6400 Mbit/s Physical Layer (HIPPI -6400-PH) - Amendment 1 (stabilized maintenance of INCITS 323:1998/AM1:2001[R2011])
- INCITS 332-1999/AM 2-2006 [S2011], Information technology Fibre Channel Arbitrated Loop 2nd Generation (FC-AL-2) Amendment 2 (stabilized maintenance of INCITS 332:1999, AM 2:2006 [R2011])

- INCITS 381-2009/AM 1:2011 [R201x], Information technology Finger Image Based Data Interchange Format - Amendment 1 (reaffirmation of INCITS 381-2009 Amendment 1-2011)
- INCITS 388-2011, Information technology Storage management (withdrawal of INCITS 388-2011)
- INCITS 404-2006 [S201x], Information technology Fibre Channel Physical Interfaces - 2 (FC-PI-2) (stabilized maintenance of INCITS 404:2006 [R2011])
- INCITS 409.4-2006 [R201x], Information technology Biometric Performance Testing and Reporting - Part 4: Operational Testing Methodologies (reaffirmation of INCITS 409.4:2006 [R2011])
- INCITS 409.5-2011 [R201x], Information Technology Biometric Performance Testing and Reporting - Part 5: Framework for Testing and Evaluation of Biometric System(s) for Access Control (reaffirmation of INCITS 409.5-2011)
- INCITS 412-2006 [S201x], Information technology SNIA Multipath Management API Specification, Version 1.0.1 (stabilized maintenance of INCITS 412:2006 [R2011])
- INCITS 414-2006 [S201x], Information technology Fibre Channel Backbone Generation 3 (FC-BB-3) (stabilized maintenance of INCITS 414:2006 [R2011])
- INCITS 416-2006 [R2011], Information technology SCSI Fibre Channel Protocol 3 (FCP-3) (withdrawal of INCITS 416:2006 [R2011])
- INCITS 417-2006 [S201x], Information technology Serial Attached SCSI-2 (SAS-1.1) (stabilized maintenance of INCITS 417:2006 [R2011])
- INCITS 418-2006 [R201x], Information technology Switch Fabric Generation 4 (FC-SW-4) (reaffirmation of INCITS 418:2006 [R2011])
- INCITS 458-2011 [R201x], Information technology SCSI Object-Based Storage Device Commands-2 (OSD-2) (reaffirmation of INCITS 458 -2011)
- INCITS 459-2011 [R201x], Information Technology Requirements for the Implementation and Interoperability of Role Based Access Control (reaffirmation of INCITS 459-2011)
- INCITS 460-2011 [R201x], Information technology Fibre Channel Physical Interface - 3 (FC-PI-3) (reaffirmation of INCITS 460-2011)
- INCITS 466-2011 [R201x], Information Technology Fibre Channel -Single Byte Command Code Sets Mapping Protocol - 4 (FC-SB-4) (reaffirmation of INCITS 466-2011)
- INCITS 467-2011 [R201x], Information technology SCSI Stream Commands 3 (SSC-3) (reaffirmation of INCITS 467-2011)
- INCITS 470-2011 [R201x], Information technology Fibre Channel -Framing and Signaling - 3 (FC-FS-3) (reaffirmation of INCITS 470 -2011)

- INCITS 473-2011 [R201x], Information Technology Conformance Testing Methodology Standard for Patron Formats Conforming to INCITS 398 2008 Information Technology - Common Biometric Exchange Formats Framework CBEFF (reaffirmation of INCITS 473 -2011)
- INCITS 474-2011 [R201x], Information Technology Biometric Application Programming Interface - Java (BioAPI Java) (reaffirmation of INCITS 474-2011)
- INCITS 475-2011 [R201x], Information Technology Fibre Channel Inter-Fabric Routing (FC-IFR) (reaffirmation of INCITS 475-2011)
- INCITS 476-2011, Information Technology SAS Protocol Layer (SPL) (withdrawal of INCITS 476-2011)
- INCITS 477-2011 [R201x], Information Technology Fibre Channel -Link Services - 2 (FC-LS-2) (reaffirmation of INCITS 477-2011)
- INCITS 478-2011 [R201x], Information technology Serial Attached SCSI 2.1 (SAS-2.1) (reaffirmation of INCITS 478-2011)
- INCITS 479-2011 [R201x], Information Technology Fibre Channel Physical Interface-5 (FC-PI-5/AM1) (reaffirmation of INCITS 479 -2011)
- INCITS 480-2011 [R201x], Information technology BIOS Enhanced Disk Drive Services 4 (EDD-4) (reaffirmation of INCITS 480-2011)
- INCITS 481-2011 [R201x], Information technology Fibre Channel Protocol for SCSI 4 (FCP-4) (reaffirmation of INCITS 481-2011)
- INCITS 215:1994 [S201x], Information Systems Programming Languages - Forth (stabilized maintenance of INCITS 215:1994 [R2011])
- INCITS/ISO 19142:2010 [R201x], Geographic information Web Feature Service (reaffirmation of INCITS/ISO 19142:2010 [2011])
- INCITS/ISO 19143:2010 [R201x], Geographic information Filter encoding (reaffirmation of INCITS/ISO 19143:2010 [2011])
- INCITS/ISO 19146:2010 [R201x], Geographic information Cross-domain vocabularies (reaffirmation of INCITS/ISO 19146:2010 [2011])
- INCITS/ISO 9542:1988/AM 1:1999 [R201x], Information processing systems - Telecommunications and information exchange between systems - End System to Intermediate System Routeing Exchange Protocol for Use in Conjunction with the Protocol for Providing the Connectionless-Mode Network Service - Amendment 1: Addition of group composition information (reaffirmation of INCITS/ISO 9542 -1988/AM1-1999 [R2011])
- INCITS/ISO/IEC 7816-15:2004/AM 1:2007 [R201x], Identification cards -Integrated circuit cards - Part 15: Cryptographic information application - Amendment 1: Examples of the use of the cryptographic information application (reaffirmation of INCITS/ISO/IEC 7816 -15:2004/AM1:2007 [2011])
- INCITS/ISO/IEC 7816-15:2004/AM 2:2008 [R201x], Identification cards -Integrated circuit cards - Part 15: Cryptographic information application - Amendment 2: Error corrections and extensions for multiapplication environments (reaffirmation of INCITS/ISO/IEC 7816 -15:2004/AM2:2008 [2011])
- INCITS/ISO/IEC 10118-2:2010 [R201x], Information technology -Security techniques - Hash-functions - Part 2: Hash-functions using an n-bit block cipher (reaffirmation of INCITS/ISO/IEC 10118-2:2010 [2011])
- INCITS/ISO/IEC 10373-1:2006 [R201x], Identification cards Test methods - Part 1: General characteristics tests (reaffirmation of INCITS/ISO/IEC 10373-1-2007 [R2011])

- INCITS/ISO/IEC 10373-3:2010 [R201x], Identification cards Test methods - Part 3: Integrated circuit cards with contacts and related interface devices (reaffirmation of INCITS/ISO/IEC 10373-3:2010 [2011])
- INCITS/ISO/IEC 10373-6:2011 [R201x], Identification cards Test methods - Part 6: Proximity cards (reaffirmation of INCITS/ISO/IEC 10373-6:2011 [2011])
- INCITS/ISO/IEC 10373-7:2008 [R201x], Identification cards Test methods - Part 7: Vicinity cards (reaffirmation of INCITS/ISO/IEC 10373-7:2008 [2011])
- INCITS/ISO/IEC 11581-6:1999 [S201x], Information technology User system interfaces and symbols - Icon symbols and functions - Part 6: Action Icons (stabilized maintenance of INCITS/ISO/IEC 11581-6 -1999 [R2011])
- INCITS/ISO/IEC 11694-4:2008 [R201x], Identification cards Optical memory cards - Linear recording method - Part 4: Logical data structures (reaffirmation of INCITS/ISO/IEC 11694-4:2008 [2011])
- INCITS/ISO/IEC 11695-3:2008 [R201x], Identification cards Optical memory cards - Holographic recording method-- Part 3: Optical properties and characteristics (reaffirmation of INCITS/ISO/IEC 11695 -3:2008 [2011])
- INCITS/ISO/IEC 13211-2:2000 [S201x], Information technology -Programming languages - Prolog - Part 2: Modules (stabilized maintenance of INCITS/ISO/IEC 13211-2-2000 [R2011])
- INCITS/ISO/IEC 13249-2:2003 [S201x], Information technology Database languages SQL multimedia and application packages Part 2: Full-Text (stabilized maintenance of INCITS/ISO/IEC 13249-2 -2003 [R2011])
- INCITS/ISO/IEC 13249-5:2003 [S201x], Information technology -Database languages - SQL multimedia and application packages -Part 5: Still image (stabilized maintenance of INCITS/ISO/IEC 13249 -5:2003 [R2011])
- INCITS/ISO/IEC 13818-4:2004/AM3:2009 [R201x], Information technology - Generic coding of moving pictures and associated audio information - Part 4: Conformance testing - Amendment 3: Level for 1080@50p/60p conformance testing (reaffirmation of INCITS/ISO/IEC 13818-4:2004/AM3:2009 [2011])
- INCITS/ISO/IEC 13818-6:1998/AM 1:2000 [R201x], Information technology Generic coding of moving pictures & associated audio info Part 6: Extensions for DSM-CC Amendment 1: Additions to support data broadcasting (reaffirmation of INCITS/ISO/IEC 13818-6 -1998/AM1-2000 [R2011])
- INCITS/ISO/IEC 14165-133:2010 [R201x], Information technology -Fibre Channel - Part 133: Switch Fabric-3 (FC-SW-3) (reaffirmation of INCITS/ISO/IEC 14165-133:2010 [2011])
- INCITS/ISO/IEC 14165-321:2009 [R201x], Information technology -Fibre Channel - Part 321: Audio-Video (FC-AV) (reaffirmation of INCITS/ISO/IEC 14165-321:2009 [2011])
- INCITS/ISO/IEC 14165-331:2007 [R201x], Information technology -Fibre Channel - Part 331: Virtual Interface (FC-VI) (reaffirmation of INCITS/ISO/IEC 14165-331:2007 [2011])
- INCITS/ISO/IEC 14495-1:2000 [R201x], Information technology -Lossless and near-lossless compression of continuous-tone still images: Baseline (reaffirmation of INCITS/ISO/IEC 14495-1-2000 [R2011])

- INCITS/ISO/IEC 14496-4:2004 [R201x], Information technology Coding of audio-visual objects - Part 4: Conformance testing (reaffirmation of INCITS/ISO/IEC 14496-4-2004 [R2011])
- INCITS/ISO/IEC 14496-6:2000 [R201x], Information technology Coding of audio-visual objects - Part 6: Delivery Multimedia Integration Framework (DMIF) (reaffirmation of INCITS/ISO/IEC 14496-6-2000 [R2011])
- INCITS/ISO/IEC 14496-20:2008AM1:2009 [R201x], Information technology - Coding of audio-visual objects - Part 4: Conformance testing (reaffirmation of INCITS/ISO/IEC 14496-20:2008/AM1:2009 [2011])
- INCITS/ISO/IEC 14496-4:2004/AM 30:2009 [R201x], Information technology - Coding of audio-visual objects - Part 4: Conformance testing - Amendment 30: Conformance testing for new profiles for professional applications (reaffirmation of INCITS/ISO/IEC 14496 -4:2004/AM30:2009 [2011])
- INCITS/ISO/IEC 14496-4:2004/AM 31:2009 [R201x], Information technology Coding of audio-visual objects Part 4: Conformance testing Amendment 31: Conformance testing for SVC profiles (reaffirmation of INCITS/ISO/IEC 14496-4:2004/AM31:2009 [2011])
- INCITS/ISO/IEC 14496-4:2004/AM 35:2009 [R201x], Information technology - Coding of audio-visual objects - Part 4: Conformance testing - Amendment 35: Simple studio profile levels 5 and 6 conformance testing (reaffirmation of INCITS/ISO/IEC 14496 -4:2004/AM35:2009 [2011])
- INCITS/ISO/IEC 14496-5:2001/AM 14:2009 [R201x], Information technology Coding of audio-visual objects Part 5: Reference software Amendment 14: Open Font Format reference software (reaffirmation of INCITS/ISO/IEC 14496-5:2001/AM14:2009 [2011])
- INCITS/ISO/IEC 14496-5:2001/AM 19:2009 [R201x], Information technology - Coding of audio-visual objects - Part 5: Reference software - Amendment 19: Reference software for Scalable Video Coding (reaffirmation of INCITS/ISO/IEC 14496-5:2001/AM19:2009 [2011])
- INCITS/ISO/IEC 14496-5:2001/AM 20:2009 [R201x], Information technology - Coding of audio-visual objects - Part 5: Reference software - Amendment 20: MPEG-1 and -2 on MPEG-4 reference software (reaffirmation of INCITS/ISO/IEC 14496-5:2001/AM20:2009 [2011])
- INCITS/ISO/IEC 14496-5:2001/AM 21:2009 [R201x], Information technology - Coding of audio-visual objects - Part 5: Reference software - Amendment 21: Frame-based Animated Mesh Compression reference software (reaffirmation of INCITS/ISO/IEC 14496-5:2001/AM21:2009 [2011])
- INCITS/ISO/IEC 14776-115:2004 [S201x], Information technology -Small Computer System Interface (SCSI) - Part 115: Parallel Interface -5 (SPI-5) (stabilized maintenance of INCITS/ISO/IEC 14776 -115:2004 [2011])
- INCITS/ISO/IEC 14776-151:2010 [S201x], Information technology -Small Computer System Interface (SCSI) - Part 151: Serial Attached SCSI - 1.1 (SAS-1.1) (stabilized maintenance of INCITS/ISO/IEC 14776-151:2010 [2011])
- INCITS/ISO/IEC 14776-342:2000 [S201x], Information technology Small Computer System Interface Part 342: Controller Commands 2 (SCC-2) (stabilized maintenance of INCITS/ISO/IEC 14776 -342:2000 [2011])

- INCITS/ISO/IEC 14776-452:2005 [S201x], Information technology -Small Computer System Interface (SCSI) - Part 452: SCSI Primary Commands - 2 (SPC-2) (stabilized maintenance of INCITS/ISO/IEC 14776-452-2005 [R2011])
- INCITS/ISO/IEC 14776-453:2009 [R201x], Information technology -Small computer system interface (SCSI) - Part 453: Primary commands-3 (SPC-3) (reaffirmation of INCITS/ISO/IEC 14776 -453:2009 [2011])
- INCITS/ISO/IEC 15444-8:2007/AM 1:2008 [R201x], Information technology JPEG 2000 image coding system: Secure JPEG 2000 Amendment 1: File format security (reaffirmation of INCITS/ISO/IEC 15444-8:2007/AM1:2008 [2011])
- INCITS/ISO/IEC 15457-1:2008 [R201x], Identification cards Thin flexible cards - Part 1: Physical characteristics (reaffirmation of INCITS/ISO/IEC 15457-1:2008 [2011])
- INCITS/ISO/IEC 15457-3:2008 [R201x], Identification cards Thin flexible cards Part 3: Test methods (reaffirmation of INCITS/ISO/IEC 15457-3:2008 [2011])
- INCITS/ISO/IEC 15693-1:2010 [R201x], Identification cards Contactless integrated circuit cards Vicinity cards Part 1: Physical characteristics (reaffirmation of INCITS/ISO/IEC 15693-1:2010 [2010])
- INCITS/ISO/IEC 15693-2:2006 [R201x], Identification cards Contactless integrated circuit cards Vicinity cards Part 2: Air interface and initialization (reaffirmation of INCITS/ISO/IEC 15693 -2:2006 [2011])
- INCITS/ISO/IEC 15693-3:2009 [R201x], Identification cards Contactless integrated circuit cards Vicinity cards Part 3: Anticollision and transmission protocol (reaffirmation of INCITS/ISO/IEC 15693-3:2009 [2011])
- INCITS/ISO/IEC 15938-3:2002/AM 3:2009 [R201x], Information technology Multimedia content description interface Part 3: Visual Amendment 3: Image Signature Tools (reaffirmation of INCITS/ISO/IEC 15938-3:2002/AM3:2009 [2011])
- INCITS/ISO/IEC 18013-2:2008 [R201x], Information technology -Personal identification - ISO-compliant driving license - Part 2: Machine-readable technologies (reaffirmation of INCITS/ISO/IEC 18013-2:2008 [2011])
- INCITS/ISO/IEC 18013-3:2009 [R201x], Information technology -Personal identification - ISO-compliant driving license - Part 3: Access control, authentication and integrity validation (reaffirmation of INCITS/ISO/IEC 18013-3:2009 [2011])
- INCITS/ISO/IEC 18809-2000 [S201x], Information technology 8 mm wide magnetic tape cartridge for information interchange Helical scan recording AIT-1 with MIC Format (stabilized maintenance of INCITS/ISO/IEC 18809-2000 [R2011])
- INCITS/ISO/IEC 18810-2001 [S201x], Information technology 8 mm wide magnetic tape cartridge for information interchange Helical scan recording AIT-2 with MIC Format (stabilized maintenance of INCITS/ISO/IEC 18810-2001 [R2011])
- INCITS/ISO/IEC 19763-3:2010 [R201x], Information technology -Metamodel framework for interoperability (MFI) - Part 3: Metamodel for ontology registration (reaffirmation of INCITS/ISO/IEC 19763 -3:2010 [2011])
- INCITS/ISO/IEC 19784-4:2011 [R201x], Information technology -Biometric application programming interface - Part 4: Biometric sensor function provider interface (reaffirmation of INCITS/ISO/IEC 19784-4:2011 [2011])

