THE CHAIR'S COLUMN

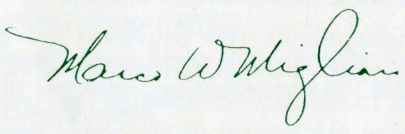
One of the goals of the IEEE Standards Board for this year has been to increase the level of electronic development and distribution of IEEE standards. Although the slow economy has forced the Standards staff to concentrate on immediate publishing issues for much of the year, we are now embarking on a project that will visibly transform our publishing environment in the very near future. This issue of the *IEEE Standards Bearer* contains articles related to the subject.

I was planning to discuss these issues further in this column; however, on August 24, Hurricane Andrew hit south Florida. The eye of the storm was centered on the Turkey Point Generating Station, which consists of two fossil-fueled and two nuclear-fueled units. As many readers know, my participation in IEEE is as a volunteer, but my employer is Florida Power & Light. I am in the staff electrical engineering group in their nuclear division, responsible for projects at both their St. Lucie and Turkey Point nuclear generating stations.

Suddenly, thinking about advanced electronic development and delivery systems seemed impossibly incongruous. Although both nuclear units functioned as designed during and after the hurricane, the entire area surrounding the plant lost electricity, water, and telephone service. I am staying on the nineteenth floor of a hotel that initially had no working elevator and where only cold food is served, knowing I am very fortunate not to be among the many who lost homes, businesses, or worse. All around me I see evidence of the storm's devastation.

As I consider the widespread effects of this disaster, it puts a sobering perspective on my work as an engineer and as a standards volunteer. We've grown so accustomed to living in an electronic age that we only stop to think about what we have when we lose it—and then we realize how dependent we've become on our computers, our fax machines, our phone lines, our traffic signals. Yet nothing is infallible or invulnerable, and natural disasters still have the power to overwhelm us and our electrical and electronics systems.

Despite the disaster, it is to the credit of the people who designed and maintain the facility, and to those volunteers who developed the standards that are used for those purposes, that both nuclear units remained in a safe condition. The IEEE has a mandate to improve the quality of life for all people through the dissemination of its information and technologies. If there is something good that comes out of the devastation in south Florida, it is that engineers can learn from it how to better prepare and protect people. The voluntary standards process, with its emphasis on improving and advancing technology through reaching broad consensus, has and will continue to be a vital means of achieving this goal.



Marco W. Migliaro
Vice-President, IEEE Standards Activities

US Government Study of Global Standards Available

The Office of Technology Assessment (OTA) of the US Congress published a report this past spring, *Global Standards: Building Blocks for the Future,* which should be of interest to everyone involved with standards. The study, which considers how standards are developed and perceived in both the US and Europe, focuses on how the process affects trade.

The OTA finds that "the economic and social stakes in standards are...large." The report recognizes that standards "help determine the efficiency and effectiveness of the economy, the cost, quality, and availability of products and services, and the state of the Nation's health, safety, and quality of life." At the same time, it warns that

> There is a clear need in the United States for greater attention to standards. In an information-based global economy, where standards are not only employed strategically as marketing tools but also serve to interconnect economic activities, inadequate support for the standards setting process will have detrimental effects.

The report also states that cooperation, rather than conflict, must be the rule for standardization in the US; currently, "the...system hides some deep-seated divisions within the standards community itself." These divisions are noticed around the world, especially by the European standards community, and they "weaken the US position internationally."

The report also calls on the US government to "assume a greater role in the future," one that goes beyond its traditional role of monitoring the "fairness and effectiveness of the standards setting processes." The report warns that the US government has continued to avoid policymaking at the Federal level, a problem that will have "serious" consequences in the future. The US government must also begin to use standards "as marketing devices to expand their trading opportunities," something that is already being done by most US competitors.

