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C A L E N D A R O F E V E N T S

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COPY DEADLINE: FIRST WEEK OF MONTH PRIOR TO PUBN.

DEC.	5	Seminar - "Basic Project Management"	IAS/IECI (Call John Anich 269-6012)	Fermi Natl. Lab. Kirk & Pine Rds. Batavia	Regis.	8:00 AM
	8	Monthly Meeting - ALL WELCOME	IEEE Executive Cte.	Brown & Root Offices 701 E. 22nd St. Lombard	Meeting	7:30 PM
	9	"Construction of TARP"	Power Engrng. Soc.	Carson Pirie Scott Wabash & Monroe Sts. Highland Rm.2,8th Fl.	Social Lunch Meeting	11:30 AM 12:00 PM 12:30 PM
	25	MERRY CHRISTMAS!				
1982						
JAN.	1	HAPPY NEW YEAR!				
	5	"Age of Space Technology"	IAS/IECI (j/w ISA)	Nielsen's Village 7330 W. North Ave. Elmwood Park	Social Dinner Meeting	5:30 PM 6:15 PM 7:15 PM
	12	Monthly Meeting - ALL WELCOME	IEEE Executive Cte.	Brown & Root Offices 701 E. 22nd St. Lombard	Meeting	7:30 PM
	13	"Variable Speed AC Drive"	Power Engrng. Soc.	Carson Pirie Scott Wabash & Monroe Sts. Highland Rm.2,8th Fl.	Social Lunch Meeting	11:30 AM 12:00 PM 12:30 PM
	20	"Fiber Optics"	Northwest Sub.	Mr. Peters Banquets 1018 Mt. Prospect Plaza Rand & Central Rds.	Social Dinner Meeting	6:00 PM 7:00 PM 8:00 PM

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Christmas



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John Tyner, Editor
Electrical Energy Management
(312) 469-5534

Tom Traub, Managing Editor
Commonwealth Edison Company
(312) 294-2703

Eleanore Burda, Copy Manager
IEEE Office
(312) 236-4609

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POWER ENGINEERING SOCIETY RECEIVES AWARD

During the Power Engineering Society regu-
lar luncheon meeting on September 18, 1981
an award presentation was made to the Chicago
Chapter.

The Chapters Representative Award for Out-
standing Performance was presented to
Chairman Carl Schwarz and Past Chairman Ken
Rooney in recognition of the Chapters quality
of meetings, programs, seminars and tours
which it conducted during the 1980-81 program
year. In the absence of Power Engineering
Society Chapters Representative James J.
Keller, the presentation was made by Ed Horn.

Congratulations!

"ETHICAL DILEMMAS IN MODERN ENGINEERING" by ROSEMARY CHALK

The editors of the trade journal Chemical Engineering conducted a reader survey on engineering ethics. They presented a set of nine hypothetical cases illustrating some ethical dilemmas that arise in the practice of engineering. The cases were accompanied by a questionnaire in which readers were asked to indicate an appropriate course of action for an "ethical" engineer to take in each case.

The response to the survey was overwhelming, with more than 4,300 readers returning the questionnaire. But perhaps the most interesting result of the survey was that the Code of Ethics of the American Institute of Chemical Engineers was almost universally ignored by the respondents in determining solutions to the problems. Fewer than a half-dozen readers even mentioned a code of ethics at all. They tried instead to resolve each problem on a very individual and personal level, and the result was a wide diversity of opinion as to what was the "right" solution to a given problem. The editors of Chemical Engineering concluded that there is a real need for the engineering profession to make its codes of ethics relevant to situations encountered by engineers in real life.

The "rights" and "wrongs" of ethical dilemmas in engineering practice are not sharply divided. True dilemmas, by definition, often involve a balancing of rights and duties, weighing values that may be ambiguously understood or unevenly shared by members of the profession. The current interest in engineering ethics is prompted in part by a search for clear-cut solutions to the knotty value judgments that must be made by a pluralistic society in using science and technology to build the kind of lifestyle we want. In the 1960's and the 1970's, society became increasingly aware that science and technology could be used both for good and for evil, and that technology may have unintended side effects that are detrimental to individuals who are not directly served by - or who do not participate in the decisions to use - a particular technology. The search for clear-cut solutions to value conflicts is often an elusive one, producing many more questions than answers. But in searching for the basic moral principles which lie beneath ethical dilemmas in engineering, we learn something about the kinds of goals that we strive towards as a society.