- INCITS/ISO/IEC 19784-1:2006/AM 3:2010 [R201x], Information technology Biometric application programming interface Part 1: BioAPI specification Amendment 3: Support for interchange of certificates and security assertions, and other security aspects (reaffirmation of INCITS/ISO/IEC 19784-1:2006/AM3:2010 [2011])
- INCITS/ISO/IEC 19795-5:2011 [R201x], Information technology -Biometric performance testing and reporting - Part 5: Access control scenario and grading scheme (reaffirmation of INCITS/ISO/IEC 19795 -5:2011 [2011])
- INCITS/ISO/IEC 19795-7:2011 [R201x], Information technology -Biometric performance testing and reporting - Part 7: Testing of oncard biometric comparison algorithms (reaffirmation of INCITS/ISO/IEC 19795-7:2011 [2011])
- INCITS/ISO/IEC 21000-8:2008/AM 1:2009 [R201x], Information technology Multimedia framework (MPEG-21) Part 8: Reference software Amendment 1: Extract reference software (reaffirmation of INCITS/ISO/IEC 21000-8:2008/AM1:2009 [2011])
- INCITS/ISO/IEC 23000-4:2009 [R201x], Information technology -Multimedia application format (MPEG-A) - Part 4: Musical slide show application format (reaffirmation of INCITS/ISO/IEC 23000-4:2009 [2011])
- INCITS/ISO/IEC 23000-6:2009 [R201x], Information technology Multimedia application format (MPEG-A) Part 6: Professional archival application format (reaffirmation of INCITS/ISO/IEC 23000 -6:2009 [2011])
- INCITS/ISO/IEC 23000-10:2009 [R201x], Information technology Multimedia application format (MPEG-A) Part 10: Video surveillance application format (reaffirmation of INCITS/ISO/IEC 23000-10:2009 [2011])
- INCITS/ISO/IEC 23000-3:2007/AM1:2009 [R201x], Information technology - Multimedia application format (MPEG-A) - Part 3: MPEG photo player application format - Amendment 1: Reference software for photo player MAF (reaffirmation of INCITS/ISO/IEC 23000 -3:2007/AM1:2009 [2011])
- INCITS/ISO/IEC 23000-4:2009/AM 1:2009 [R201x], Information technology Multimedia application format (MPEG-A) Part 4: Musical slide show application format Amendment 1: Conformance and reference software for musical slide show application format (reaffirmation of INCITS/ISO/IEC 23000-4:2009/AM1:2009 [2011])
- INCITS/ISO/IEC 23000-7:2008/AM 1:2009 [R201x], Information technology - Multimedia application format (MPEG-A) - Part 7: Open access application format - Amendment 1: Conformance and reference software for open access application format (reaffirmation of INCITS/ISO/IEC 23000-7:2008/AM1:2009 [2011])
- INCITS/ISO/IEC 23004-8:2009 [R201x], Information technology -Multimedia Middleware - Part 8: Reference software (reaffirmation of INCITS/ISO/IEC 23004-8:2009 [2011])
- INCITS/ISO/IEC 24709-3:2011 [R201x], Information technology Conformance testing for the biometric application programming interface (BioAPI) Part 3: Test assertions for BioAPI frameworks (reaffirmation of INCITS/ISO/IEC 24709-3:2011 [2011])
- INCITS/ISO/IEC 29109-10:2010 [R201x], Information technology Conformance testing methodology for biometric data interchange formats defined in ISO/IEC 19794 Part 10: Hand geometry silhouette data actions (reaffirmation of INCITS/ISO/IEC 29109-10:2010 [2011])
- INCITS/ISO/IEC 29159-1:2010 [R201x], Information technology -Biometric calibration, augmentation and fusion data - Part 1: Fusion information format (reaffirmation of INCITS/ISO/IEC 29159-1:2010 [2011])

- INCITS/ISO/IEC 9293:1994 [S201x], Diskette Labels and File Structure for Information Interchange (stabilized maintenance of INCITS/ISO/IEC 9293-1994 [R2011])
- INCITS/ISO/IEC 10561:1999 [S201x], Information technology Office Equipment - Printing Devices Method for measuring printer throughput - Class 1 and Class 2 printers (stabilized maintenance of INCITS/ISO/IEC 10561-1999 [R2011])
- INCITS/ISO/IEC 11319:1993 [S201x], Information Technology 8mm Wide Magnetic Tape Cartridges for Information Interchange Helical Scan Recording (stabilized maintenance of INCITS/ISO/IEC 11319:1993 [R2008])
- INCITS/ISO/IEC 11571:1998 [S201x], Information technology -Telecommunications and Information Exchange Between Systems -Private Integrated Services Networks - Addressing (stabilized maintenance of INCITS/ISO/IEC 11571-1998 [R2011])
- INCITS/ISO/IEC 14750:1999 [R201x], Information Technology Open Distributed Processing - Interface Definition Language (reaffirmation of INCITS/ISO/IEC 14750-1999 [R2011])
- INCITS/ISO/IEC 14752:2000 [R201x], Information Technology Open Distributed Processing Protocol Support for Computational Interactions (reaffirmation of INCITS/ISO/IEC 14752-2000 [R2011])
- INCITS/ISO/IEC 14753:1999 [R201x], Information Technology Open Distributed Processing Interface References and Binding (reaffirmation of INCITS/ISO/IEC 14753-1999 [R2011])
- INCITS/ISO/IEC 14769:2001 [R201x], Information Technology Open Distributed Processing - Type Repository Function (reaffirmation of INCITS/ISO/IEC 14769-2001 [R2011])
- INCITS/ISO/IEC 14771:1999 [R201x], Information Technology Open Distributed Processing Naming Framework (reaffirmation of INCITS/ISO/IEC 14771-1999 [R2011])
- INCITS/ISO/IEC 16485:2000 [R201x], Information technology Mixed Raster Content (MRC) (reaffirmation of INCITS/ISO/IEC 16485-2000 [R2011])
- INCITS/ISO/IEC 19105:2000 [R201x], Geographic information Conformance and testing (reaffirmation of INCITS/ISO/IEC 19105:2000 [R2011])
- INCITS/ISO/IEC 19123:2005 [R201x], Geographic information Schema for coverage geometry and functions (reaffirmation of INCITS/ISO/IEC 19123:2005 [R2011])
- INCITS/ISO/IEC 19133:2005 [R201x], Geographic information Location Based Services Tracking and navigation (reaffirmation of INCITS/ISO/IEC 19133:2005 [R2011])
- INCITS/ISO/IEC 19135:2005 [R201x], Geographic information Procedures for registration of geographical information items (reaffirmation of INCITS/ISO/IEC 19135:2005 [R2011])
- INCITS/ISO/IEC 22051:2002 [S201x], Information technology Data interchange on 12,7 mm, 448-track magnetic tape cartridges - SDLT1 format (stabilized maintenance of INCITS/ISO/IEC 22051:2002 [R2008])
- INCITS/ISO/IEC 29183:2010 [R201x], Information technology Office equipment - Method for measuring digital copying productivity of a single one-sided original (reaffirmation of INCITS/ISO/IEC 29183 -2010 [2011])
- INCITS/ISO/IEC 4909:2006 [2011], Identification cards Financial transaction cards Magnetic stripe data content for track 3 (identical national adoption of)

OPEI (Outdoor Power Equipment Institute)

Office: 341 South Patrick Street

Alexandria, VA 22314

 Contact:
 Daniel Mustico

 Phone:
 (703) 549-7600

 Fax:
 (703) 549-7604

 E-mail:
 dmustico@opei.org

BSR/OPEI B71.4-201x, Commercial Turf Care Equipment - Safety

Specifications (revision of ANSI/OPEI B71.4-2012)

Obtain an electronic copy from: dmustico@opei.org

TAPPI (Technical Association of the Pulp and Paper Industry)

Office: 15 Technology Parkway South

Peachtree Corners, GA 30092

 Contact:
 Laurence Womack

 Phone:
 (770) 209-7276

 Fax:
 (770) 446-6947

 E-mail:
 standards@tappi.org

BSR/TAPPI T 272 sp-201x, Forming handsheets for reflectance testing of pulp (sheet machine procedure) (revision of ANSI/TAPPI T 272 sp -2012)

BSR/TAPPI T 1500 gl-12-201x, Optical measurements terminology (related to appearance evaluation of paper) (revision of ANSI/TAPPI T 1500 gl-2012)

TIA (Telecommunications Industry Association)

Office: 1320 North Courthouse Road

Suite 200

Arlington, VA 22201

 Contact:
 Teesha Jenkins

 Phone:
 (703) 907-7706

 Fax:
 (703) 907-7727

E-mail: standards@tiaonline.org

BSR/TIA 569-D-1-201x, Telecommunications Pathways and Spaces: Addendum 1 - Revised Temperature and Humidity Requirements for Telecommunications Spaces (addenda to ANSI/TIA 569-D-2015)

Obtain an electronic copy from: TIA

BSR/TIA 606-C-201x, Administration Standard for Telecommunications Infrastructure (revision and redesignation of ANSI/TIA 606-B-2012)

Obtain an electronic copy from: TIA

Call for Members (ANS Consensus Bodies)

Call for Committee Members

ASC 01

Are you interested in contributing to the development and maintenance of valuable industry safety standards? The ASC O1 is currently looking for members in the following categories:

- o General Interest
- Government
- o Producer
- o User

If you are interested in joining the ASC O1, contact WMMA Associate Director Jennifer Miller at jennifer@wmma.org.

Final Actions on American National Standards

The standards actions listed below have been approved by the ANSI Board of Standards Review (BSR) or by an ANSI-Audited Designator, as applicable.

AAMI (Association for the Advancement of Medical Instrumentation)

New National Adoption

ANSI/AAMI/ISO 80369-3-2016, Small-bore connectors for liquids and gases in healthcare applications - Part 3: Connectors for enteral applications (identical national adoption of ISO 80369-3): 8/3/2016

ANSI/AAMI/ISO 7198, Ed. 4-2016, Cardiovascular implants and extracorporeal systems - Vascular Prostheses - Tubular vascular grafts and vascular patches (identical national adoption of ISO/DIS 7198 and revision of ANSI/AAMI/ISO 7198-2001 (R2010)): 8/2/2016

ANS (American Nuclear Society)

Reaffirmation

ANSI/ANS 6.4-2006 (R2016), Nuclear Analysis and Design of Concrete Radiation Shielding for Nuclear Power Plants (reaffirmation of ANSI/ANS 6.4-2006): 8/4/2016

API (American Petroleum Institute)

Reaffirmation

ANSI/API Standard 618-2008 (R2016), Reciprocating Compressors for Petroleum, Chemical, and Gas Industry Services (reaffirmation of ANSI/API 618-2008): 8/3/2016

ASC X9 (Accredited Standards Committee X9, Incorporated)

Revision

ANSI X9.100-10-2016, Paper Specifications for MICR Documents (revision of ANSI X9.100-10-2010): 8/2/2016

ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.) Addenda

ANSI/ASHRAE Standard 160d-2016, Criteria for Moisture-Control Design Analysis in Buildings (addenda to ANSI/ASHRAE Standard 160-2009): 8/1/2016

Revision

ANSI/ASHRAE Standard 154-2016, Ventilation for Commercial Cooking Operations (revision of ANSI/ASHRAE Standard 154-2011): 8/1/2016

ASME (American Society of Mechanical Engineers) Revision

ANSI/ASME B30.7-2016, Winches (revision of ANSI/ASME B30.7 -2011): 8/3/2016

ASQ (ASC Z1) (American Society for Quality) New National Adoption

ANSI/ASQ/ISO 14004-2016, Environmental management systems -General guidelines on implementation (identical national adoption of ISO 14004:2016): 8/3/2016

ASSE (ASC A10) (American Society of Safety Engineers)

New Standard

ANSI/ASSE A10.43-2016, Confined Space Entry for Construction and Demolition Operations (new standard): 8/4/2016

ANSI/ASSE A10.48-2016, Criteria for Safety Practices with the Construction, Demolition, and Maintenance of Communication Structures (new standard): 8/3/2016

ASSE (ASC Z117) (American Society of Safety Engineers)

Revision

ANSI/ASSE Z117.1-2016, Safety Requirements for Entering Confined Spaces (revision of ANSI ASSE Z117.1-2009): 8/4/2016

ASTM (ASTM International)

New Standard

ANSI/ASTM F1668-2016, Guide for Construction Procedures for Buried Plastic Pipe (new standard): 7/26/2016

Reaffirmation

ANSI/ASTM F1888-2014 (R2016), Test Method for Compression-Displacement of Baseballs and Softballs (reaffirmation of ANSI/ASTM F1888-2009 (R2014)): 7/26/2016

Revision

ANSI/ASTM D1655-2016a, Specification for Aviation Turbine Fuels (revision of ANSI/ASTM D1655-2015): 8/1/2016

ANSI/ASTM D3241-2016a, Test Method for Thermal Oxidation Stability of Aviation Turbine Fuels (revision of ANSI/ASTM D3241 -2016): 7/26/2016

ANSI/ASTM D6300-2016a, Practice for Determination of Precision and Bias Data for Use in Test Methods for Petroleum Products and Lubricants (revision of ANSI/ASTM D6300-2016): 7/26/2016

ANSI/ASTM D7223-2016a, Specification for Aviation Certification Turbine Fuel (revision of ANSI/ASTM D7223-2016): 7/26/2016

ANSI/ASTM D7566-2016b, Specification for Aviation Turbine Fuel Containing Synthesized Hydrocarbons (revision of ANSI/ASTM D7566-2016): 7/26/2016

ANSI/ASTM E8-2016, Test Methods for Tension Testing of Metallic Materials (revision of ANSI/ASTM E8-2015a): 8/1/2016

ANSI/ASTM E699-2016, Practice for Evaluation of Agencies Involved in Testing, Quality Assurance, and Evaluating of Building Components (revision of ANSI/ASTM E699-2009): 8/1/2016

ANSI/ASTM F963-2016, Consumer Safety Specification for Toy Safety (revision of ANSI/ASTM F963-2011): 8/1/2016

ATIS (Alliance for Telecommunications Industry Solutions)

New Standard

ANSI/ATIS 1000066-2016, Emergency Telecommunications Service (ETS) Network Element Requirements for IMS-based Next Generation Network (NGN) Phase 2 (new standard): 8/3/2016

AWS (American Welding Society)

New Standard

ANSI/AWS J1.2M/J1.2-2016, Guide for Installation and Maintenance of Resistance Welding Machines (new standard): 8/4/2016

Revision

ANSI/AWS D1.8/D1.8M-2016, Structural Welding CodeSeismic Supplement (revision of ANSI/AWS D1.8/D1.8M-2009): 8/3/2016

CGA (Compressed Gas Association)

Revision

ANSI/CGA G-13-2016, Storage and Handling of Silane and Silane Mixtures (revision of ANSI/CGA G-13-2006): 8/4/2016

CSA (CSA Group)

New Standard

ANSI/CSA HGV 4.3-2016, Test Methods for Hydrogen Fueling Parameter Evaluation (new standard): 8/4/2016

Reaffirmation

* ANSI Z21.80-2011 (R2016)/CSA 6.22-2011 (R2016) and ANSI Z21.80a-2012 (R2016)/CSA 6.22a-2012 (R2016), Line Pressure Regulators (same as CSA 6.22) (reaffirmation of ANSI Z21.80a-2011, ANSI Z21.80a-2012): 8/3/2016

CTA (Consumer Technology Association)

Reaffirmation

 * ANSI/CTA 909-B-2010 (R2016), Antenna Control Interface (reaffirmation and redesignation of ANSI/CEA 909-B-2010): 8/3/2016

ESTA (Entertainment Services and Technology Association)

New Standard

ANSI E1.53-2016, Overhead mounting of luminaires, lighting accessories, and other portable devices: specification and practice (new standard): 8/4/2016

NSF (NSF International)

Revision

- * ANSI/NSF 7-2016 (i10r5), Commercial Refrigerators and Freezers (revision of ANSI/NSF 7-2014): 7/31/2016
- * ANSI/NSF 49-2016 (i78r3), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49 -2014): 8/1/2016

TIA (Telecommunications Industry Association)

Reaffirmation

- ANSI/TIA 222-G-2005 (R2016), Structural Standard for Antenna Supporting Structures and Antennas (reaffirmation of ANSI/TIA 222-G-2005 (R2012)): 8/3/2016
- ANSI/TIA 222-G-1-2007 (R2016), Structural Standards for Steel
 Antenna Towers and Antenna Supporting Structures Addendum 1
 (reaffirmation of ANSI/TIA 222-G-1-2007 (R2013)): 8/3/2016
- ANSI/TIA 1019-A-2012 (R2016), Standard for Installation, Alteration and Maintenance of Antenna Supporting Structures and Antennas (reaffirmation of ANSI/TIA 1019-A-2012): 8/3/2016

UL (Underwriters Laboratories, Inc.)