To read the findings of the OTA in the report, write to the US Government Printing Office, Superintendent of Documents, MS: SSOP, Washington, DC 20402-9328. ◆

Windows to ... ON-LINE STANDARDS

An Argument for Placing Standards on the Internet

by Carl Malamud

Putting standards online is a political issue, not a technical one. Granted, there are problems of authentication and accounting, of file formats and access methods, but the main question is *who* should get access, not *how* to get access. Last year, I became involved in an experiment that demonstrated the potential—and the politics—of on-line standards.

In June 1991, a group of volunteers, headed by myself, approached the Secretary-General of the International Telecommunication Union (ITU) with an offer. At the time, the 1988 version of the International Telegraph and Telephone Consultative Committee (CCITT) standards (the "Blue Book") was stored in a proprietary text-formatting system developed by the ITU. Internal staff estimates had concluded that it would be prohibitively expensive to transfer the data into a more modern text-processing system. We offered to convert their standards, and in exchange for our services, the ITU agreed to an experiment whereby the standards would be posted on the Internet for distribution. Our group did a preliminary conversion of the data and posted the standards on a server at the University of Colorado.

The standards were converted into a variety of formats, ranging from plain ASCII text to WordPerfect to PostScript. Access to the data was through the Anonymous File Transfer Protocol mechanism or via e-mail based requests, and was available to anybody via the Internet or through any system connected to the Internet with a mail gateway.

The results were astounding. Within days of making the standards available, with no coordination or solicitation, 21 other mirrored servers on four continents had come into operation. In less than 90 days, over 500 000 files were transferred to several thousand hosts in over 40 different countries.

Clearly this experiment was answering an unmet need for on-line distribution of standards. The ITU began to realize that the Internet is not some academic toy but is, in fact, a global network with over 10 million users. Just as our team of volunteers was getting ready to enter the next stage of reformatting the data to fix presentation flaws in the initial conversion, the ITU cancelled the experiment.

The ITU became scared because they could see that on-line distribution would quickly overshadow their paper distribution effort and would diminish their hard copy sales. Apparently, the ITU did not feel that wider dissemination of technical standards was important enough to merit on-line distribution.

Standards bodies have many arguments for not distributing standards online. Revenue is usually the first consideration, since standards bodies rely upon document sales to fund a substantial portion of their operation.

In the case of the ITU, it was true that substantial revenue was available through document sales, but it was also true that an incredible amount of waste went into the production of printed documents. A decrease in revenues could easily be offset by modern management techniques and by the exercise of fiscal responsibility. The same would hold true for other standards developing bodies, and for the American National Standards Institute (ANSI).

The big question is one of will. Standards bodies have a reason for being: the widespread application of their standards. Charging rates of $1 per page and up is no way to get standards used. Even though knowledge of standards is a prerequisite to a broad education in the field, young professionals at computer companies cannot justify buying increasingly expensive standards in large quantities.

Standards bodies, including the IEEE, must decide if the wide application of technical standards is an important part of their mission. If so, selling high-priced documents is not compatible with that mission. On-line, free distribution of standards is a vital part of a successful standards effort. ◆

Carl Malamud (carl@malamud.com) is the author of seven professional reference books including Exploring the Internet: A Technical Travelogue *(Prentice Hall, 1992). He was coordinator of the ITU experiment for distribution of CCITT standards on the global Internet.*

Jay Iorio Joins Board of Directors of SGML Forum

Jay Iorio of the IEEE Standards staff recently accepted an invitation to join the Board of Directors of the SGML Forum of New York. The Forum is devoted to the exchange of ideas and information about SGML. Organized primarily as a user group, the Forum seeks to promote an understanding of the scope and benefits of SGML and to further its practical application within a variety of industries. For more information about the SGML Forum and a meeting schedule, contact Joe Davidson at (212) 691-4463.

✗ *Errata* ✗

In the "Congratulations" section of the July 1992 issue, Jeffrey S. Kimmel should have been listed as the chair of the 1003.1-1988/INT, 1992 Edition, POSIX Interpretations.

In the same section, Eike Waltz's name was misspelled.

