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

For reservations call the IEEE office at 236-4609
(unless otherwise indicated)

COPY DEADLINE: FIRST WEEK OF MONTH PRIOR TO PUBN.

1982					
JAN.	1	HAPPY NEW YEAR!			
	5	"Age of Space Transportation-The Space Shuttle"	Indus. Appls. Soc. and IECI (j/w ISA)	The Cypress Restaurant 500 E. Ogden Ave. Hinsdale	Social 6:00 PM Dinner 7:00 PM Meeting 8:00 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 11:30 AM Lunch 12:00 PM Meeting 12:30 PM
	20	"Fiber Optic Technology"	Northwest Sub.	Mr. Peters Banquets 1018 Mt. Prospect Plaza Rand & Central Rds.	Social 6:00 PM Dinner 7:00 PM Meeting 8:00 PM
FEB.	8	"Acoustic Microscopy: Methods, Appls., Outlook"	Antennas & Prop./ Micro. Theory & Tech. Soc. (j/w EMBS)	Louis Restaurant 351 E. Lake St. Addison	Social 5:30 PM Dinner 6:30 PM Meeting 7:30 PM
	9	Monthly Meeting - ALL WELCOME	IEEE Executive Cte.	Brown & Root Offices 701 E. 22nd St. Lombard	Meeting 7:30 PM
	10	"Lightning Protection"	Indus. Appls. Soc. & Industl. Electronic Control Instru. Soc.	Nielsen's Village 7330 W. North Ave. Elmwood Park	Social 5:30 PM Dinner 6:15 PM Meeting 7:15 PM
	10	"Static VAR Controller"	Power Engrng. Soc.	Carson Pirie Scott Wabash & Monroe Sts. Highland Rm. 2, 8th Fl.	Social 11:30 AM Lunch 12:00 PM Meeting 12:30 PM
	14	Valentine's Day Party - "Entertainment '82"	Power Engrng. Soc. (j/w Fox Valley Sub.)	Drury Lane South 2500 W. 95th St. Evergreen Park	Dn. 5 PM-Show 7 PM (For infor., Al Lowry, 294-8273)
	17	"QA/QC in Nuclear Power Stations"	Fox Valley Sub. (j/w Pwr. Engrng. Soc.)	To be determined	
	21-27	Natl. Engrs.' Week			
	23	"New Speech Tech."	Communications Soc.	To be determined	

HERE'S THE WAY TO WIN YOUR LADY'S HEART

The Power Engineering Society and Fox Valley Subsection will celebrate St. Valentine's Day with their ladies at a theatre/dinner party on Sunday, February 14 at Drury Lane South in Evergreen Park. "Entertainment '82", a musical revue, is the theatre fare. Dinner is 5:00 PM and showtime 7:00 PM. The cost, per couple for dinner and show (including tax and gratuity) is \$29.50. You have an entrée choice of either chopped steak, Boston scrod or chicken and dumplings. Reservation deadline is January 30. For further information, call PES Arrangements Chairman, Al Lowry at Commonwealth Edison, 294-8273. Mail reservations, with check payable to the Power Engineering Society, Chicago Chapter to: Tom Martin, PES Secy./Treas. • c/o Sargent & Lundy • 55 East Monroe Street • Room 25F13 • Chicago 60603.

IAS/IECI PRESENTING "AGE OF SPACE TRANSPORTATION..."

The advent of the Space Shuttle, the first true spaceship, is the beginning of a new chapter in Man's exploration and exploitation of space. With the Shuttle's ability to carry large quantities of material and manpower, space can be utilized in the areas of defense, energy production and research in ways never before possible. A slide presentation will be offered on the Shuttle and discussion on the impact of the Shuttle on space transportation and the future of NASA's space program in general.

Speaker John H. Dunn, Division Director Quality Motivation, Rockwell International Corporation has spent 14 years at the Rockwell Space Systems Group with assignments on the Apollo, Skylab, Apollo/Soyuz and Space Shuttle programs. Currently, Mr. Dunn is responsible for development of quality programs for Rockwell's Graphic Systems Division, which is the world's largest producer of newspaper printing presses.

The meeting date is January 5. See Calendar of Events for meeting location and time.

GUIDING LIGHT VIA OPTICAL FIBERS

The basic mechanism of guiding light via optical fibers will be described along with various types of available fiber optic cable at the Northwest Subsection meeting on January 20. The parameters associated with the use of these cables in actual data or analog signal transfer applications will be discussed to provide potential users with guidelines to system design and operation. With the accelerating employment of fiber optic links they are becoming integral parts of present data and communications systems. Mr. Ronald L. Ohlhaber, Product Development Manager, Fiber Optics Department, Belden Corporation will speak on "Fiber Optic Technology."

NATIONAL LECTURER, DR. KESSLER TO SPEAK ON FEBRUARY 8

The Antennas and Propagation/Microwave Theory and Techniques Societies, joint with the Engineering in Medicine and Biology Society will host Dr. Lawrence Kessler of Sonoscan, Inc. and IEEE Sonics and Ultrasonics Group National Lecturer.

Dr. Kessler will speak on "Acoustic Microscopy: Methods, Applications, Outlook." The talk will concentrate on the application of acoustic microscopes at frequencies up to several GHz to nondestructive testing, quality control and biomedical research. He will discuss types of acoustic microscopes and will also offer some thoughts on future directions.