New National Adoption

ANSI/UL 60730-1-2016, Automatic Electrical Controls, Part 1: General Requirements (identical national adoption of IEC 60730-1 and revision of ANSI/UL 60730-1-2013a): 8/3/2016

Reaffirmation

ANSI/UL 1022-2012 (R2016), Standard for Safety for Line Isolation Monitors (reaffirmation of ANSI/UL 1022-2012): 8/3/2016

Revision

- * ANSI/UL 1026-2016b, Standard for Safety for Electric Household Cooking and Food Serving Appliances (Proposal dated 3/11/16) (revision of ANSI/UL 1026-2016): 8/1/2016
- * ANSI/UL 1026-2016c, Standard for Safety for Electric Household Cooking and Food Serving Appliances (Proposals dated 4/15/16) (revision of ANSI/UL 1026-2016): 8/1/2016
- ANSI/UL 1066-2016, Standard for Safety for Low-Voltage AC and DC Power Circuit Breakers Used in Enclosures (revision of ANSI/UL 1066-2013): 8/2/2016
- ANSI/UL 1066-2016a, Standard for Safety for Low-Voltage AC and DC Power Circuit Breakers Used in Enclosures (revision of ANSI/UL 1066-2013): 8/2/2016
- ANSI/UL 1254-2016, Standard for Pre-Engineered Dry Chemical Extinguishing System Units (revision of ANSI/UL 1254-2015): 8/2/2016
- ANSI/UL 2127-2016, Standard for Inert Gas Clean Agent Extinguishing System Units (revision of ANSI/UL 2127-2015): 8/3/2016
- ANSI/UL 2166-2016, Standard for Halocarbon Clean Agent Extinguishing System Units (revision of ANSI/UL 2166-2015): 8/3/2016

Project Initiation Notification System (PINS)

ANSI Procedures require notification of ANSI by ANSI-accredited standards developers (ASD) of the initiation and scope of activities expected to result in new or revised American National Standards (ANS). Early notification of activity intended to reaffirm or withdraw an ANS and in some instances a PINS related to a national adoption is optional. The mechanism by which such notification is given is referred to as the PINS process. For additional information, see clause 2.4 of the ANSI Essential Requirements: Due Process Requirements for American National Standards.

Following is a list of proposed actions and new ANS that have been received recently from ASDs. Please also review the section in Standards Action entitled "American National Standards Maintained Under Continuous Maintenance" for additional or comparable information with regard to standards maintained under the continuous maintenance option. To view information about additional standards for which a PINS has been submitted and to search approved ANS, please visit www.NSSN.org, which is a database of standards information. Note that this database is not exhaustive.

Directly and materially affected interests wishing to receive more information or to submit comments are requested to contact the standards developer directly within 30 days of the publication of this announcement.

ASA (ASC S12) (Acoustical Society of America)

Office: 1305 Walt Whitman Rd

Suite 300

Melville, NY 11747

Contact: Neil Stremmel

Fax: (631) 923-2875

E-mail: nstremmel@acousticalsociety.org

ANSI/ASA S12.16-1992 (R2013), Guidelines for the Specification of Noise of New Machinery (withdrawal of ANSI/ASA S12.16-1992 (R2013))

Stakeholders: Builders, architects, plant engineers, industrial hygienists, manufacturers, environmental professionals.

Project Need: There is not enough interest in this standard to justify its revision and maintenance.

Provides guidelines for obtaining noise level data from manufacturers of stationary equipment. The standard references existing American National Standards Institute, trade, and professional association measurement standards and techniques to request manufacturer noise level data. Appendices provide guidance for interpretation of the data received from the manufacturer.

ASME (American Society of Mechanical Engineers)

Office: Two Park Avenue

New York, NY 10016

Contact: Mayra Santiago

Fax: (212) 591-8501

E-mail: ansibox@asme.org

BSR/ASME B31P-201x, Preheat and Heat Treatment for Pressure Piping (new standard)

Stakeholders: Industries that utilize pressure piping constructed to the ASME B31 Code including - Power Piping, Process Piping, Liquid and Slurry Piping Transportation Systems, Refrigeration Piping, Gas Transmission and Distribution

Project Need: The B31 Code Sections are widely diverse regarding the rules for preheating and post-heat treatment (including both post-bending and -forming heat treatment and post-welding heat treatment). Uniformity and the ability to use technical advancements for the heat-treatment rules are extremely difficult to accomplish in multiple B31 Section Codes. The ability to provide a B31 Standard is expected to provide a mechanism for consistency as well as technical advancements for the B31 Codes.

This standard describes preheat and heat treatment requirements for metallic piping in the scope of the ASME B31 Code for Pressure Piping.

AWS (American Welding Society)

Office: 8669 NW 36th Street, #130

Miami, Florida 33166-6672

Contact: Annik Babinski

Fax: (305) 443-5951

E-mail: ababinski@aws.org

BSR/AWS C1.1M/C1.1-201x, Recommended Practices for Resistance Welding (revision of ANSI/AWS C1.1M/C1.1-2012)

Stakeholders: Welding industry.

Project Need: It is the intent of this publication to present current concepts and practices for resistance welding (and related processes) of ferrous and nonferrous metals including coated and dissimilar metals. Where practical, welding schedules are included. In other instances where schedules are too varied or the state-of-the-art is not sufficiently developed, descriptive guidelines are included to enable the user to establish welding procedures to meet its requirements.

This Recommended Practices is a collection of data and procedures that are intended to assist the user in setting up resistance-welding equipment to produce resistance-welded production parts. While the recommendations included are not expected to be final procedures for every production part or every welding machine, they serve as starting points from which a user can establish acceptable welding-machine settings for specific production welding applications. In some cases, recommended machine data is not available. In these instances, some description of the process is given to assist the reader in determining if the process might be suitable for the application.

AWS (American Welding Society)

Office: 8669 NW 36 Street, #130

Miami, FL 33166
Contact: Stephen Hedrick

E-mail: steveh@aws.org

BSR/AWS F4.1-201x, Safe Practices for the Preparation of Containers and Piping for Welding, Cutting, and Allied Processes (revision of ANSI/AWS F4.1-2007)

Stakeholders: Welders, repair personnel, welding engineers.

Project Need: To provide guidance on the preparation of containers and piping for welding and cutting.

This standard informs the reader of the necessary safe practices to be followed in the cleaning and preparation of containers and piping for welding or cutting. It describes various methods for cleaning, including water, steam, hot chemical and mechanical, and techniques to be used for their proper preparation, such as inerting.

BSR/AWS G1.6-201x, Specification for the Qualification of Plastics Welding Inspectors for Hot Gas, Hot Gas Extrusion, and Heated Tool Butt Thermoplastic Welds (revision of ANSI/AWS G1.6-2006)

Stakeholders: Plastic welders, plastic welding inspectors, employers.

Project Need: Provides guidance on the qualification of plastics welding inspectors.

This standard defines the qualification requirements of Hot Gas, Hot Gas Extrusion, and Heated Tool Butt Thermoplastic welding inspectors. The qualification requirements for visual plastics welding inspectors include experience and satisfactory completion of an examination that includes demonstrated capabilities.

CAAS (Commission on Accreditation of Ambulance Services)

Office: 1926 Waukegan Road

Suite 300

Glenview, IL 60025 Contact: Marcie McGlynn E-mail: marciem@tcag.com

BSR/CAAS GVS v1.0-201x, CAAS Ground Vehicle Standard (GVS) v1.0 (new standard)

Stakeholders: Ambulance manufacturers, EMS equipment manufacturers, EMS State Agencies/officials, Ambulance purchasers,

owner/operators, EMS industry groups/associations.

Project Need: Ambulance purchasers/manufacturers require minimum performance criteria and standardized testing requirements to design, build, and test new ambulances. Additionally, State or County EMS agencies require a standard that can be referenced for state licensing purposes. This standard would replace the expiring GSA purchasing specifications currently used as the de facto standard for the ambulance industry.

This standard is designed to meet the purchasing and manufacturing needs of the entire EMS/ambulance transportation industry. It establishes minimum requirements for the performance, design, manufacturing and standardized, independent testing of new ground ambulance transportation vehicles for ALL providers in the industry, including commercial/private, fire/rescue, EMS third-service, volunteer, industrial, hospital, and federal (military or non-military) entities providing emergency, non-emergency and/or inter-facility at the ALS/BLS and SCT level.

CSA (CSA Group)

Office: 8501 East Pleasant Valley Rd.

Cleveland, OH 44131

Contact: Cathy Rake (216) 520-8979 Fax:

cathy.rake@csagroup.org E-mail:

BSR Z21.72-201x. Portable Type Gas Camp Stoves (same as CSA 11.2) (revision of ANSI Z21.72-2015)

Stakeholders: Consumers, manufacturers, gas suppliers, certifying agencies.

Project Need: Revise the standard for safety.

Details test and examination criteria for portable camp cook stoves for use with propane HD-5 only, having input ratings of 12,000 Btu per hour or less and intended for use both indoors in adequately ventilated structures and outdoors. This standard applies to stoves designed for self-contained fuel supplies using fuel cylinders of not more than 75 cubic inches (2-1/2 pounds nominal water capacity).

ESTA (Entertainment Services and Technology Association)

Office: 630 Ninth Avenue

Suite 609

New York, NY 10036-3748

Contact: Karl Ruling (212) 244-1502 Fax: E-mail: standards@esta.org

BSR E1.59-201x, Automation Vector Transmission Protocol (new

standard)

Stakeholders: Automation system manufacturers; media server; lighting, sound, and projection system manufacturers; integrators, and system programmers.

Project Need: Interfacing automation systems with other standard entertainment control systems (i.e. lighting, sounds, media) is becoming increasingly common. Communicating between these systems is often done through custom engineered solutions or using a proprietary communication protocol. This standard is intended to allow systems engineers to spend less time on establishing communication and more time innovating artistic solutions.

This standard intends to specify a protocol over which entertainment automation systems can transmit vector data (position, velocity, timestamp, etc.) to non-automation control systems for the purpose of synchronizing motion and effects. Data transmitted is intended to coordinate visual and audio elements of a production and should not be used for safety critical applications (i.e., object collision avoidance between automation systems).

TAPPI (Technical Association of the Pulp and Paper Industry)

Office: 15 Technology Parkway South

Peachtree Corners, GA 30092

Contact: Laurence Womack (770) 446-6947 Fax: E-mail: standards@tappi.org

BSR/TAPPI T 272 sp-201x, Forming handsheets for reflectance testing of pulp (sheet machine procedure) (revision of ANSI/TAPPI T 272 sp -2012)

Stakeholders: Manufacturers of pulp, paper, packaging, or related products; consumers or converters of such products; and suppliers of equipment, supplies, or raw materials for the manufacture of such products.

Project Need: To conduct required five-year review of an existing TAPPI/ANSI standard in order to revise it if needed to address new technology or correct errors.

This practice describes the procedure using the TAPPI sheet machine for preparing reflectance-testing specimen sheets of bleached or unbleached pulp whose fibers are readily dispersed in water. This practice permits the preparation of sheets having a smooth and reproducible surface for reflectance measurements with a minimum of washing or contamination of the sample.

BSR/TAPPI T 1500 gl-12-201x, Optical measurements terminology (related to appearance evaluation of paper) (revision of ANSI/TAPPI T 1500 gl-2012)

Stakeholders: Manufacturers of pulp, paper, packaging, or related products; consumers or converters of such products; and suppliers of equipment, supplies, or raw materials for the manufacture of such products.

Project Need: To conduct required five-year review of an existing TAPPI/ANSI standard in order to revise it if needed to address new technology or correct errors.

This glossary defines terms used in the pulp and paper industry relating to both visual and instrumental evaluations of appearance. This technical terminology includes such optical assessments such as brightness, whiteness, color, gloss, opacity, scattering, absorption, etc.

UL (Underwriters Laboratories, Inc.)

Office: 333 Pfingsten Road

Northbrook, IL 60062-2096

Contact: Susan Malohn
Fax: (847) 407-1725

E-mail: Susan.P.Malohn@ul.com

BSR/UL 62446-1-201x, Photovoltaic (PV) systems - Requirements for testing, documentation and maintenance - Part 1: Grid connected systems - Documentation, commissioning tests and inspection (national adoption with modifications of IEC 62446-1)

Stakeholders: System designers and Installers of grid.

Project Need: ANSI approval of a new UL IEC-based standard.

The information and documentation required to be handed over to a customer following the installation of a grid-connected PV system. It also describes the commissioning tests, inspection criteria, and documentation expected to verify the safe installation and correct operation of the system. This part is for grid-connected PV systems that do not utilize energy storage (e.g., batteries) or hybrid systems; and is for use by system designers and installers of grid-connected solar PV systems as a template to provide effective documentation to a customer. This does not address CPV (concentrating PV) systems; however, many of the parts may apply.

American National Standards Maintained Under Continuous Maintenance

The ANSI Essential Requirements: Due Process Requirements for American National Standards provides two options for the maintenance of American National Standards (ANS): periodic maintenance (see clause 4.7.1) and continuous maintenance (see clause 4.7.2). Continuous maintenance is defined as follows:

The standard shall be maintained by an accredited standards developer. A documented program for periodic publication of revisions shall be established by the standards developer. Processing of these revisions shall be in accordance with these procedures. The published standard shall include a clear statement of the intent to consider requests for change and information on the submittal of such requests. Procedures shall be established for timely, documented consensus action on each request for change and no portion of the standard shall be excluded from the revision process. In the event that no revisions are issued for a period of four years, action to reaffirm or withdraw the standard shall be taken in accordance with the procedures contained in the ANSI Essential Requirements.

The Executive Standards Council (ExSC) has determined that for standards maintained under the Continuous Maintenance option, separate PINS announcements are not required. The following ANSI Accredited Standards Developers have formally registered standards under the Continuous Maintenance option.

- AAMI (Association for the Advancement of Medical Instrumentation)
- AAMVA (American Association of Motor Vehicle Administrators)
- AGA (American Gas Association)
- AGSC (Auto Glass Safety Council)
- ASC X9 (Accredited Standards Committee X9, Incorporated)
- ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)
- ASME (American Society of Mechanical Engineers)
- ASTM (ASTM International)
- GBI (The Green Building Initiative)
- GEIA (Greenguard Environmental Institute)
- HL7 (Health Level Seven)
- IESNA (The Illuminating Engineering Society of North America)
- MHI (ASC MH10) (Material Handling Industry)
- NAHBRC (NAHB Research Center, Inc.)
- NBBPVI (National Board of Boiler and Pressure Vessel Inspectors)
- NCPDP (National Council for Prescription Drug Programs)
- NISO (National Information Standards Organization)
- NSF (NSF International)
- PRCA (Professional Ropes Course Association)
- RESNET (Residential Energy Services Network)
- TIA (Telecommunications Industry Association)
- UL (Underwriters Laboratories, Inc.)