Separation of X3 and the US TAG to ISO/IEC JTC1

A proposal to merge Accredited Standards Committee X3 and the United States Technical Advisory Group to ISO/IEC JTC1* has been abandoned. The secretariat for both of these committees is CBEMA (Computer and Business Equipment Manufacturers Association). They will remain as two distinct committees, with different scopes and purposes. X3 is accredited by ANSI (American National Standards Institute) to develop standards for information processing systems. The US TAG to ISO/IEC JTC1 is the body that forms US positions for input into the international standards activity for information technology. Membership on both X3 and the US TAG is also by organization, and is open to all materially interested and affected parties in the United States.

Beyond the particular activities of these committees, the IEEE Computer Society also sponsors standards for information systems. However, membership on IEEE working groups is open to individuals as well as to organizational representatives. Both IEEE and X3 are members of the US TAG to ISO/IEC JTC1, along with other organizations, such as Electronic Industries Association, IBM, Hewlett-Packard, Digital Equipment, Apple, Sun Microsystems, AT&T, US Department of Defense, American Nuclear Society, and the National Institute of Science and Technology. ◆

*Joint Technical Committee 1, on information technology, of the International Organization for Standardization and the International Electrotechnical Commission.

The IEEE Standards Board formally congratulates the Chairs, Vice Chairs, and Special Contributors listed below as well as their working groups on the publication of their standard or collection.

Bruce Barrow, Chair: *268-1992* American National Standard for Metric Practice

E. M. Fort, Chair: *275-1992* IEEE Recommended Practice for Thermal Evaluation of Insulation Systems for Alternating-Current Electric Machinery Employing Form-Wound Preinsulated Stator Coils for Machines Rated 6900 V and Below

L. C. Gonzalez, Chair: *308-1991* IEEE Standard Criteria for Class 1E Power Systems for Nuclear Power Generating Stations

D. C. Lee, Chair: *421.5-1992* IEEE Recommended Practice for Excitation System Models for Power System Stability Studies

Roy L. Balke, Chair: *432-1992* IEEE Guide for Insulation Maintenance for Rotating Electric Machinery (5 hp to less than 10 000 hp)

Bal K. Gupa, Chair: *522-1992* IEEE Guide for Testing Turn-to-Turn Insulation on Form-Wound Stator Coils for Alternating-Current Rotating Electric Machines

J. F. Cartwright, Chair: *524-1991* IEEE Guide to the Installation of Overhead Transmission Line Conductors

J. Reese Brown, Chair: *662-1992* IEEE Standard Terminology for Semiconductor Memory

James P. Lonjers, Chair: *1003.5-1992* IEEE Standard for Information Technology—POSIX Ada Language Interfaces—Part 1: Binding for System Application Program Interface (API)

John J. McGrory, II, Chair: *1003.9-1992* IEEE Standard for Information Technology—POSIX FORTRAN 77 Language Interfaces—Part 1: Binding for System Application Program Interface (API)

M. O. Durham, Chair: *1017-1991* IEEE Recommended Practice for Field Testing Electric Submersible Pump Cable

M. O. Durham, Chair: *1018-1991* IEEE Recommended Practice for Specifying Electric Submersible Pump Cable—Ethylene-Propylene Rubber Insulation

M. O. Durham, Chair: *1019-1991* IEEE Recommended Practice for Specifying Electric Submersible Pump Cable—Polypropylene Insulation

Bob Hillman, Chair, WASG; **Al Lowenstein,** Chair, P1029.1; and **Jacques Tête,** Vice-Chair, P1029.1: *1029.1-1991* IEEE Standard for Waveform and Vector Exchange (WAVES)

Kim Clohessy, Chair: *1101.2-1992* IEEE Standard for Mechanical Core Specifications for Conduction-Cooled Eurocards

David V. James, Chair: *1212-1991* IEEE Standard Control and Status Register (CSR) Architecture for Microcomputer Buses

A. Dixon, Chair: *C37.30-1992* IEEE Standard Requirements for High-Voltage Air Switches

Harvey W. Mikulecky, Chair: *C37.100-1992* IEEE Standard Definitions for Power Switchgear