One of the most important value conflicts that I see occurring today in science and technology is balancing the needs of a society for effective communication with the rights of an individual to privacy and confidentiality. There has always been a historic tension - particularly in democratic societies - between individual rights and the common good, and it is now appearing in the development of information technology.

It's very important that engineers be aware of and acknowledge the basic values that guide their technical choices. Otherwise we have a situation which I call ethical drift, in which a person says, "I'm designing something that is value-free; it can be used for either good or evil. There's a particular need that I'm responding to, and there really are no broader ethical issues associated with it." This is a very narrow - and dangerous - perspective for a professional to have. There's a real need for the engineer to ask: "What values are imbedded in the private demands that I'm responding to? What public goods do they address?" This is not to say that engineers should become philosophers. But they need to recognize the value implications of their work.

(Excerpted from IEEE Technology and Society)

BOOK ON ACTIVE FILTERS PUBLISHED BY IEEE PRESS

The publication of Modern Active Filter Design, a Book of Selected Reprints has been announced by the IEEE Press. This volume, sponsored by the IEEE Circuits and Systems Society, was edited by Rolf Schaumann of the University of Minnesota, Michael A. Soderstrand of the University of California, and Kenneth R. Laker of Bell Laboratories.

Active filters have taken on an important role in divers and diverse applications, and it is becoming increasingly necessary for workers in a variety of fields to understand their design and use. The purpose of this volume is to facilitate gaining that understanding.

The contents follow a natural development from general considerations through the design of second and higher-order filters, integrated analog filters and, the most recent type, switched-capacitor filters. The 42 reprinted papers, all published in the last decade, are arranged by subject into the following six parts: Design Considerations, Second-Order Filter Sections, Design of High-Order Filters, Fabrication, Techniques for Monolithic Continuous Analog Active Filters, Techniques for Monolithic Switched-Capacitor Filters. Introductory comments by the editors for each part relate the papers to each other and to the rest of the literature. An ordered bibliography of over a thousand publications is included to help the reader gain access to recent research. The organization of the book makes it appropriate as a text for self study or for short courses as well as for general reference.

Modern Active Filter Design is priced at \$15.45 for the paperbound member edition. A clothbound edition is available to non-members for \$30.95 (discounted to \$23.20 for IEEE members). This 436-page volume can be ordered postpaid from the IEEE Service Center at 445 Hoes Lane, Piscataway, New Jersey 08854. Payment should accompany orders.

CATALOG OF CONTINUING EDUCATION COURSES AVAILABLE

A catalog describing 212 continuing education courses for engineers has been published by the Educational Activities Board of the IEEE. All courses have originated with, or have been contracted by, the IEEE as a service to its members. Featuring descriptions of 177 "live" short courses of one, two and three days' duration, the catalog also describes 18 individualized home-study programs - both interactive and self-study, also 17 video-taped courses for group instruction.

All courses are applications-oriented and cover the state-of-the-art in a broad range of topical electrical/electronics technologies, as well as business and management subjects. Titled IEEE Continuing Education Courses - 1981/82, the catalog outlines the many options available for short course sponsorship by such entities as IEEE technical and geographical units, universities and conferences, and by corporations for in-house training. The Institute's program for awarding Continuing Education Achievement Units (CEAU's) is also described.

The IEEE continuing education program is a major part of the Institute's educational mission, which is to provide its members and other engineers with ongoing opportunities to upgrade and broaden their knowledge and to become more productive in their work. To obtain a copy of this new catalog, contact: Continuing Education Department, IEEE Service Center, 445 Hoes Lane, Piscataway, New Jersey 08854. Telephone: 201/981-0060, extensions 175 or 177.