Dr. Lawrence W. Kessler was born in Chicago and received the BSEE degree from Purdue University and the Ph.D. degree in Electrical Engineering from the University of Illinois. He is listed in Who's Who in the Midwest and American Men and Women of Science. He has authored over 50 technical publications and holds four patents.

This program should be of interest to many IEEE groups other than the hosting societies. Everyone is cordially invited.

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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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Professional Activity

UPDATE

THE ENGINEER SHORTAGE

Do we indeed have one, or is it a shortage of individuals who have endured a strenuous discipline for four years, who are unwilling to work for the wages some employers pay?

Is the hue and cry that our nation is in a perilous position because we are not graduating enough engineers, merely the propaganda of tenured professors who want more students to insure their security?

Newspapers are filled with advertisements for electrical engineers who are learned in the latest state of the art. But what has happened to the EE who graduated 20 years ago? He could very well be earning less take home dollars than the graduate EE he is expected to "train."

The following article is excerpted from the IEEE Legislative Report. It should not be construed as representing the position of the IEEE.

USAB HOLDS WORKSHOP ON ENGINEERING MANPOWER

Congress, academic bodies, industry associations, defense analysts and professional groups continue efforts to gain an understanding of what is called critical shortages of engineers and skilled manpower during the 80's and beyond. During the week of November 16, USAB convened a workshop of high-level, informed experts to examine shortages being projected by various bodies, such as the American Electronics Association. After listening to discussions, USAB Chairman Richard Gowen advised participants to reassess the information and, if possible, come up with an informed judgment that USAB can contribute to future policy discussions.

Gowen believes, he said in summary, that the engineering manpower problem is complex and is made up of many variables, assumptions and projections. It differs from region to region and is affected by other important factors such as salary and the nature of the educational system that produces new engineering manpower. Gowen and Dr. Robert Larson, IEEE president-designate for 1982, say we can deal with "parts" of the problem in an effective way even if we can't solve the entire nation's "engineering manpower problem." A model for addressing the system that Larson has created was enthusiastically endorsed.

Among the participants at the November 16-17 session were experts on scientific manpower from the National Science Foundation and Department of Defense; staff aides from the Congressional science committees; representatives of the Engineering Manpower Commission and the College Placement Council; industry and union representatives; members of other professional societies; and a host of IEEE officials. The Defense Department and defense industry people have been concerned for the past several years about the deteriorating industrial base, manpower shortages being a major component of that base.

On November 3 before Sen. Lloyd Bentsen (D., TX) and his Economic Goals Subcommittee, Dr. Karl Willenbrock discussed the AEA projections of engineer shortages. He stated "Extrapolating the collected data to the entire electronics industry and focusing on the EE/CS areas shows a projected demand for some 199,000 new electrical (EE) and computer science (CS) engineers by 1985. However, the projections through 1985 for degrees to be awarded in these two fields from all U.S. colleges and universities indicate some 70,000 new BS/EE and BS/CS graduates. The shortfall between supply and demand of BS/EE and CS engineers projects to 129,000 or 25,000 annually. To meet just the needs of electronics industry alone, the engineering schools would have to triple their output of EE and CS engineers each year for the next five years. This statement does not take into account the needs of other engineering-intensive industries."

However, Robert Barden pointed out at the USAB workshop that engineers' salaries are not shooting upward as one would expect if the shortages are as dire as stated. He suggests the areas with the greatest number of openings (California, for instance), cannot attract engineers because of the high cost of housing there.

Your PAC Chairman, John Waters, would appreciate your comments. You may address him c/o IEEE Chicago Section • 125 S. Clark Street • Room 1545 • Chicago, Illinois 60603.

The Vehicular Technology Society is alive and well, and will be launching its 1982 program shortly. Help your own technological growth by helping this society to flourish through your active participation. "Volunteers" for Vice Chairman, Secretary and Treasurer positions are most welcome. Contact Dick Crouse at Motorola -- 576-6189 -- for more information.

COMMUNICATIONS SOCIETY COMING BACK ON LINE

New interest in reactivating the Communications Society was appropriately generated recently through a series of conference calls between four Chicago Section communications enthusiasts. The group has already planned a tentative meeting date of February 23 on "New Speech Technology."

Those of you who remember the fine meetings held by this society earlier and those of you who are newly interested in plugging-in to this group, please contact one or more of these enthusiasts: At Bell Labs., Narisa N. Y. Chu, (979-3999) or Daryl J. Eigen, (979-5353); at GTE Automatic Electric, Allen E. Kaphengst, (681-7100, extension 4872); and at Motorola, Inc., Terence Sumner, (576-5382).

"TRENDS IN ENGINEERING SALARIES" TOPIC AT IEC MEETING

At a luncheon meeting on January 13, the Illinois Engineering Council (IEC) will co-sponsor an informative meeting, "Trends in Engineering Salaries." The speaker will be Kenneth E. Foster, Director of Compensation Planning for Towers, Perrins, Forster & Crosby. Mr. Foster is also Chairman, Salary Survey for the Engineering Manpower Commission, American Association Engineering Societies. The Auditorium Room of Carson, Pirie Scott & Company in Chicago's Loop is the meeting locale. The other co-sponsors are American Society of Mechanical Engineers and The Western Society of Engineers. For reservations, call The Western Society of Engineers at 372-3760.

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