Roger Jacobsen, Chair: *C57.120-1991* IEEE Standard Loss Evaluation Guide for Power Transformers and Reactors

John N. Davis, Chair, Instrument Transformers Subcommittee: *C57.13.2-1991* IEEE Standard Conformance Test Procedures for Instrument Transformers

Stan Kershaw, Chair: *C62.22-1991* IEEE Guide for the Application of Metal-Oxide Surge Arresters for Alternating-Current Systems

J. J. Burke, Chair: *C62.92.4-1991* IEEE Guide for the Application of Neutral Grounding in Electrical Utility Systems, Part IV—Distribution

John M. Osepchuk, Chair: *C95.3-1991* IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields—RF and Microwave

Collections

Conrad Muller, Thomas Smith, and **Bruce Barrow,** Special Contributors: **Electrical and Electronics Graphic & Logic Symbols and Reference Designations Standards Collection,** 1992 Edition

Don Heirman and **Ed Bronaugh,** Special Contributors: **Electromagnetic Compatibility Standards Collection,** 1992 Edition

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1019-1991 IEEE Recommended Practice for Specifying Electric Submersible Pump Cable—Polypropylene Insulation (ANSI) (ISBN 1-55937-194-3) [SH15024-NTH] $42.00

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308-1991 IEEE Standard Criteria for Class 1E Power Systems for Nuclear Power Generating Stations (ISBN 1-55937-191-9) [SH14985-NTH] $41.00

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662-1992 IEEE Standard Terminology for Semiconductor Memory (ISBN 1-55937-221-4) [SH15248-NTH] $40.00

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Standards Coordinating Committee 14: Quantities, Units, and Letter Symbols

268-1992 American National Standard for Metric Practice (ISBN 1-55937-246-X) [SH15529-NTH] $35.00

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Standardization for Emerging Technologies in LEOS

by Charles Morrison

The July 1992 edition of the *IEEE Standards Bearer* formally notified the world that the Standards Committee of the Lasers and Electro-Optics Society (LEOS) is back in business after several years of inactivity, with four newly approved standards projects underway.

Until recently, the technologies encompassed by LEOS had been limited to the research and development world. But the advent of fiber-optic communications, the CD player, and, yes, the bar code reader has brought these technologies into everyday life. The manufacturing of components and systems has matured; over the next decade, electro-optic technologies (in the broadest sense) will be further introduced around the world in countless new products and applications.

The explosion of applications employing electro-optic technologies has made the correspondence between electro-optic component suppliers, system designers, and product manufacturers complex and tedious. Specifications for components often must include instructions for measuring characteristics and an explanation of how to deduce particular parameters from those characteristics. To those who are old hands in the standards arena, this is a familiar scenario—"standardization" becomes the universally accepted means of facilitating smooth interaction among suppliers, designers, and manufacturers of emerging technologies, and electro-optics is no exception.

Because semiconductor lasers are proliferating in quantities and applications at geometric growth rates, the four new standards projects sponsored by LEOS are concerned with the methods of characterizing these devices. In addition, it has become widely recognized that the laser standards already in existence apply only to gas and/or solid-state lasers (with the exception of IEC 825, Radiation Safety of Laser Products) and do not apply to semiconductor lasers. In the case of lasers, one size does *not* fit all! This situation has also stimulated the call for measurement standards that apply directly to semiconductor lasers.