To obtain additional information with regard to these standards, including contact information at the ANSI Accredited Standards Developer, please visit *ANSI Online* at www.ansi.org/asd, select "Standards Activities," click on "Public Review and Comment" and "American National Standards Maintained Under Continuous Maintenance." This information is also available directly at www.ansi.org/publicreview.

Alternatively, you may contact the Procedures & Standards Administration department (PSA) at psa@ansi.org or via fax at 212-840-2298. If you request that information be provided via E-mail, please include your E-mail address; if you request that information be provided via fax, please include your fax number. Thank you.

ANSI-Accredited Standards Developers Contact Information

The addresses listed in this section are to be used in conjunction with standards listed in PINS, Call for Comment and Final Actions. This section is a list of developers who have submitted standards for this issue of Standards Action – it is not intended to be a list of all ANSI-Accredited Standards Developers. Please send all address corrections to Standards Action Editor at standact@ansi.org.

AAMI

Association for the Advancement of Medical Instrumentation

4301 N Fairfax Drive Suite 301

Arlington, VA 22203-1633 Phone: (703) 647-2779 Web: www.aami.org

ADA (Organization)

American Dental Association

211 East Chicago Avenue Chicago, IL 60611-2678 Phone: (312) 587-4129 Fax: (312) 440-2529 Web: www.ada.org

American Iron and Steel Institute

25 Massachusetts Avenue, NW

Suite 800

Washington, DC 20001 Phone: (202) 452-7100 Fax: (202) 452-1039 Web: www.steel.org

ANS

American Nuclear Society 555 North Kensington Avenue La Grange Park, IL 60526

Phone: (708) 579-8268 Fax: (708) 579-8248 Web: www.ans.org

American Petroleum Institute

1220 L Street, NW Washington, DC 20005 Phone: (202) 682-8190 Fax: (202) 962-4797 Web: www.api.org

ASA (ASC S12)

Acoustical Society of America

1305 Walt Whitman Rd Suite 300 Melville, NY 11747 Phone: (631) 390-0215 Fax: (631) 923-2875

Web: www.acousticalsociety.org

Accredited Standards Committee X9, Incorporated

275 West Street Suite 107 Annapolis, MD 21401 Phone: (410) 267-7707 Web: www.x9.org

ASHRAE

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

1791 Tullie Circle, NE Atlanta, GA 30329 Phone: (678) 539-1214 Fax: (678) 539-2214 Web: www.ashrae.org

American Society of Mechanical **Engineers**

Two Park Avenue New York, NY 10016 Phone: (212) 591-8521 Fax: (212) 591-8501 Web: www.asme.org

American Society for Quality

600 N Plankinton Ave Milwaukee, WI 53203 Phone: (414) 272-8575 Web: www.asq.org

ASSE (ASC Z117)

American Society of Safety Engineers

520 N. Northwest Highway Park Ridge, IL 60068 Phone: (847) 232-2012 Fax: (847) 699-2929 Web: www.asse.org

ASSE (Safety)

American Society of Safety Engineers

520 N. Northwest Highway Park Ridge, IL 60068 Phone: (847) 768-3411 Fax: (847) 296-9221 Web: www.asse.org

ΔSTM

ASTM International

100 Barr Harbor Drive West Conshohocken, PA 19428-2959 Phone: (610) 832-9744

Fax: (610) 834-3683 Web: www.astm.org

Alliance for Telecommunications **Industry Solutions**

1200 G Street NW Suite 500 Washington, DC 20005 Phone: (202) 434-8840 Web: www.atis.org

AWS

American Welding Society 8669 NW 36th Street, #130 Miami, Florida 33166-6672 Phone: (800) 443-9353 Fax: (305) 443-5951 Web: www.aws.org

CAAS

Commission on Accreditation of **Ambulance Services**

1926 Waukegan Road Suite 300 Glenview, IL 60025

Phone: (847) 657-6828 ext. 3016

Web: www.caas.org

CGA

Compressed Gas Association 14501 George Carter Way Suite 103

Chantilly, VA 20151 Phone: (703) 788-2728

Fax: (703) 961-1831 Web: www.cganet.com

CSA

CSA Group

8501 East Pleasant Valley Rd. Cleveland, OH 44131 Phone: (216) 524-4990 x88321 Fax: (216) 520-8979

Web: www.csa-america.org

Consumer Technology Association

1919 South Eads Street Arlington, VA 22202 Phone: (703) 907-7697 Fax: (703) 907-4197 Web: www.ce.org

Entertainment Services and Technology Association

630 Ninth Avenue Suite 609 New York, NY 10036-3748 Phone: (212) 244-1505 Fax: (212) 244-1502 Web: www.esta.org

HPS (ASC N13)

Health Physics Society

1313 Dolley Madison Blvd Suite 402 McLean, VA 22101 Phone: (703) 790-1745 Fax: (703) 790-2672 Web: www.hps.org

ITI (INCITS)

InterNational Committee for Information Technology Standards

1101 K Street NW Suite 610 Washington, DC 20005-3922 Phone: (202) 626-5737 Fax: (202) 638-4922 Web: www.incits.org

NEMA (ASC C12)

National Electrical Manufacturers Association

1300 North 17th Street Suite 900 Rosslyn, VA 22209 Phone: (703) 841-3227 Fax: (703) 841-3327 Web: www.nema.org

NSF International 789 N. Dixboro Road Ann Arbor, MI 48105-9723 Phone: (734) 769-5197 Web: www.nsf.org

Outdoor Power Equipment Institute

341 South Patrick Street Alexandria, VA 22314 Phone: (703) 549-7600 Fax: (703) 549-7604 Web: www.opei.org

Society of Cable Telecommunications **Engineers**

140 Philips Road Exton, PA 19341-1318 Phone: (480) 252-2330 Fax: (610) 363-5898 Web: www.scte.org

TAPPI

Technical Association of the Pulp and Paper Industry

15 Technology Parkway South Peachtree Corners, GA 30092 Phone: (770) 209-7276 Fax: (770) 446-6947 Web: www.tappi.org

Telecommunications Industry Association

1320 North Courthouse Road Suite 200 Arlington, VA 22201 Phone: (703) 907-7706 Fax: (703) 907-7727 Web: www.tiaonline.org

Underwriters Laboratories, Inc.

333 Pfingsten Road Northbrook, IL 60062-2096 Phone: (847) 664-1725 Fax: (847) 407-1725

Web: www.ul.com

ISO & IEC Draft International Standards



This section lists proposed standards that the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) are considering for approval. The proposals have received substantial support within the technical committees or subcommittees that developed them and are now being circulated to ISO and IEC members for comment and vote. Standards Action readers interested in reviewing and commenting on these documents should order copies from ANSI.

Comments

Comments regarding ISO documents should be sent to ANSI's ISO Team (isot@ansi.org); those regarding IEC documents should be sent to Tony Zertuche, General Secretary, USNC/IEC, at ANSI's New York offices (tzertuche@ansi.org). The final date for offering comments is listed after each draft.

Ordering Instructions

ISO and IEC Drafts can be made available by contacting ANSI's Customer Service department. Please e-mail your request for an ISO or IEC Draft to Customer Service at sales@ansi.org. When making your request, please provide the date of the Standards Action issue in which the draft document you are requesting appears.

ISO Standards

AIRCRAFT AND SPACE VEHICLES (TC 20)

- ISO/DIS 1464, Aerospace Tripod jacks Clearance dimensions 10/21/2016, \$40.00
- ISO/DIS 9667, Aircraft ground support equipment Tow bars 10/21/2016, \$40.00
- ISO/DIS 9788, Double stud tie-down fittings Double stud tie-down fittings Design and testing requirements 10/21/2016, \$53.00
- ISO/DIS 10842, Aircraft Locations and type of ground service connections 12/7/2016, \$53.00
- ISO/DIS 21100, Air cargo unit load devices Performance requirements and test parameters 10/21/2016, \$107.00

ANAESTHETIC AND RESPIRATORY EQUIPMENT (TC 121)

- ISO/DIS 11195, Gas mixers for medical use Stand-alone gas mixers 10/21/2016, \$67.00
- ISO/DIS 80601-2-55, Medical electrical equipment Part 2-55: Particular requirements for the basic safety and essential performance of respiratory gas monitors - 10/23/2016, \$134.00

CARBON DIOXIDE CAPTURE, TRANSPORTATION, AND GEOLOGICAL STORAGE (TC 265)

ISO/DIS 27917-1, Carbon dioxide capture, transportation and geological storage - Vocabulary - Part 1: Cross-cutting terms -8/25/2016, \$67.00

CAST IRON AND PIG IRON (TC 25)

ISO/DIS 945-1, Microstructure of cast irons - Part 1: Graphite classification by visual analysis - 8/26/2016, \$98.00

DIMENSIONAL AND GEOMETRICAL PRODUCT SPECIFICATIONS AND VERIFICATION (TC 213)

ISO/DIS 20170, Geometrical product specifications (GPS) -Decomposition of geometrical characteristics for manufacturing control - 10/27/2016, \$77.00

MACHINE TOOLS (TC 39)

ISO/DIS 19085-8, Woodworking machines - Safety - Part 8: Wide-belt calibrating and sanding machines - 8/26/2016, \$112.00

MATERIALS, EQUIPMENT AND OFFSHORE STRUCTURES FOR PETROLEUM AND NATURAL GAS INDUSTRIES (TC 67)

ISO 3183/DAmd1, Petroleum and natural gas industries - Steel pipe for pipeline transportation systems - Amendment 1 - 10/23/2016, \$71.00

NUCLEAR ENERGY (TC 85)

ISO/DIS 12800, Nuclear fuel technology - Guide to the measurement of the specific surface area of uranium oxide powders by the BET method - 8/26/2016, \$46.00

PLASTICS (TC 61)

- ISO/DIS 877-1, Plastics Methods of exposure to solar radiation Part 1: General guidance 8/26/2016, \$62.00
- ISO/DIS 877-2, Plastics Methods of exposure to solar radiation Part 2: Direct weathering and exposure behind window glass 8/26/2016, \$40.00
- ISO/DIS 877-3, Plastics Methods of exposure to solar radiation Part 3: Intensified weathering using concentrated solar radiation 8/26/2016, \$58.00
- ISO/DIS 19927, Fibre-reinforced plastic composites Determination of interlaminar strength and modulus by double beamshear test 10/22/2016, \$82.00

ROLLING BEARINGS (TC 4)

ISO/DIS 12297-2, Rolling bearings - Cylindrical rollers - Part 2: Ceramic rollers - Boundary dimensions, geometrical product specifications (GPS) and tolerance values - 10/22/2016, \$67.00

RUBBER AND RUBBER PRODUCTS (TC 45)

- ISO 23233/DAmd1, Rubber, vulcanized or thermoplastic -Determination of resistance to abrasion using a driven, vertical abrasive disc - Amendment 1 - 10/28/2016, \$29.00
- ISO/DIS 1436, Rubber hoses and hose assemblies Wire-braidreinforced hydraulic types for oil-based or water-based fluids -Specification - 8/26/2016, \$58.00
- ISO/DIS 3862, Rubber hoses and hose assemblies Rubber-covered spiral-wire-reinforced hydraulic types for oil-based or water-based fluids Specification 8/26/2016, \$62.00
- ISO/DIS 4079, Rubber hoses and hose assemblies Textile-reinforced hydraulic types for oil-based or water-based fluids Specification 8/26/2016, \$62.00
- ISO/DIS 9298, Rubber compounding ingredients Zinc oxide Test methods 8/27/2016, \$62.00

ISO/DIS 20299-2, Film for wrapping rubber bales - Part 2: Natural rubber - 8/24/2016, \$29.00

SHIPS AND MARINE TECHNOLOGY (TC 8)

IEC/IEEE DIS 80005-3, Utility connections in port - Part 3: Low Voltage Shore Connection (LVSC) Systems - General requirements, \$112.00

SIEVES, SIEVING AND OTHER SIZING METHODS (TC 24)

ISO 9276-4/DAmd1, Representation of results of particle size analysis - Part 4: Characterization of a classification process - Amendment 1 - 8/27/2016, \$29.00

SOLID MINERAL FUELS (TC 27)

ISO/DIS 7404-4, Methods for the petrographic analysis of coals - Part 4: Method of determining microlithotype, carbominerite and minerite composition - 10/27/2016, \$58.00

TOBACCO AND TOBACCO PRODUCTS (TC 126)

- ISO/DIS 20778, Cigarettes Routine analytical cigarette smoking machine - Definitions and standard conditions with an intense smoking regime - 10/21/2016, \$77.00
- ISO/DIS 20779, Cigarettes Generation and collection of total particulate matter using a routine analytical smoking machine with an intense smoking regime 10/21/2016, \$71.00

TRANSFUSION, INFUSION AND INJECTION EQUIPMENT FOR MEDICAL USE (TC 76)

ISO/DIS 15378, Primary packaging materials for medicinal products -Particular requirements for the application of ISO 9001:2015, with reference to good manufacturing practice (GMP) - 10/27/2016, \$146.00

TRANSPORT INFORMATION AND CONTROL SYSTEMS (TC 204)

ISO/DIS 16461, Intelligent transport systems - Criteria for privacy and integrity protection - 10/27/2016, \$71.00

WELDING AND ALLIED PROCESSES (TC 44)

- ISO/DIS 14731, Welding coordination Tasks and responsibilities 10/27/2016, \$58.00
- ISO/DIS 15012-3, Health and safety in welding and allied processes Requirements, testing and marking of equipment for air filtration Part 3: Determination of the capture efficiency of on-torch welding fume extraction devices 8/25/2016, \$82.00

ISO/IEC JTC 1, Information Technology

- ISO/IEC DIS 10646, Information technology Universal Coded Character Set (UCS) 8/26/2016, \$175.00
- ISO/IEC DIS 17203, Information technology Open Virtualization Format (OVF) specification 10/23/2016, \$134.00
- ISO/IEC DIS 19944, Information technology Cloud computing Cloud services and devices: data flow, data categories and data use -10/21/2016, \$155.00
- ISO/IEC DIS 18047-6, Information technology Radio frequency identification device conformance test methods Part 6: Test methods for air interface communications at 860 MHz to 960 MHz 8/28/2016, \$155.00

IEC Standards

- 3/1270A/CD, IEC/TS 630734 Ed. 1.0: Guidance how to design graphical symbols for diagrams for standardization and inclusion in IEC 60617, 09/30/2016
- 9/2181/CDV, IEC 62888-2 Ed.1: Railway applications Energy mesurement on board trains Part 2: Energy measuring, 10/28/2016

- 9/2182/CDV, IEC 62888-3 Ed.1: Railway applications Energy measurement on board trains Part 3: Data handling, 10/28/2016
- 9/2183/CDV, IEC 62888-4 Ed.1: Railway applications Energy measurement on board trains Part 4: Communication, 10/28/2016
- 22E/174/FDIS, IEC 61204-3 Ed.3: Low-voltage switch mode power supplies - Part 3: Electromagnetic compatibility (EMC), 09/16/2016
- 22H/208/FDIS, IEC 62040-5-3 Ed.1: Uninterruptible power systems (UPS) Part 5-3: DC output UPS Performance and test requirements, 09/16/2016
- 34B/1875/CD, IEC 60061 f72 Ed.3: Lamp caps and holders together with gauges for the control of interchangeability and safety Part 1: Lamp caps; Part 2: Holders; Part 3: Gauges, 10/28/2016
- 35/1366/NP, Future IEC 60086-6/Ed1: Primary batteries Part 6: Environmental, 10/28/2016
- 36/384/CDV, IEC 61466-2 Am 2 Ed1: Amendment 2: Composite string insulator units for overhead lines with a nominal voltage greater than 1 000 V Part 2: Dimensional and electrical characteristics, 10/28/2016
- 38/513/CDV, IEC 61869-11: Instrument transformers Part 11: Additional requirements for low-power passive voltage transformers, 10/28/2016
- 46/611/CD, IEC 61935-1 Ed 5: Specification for the Testing of Balanced and Coaxial Information Technology Cabling Part 1: Installed balanced cabling as specified in ISO/IEC 11801-1 and related standards., 09/30/2016
- 46/612/CD, IEC 61935-1-1 Ed 1: Testing of Balanced Communication Cabling in Accordance with ISO/IEC 11801 and Coaxial Information Technology Cabling Part 1-1: Additional requirements for the measurement of Transverse Conversion Loss and Equal Level Transverse Conversion Transfer Loss, 09/30/2016
- 46/613/CD, IEC 61935-1-2 Ed 1: Testing of Balanced Communication Cabling in Accordance with ISO/IEC 11801-1 Part 1-2: Additional requirements for measurement of resistance unbalance with field test instrumentation, 09/30/2016
- 46/614/CD, IEC 61935-2 Ed 4: Specification for the Testing of Balanced and Coaxial Information Technology Cabling Part 2: Cords as specified in ISO/IEC 11801 and related standards, 09/30/2016
- 46A/1308/CDV, IEC 61196-1-303: Coaxial communication cables -Part 1 - 303: Mechanical test methods test methods - Test for plating thickness, 10/28/2016
- 48B/2522/CD, IEC 61076-3-119/Ed1: Connectors for electronic equipment Product requirements Part 3-119: Rectangular connectors Detail specification for unshielded, free and fixed 10 way connectors with push-pull coupling for industrial environments with frequencies up to 100 MHz, 09/30/2016
- 57/1762/DTR, IEC/TR 61850-90-10 Ed. 1 Communication networks and systems for power utility automation Part 90-10: IEC 61850 objects for scheduling, 09/30/2016
- 62D/1388/CD, IEC 60601-2-26: Medical Electrical Equipment Part 2 -26: Particular requirements for the basic safety and essential performance of electroencephalographs, 10/28/2016
- 62D/1393/CD, IEC 60601-2-31: Medical Electrical Equipment Part 2 -31: Particular requirements for the basic safety and essential performance of external cardiac pacemakers with internal power source, 09/30/2016
- 64/2136/CD, Amendment 3 to IEC 60364-5-53 (f1): Low voltage electrical installation Part 5-53 Selection and rection of electrical equipment Isolation, switching and control: Clause 530 Scope, Definitions, 10/28/2016
- 64/2137/CD, Amendment 3 to IEC 60364-5-53 (f2): Low voltage electrical installation Part 5-53 Selection and rection of electrical equipment Isolation, switching and control: Clauses 535,536,537, 10/28/2016

- 69/432/CD, ISO 15118-1 Ed2: Road vehicles Vehicle to grid communication interface Part 1: General information and use-case definition. 10/28/2016
- 77/525/DTR, IEC TR 61000-4-1: Electromagnetic Compatibility (EMC) Part 2-5: Environment Description and classification of electromagnetic environments, 09/30/2016
- 86/501/CD, IEC 62129-3/Ed1: Calibration of wavelength/optical frequency measurement instruments Part 3: Optical frequency meters using optical frequency combs, 09/30/2016
- 88/589/CDV, IEC 61400-25-5 Ed.2: Wind energy generation systems -Part 25-5: Communications for monitoring and control of wind power plants - Conformance testing, 10/28/2016
- 95/351/CD, IEC 60255-187-1: Measuring relays and protection equipment Part 187-1: Functional requirements for restrained and unrestrained differential protection of motors, generators and transformers, 09/30/2016
- 100/2706/CDV, IEC 60728-13-1 Ed. 2.0 Cable networks for television signals sound signals and interactive services - Part 13-1: Bandwidth expansion for broadcast signal over FTTH system (TA 5), 10/28/2016
- 106/366/CDV, IEC 62232: Determination of RF field strength, power density and SAR in the vicinity of radiocommunication base stations for the purpose of evaluating human exposure, 10/28/2016
- 106/376/FDIS, Amendment 1 to IEC 62226-3-1: Exposure to electric or magnetic fields in the low and intermediate frequency range -Methods for calculating the current density and internal electric field induced in the human body - Part 3-1: Exposure to electric fields -Analytical and 2D numerical models, 09/16/2016
- 110/781A/DTR, IEC/TR 62977-2-3 Ed.1: Electronic display devices Part 2-3: Measurements of optical properties Multi-colour test patterns, 09/23/2016
- 110/783/CD, IEC 62595-2-3 Ed.1: Display lighting unit Part 2-3: Electro-optical measuring methods of LED frontlight unit, 09/30/2016
- 110/784/FDIS, IEC 62629-22-1 Ed.2: 3D Display devices Part 22-1: Measuring methods for autostereoscopic displays Optical, 09/16/2016
- 113/330/NP, IEC TS 62607-6-2: Nanomanufacturing Key Control Characteristics Part 6-2: Graphene Evaluation of the number of layers of graphene, 10/28/2016
- CIS/A/1171/CDV, Amendment 2 to CISPR 16-4-2 (f2): Specification for radio disturbance and immunity measuring apparatus and methods Part 4-2: Uncertainties, statistics and limit modelling Measurement instrumentation uncertainty, 10/28/2016
- C/1979/DV, Draft IEC Guide 118 Edition 1; Inclusion of energy efficiency aspects in electrotechnical publications. (NOTE: This document is to be read in conjunction with C/1980/DV.), 12/09/2016
- C/1980/DV, Draft IEC Guide 119 Edition 1, Preparation of energy efficiency publications and the use of basic energy efficiency publications and group energy efficiency publications (NOTE: This document is to be read in conjunction with C/1979/DV.), 12/09/2016

Newly Published ISO & IEC Standards



Listed here are new and revised standards recently approved and promulgated by ISO - the International Organization for Standardization – and IEC – the International Electrotechnical Commission. Most are available at the ANSI Electronic Standards Store (ESS) at www.ansi.org. All paper copies are available from Standards resellers (http://webstore.ansi.org/faq.aspx#resellers)..

ISO Standards

ISO/IEC JTC 1 Technical Reports

ISO/IEC TR 18120:2016. Information technology - Learning, education, and training - Requirements for e-textbooks in education, \$240.00

ACOUSTICS (TC 43)

ISO 10140-1:2016. Acoustics - Laboratory measurement of sound insulation of building elements - Part 1: Application rules for specific products, \$240.00

APPLICATIONS OF STATISTICAL METHODS (TC 69)

ISO 22514-4:2016. Statistical methods in process management -Capability and performance - Part 4: Process capability estimates and performance measures, \$200.00

CYCLES (TC 149)

ISO 6699:2016. Cycles - Handlebar centre and stem dimensions, \$51.00

DIMENSIONAL AND GEOMETRICAL PRODUCT SPECIFICATIONS AND VERIFICATION (TC 213)

ISO 14405-1:2016. Geometrical product specifications (GPS) - Dimensional tolerancing - Part 1: Linear sizes, \$240.00

ESSENTIAL OILS (TC 54)

ISO 13171:2016, Essential oil of oregano [Origanum vulgare L. subsp. hirtum (Link) letsw], \$88.00

FLUID POWER SYSTEMS (TC 131)

ISO 5781:2016, Hydraulic fluid power - Pressure-reducing valves, sequence valves, unloading valves, throttle valves and check valves - Mounting surfaces, \$149.00

ISO 12829:2016. Hydraulic spin-on filters with finite lives - Method for verifying the rated fatigue life and the rated static burst pressure of the pressure-containing envelope, \$88.00

GEARS (TC 60)

ISO 6336-5:2016. Calculation of load capacity of spur and helical gears - Part 5: Strength and quality of materials, \$200.00

MACHINE TOOLS (TC 39)

ISO 3070-2:2016. Machine tools - Test conditions for testing the accuracy of boring and milling machines with horizontal spindle -Part 2: Machines with movable column along the X-axis (floor type), \$240.00

MEDICAL DEVICES FOR INJECTIONS (TC 84)

ISO 6009:2016, Hypodermic needles for single use - Colour coding for identification, \$51.00

ISO 7864:2016. Sterile hypodermic needles for single use - Requirements and test methods, \$149.00

ISO 9626:2016. Stainless steel needle tubing for the manufacture of medical devices - Requirements and test methods, \$149.00

NATURAL GAS (TC 193)

ISO 6976:2016. Natural gas - Calculation of calorific values, density, relative density and Wobbe indices from composition, \$240.00

NUCLEAR ENERGY (TC 85)

ISO 12183:2016. Nuclear fuel technology - Controlled-potential coulometric assay of plutonium, \$173.00

OTHER

ISO 19076:2016, Leather - Measurement of leather surface - Using electronic techniques, \$123.00

PAPER, BOARD AND PULPS (TC 6)

<u>ISO 11476:2016</u>, Paper and board - Determination of CIE whiteness, C/2° (indoor illumination conditions), \$123.00

ROAD VEHICLES (TC 22)

<u>ISO 14230-2:2016</u>, Road vehicles - Diagnostic communication over K-Line (DoK-Line) - Part 2: Data link layer, \$200.00

ISO 17987-1:2016, Road vehicles - Local Interconnect Network (LIN) - Part 1: General information and use case definition, \$88.00

ISO 17987-2:2016, Road vehicles - Local Interconnect Network (LIN) - Part 2: Transport protocol and network layer services, \$240.00

<u>ISO 17987-3:2016.</u> Road vehicles - Local Interconnect Network (LIN) - Part 3: Protocol specification, \$200.00

SOLID BIOFUELS (TC 238)

<u>ISO 18846:2016.</u> Solid biofuels - Determination of fines content in samples of pellets, \$51.00

STEEL (TC 17)

ISO 14590:2016, Cold-reduced steel sheet of high tensile strength and low yield point with improved formability, \$88.00

ISO/IEC JTC 1, Information Technology

<u>ISO/IEC 15961-4:2016</u>, Information technology - Radio frequency identification (RFID) for item management: Data protocol - Part 4: Application interface commands for battery assist and sensor functionality, \$149.00

IEC Standards

FUSES (TC 32)

<u>IEC 60269-2 Amd.1 Ed. 5.0 b:2016</u>, Amendment 1 - Low-voltage fuses - Part 2: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application) - Examples of standardized systems of fuses A to K, \$43.00

Proposed Foreign Government Regulations

Call for Comment

U.S. manufacturers, exporters, regulatory agencies and standards developing organizations may be interested in proposed foreign technical regulations issued by Member countries of the World Trade Organization (WTO). In accordance with the WTO Agreement on Technical Barriers to Trade (TBT Agreement), Members are required to report proposed technical regulations that may significantly affect trade to the WTO Secretariat in Geneva, Switzerland. In turn, the Secretariat disseminates the information to all WTO Members. The purpose of this requirement is to provide global trading partners with an opportunity to review and comment on the regulations before they become final.

The National Center for Standards and Certification Information (NCSCI) at the National Institute of Standards and Technology

(NIST), distributes these proposed foreign technical regulations to U.S. stakeholders via an online service, Notify U.S. Notify U.S. is an e-mail and Web service that allows interested U.S. parties to register, obtain notifications, and read full texts of regulations from countries and for industry sectors of interest to them. To register for Notify U.S., please go to Internet URL: http://www.nist.gov/notifyus/ and click on "Subscribe".

NCSCI is the WTO TBT Inquiry Point for the U.S. and receives all notifications and full texts of regulations to disseminate to U.S. Industry. For further information, please contact: NCSCI, NIST, 100 Bureau Drive, Gaithersburg, MD 20899-2160; Telephone: (301) 975-4040; Fax: (301) 926-1559; E-mail: ncsci@nist.gov or notifyus@nist.gov.

Information Concerning

American National Standards

INCITS Executive Board

ANSI Accredited SDO and US TAG to ISO/IEC JTC 1, Information Technology

The InterNational Committee for Information Technology Standards (INCITS), an ANSI accredited SDO, is the forum of choice for information technology developers, producers and users for the creation and maintenance of formal de jure IT standards. INCITS' mission is to promote the effective use of Information and Communication Technology through standardization in a way that balances the interests of all stakeholders and increases the global competitiveness of the member organizations.

The INCITS Executive Board serves as the consensus body with its oversight of programs of its 40+ Technical Committees. Additionally, the INCITS Executive Board exercises international leadership in its role as the US Technical Advisory Group (TAG) to ISO/IEC JTC 1, Information Technology.

The INCITS Executive Board has eleven membership categories that can be viewed at

http://www.incits.org/participation/membership-info.
Membership in all categories is always welcome. INCITS
also seeks to broaden its membership base and looks to
recruit new participants in the following under-represented
membership categories:

• Producer - Hardware

This category primarily produces hardware products for the ITC marketplace.

• Producer - Software

This category primarily produces software products for the ITC marketplace.

Distributor

This category is for distributors, resellers or retailers of conformant products in the ITC industry.

User

This category includes entities that primarily reply on standards in the use of a products/service, as opposed to producing or distributing conformant products/services.

Consultants

This category is for organizations whose principal activity is in providing consulting services to other organizations.

Standards Development Organizations and Consortia

o "Minor" an SDO or Consortia that (a) holds no TAG assignments; or (b) holds no SC TAG assignments, but does hold one or more Work Group (WG) or other subsidiary TAG assignments.

Academic Institution

This category is for organizations that include educational institutions, higher education schools or research programs.

Other

This category includes all organizations who do not meet the criteria defined in one of the other interest categories.

Membership in the INCITS Executive Board is open to all directly and materially affected parties in accordance with INCITS membership rules. To find out more about participating on the INCITS Executive Board, please contact Jennifer Garner at 202-626-5737 or jgarner@itic.org. Visit www.INCITS.org for more information regarding INCITS activities.

Calls for Members

Society of Cable Telecommunications

ANSI Accredited Standards Developer

SCTE, an ANSI-accredited SDO, is the primary organization for the creation and maintenance of standards for the cable telecommunications industry. SCTE's standards mission is to develop standards that meet the needs of cable system operators, content providers, network and customer premises equipment manufacturers, and all others who have an interest in the industry through a fair, balanced and transparent process.

SCTE is currently seeking to broaden the membership base of its ANS consensus bodies and is interested in new members in all membership categories to participate in new work in fiber-optic networks, advanced advertising, 3D television, and other important topics. Of particular interest is membership from the content (program and advertising) provider and user communities.

Membership in the SCTE Standards Program is open to all directly and materially affected parties as defined in SCTE's membership rules and operating procedures. More information is available at www.scte.org or by e-mail from standards@scte.org.

ANSI Accredited Standards Developers

Approval of Reaccreditation

ASC Z540 – Standards Writing Group for Metrology and Testing

The reaccreditation of Accredited Standards Committee Z540, Standards Writing Group for Metrology and Testing has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on ASC Z540-sponsored American National Standards, effective August 1, 2016. For additional information, please contact the Secretariat of ASC Z540: Mr. Craig Gulka, Executive Director, NCSL International, 5766 Central Avenue, Suite 150, Boulder, CO 80301; phone: 303.440.3385; e-mail: cgulka@ncsli.org.

National Institute of Standards and Technology/Information Technology Laboratory (NIST/ITL)

The reaccreditation of the National Institute of Standards and Technology/Information Technology Laboratory (NIST/ITL), an ANSI Member and Accredited Standards Developer, has been approved at the direction of ANSI's Executive Standards Council under NIST/ITL's recently revised operating procedures for documenting consensus on NIST/ITL-sponsored American National Standards, effective August 4, 2016. For additional information, please contact: Mr. Michael D. Hogan, Standards Liaison, National Institute of Standards and Technology/Information Technology Laboratory, 100 Bureau Drive, Stop 8900, Gaithersburg, MD 20899-8900; phone: 301.975.2926; e-mail:

m.hogan@nist.gov.

International Organization for Standardization (ISO)

Establishment of ISO Subcommittee

ISO/TC 20/SC 18 - Materials

ISO/TC 20 – Aircraft and space vehicles has created a new ISO Subcommittee on Materials (ISO/TC 20/SC 18) The Secretariat has been assigned to France (AFNOR).

ISO/TC 20/SC 18 operates under the following scope:

Standardization of materials and related processes (e.g. : surface treatment/coating, defects in composites...) used by aircraft and engine manufacturers,

- Excluded materials: ISO/TC 35 Paints and varnishes, ISO/TC 17 Steel, ISO/TC 25 Cast irons and pig irons, ISO/TC 26 Copper and copper alloys, ISO/TC 45 Rubber and rubber products, ISO/TC 79 Light metals and their alloys, ISO/TC 155 Nickel and nickel alloys, ISO/TC 206 Fine ceramics...,
- Excluded processes: ISO/TC 44/WG 4 Welding and brazing in aerospace, ISO/TC 107 Metallic and other inorganic coatings, ISO/TC 156 Corrosion of metals and alloys, ISO/TC 244 Industrial furnaces and associated processing equipment, ISO/TC 261 Additive manufacturing.

Organizations interested in serving as the U.S. TAG Administrator or participating on the U.S. TAG should contact ANSI's ISO Team (isot@ansi.org).