The following projects are underway:

- P1314, *Standard Test Method for Measuring Astigmatic Length of Semiconductor Lasers.* This includes the methods for parameter extraction for astigmatic length and change in astigmatic length with power output and temperature.
- P1315, *Standard Test Methods forGenerating Far-Field Spatial Mode Distributions of Semiconductor Lasers, and Related Parameter Extraction Techniques.* This project provides methods for the measurement of the perpendicular (vertical) and parallel (horizontal) far fields for all semiconductor lasers. It includes methods for parameter extraction for number of modes; full-width-at-half-maximum vaues; pointing values; ripple; and aspect ratio.
- P1316, *Standard Test Method for Generating the Characteristic Optical Output Power as a Function of Input Drive Current for Semiconductor Lasers, and Related Parameter Extraction Techniques.* Methods for the measurement of the PIV characteristic of all semiconductor lasers are covered in this project. Included are the methods for parameter extraction for the threshold current; the differential quantum efficiency; the power at threshold; the linearity; the turn-on voltage; the voltage at threshold; and three different characteristic temperatures.
- P1317, *Standard Method for Measuring Feedback Noise in Semiconductor Lasers.* The measurement of feedback noise effects in all semiconductor lasers is covered in this project. It includes measurements for effects with and without a modulated signal. Also included are methods for parameter extraction for relative intensity noise; RIN as a function of temperature; modulation frequency; and feedback.

Consensus is the name of the standards game, so anyone who wishes to be included in the working groups or on the distribution list for the circulation of drafts, or who just has questions, should contact Charles Morrison by telephone at (914) 892-7444 or via the Internet at cbmorrison@vnet.ibm.com. ◆

Charles Morrison is chair of the Standards Committee of the Lasers and Electro-Optics Society.

IEEE STANDARDS BOARD ACTIONS

APPROVED PARs FOR NEW STANDARDS

P802.6l (C/TCCC) Standard for Point-to-Point Interface for IEEE 802.6 Subnetwork of a Metropolitan Area Network

P802.8 (C/TCCC) IEEE 802 Recommended Practice for Fiber Optic Local and Metropolitan Area Networks

P802.10f (C/TCCC) Standard for Secure Data Exchange Sub-Layer Management

P996.1 (C/MM) Standard for Compact Embedded-PC Modules

P1226.1 (SCC20) Standard Common ADA Packages for ADA Based Environment for Test (ABET)

P1226.2 (SCC20) Standard ATLAS—Level Test Procedure Interface for ADA Based Environment for Test (ABET)

P1226.3 (SCC20) Standard Test Equipment Configuration Software Interface for ADA Based Environment for Test (ABET)

P1226.4 (SCC20) Standard Test Resource Software Interface for ADA Based Environment for Test (ABET)

P1226.5 (SCC20) Standard Software Interface to Communication Buses for ADA Based Environment for Test (ABET)

P1226.6 (SCC20) Guide for the Understanding of the ADA Based Environment for Test (ABET)

P1244.1 (C/MSS) Object Identifier Standard for Storage Systems

P1323 (C/SE) Standard for Information Technology—Reuse of Software Process Artifacts—Source Code Reuse

P1325 (PE/SWG) Recommended Practice for Reporting Field Failure Data for Power Circuit Breakers

P1329 (COM/TranSysCom) Standard Method for Measuring Transmission Performance of Hands-Free Telephone Sets

APPROVED PARs FOR STANDARDS REVISIONS

P515.1 (IA/P&CI) IEEE Recommended Practice for the Testing, Design, Installation and Maintenance of Electrical Resistance Heat Tracing for Commercial Applications

P605 (PE/SUB) Guide for Design of Substation Rigid-Bus Structures

P802.6m (C/TCCC) Standard for a Subnetwork of a Metropolitan Area Network

P957 (PE/T&D) Guide for Cleaning Insulators

P980 (PE/SUB) Guide for Containment and Control of Oil Spills in Substations

P993 (SCC20) Standard for Test Equipment Description Language (TEDL)

P1002 (C/SE) Standard Taxonomy for Software Engineering Standards

P1027 (COM/TranSysCom) Standard Method for Measurement of Magnetic Field in the Vicinity of a Telephone Receiver

P1074 (C/SE) Standard for Developing Software Life Cycle Processes

P1128 (EMC/SC) Recommended Practice for RF Absorber Performance Evaluation in the Range 30 MHz to 5 GHz

P2003 (C/OS) Standard for Information Technology—Test Methods for Measuring Conformance to POSIX