ISO/TC 282/SC 4 - Industrial Water Reuse

ISO/TC 282—Water reuse has created a new ISO Subcommittee on Industrial water reuse (ISO/TC 282/SC 4). The Secretariat has been assigned to China (SAC).

ISO/TC 282/SC 4 operates under the following scope:

Standardization in the field of industrial water reuse, include the following:

- Classification of industrial wastewater treatments;
- Industrial wastewater pre-treatment (before treatment plant) and/or treatment in industrial wastewater plant;
- Management and development of industrial wastewater for reuse as a water source in industrial plants, which excludes the municipal treated wastewater use as a water source in industrial plants;
- Aspects of technology, economy, management and energy consumption of industrial wastewater reuse.

Organizations interested in serving as the U.S. TAG Administrator or participating on the U.S. TAG should contact ANSI's ISO Team (isot@ansi.org).

New Work Item Proposal

Wheeled Child Conveyances

Comment Deadline: August 26, 2016

AFNOR, the ISO member body for France, and SAC, the ISO member body for China, have jointly submitted to ISO a new work item proposal for the development of an ISO standard on Wheeled Child Conveyances, with the following scope statement:

Standardization deliverable in the field of wheeled child conveyances designed for the carriage of one or more children. It covers safety requirements and test methods.

Excluded: toys, shopping trolleys, baby carriers fitted with wheels, wheeled child conveyances propelled by a motor and wheeled child conveyances designed for children with special needs.

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, August 26, 2016.

ISO Proposal for a New Field of ISO Technical Activity

Remanufacturing Technology

Comment Deadline: September 2, 2016

SAC, the ISO member body for China, has submitted to ISO a proposal for a new field of ISO technical activity on Remanufacturing Technology, with the following scope statement:

Standardization and coordination of remanufacturing technology, including remanufacturing terminology standards and generic technology standards for remanufacturing processes, such as dismantling, cleaning, inspection, coating preparation, forming processing and assembly. The scope of the new TC does not include the relevant areas of TC 127 and TC 67/SC4.

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, September 2, 2016.

ISO Proposal for a New Field of ISO Technical Activity

Remanufacturing Technology

Comment Deadline: September 2, 2016

SAC, the ISO member body for China, has submitted to ISO a proposal for a new field of ISO technical activity on Remanufacturing Technology, with the following scope statement:

Standardization and coordination of remanufacturing technology, including remanufacturing terminology standards and generic technology standards for remanufacturing processes, such as dismantling, cleaning, inspection, coating preparation, forming processing and assembly. The scope of the new TC does not include the relevant areas of TC 127 and TC 67/SC4.

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, September 2, 2016.

U.S. Technical Advisory Groups

Approval of TAG Recognition

U.S. TAG to ISO TC 255 – Biogas

ANSI's Executive Standards Council (ExSC) has formally approved the accreditation of the U.S. Technical Advisory Group to ISO TC 255, Biogas under the Model Operating Procedures for U.S. Technical Advisory Groups to ANSI for ISO Activities (Annex A of the ANSI International Procedures) with the American Society of Agricultural and Biological Engineers (ASABE) serving as TAG Administrator, effective August 3, 2016. For additional information, please contact: Mr. Scott Cedarquist, Director, Standards & Technical, American Society of Agricultural and Biological Engineers, 2950 Niles Road, St. Jospeh, MI 49085-9659; phone: 269.932.7031; e-mail: cedarq@asabe.org.

Meeting Notices

AHRI Meeting

Revision of ANSI/AHRI Standard 1230, Performance Rating of Variable Refrigerant Flow Multi-Split Air Conditioning and Heat Pump Equipment

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) will be holding a face-to-face meeting at AHRI headquarters in Arlington, Va., on August 22-23 from 9 a.m. to 5 p.m. If you are interested in participating in the meeting or providing comments on the standard, please contact AHRI staff member Richie Mohan at rmohan@ahrinet.org.

RIA Meeting

Robotics Industries Association (RIA)

ANSI-Accredited Group: ANSI R15.08, Subcommittee on Industrial Mobile Robot Safety.

What: Meeting #2 of 2016

Day/Date: Friday, October 21, 2016

Time: 12:30 – 4:00 PM EDT Where: Cincinnati, OH

Purpose:

- 1) Update on other ANSI R15 activities
- 2) Develop final recommendation on scope, goals of the committee
- Identify gaps among existing standards in the area of mobile robotics

For more information, contact: Carole Franklin, at cfranklin@robotics.org.

Information Concerning

ANSI Accredited Standards Developers

Application for Accreditation

Licensing Executives Society (U.S.A. and Canada), Inc.

Comment Deadline: September 12, 2016

The Licensing Executives Society (U.S.A. and Canada), Inc., a new ANSI member in 2016, has submitted an application for accreditation as an ANSI Accredited Standards Developer (ASD) and proposed operating procedures for documenting LES-sponsored *American National Standards*. LES's proposed scope of standards activity is as follows:

The key purposes of the LES standards development activities are the following:

- Raise the standards of business conduct in IP-oriented transactions
- Improve the practice of IP management and by doing so mitigate its risks
- Reduce the cost and time required to do IP-oriented transactions and IP management
- Protect and preserve the value of IP for innovative individuals and enterprises

The scope of the work is all of IP management (The focus right now is on Management Systems Standards). LES intends for the standards it develops to be relevant and useful internationally. When we use the term "IP," we are actually referring to intangible property generally or what some people call intellectual capital. In other words, we are not limiting our application of standards development disciplines only to patents, copyrights, trademarks and trade dress, and trade secrets. We are also including management of knowhow, proprietary, confidential, and commercial information, enterprise processes, financial information, enterprise strategies, and any other non-public information or ways of doing business belonging to an enterprise.

The standards that LES intends to develop will apply, for example, to the behavior of parties to a transaction involving intellectual capital – whether licensing or assignment of rights – the valuation of the intellectual capital, the development and securing of rights to intellectual property capital, the sharing and use of IP in commercial transactions, and the protection of (whether through legal or business process means of own-enterprise or other-enterprise) intellectual capital.

To obtain a copy of LES's application and proposed operating procedures or to offer comments, please contact: Ms. Kelli Baxter, Executive Director, COO, Licensing Executives Society (USA and Canada), Inc., 12100 Sunset Hills Road, Suite 130, Reston, VA 20190; phone: 703.234.4088; E-mail: kbaxter@les.org. Please submit any comments to LES by **September 12**, **2016**, with a copy to the ExSC Recording Secretary in ANSI's New York Office (E-mail: Jthompso@ANSI.org). As the proposed procedures are available electronically, the public review period is **30 days**. You may view or download a copy of LES's proposed operating procedures from ANSI Online during the public review period at the following URL:www.ansi.org/accredPR.

Information Concerning

International Organization for Standardization (ISO)

Call for International (ISO) Secretariat

ISO/TC 180/SC 4 – Systems - Thermal performance, reliability and durability

Reply Deadline: September 8, 2016

Currently, the U.S. holds a leadership position as Secretariat of ISO/TC 180/SC 4 – *Systems - Thermal performance, reliability and durability.* ANSI has delegated the responsibility for the administration of the Secretariat for ISO/TC 180/SC 4 to the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE). ASHRAE has advised ANSI of its intent to relinquish its role as delegated Secretariat for this committee.

Development of standards in the field of Systems – Thermal performance, reliability and durability within the scope of ISO/TC 180:

Standardization in the field of solar energy utilization in space and water heating, cooling, industrial process heating and air conditioning.

ANSI is seeking organizations in the U.S. that may be interested in assuming the role of delegated Secretariat for ISO/TC 180/SC 4. Alternatively, ANSI may be assigned the responsibility for administering an ISO Secretariat. Any request that ANSI accept the direct administration of an ISO Secretariat shall demonstrate that:

- 1. The affected interests have made a financial commitment for not less than three years covering all defined costs incurred by ANSI associated with holding the Secretariat;
- 2. The affected technical sector, organizations or companies desiring that the U.S. hold the Secretariat request that ANSI perform this function;
- The relevant U.S. TAG has been consulted with regard to ANSI's potential role as Secretariat; and
- 4. ANSI is able to fulfill the requirements of a Secretariat.

If no U.S. organization steps forward to assume the ISO/TC 180/SC 4 Secretariat, or if there is insufficient support for ANSI to assume direct administration of this activity by **Friday**, **September 8, 2016**, then ANSI will inform the ISO Central Secretariat that the U.S. will relinquish its leadership of the committee. This will allow ISO to solicit offers from other countries interested in assuming the Secretariat role.

Information concerning the United States retaining the role of international Secretariat may be obtained by contacting ANSI's ISO Team (<u>isot@ansi.org</u>).



BSR/ASHRAE Addendum b to ANSI/ASHRAE Standard 161-2013

Public Review Draft

Proposed Addendum b to Standard 161-2013, Air Quality within Commercial Aircraft

First Public Review (August 2016)
(Draft shows Proposed Changes to Current Standard)

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at www.ashrae.org/standards-research--technology/public-review-drafts and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at www.ashrae.org/bookstore or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

This standard is under continuous maintenance. To propose a change to the current standard, use the change submittal form available on the ASHRAE website, www.ashrae.org.

The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, or design, and ASHRAE expressly disclaims such.

© 2016 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: standards.section@ashrae.org.

ASHRAE, 1791 Tullie Circle, NE, Atlanta GA 30329-2305

BSR/ASHRAE Addendum b to ANSI/ASHRAE Standard 161-2013, Air Quality within Commercial Aircraft Ligust 12, 2016 - Page 54 of 73 Pages First Public Review Draft

(This foreword is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard. It has not been processed according to the ANSI requirements for a standard and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.)

FOREWORD

This proposed addendum updates the normative references and revises Section 8.10 (formerly titled "Pesticides") with more emphasis on non-chemical methods of insect control on aircraft.

Note: In this addendum, changes to the current standard are indicated in the text by <u>underlining</u> (for additions) and <u>strikethrough</u> (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum b to Standard 161-2013

Revise Section 4 as shown below.

4. COMPLIANCE

To comply with this standard, the requirements of Sections 5, 6, 7, 8, and 9 shall be met. This standard is intended to be independent of specific aircraft systems and equipment. Applying this standard requires some knowledge of common aircraft environmental control systems and equipment.

Descriptions of common environmental controls systems and equipment may be found in Chapter 1012 of the 20072015 ASHRAE Handbook—HVAC Applications.³

Revise Section 5.2 as shown below. The remainder of Section 5.2 is unchanged.

5.2 Temperature. Temperature design and operating requirements for thermal comfort in the aircraft cabin are specified in Table 5.2. The criteria are based on aircraft environmental control system (ECS) engineering design experience and on ANSI/ASHRAE Standard 55-20042013,⁵ including recognition of the influence of occupants' activity level, the proximity to sources of cooling or heating (e.g., doors, galley ovens), and the season of the year on the perception of thermal comfort.

[...]

Revise footnote "a" in Table 5.2 as shown below. The remainder of Table 5.2 is unchanged.

a. See ANSI/ASHRAE Standard 55-20042013⁵ for measurement and calculation of operative temperatures in this table.

Revise Section 6.3.3 as shown below.

6.3.3 Building Air Quality. If the source of supply air during ground operations is the interior of the airport terminal or some other building, then the air in the building space from which the air is drawn shall meet the requirements of ANSI/ASHRAE Standard 62.1-20042016.8

Revise Section 8.10, as shown below. The remainder of Section 8.10 is unchanged.

8.10 Pesticides Disinsection Methods to Comply With Relevant Quarantine Regulations

Operation	a. To ensure that <u>disinsection is justified</u> spraying is necessary, governments that enforce					
	spraying disinsection rules on arriving aircraft shall be asked for documentation according					
	to ICAO Standard 2.23 ²² at least annually on the threats posed by imported insects, at					
	least annually.					

BSR/ASHRAE Addendum b to ANSI/ASHRAE Standard 161-2013, Air Quality within Commercial Aircraft ugust 12, 2016 - Page 55 of 73 Pages First Public Review Draft

- b. When the aircraft systems permit, air packs shall be operated with the highest available flow of outside air during the 24 hours following residual application, when occupied. (See U.S. Navy Shipboard Pest Control Manual²³²¹ for related information.)
- c. Air packs shall be operated on the highest flow setting after in-flight spraying.
- d. <u>Non-chemical methods of disinsection are preferred</u>, but if chemical methods are used then <u>Rr</u>outing schedules of sprayed aircraft shall be reviewed <u>with the intent and should</u> be modified to minimize the number of pesticide applications and minimize the number of residually treated aircraft operated on <u>domestic</u> flights <u>that do not require disinsection</u> (Sutton et al., 2007 <u>CADHS 2003</u>)²⁴²².

Revise Section 9.1 as shown below.

9.1 Thermal Measurements. Thermal environmental parameters, including air temperature, surface temperatures, operative temperature, relative humidity, and air speed shall be determined in accordance with Section 7 of ANSI/ASHRAE Standard 55-20042013, *Thermal Environmental Conditions for Human Occupancy*.

Revise Section 10 as shown below. Renumber the references as applicable.

10. REFERENCES

- 1. FAA, 1996. Code of Federal Regulations, Title 14 Aeronautics and Space, U.S. Federal Aviation Administration, Department of Transportation, Part 25 Airworthiness Standards: Transport Category Airplanes. Although the scope of this standard references 14CFR25 to define the category of aircraft to which the standard applies, it is not intended to exclude aircraft of the same category certified in other jurisdictions.
- 2. FAA Airworthiness Inspector's Handbook, Order 8300:10, Volume 2, Chapter 60, Section 5, US Federal Aviation Administration, Department of Transportation, US Government Printing Office, Washington, DC, October, 2006.
- 3. <u>2007</u>2015 *ASHRAE Handbook—HVAC Applications*, Chapter <u>10</u>12, Aircraft, American Society of Heating, Refrigerating and Air-Conditioning Engineers, Atlanta.
- 4. FAA, 1996. Code of Federal Regulations, Title 14 Aeronautics and Space, U.S. Federal Aviation Administration, Department of Transportation, Part 25, Airworthiness Standards: Transport Category Airplanes, Section 841, Pressurized Cabins, Amdt. 25-87, U.S. Government Printing Office, Washington, DC.
- 5. ANSI/ASHRAE Standard 55-20042013, *Thermal Environmental Conditions for Human Occupancy*, American Society for Heating, Refrigerating and Air-Conditioning Engineers, Atlanta.
- 6. IEST-RP-C0007.2<u>CC007.2</u>: Institute of Environmental Science and Technology, *Recommended Practice for Efficiency Test Method for High Efficiency Filters*-Testing ULPA Filters, 940 East Northwest Highway, Mt. Prospect, IL 60056, 2007.
- 7. EN-1822-1: European Standard High Efficiency Air Filters (<u>EPA</u>, HEPA and ULPA)—Part 1: *Classification*, *Performance Testing*, *Markings*. CEN Central Secretariat: rue de Strassart, 36, B-1050 Brussels, <u>2009 Edition</u>.
- 8. ANSI/ASHRAE Standard 62.1-20042016, *Ventilation for Acceptable Indoor Air Quality*, American Society for Heating, Refrigerating and Air-Conditioning Engineers, Atlanta.
- 9. FAA, 1998. Code of Federal Regulations, Title 14 Aeronautics and Space, U.S. Federal Aviation Administration, Department of Transportation, Part 25, Airworthiness Standards: Transport Category Airplanes, Section 832 Cabin Ozone Concentration, Amdt. 25-94, U.S. Government Printing Office, Washington, DC.

- 10. FAA, 1996. Code of Federal Regulations, Title 14 Aeronautics and Space, U.S. Federal Aviation Administration, Department of Transportation, Part 121, Operating Requirements: Domestic, Flag and Supplemental Operations, Section 578 Cabin Ozone Concentration, Amdt. 121-251, U.S. Government Printing Office, Washington, DC.
- 11. FAA, 1980. U.S. Federal Aviation Administration, Department of Transportation. Advisory Circular 120-38: *Transport Category Airplanes Cabin Ozone Concentrations*. U.S. Government Printing Office, Washington, DC.
- 12. SHK, 2001. Report RL 2001:41e "Accident investigation into incident onboard aircraft SE-DRE during flight between Stockholm and Malmö M county, Sweden. Case L-102/99." Statens Haverikommission Board of Accident Investigation, Stockholm, Sweden.
- 13. NIOSH, 2004. U.S. National Institute for Occupational Safety & Health, Department of Health & Human Services. NIOSH Publication 2005-100: *Respirator Selection Logic*, Chapter III: Respirator Selection Logic Sequence. Cincinnati, OH.
- 14. FAA, 2000. U.S. Federal Aviation Administration, Department of Transportation. Advisory Circular 150-5300-14: *Design of Aircraft Deicing Facilities*; see also earlier versions published in 1993 and 1999. U.S. Government Printing Office, Washington, DC.
- 15. OSHA, 1996. U.S. Occupational Safety and Health Administration, Department of Labor Code of Federal Regulations Title 29, Subpart Z (Toxic and Hazardous Substances), Standard 1910.1200: Hazard communication (61CFR5507) Washington, DC.
- 156. FAA, 1996. Code of Federal Regulations, Title 14 Aeronautics and Space, U.S. Federal Aviation Administration, Department of Transportation, Part 382, Operating Requirements: Domestic, Flag and Supplemental Operations, Section 51: Communicable diseases. U.S. Government Printing Office, Washington, DC.
- 167. FAA, 2001. Code of Federal Regulations, Title 14 Aeronautics and Space, U.S. Federal Aviation Administration, Department of Transportation, Part 121, Operating Requirements: Domestic, Flag and Supplemental Operations, Section 801: Crewmember training for in-flight medical events. U.S. Government Printing Office, Washington, DC.
- 178. CDC, 2003. Code of Federal Regulations, Title 42 Public Health, U.S. Centers for Disease Control and Prevention, Department of Health and Human Services, Part 71, Foreign Quarantine, Section 1: Definitions. U.S. Government Printing Office, Washington, DC.
- 189. CDC, 2003. Code of Federal Regulations, Title 42 Public Health, U.S. Centers for Disease Control and Prevention, Department of Health and Human Services, Part 71, Foreign Quarantine, Section 21: Radio report of death or illness. U.S. Government Printing Office, Washington, DC.
- <u>1920</u>. CDC 2005. *Guidance about SARS for Airline Flight Crews, Cargo, and Cleaning Personnel, and Personnel Interacting with Arriving Passengers*. U.S. Centers for Disease Control and Prevention, Department of Health and Human Services, Atlanta, GA.
- 204. ICAO, 2004. 12th Meeting of the Facilitation (FAL) Division of the International Civil Aviation Organization, Working Paper 117 (FAL/12-WP/117), Cairo, Egypt.
- 22. ICAO, 2002. 11th Ed., Annex 9 to the Convention on International Civil Aviation: Facilitation, Section D. "Disinsection of aircraft." Montreal, Canada.
- 2<u>1</u>3. DOD, 2003. *U.S. Navy Shipboard Pest Control Manual*, Chapter 2: Shipboard Pests. U.S. Navy Disease Vector Ecology Control Center, Department of Defense, Bangor, WA.

BSR/ASHRAE Addendum b to ANSI/ASHRAE Standard 161-2013, Air Quality within Commercial Aircraft Ligust 12, 2016 - Page 57 of 73 Pages First Public Review Draft

- 224. CADHS, 2003. California Department of Health Services Occupational Health Branch (2003) *Investigative report:* Occupational illness among flight attendants due to aircraft disinsection, Oakland, CA. Sutton, PM; Vergara, X; Beckman, J et al. "Pesticide illness among flight attendants due to aircraft disinsection," Am J Ind Med, 50: 345-56, 2007.
- 235. IATA, 2006. *Dangerous Goods Regulations*, 47th Edition. International Air Transport Association, Geneva, Switzerland.
- 246. ICAO, 2005. Document 9284-AN/905: *Technical Instructions For The Safe Transport of Dangerous Goods By Air.* International Civil Aviation Organization, Montreal, Canada.



BSR/ASHRAE Addendum c to ANSI/ASHRAE Standard 161-2013

Public Review Draft

Proposed Addendum c to Standard 161-2013, Air Quality within Commercial Aircraft

First Public Review (August 2016)
(Draft shows Proposed Changes to Current Standard)

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at www.ashrae.org/standards-research--technology/public-review-drafts and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at www.ashrae.org/bookstore or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

This standard is under continuous maintenance. To propose a change to the current standard, use the change submittal form available on the ASHRAE website, www.ashrae.org.

The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, or design, and ASHRAE expressly disclaims such.

© 2016 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: standards.section@ashrae.org.

ASHRAE, 1791 Tullie Circle, NE, Atlanta GA 30329-2305

BSR/ASHRAE Addendum c to ANSI/ASHRAE Standard 161-2013, Air Quality within Commercial Air Craft Bugust 12, 2016 - Page 59 of 73 Pages First Public Review Draft

(This foreword is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard. It has not been processed according to the ANSI requirements for a standard and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.)

FOREWORD

The proposed addendum references a 2015 ICAO document regarding airline worker education/training relevant to onboard fume events, and revises Section 8.10 (formerly titled "Pesticides") with more emphasis on non-chemical methods of insect control on aircraft.

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and strikethrough (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum c to Standard 161-2013

Revise Section 8.1 as shown below. The remainder of Section 8.1 is unchanged.

8.1 Introduction

[...]

In many cases, to implement these provisions, it will be necessary to train relevant personnel, which may include the mechanics, ground staff, flight attendants, and pilots; see ICAO, 2015(a)²⁷ for guidance. [...]

Revise Section 8.2 as shown below. The remainder of Section 8.2 is unchanged.

Remedies a. Responsible employees shall be given training, supplies, and time to clean contaminated surfaces in order to mitigate potential health hazards associated with crew or passenger contact; see ICAO, 2015(a)²⁷ for guidance.

Revise Section 8.10 as shown below. The remainder of Section 8.10 is unchanged.

Design

The availability, feasibility, and efficacy of non-chemical disinsection methods (e.g., air curtains) should be evaluated and, working with countries that require disinsection and with the World Health Organization, approval for these methods should be sought, as recommended in FAL/12 WP/117 (ICAO, 2001). Non-chemical disinsection methods (e.g., air curtains and net doors) that are at least as effective as currently-approved chemical methods should be utilized on aircraft in operation, both to prevent the transport of insects that carry vector-borne disease, and to prevent aircraft occupant exposure to insecticides. Any disinsection method must first be approved by the World Health Organization, per ICAO Standard 2.25 (ICAO, 2015(b))²¹.

Maintenance a.

- Non-chemical disinsection methods are preferred, but if chemical methods are used then, I if a country will accept application on an unoccupied aircraft, then this method shall be applied instead of inflight application.
- b. Non-chemical disinsection methods are preferred, but if chemical methods are used then, Ffor disinsecting an unoccupied aircraft (e.g., residual or blocks-away application), a program to ensure that the aircraft is properly vented following pesticide application shall be developed, implemented, and enforced, such that the surfaces (including the flight deck, galleys, seats, crew rest areas and overhead bins) are dry and all areas of the cabin are odor free before crew members and passengers are expected

BSR/ASHRAE Addendum c to ANSI/ASHRAE Standard 161-2013, Air Quality within Commercial AirCraft Pugust 12, 2016 - Page 60 of 73 Pages First Public Review Draft

- to board. For reference, the U.S. Navy requires that their submarines are ventilated and unoccupied for 24 hours following residual pesticide application.
- c. Non-chemical disinsection methods are preferred, but if chemical methods are used then crew rest areas (including Mmattresses and bedding) in the crew rest areas, bassinets, and food preparation areas shall not be sprayed. be treated off the aircraft and left until completely dry for a minimum of three days before being returned to the aircraft.

Revise Section 10 as shown below. The remainder of Section 10 is unchanged.

10. REFERENCES

[...]

- 21. ICAO, 2004. 12th Meeting of the Facilitation (FAL) Division of the International Civil Aviation Organization, Working Paper 117 (FAL/12-WP/117), Cairo, Egypt.
- 21. ICAO, 2015b. "Annex 9 to the Convention on International Civil Aviation: Facilitation," 14th Edition, International Standards and Recommended Practices. International Civil Aviation Organization, Montreal, Canada, Oct. 2015.

[...]

27. ICAO, 2015a. "Circular 344: Guidelines on Education, Training, and Reporting Practices related to Fume Events," Cir. 344- AN/202, International Civil Aviation Organization, Montreal, Canada, Nov. 2015.

Revision to NSF/ANSI 49-2014 Issue 96, Draft 1 (August 2016)

Not for publication. This document is part of the NSF International standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

[Note – the changes are illustrated below using strikeout for proposed removal of existing text and gray highlights to indicate the proposed new text. ONLY the highlighted text and strikeout text is within the scope of this ballot. Rationale Statements are in RED and only used to add clarity; these statements will NOT be in the finished publication]

NSF/ANSI - 49 Biosafety Cabinetry: Design, Construction, Performance, and Field Certification

•

•

Annex A

(normative)

•

A.6 Personnel, product, and cross-contamination protection (biological) tests

•

Method C

- a) Aseptically subculture from a stock culture of *B. atrophaeus* ATCC 9372 displaying characteristic orange pigmentation to tryptic soy broth (TSB).
- b) Incubate for 24 h at 95-99°F (35-37°C).
- Aseptically inoculate Roux flasks containing fortified nutrient agar (NA) with the TSB culture.
- d) Incubate inverted Roux flasks at 95-99°F (35-37°C). Check progress of sporulation for development of mature spores; a phase contrast microscope will show mature spores as phase bright. For *B. atrophaeus* 9372, 95% mature spores are generally obtained in 5 days.
- e) Harvest spores by adding cold sterile deionized water (CSDW) to each flask and washing the bacteria from the agar surface; transfer harvest to sterile centrifuge bottles.
- f) Wash spores three times in CSDW by centrifugation at 10,000-12,000 rpm in a refrigerated super centrifuge at 50°F (10°C).
- g) After the final wash, suspend spores in aqueous ethanol.
- h) Determine spore concentration by standard dilution-plate methods using PBS and TSA.
- i) Incubates plates for 48 ± 2 h at 95-99°F (35-37°C).
- j) Dilute the spore suspension with PBS to obtain a final spore concentration of 5 x 108 to 8 x 108/ml.

Revision to NSF/ANSI 49-2014 Issue 96, Draft 1 (August 2016)

Not for publication. This document is part of the NSF International standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

k) Store the stock spore suspension at 39°F (4°C) or divide into aliquots to store in sterile screw-cap vials at -94°F (-70°C). Make frequent checks of spore viability by surface plating and of spore predominance by an acceptable spore staining technique.

Method D

- a) Aseptically inoculate (by streak plating technique) characteristic orange pigmented *B. atrophaeus* 9372 culture to several TSA petri plates.
- b) Incubate for 1-3 days at 86-95°F (30-35°C).
- c) Remove characteristic (pigmented dark orange) colonies and transfer to fortified Nutrient Agar petri plates.
- d) Incubate plates at 86-95°F (30-35°C) until 95% spores have formed. Periodically verify sporulation using phase contrast microscopy. Do not harvest until 95% of cells have formed phase bright spores.
- Harvest spores by adding sterile deionized (DI) water to each plate and gently washing growth from the agar surface. Transfer spores to sterile centrifuge bottles.
- f) Wash spores three times in sterile DI water by centrifugation at 4,000 rpm for 30 minutes.
- g) Add 10-15 mL of sterile DI water to each tube and vortex to re-suspend spores.
- h) Heat the stock culture suspension at 167-185°F (75-85°C) for 20 minutes.
- i) Sonicate the spore suspension for 10 minutes at 60% intensity.
- j) Wash spores three times in sterile DI water by centrifugation at 4,000 rpm for 30 minutes. Resuspend in sterile DI water and add sterile glass beads after final wash.
- k) Determine spore concentration by standard dilution-plate methods using PBS and TSA.
- I) Incubate the plates for 2-3 days at 86-95°F (30-35°C).
- m) Dilute the spore suspension with PBS to obtain a final spore concentration of 5 x 10⁸ to 8 x 10⁸/ml.
- Store the stock spore suspension at 39°F (4°C) or divide into aliquots to store in sterile screw-cap vials at -94°F (-70°C). Make frequent checks of spore viability by surface plating and of spore predominance by an acceptable spore staining technique.

Revision to NSF/ANSI 350 - 2014 Issue 12, Revision 1 (July 2016)

Not for publication. This document is part of the NSF International standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

NSF/ANSI 350 - Onsite Residential and Commercial Water Reuse Treatment Systems

- •
- •
- •

8.1.2.2.2.5 Cleaning chemical stress: graywater commercial treatment systems

During final 4.5 wk (31 d) of design loading, the system shall be subjected to an additional load amount of cleaning compounds during the dosing period of 9:00 p.m. to 10:00 p.m. During the 7:00 a.m. to 5:00 p.m. dosing period, the system shall be dosed with 90 % of its daily hydrolic capacity with the graywater challenge specified in 8.1.2.1.3; and during the dosing period of 9:00 p.m. to 10:00 p.m, dosing shall be 10 % of its rated daily hydrolic capacity. Dosing shall consist of the base water as described in 8.1.2.1 in addition to the cleaning compound at the following concentration:

Cleaning compound	Amount				
trisodium phosphate (TSP) ¹	750 mL/100 L of base water				
test dust ²¹	10 /100 L of base water				

¹⁻See Annex C for example products.

Rationale:

Language in the chemical stress section uses the term "additional load". A reasonable person could read this and interpret it to mean that additional wastewater would be added during the stress. However, this is not the current interpretation of this language that NSF has made. The current interpretation is that the test dust and trisodium phosphate are added to the <u>base water</u> at the concentrations specified in the table. For example, a system designed to treat 300 liters per day will be dosed with 30 liters during the 9 to 10 p.m. dosing period. This means that 3 grams of test dust will be added to the 30 liters of the base water described in section 8.1.2.1. It appears that you would also add 225 mL of a solution of trisodium phosphate or perhaps 225 grams of trisodium phosphate. The graywater challenge specified in 8.1.2.1.3 would be added during the 7:00 a.m. to 5:00 p.m. dosing period but not during the 9:00 p.m. to 10:00 p.m. dosing period when just the trisodium phosphate, test dust, and base water are added. The reference to Annex C for example products doesn't make sense as Annex C only state "analytical grade".

Page 1 of 1

^{1 &}lt;sup>2</sup> See ISO 12103-1, Road Vehicles – Test Dust for Filter Evaluation. The test dust shall meet the specification of ISO 12103-1, A2 - Fine test dust. A test dust that meets these specifications is available from Powder Technology, Inc., PO Box 1464, Burnsville, MN 55337

<www.powdertechnologyinc.com/products/test-dust/testdust.php>.

BSR/UL 746A, Standard for Polymeric Materials – Short Term Property Evaluations

1. Revision of Lab Environment Conditions for Ignition and HVTR Tests in UL 746A

PROPOSAL

25 High-Voltage Arc-Tracking-Rate Performance Level Categories of Solid Insulating Materials

25.3 Specimens

25.3.1 The specimens are to be three bars 125 ± 5 mm long by 13.0 ± 0.5 mm wide. For a standard comparison of materials, each specimen is to be 3.18 ± 0.25 mm (0.125 ± 0.010 inch) thick. Thin materials are to be tested by first clamping them together to form a specimen as close to 3.2 mm (1/8 inch) thick as possible. All specimens are to be tested at 23.0 $\pm 2.0^{\circ}$ C (73.4 $\pm 3.6^{\circ}$ F) and 50 ± 10 in a laboratory atmosphere of 25.0 $\pm 10.0^{\circ}$ C and ≤ 75 percent relative humidity. All specimens are to be maintained at the test conditions for a minimum of 40 hours 23 $\pm 2^{\circ}$ C and 50 ± 10 percent relative humidity for a minimum of 48 hours prior to testing. Once removed from the pre-conditioning environment, specimens shall be tested within 30 minutes.

RESISTANCE TO IGNITION OF POLYMERIC MATERIALS

- 31.1 (No change For Reference Only) Sections 32 35 cover test methods for the determination of the resistance of polymeric materials to ignition from electrical sources. They can be applied to other nonmetallic materials if found to be applicable.
- 31.2 (No change For Reference Only) The tests can be useful in judging the acceptability of a material for a particular application, in comparing the resistance to ignition characteristics of different materials, or in determining the ability of a material to comply with a defined level of ignition resistance.
- 31.3 (No change For Reference Only) These requirements do not cover large masses of materials when used as building materials.
- 31.4 Specimens are to be tested following conditioning for a minimum of 48 hours at 23 ±2°C and 50 ±10 percent relative humidity. Once removed from the pre-conditioning environment, specimens are to be tested within 30 minutes.
- 31.5 All specimens are to be tested in a laboratory atmosphere of 25 ±10°C and ≤ 75 percent relative humidity.