REVISED PARs

P802.5j (C/TCCC) Standard for Information Processing Systems—Local Area Networks—Part 5: Token Ring Access Method and Physical Layer Specification—Fiber Optic Media Station Attachment

P802.9 (C/TCCC) Standard for the Integrated Services (IS) LAN Interface at the MAC and PHY Layers

P1003.19 (C/OS) Standard for Information Technology—POSIX FORTRAN 90 Language Interfaces—Part 1: Binding for System Application Program Interface (API)

P1224 (C/OS) Standard for Information Technology—Open Systems Interconnection (OSI) Abstract Data Manipulation—Application Program Interfaces (API) [Language Independent]

P1224.1 (C/OS) Standard for Information Technology—X.400 Based Electronic Messaging Application Program Interfaces (API) [Language Independent]

P1224.2 (C/OS) Standard for Information Technology—Directory Services Application Programming Interface (API)—Language Independent Specification

P1326 (C/OS) Standard for Information Technology—Test Methods for Measuring Conformance to Open Systems Interconnection (OSI) Abstract Data Manipulation—Application Program Interface (API) [Language Independent]

P1326.1 (C/OS) Standard for Information Technology—Test Methods for Measuring Conformance to X.400 Based Electronic Messaging Application Program Interfaces (API) [Language Independent]

P1326.2 (C/OS) Standard for Information Technology—Test Methods for Directory Services Application Programming Interface (API)—Language Independent Specification (P1003.17-LIS)

P1327 (C/OS) Standard for Information Technology—Open Systems Interconnection (OSI) Data Manipulation C Language Interfaces—Binding for Application Program Interfaces (API)

P1327.1 (C/OS) Standard for Information Technology—X.400 Based Electronic Messaging C Language Interfaces—Binding for Application Program Interfaces (API)

P1327.2 (C/OS) Standard for Information Technology—Directory Services Application Programing Interface (API)—C Language Specification

P1328 (C/OS) Standard for Information Technology—Test Methods for Measuring Conformance to Open Systems Interconnection (OSI) Abstract Data Manipulation C Language Interfaces—Binding for Application Program Interfaces (API)

P1328.1 (C/OS) Standard for Information Technology—Test Methods for Measuring Conformance to X.400 Based Electronic Messaging C Language Interfaces—Binding for Application Program Interfaces (API)

P1328.2 (C/OS) Standard for Information Technology—Test Methods for Directory Services Application Programming Interface (API)—C Language Specification (P1003.17-C)

PC57.119 (PE/TR) Recommended Practice for Performing Temperature Rise Tests on Oil Immersed Power Transformers at Loads Beyond Nameplate Rating

APPROVAL OF NEW STANDARDS

802.10b (C/TCCC) Standard for Interoperable Local Area Network (LAN) Security (SILS)—Part B: Secure Data Exchange

1003.2 (C/OS) Standard for Information Technology—Portable Operating System Interfaces (POSIX)—Part 2: Shell and Utilities

1003.2a (C/OS) Standard for Information Technology—Portable Operating System Interfaces (POSIX)—Part 2: Shell and Utilities, User Portability Extension

1036 (PE/T&D) Guide for Application of Shunt Power Capacitors

1045 (C/SE) Standard for Software Productivity Metrics

1115 (PE/ED&PG) Recommended Practice for Sizing Nickel-Cadmium Batteries for Stationary Applications

1155 (C/MM) High Speed Backplane Instrumentation Bus Structure

1214 (NPS/NI&D) Standard MCA Histogram Data Interchange Format for Nuclear Spectroscopy

C57.12.60 (PE/TR) Trial Use Standard Test Procedures for Thermal Evaluation of Insulation Systems for Solid-Cast and Resin Encapsulated Power and Distribution Transformers

APPROVAL OF REVISED STANDARDS

18 (PE/T&D) Standard for Shunt Power Capacitors

100 (SCC10) The New IEEE Standards Dictionary of Electrical and Electronics Terms

525 (PE/SUB) Guide for the Design and Installation of Cable Systems in Substations

656 (PE/TR) Standard for the Measurement of Audible Noise from Overhead Transmission Lines

802.1b (C/TCCC) IEEE Standards for Local and Metropolitan Area Networks: Local Area Network (LAN)/Metropolitan Area Network (MAN) Management

802.3k (C/TCCC) IEEE Standards for Local and Metropolitan Area Networks: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications: Layer Management for 10 Mb/s Baseband Repeaters

802.3l (C/TCCC) IEEE Standards for Local and Metropolitan Area Networks: Carrier Sense Multiple Access/Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications: MAU, Type 10BASE-T, PICS Proforma

802.4b (C/TCCC) IEEE Standards for Local and Metropolitan Area Networks: Supplement to IEEE Std 802.4, Redundant Media Control Unit

C57.12.00c (PE/TR) Supplement to Standard General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers—Section 5.9, Reference Temperature for No-Load Losses and Section 9.4, Accuracy Requirements for Measured Losses

C57.12.00h (PE/TR) Supplement to Standard General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers—Section 5.12, Nameplates (Table 9, Note 4)

C57.12.00i (PE/TR) Supplement to Standard General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers—Section 5.12, Nameplates (Table 9, Note 2)

C57.12.00j (PE/TR) Supplement to Standard General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers—Section 6.8, Minimum External Clearances Between Transformer Live Parts of Different Phases of the Same Voltage

C57.12.00k (PE/TR) Supplement to Standard General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers—Section 5.12, Nameplates (Table 17, Note 1)

REAFFIRMED STANDARDS

11 (PE/EM) Standard for Rotating Electric Machinery for Rail and Road Vehicles

292 (AES/GAP) Specification Format for Single-Degree-of-Freedom Spring-Restrained Rate Gyros

293 (AES/GAP) Test Procedure for Single-Degree-of-Freedom Spring-Restrained Rate Gyros

444 (IA/SPC) Standard Practices and Requirements for Thyristor Converters and Motor Drives, Part 1: Converters for DC Motor Armature Supplies

597 (IA/SPC) Practices and Requirements for General Purpose Thyristor DC Drives

661(COM/TranSysCom) Standard Methods for Determining Objective Loudness Ratings of Telephone Connections

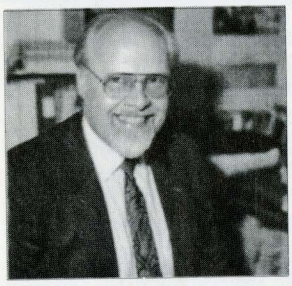
990 (C/SE) Recommended Practice for Ada as a Program Design Language

1012 (C/SE) Standard for Software Verification and Validation Plans

ACRONYMS

AES/GAP	Aerospace & Electronic Systems/Gyro & Accelerometer Panel
C/MM	Computer/Microprocessor & Microcomputer
C/MSS	Computer/Mass Storage Systems
C/OS	Computer/Operating Systems and Application Environments
C/SE	Computer/Software Engineering
C/TCCC	Computer/Technical Committee on Computer Communications
COM/Tran-SysCom	Communications/Transmission Systems Committee
EMC/SC	Electromagnetic Compatibility/ Standards Committee
IA/P&CI	Industry Applications/Petroleum & Chemical Industry
IA/SPC	Industry Applications/Static Power Converter
NPS/NI&D	Nuclear & Plasma Sciences/Nuclear Instruments & Detectors
PAR	Project Authorization Request
PE/ED&PG	Power Engineering/Energy Development & Power Generation
PE/EM	Power Engineering/Electric Machinery
PE/SUB	Power Engineering/Substations
PE/SWG	Power Engineering/Switchgear
PE/T&D	Power Engineering/Transmission & Distribution
PE/TR	Power Engineering/Transformers
SCC10	Standards Coordinating Committee 10 (Terms and Definitions)
SCC20	Standards Coordinating Committee 20 (ATLAS)

IEEE Standards Loses Two Outstanding Leaders



Hans Karlsson, one of the IEEE standards community's most well respected and influential leaders, died of cancer on August 31.