33.3 Specimen

- 33.3.1 (No change For Reference Only) Standard bar specimens are to be 13.0 mm ±0.5 mm wide by 125 mm ±5 mm long by the thickness to be tested. The maximum thickness is not to exceed 3.3 mm.
 - 33.3.2 Specimens are to be tested following conditioning for a minimum of 48 hours at 23 \pm 2°C (73 \pm 4°F) and 50 \pm 10 percent relative humidity.

34.3 Specimens

34.3.1 The test specimens are to be three bars measuring 125 ±5 mm long by 13.0 ±0.5 mm wide by the thickness to be tested. The specimens are to be tested after 40 hours of exposure at 23.0 ±2.0°C (73.4 ±3.6°F) and 50 ±10 percent relative humidity.

UL copyrighted Indicated. Not authorized for further reproduction

BSR/UL 1088, Standard for Safety for Temporary Lighting Strings

1. Revise standard to allow for temporary lighting strings for indoor use only

- 1.1 These requirements cover temporary lighting strings rated not more than 20 A, 125 V, intended for indoor and or outdoor use to provide temporary illumination during the period of construction, remodeling, maintenance, repair, or demolition of buildings or structures, or similar activities, in accordance with the Canadian Electrical Code (CE Code), Part I, CSA C22.1, Section 76, and the U.S. National Electrical Code (NEC), ANSI/NFPA 70, Article 590.
- 6.10 A <u>Unless a lighting string is marked "Suitable for Indoor, Dry Location Use Only," a</u> self-ballasted lamp provided with a temporary lighting string shall be suitable for damp or wet locations in accordance with the marking required by 44.7 and comply with the applicable requirements in CSA C22.2 No. 1993 / UL 1993.
- 13.7 Except for temporary lighting strings constructed of continuous line to load conductors, a cord connector provided with a temporary lighting string that employs non-replaceable light sources shall be of a nonstandard multiplin configuration and shall comply with the following:
 - a) The applicable requirements of CSA C22.2 No. 42 / UL 498, or CSA C22.2 No. 21 / UL 817, and be suitable for making and breaking under load with respect to the Overload, Temperature, and Resistance to Arcing tests described in CSA C22.2 No. 42 / UL 498.

Exception: A cord connector on a temporary lighting string employing a through cord Power Supply that complies with CAN/CSA-C22.2 No. 223 / UL 1310, need not be evaluated for making and breaking under load.

- b) The pins shall be recessed such that the male and female connectors are mechanically secured prior to any electrical connection.
- c) The connectors shall be subjected to the Water Spray Test, Section 34, in any position where the pins initially make an electrical connection (i.e. the pins are partially inserted and any connector ring or latch may be opened).

Exception: A cord connector marked "Suitable for Indoor, Dry Location Use Only," need not be evaluated for Water Spray Test as indicated in Table 8.

- d) The connector shall be keyed so that the wires are connected to the correct circuit.
- 14.1 Tap or splice insulation shall be at least equivalent to the insulation of the flexible cord or cable to which it is assembled. The properties to be considered in determining the equivalency are its insulating properties, the secureness of insulation, the exclusion of moisture and resistance to sunlight, crushing, and low temperature.

Exception: A lighting string marked "Suitable for Indoor, Dry Location Use Only," need not exclude moisture or have resistance to sunlight properties.

- 15.1 A screw lampholder shall be of the medium or admedium Edison keyless-base weatherproof type or non-weatherproof type for lighting strings marked "Suitable for Indoor, Dry Location Use Only".
- 15.6 The acceptability of an insulating material shall include consideration of the aging characteristics relative to its normal steady-state operating temperatures and its resistance to the effects of sunlight and weather.

Exception: The acceptability of an insulating material for a lighting strings marked "Suitable for Indoor, Dry Location Use Only" shall include consideration of the aging characteristics relative to its normal steady-state operating temperatures.

17.4 A flexible cord employed in a temporary lighting string shall be suitable for outdoor use and have a serviceability rating equal to or greater than that of hard-usage type cords such as SJW, SJEW, SJOW, SJEOW, SJTW, or equivalent power-supply cords.

Exception: A lighting string marked "Suitable for Indoor, Dry Location Use Only" need not meet requirements for outdoor use.

17.5 Cables employed in a temporary lighting string shall be a standard wet-location of:

In Canada:

Type TC cable, or equivalent, additionally complying with the requirements for low-temperature and sunlight-resistant use as applicable to outdoor cords.

In the United States:

Type UF cable, Type TC cable, or equivalent, additionally complying with the requirements for low-temperature and sunlight-resistant use as applicable to outdoor cords.

These cable types are required to be supported by messenger wire and marked in accordance with 44.18 when used overhead.

Exception: A lighting string marked "Suitable for Indoor, Dry Location Use Only" need not meet requirements for outdoor cords in the Water Spray Test, Insulation Resistance Test, and Sunlight Resistance Test, Sections 34 - 36 as indicated in Table 8.

34.4 The water-spray apparatus is to consist of three spray heads mounted as shown in Figure 6. The spray heads are to be constructed in accordance with the details shown in Figure 7. The water pressure is to be maintained at 34.5 kPa (5 lbf/in²) at each spray head. The device is to be positioned in the area of water spray so that the greatest quantity of water is likely to enter the device.

Exception: A lighting string marked "Suitable for Indoor, Dry Location Use Only" need not meet requirements in the Water Spray Test, Section 34 as indicated in Table 8.

35.6 All rubber parts are to be conditioned for at least 48 h at room temperature before being subjected to the above tests.

<u>Exception: A lighting string marked "Suitable for Indoor, Dry Location Use Only" need</u> not meet requirements in the Insulation Resistance Test, Section 35 as indicated in Table 8.

36.4 The specimens are to be mounted vertically on the inside of the cylinder, facing the arcs, and the cylinder is to be rotated about the arcs at 1 rpm. A system of nozzles is to be provided that sprays each specimen in turn with water as the cylinder revolves. The operating cycle is to consist of 102 min of only light and 18 min of light and water. The temperature within the cylinder while the apparatus is in operation is to be 63.0 ±5.0°C (145.4 ±9.0°F), and the test is to be continued until a total of 720 h has elapsed.

Exception: A lighting string marked "Suitable for Indoor, Dry Location Use Only" need not meet requirements in the Sunlight Resistance Test, Section 36 as indicated in Table 8.

- 44.1 A temporary lighting string shall be plainly marked where the marking will be readily visible with:
 - a) The name or trade name of the manufacturer, or other descriptive marking used to identify the organization responsible for the product;
 - b) The electrical rating; and
 - c) The date or other dating period of manufacture not exceeding any three consecutive months. The date of manufacture shall comply with the format in ISO 8601; and
 - d) "Suitable for Indoor, Dry Location Use Only", if applicable.

Table 8

Non-applicable tests for lighting strings marked Suitable for Indoor, Dry Location Use Only

Test	<u>Reference</u>
Water Spraw Test	Section 34
Insulation Resistance Test	Section 35
Suntient Resistance Test	Section 36

BSR/UL 2225, Standard for Safety for Cables and Cable-Fittings for Use in Hazardous (Classified) Locations

1. Revisions to Add Low Ambient Test Requirements to Section 24

PROPOSAL

24.4 For explosion proof and flameproof cable sealing fittings for use in Groups A, B, C or D (minus 58°F), that have been determined to comply with the Explosion Tests requirements in Section 23, the fittings shall be subjected to the Hydrostatic Pressure Test of Carrier the test factor of circuits. aure section don room.

don room, do the test factor of six times the maximum internal explosion pressures (based on room ambient

Summary of BSR MH16.3-201X Changes

Original text: abcdef Added text: abcdef Deleted text: abcdef

1.4.3 Conformance

All rack installations produced in conformity to this specification shall be identified by a plaque having the same characteristics as specified in Section 1.4.2. The same plaque is permitted to be used to show permissible arm loads, <u>maximum number of arm levels</u>, <u>maximum column load and other loading considerations</u>.

1.4.7 Column Base Plates, Column Bases Base, Column-Base Beams and Anchor Bolts

The bottom of all cantilever columns shall be furnished with <u>column</u> bases and <u>f</u>, <u>column-base beams</u> or column base plates, <u>or any combination thereof</u>, capable of transferring loads to the floor slab, as specified in Section 8. All cantilevered storage rack column-base assemblies, shall be anchored to the floor by <u>a minimum of two</u> anchors <u>at or near each end of the base assembly</u>. The anchors shall be capable of withstanding the forces caused by both horizontal and vertical loads on the cantilevered storage rack.

2.1 LOAD COMBINATIONS FOR THE ASD DESIGN METHOD

Revise: When the ASD design method is used, all load factors and combinations shall be as stated in the ASCE 7 [5], as modified below for cantilevered storage racks. If earlier versions of ASCE 7 are used, revise the load factors and combinations accordingly.

2.7.1 Earthquake Forces – General

When customer specifications require, In Seismic Design Category B, C, D, E or local building codes dictate, that F, provisions shall be made to account for earthquake effects and the associated lateral forces, the customer or their representative shall bring such requirements to the attention of the rack manufacturer.

New paragraph: When cantilevered racks are attached to the building or other structures, their seismic design shall include the effects of the other structure on the rack system including the effects on the period of vibration and forces transferred from that structure to the rack as well as forces transferred from the racks to that other structure. The load factors as defined in Section 2 may be used.

2.7.2.1 Redundancy Factor

Add: In load combinations where Ω is used, ρ may be taken as 1.0.

New: 2.7.2.2.3 Seismic Design Parameters

Cantilevered storage rack columns and bases shall use the applicable seismic design parameters, R, Ω_0 , and C_d , in accordance with Table 2.7.2.2.3, in determining the base shear, element design forces and design drift. Detailing requirements shall comply with the applicable reference standards.

TABLE 2.7.2.2.3 –Values of R, Ω_0 AND C_d

	Seismic Design Category	R	Ω_0	C _d	Detailing Requirements
Hot-rolled Steel					
Ordinary Moment Frame (cross-aisle)	B or C	3.0	3	3.0	AISC 360 [2]
Ordinary Moment Frame (cross-aisle) ^b	D, E or F	2.5	2	2.5	AISC 341 [11]

Ordinary Braced Frame (down-aisle)	B or C	3.0	3	3.0	AISC 360 [2]
Ordinary Braced Frame (down-aisle) ^b	D, E or F	3.25	2	3.25	AISC 341 [11]
Cold-formed Steel					
Ordinary Moment Frame (cross-aisle)	B or C	3.0	3	3.0	AISI S100 [1]
Ordinary Moment Frame (cross-aisle) ^a	D, E or F	1.0	1	1.0	AISI S100 [1]
Ordinary Braced Frame (down-aisle)	B or C	3.0	3	3.0	AISI S100 [1]
Ordinary Braced Frame (down-aisle) ^a	D, E or F	1.5	1	1.5	AISI S100 [1]

NOTES -

- a) Cold-formed steel sections that meet the requirements of AISC 341 Table D1.1 are permitted to be designed in accordance with AISC 341.
- b) The column-to-base connection shall be designed to the lesser of M_n of the column or the factored moment at the base of the column for the seismic load case using the overstrength factor.

New: 2.7.3 Displacement-based Method

As an alternate to the Equivalent Lateral Force Method in Section 2.7.2, the seismic design evaluation may be performed using a displacement-based method. The analysis shall account for the upright stiffness, including the base joist stiffness, from properly substantiated testing data. Additional information can be found in Section C2.7.3 of the Commentary.

New: 2.9 OTHER LOADS

Other applicable loads shall be considered in accordance with ASCE 7 [5]. The load combinations in Section 2 of ASCE 7 [5] shall be used for these loads.

3 DESIGN PROCEDURES

Add new paragraph at end: Displacement-based designs shall be based on cyclic testing in accordance with Section 10.4, scaled so that the last displacement target is at least 15% beyond the displacement, where the maximum moment is attained. Analytical methods may only be used if correlated with testing of similar racks.

4.1.2 Design for Flexure

For cantilevered rack columns consisting of two lipped channels welded at the lips, the perforations may be ignored if they are in two rows in the webs, the horizontal or vertical dimension of the holes does not exceed 1.0 inch and the holes are spaced no closer than 3 inches center-to-center. For such members the nominal flexural strength [moment resistance] shall be taken as 0.95 times the Mn determined according Modifications to the provisions of the AISI [1]. S100 [1] for computing the section properties are given in Section 4.1.2 and Section 4.1.3.

5.1 GENERAL

Arms shall be designed for the critical location of all loads for the most unfavorable condition using the load combination as specified in in accordance with Section 2. The location and distribution of the load shall also be considered per in accordance with Section 5.3.5.3

5.3 BENDING MOMENTS

Original text: Bending forces exerted on the arm are a result of downward forces created by uniform loads, point loads, eccentric loads and impact forces or the upward forces imposed by lifting equipment. The arms shall be designed for loads that are symmetrically placed and evenly distributed in the downaisle and cross-aisle directions, unless otherwise notified by the customer. The loads shall be considered equally supported by all arms under the load and the load is evenly distributed from the tip to the rear of the arm.

Revised text: The arm shall be designed for any bending moments exerted on the arm as a result of downward forces in accordance with the load combinations in Section 2.1 or Section 2.2. In addition, the upward forces imposed by lifting equipment, as specified in Section 2.4.2, shall be resisted.

In the absence of other information, the arms shall be designed for loads that are symmetrically placed and evenly distributed in the down-aisle and cross-aisle directions. The loads shall be considered equally supported by all arms under the load and the load is evenly distributed from the tip to the rear of the arm.

When other loading distributions are specified by the customer as in accordance with Section 1.4.1 the bending moment of the arm shall be determined by considering the arm as supported at the column. The permissible load capacity shall be determined by conventional methods of analysis in accordance with AISI S100 [1] or the AISC 360 [2].

5.5 CONNECTION DESIGN

The connection design shall satisfy product downward forces, including impact, and any moment. The arm-to-column connection shall be designed for any bending moments and shear forces exerted on the arm as a result of downward forces in accordance with the load combinations in Section 2.1 or Section 2.2. In addition, the upward forces imposed by lifting equipment, as specified in Section 2.4.2, must be resisted.

6.2.2.3 Fixed-base and Moment-connected Top Tied

Original text: If the base to column connection stiffness and the top tie stiffness, KS > 20EI/L, the effective length for the column in the strong axis shall be taken as 1.5 times the height to the center of gravity of the arm loads, excluding the load on the base beam. For other distributions of loading, KL should be computed by rational analysis consistent with the AISC [2] or AISI [1] Specifications.

Revised text: For cantilever racks with a fixed base and a rigid moment-connected top tie, the effective length should be determined by a properly substantiated rational analysis. Refer to AISC 360 [2] or AISI S100 [1] for methods of design.

6.5 Compression Flange Bracing

If the loads are evenly spaced across a minimum of two (2) arms, then it can be assumed that the column compression flange is laterally braced at these points the location of the arms. A solid shelf, when properly constrained between the load arms, may provide sufficient stiffness as a shear diaphragm for restraint of the compression flange of the column.

6.7 Torsional Restraint

New paragraph: A solid shelf, when properly connected between the load arms, provides sufficient stiffness as a shear diaphragm for torsional restraint of the compression flange of the column.

Summary of BSR 30.3-201X Changes

Original text: abcdef Added text: abcdef Deleted text: abcdef

4.3.2 Warning Labels

<u>Vehicle restraining devices shall be provided with labels in accordance with the ANSI Z535.1 and Z535.4</u> series of standards.

Pertinent cautions and instruction markings for the acceptable operation of the restraining device shall be provided on durable labels. The labels shall be permanently affixed to the restraining device, control box, if applicable, and/or near the restraining device.

5.2 Structural Testing for RIG Vehicle Restraints

e) The test load shall be applied to the same vehicle restraining device five times and be held for a minimum of (2) seconds during each application. The test load applications may should take place without having to reset or move the barrier, except for inspection.

5.3 Structural Testing for Wheel Restraints

d) The test load shall be a horizontal force of not less than 22,500 lbf. (100 KN) static load. The force shall be applied to the same vehicle restraining device five times and be held for (2) seconds during each application. The force applications ean should take place without having to reset or move the barrier except for inspection.