Karlsson, who was 49, had been involved with IEEE standards activities for well over a decade. He chaired the family of 1301 Metric Mechanical Standards for Microcomputers, was an active member of the IEEE Microprocessor Standards Committee, and served as the Vice Chair of the IEEE Bus Architecture Standards Committee (BASC). He also contributed to the development of many other standards within the Computer Society. He worked as Manager of Strategic Partnering, Products & Technology, for L. M. Ericsson in Stockholm.

Known as the gentle giant by his friends and colleagues within the IEEE, Karlsson was a master at forging cooperative relationships with others. His commanding, yet not demanding, approach to management made it possible for consensus to be achieved on the 1301 standards in record time.

In recognition of his achievements, BASC has proposed a new award in Karlsson's name. If accepted by the Computer Society Board of Governors, it would be given annually to the most outstanding team leader in computer standards.

Hans Karlsson will be sorely missed by the standards community he helped to develop, and by his friends and colleagues within IEEE. He left behind a wife, Agneta, and two children: Peter, 19, and Pia, 21. ◆

Sava Sherr, former Staff Director of IEEE Standards and an active member of the IEEE Computer Society, died on August 27.

Sherr served as IEEE Staff Director from 1980 to 1987. Sherr "played a major role in establishing the now robust program in computer and information technology standards within the IEEE Computer Society," says Helen M. Wood, member of the IEEE Board of Directors and Past President of the IEEE Computer Society. He was also a leading figure in the establishment of International Electrotechnical Committee and International Organization for Standardization Joint Technical Committee 1 (ISO/IEC JTC 1) for information technology standards.

Before coming to IEEE, Sherr spent six years as Managing Director and Chief Operating Officer of the American National Standards Institute (ANSI). He previously headed the standards effort at IEEE from 1970 to 1976. He had been a Vice President of the US National Committee of the IEC and a member of the Industry Functional Advisory Committee (IFAC) of the US Trade Representative. He had served as Vice Chair of the Board of Directors of the American National Metric Council and Chair of its Finance Committee.

Since retiring from IEEE in 1987, Sherr continued to work as a private consultant and to be involved in Computer Society activities. In 1987, he received a Meritorious Service Certificate from the Computer Society for standards administration. ◆

FUTURE *(Continued from page 1)*

system, SGML enables standards to be developed online, with standards developers using SGML to structure and "tag" the elements of their documents. Ultimately, all standards documents (including drafts) will become part of a document database (or *docubase*) that will be accessible for a broad range of inquiries and searches. One of the key pieces of this pilot project will be making the information contained in the docubase available to standards developers and users via telephone and the Internet. Frustrating hardware and software incompatibilities will be eliminated, and standards users and developers will be able to search for terms, references, and related standards and subjects in one place.

Because this pilot project is based on a language rather than on a proprietary hardware or software platform, standards developers will no longer have to worry about whether their text file is compatible with the IEEE Standards Department's hardware or software, nor whether older files are still readable. This on-line development process will actually create an environment that will guide standards developers in putting standards together, and creating structured documents that harmonize with the entire standards docubase and most closely with those standards to which they are linked. Project editors will advise and assist developers during the standards-development process and, once a draft is approved, will expedite its publication. Glossaries of terms would be self-generating, and standards users could potentially create custom glossaries to suit their own needs. At last, IEEE Standards will move from *desktop* publishing to *electronic* publishing, in the truest sense.

This system will bring profound changes to the development, use, and perception of standards throughout the world. IEEE Standards believes that its database of standards is a living database—and that in the future it will be used in ways that are unforeseeable to us now. Removing the barriers to information is, what this project is about. ◆

The Standards Department is looking for additional working groups that are interested in getting involved with the pilot project. Please contact Jay Iorio (j.iorio@ieee.org) at (908) 234-0814 for more information.