

Engineering Manpower:
Supply & Demand

On Saturday, April 23, 1983 in the Washington, D.C. USAB office the Manpower Task Force met, completed, and unanimously approved a position statement concerning Engineering Manpower Supply and Demand.

Primarily this statement was prepared as a response to the flawed, American Electronics Association’s survey and their many dubious press releases depicting engineering manpower shortages. The position Statement is for IEEE members, Congress, Federal Government agencies, industry and the media.

INTERPRETATION OF ENGINEERING MANPOWER
SUPPLY AND DEMAND SURVEYS

Summary

It is the position of the Manpower Task Force that the results of surveys of engineering manpower can and often are subject to significant misinterpretation because of simplistic analysis and data gathering methodology.

The Manpower Task Force recommends that any such analysis include factors which will assure an understanding of both national and local forces influencing engineering manpower supply and demand. Examples of these forces are GNP at the national level and housing costs at the local level. Only by understanding these forces can correct conclusions be drawn from raw manpower survey data.

Demand for engineers has historically been driven by the national economic health, and by major government programs more than any other factors.

Extreme caution must be exercised by examining the methodology and sampling methods of a survey before considering the merits of manpower projections based on that survey.

Inadequate and inappropriate utilization of engineers increases demand. Increasing the efficient use of existing technically skilled manpower can be implemented immediately and will tend to decrease the pressure for more engineers in certain geographies and disciplines.

Local shortages of engineers created by geographic anomalies (such as the high cost of housing or high tax rates) cannot be extrapolated to indicate a national shortage.

Engineering is such a multifaceted entity that demand (or lack of it) for engineers as a whole cannot be interpreted to extend directly to each discipline (e.g., a demand for “engineers” does not necessarily mean that there is a demand for electrical engineers).

Each engineering discipline is sufficiently stratified that demand (or lack of it) for, say, electrical engineers, does not mean that there is a demand (or lack of it) for all specialties of electrical engineers.

The precise definition of “engineer” greatly influences the conclusions which may be correctly drawn from engineering manpower surveys.

Your New Jersey Representatives

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NEWSLETTER STAFF

Editor M. M. Perugini
Managing Editor B. Blair
Business Manager A. M. Beattie

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It is not necessary to inform the North Jersey Section when you change your mailing address. The NEWSLETTER and other section mailings use a list provided by IEEE’s national headquarters in New York. This means the Section has no need to maintain a mailing list or addressing plates. Section membership records are changed when Headquarters notifies us.

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For information on advancing to Senior Member grade, contact Don Weinstein, Kulite Semiconductor, 1039 Hoyt Avenue, Ridgefield, N.J. 07657, (201) 945-3000.

IAS Officers

The NJ IAS Chapter has elected new officers for the 1983-84 year. New officers are:

Chairman: Mr. Irvin West, 801 Maybie Street, New Milford, N.J. 07646.
Vice Chairman: Mr. Edward Burroughs, 87 Lackawanna Boulevard, Gillette, N.J. 07933.
Secretary: Mr. Irvin L. Hoechner, 83 Alexander Avenue, Nutley, N.J. 07110.
Treasurer: Mr. Frank Faulkner, 270 Brooklake Road, Florham Park, N.J. 07932.

Pay For One Year Get 16 Months

Encourage your associates to join the IEEE. If they become members after September 1st, they get a bonus! Pay for one year and membership is for all of 1984 and the balance of 1983.

For details, bring them to the North Jersey Section Social on September 23 or contact Don Weinstein, Kulite Semiconductor, 1039 Hoyt Avenue, Ridgefield, N.J. 07657, (201) 945-3000.

PACE Report

A “Meet The Candidates” night has been planned for September. All four candidates for President-Elect have been invited and confirmed for Friday, September 23 at ITT, Nutley, N.J.

The original date was the regular PACE meeting date of the third Wednesday, but phone conversations with each of the candidates revealed a conflict with a “Candidates Nite” in Boston.

I had to make a snap decision for an alternate meeting and since Dick Tax had already organized a “Social” at ITT, I invited these men to join us there.

Thus:

Mr. Irwin Feerst
Mr. Hans Cherney
Mr. Jerrier Haddad
Mr. Don King

will all be with us at various times in the evening.

MAITLAND McLARIN, PACE Chairman

Flea Market

The IEEE student branch at the DeVry Technical Institute, Woodbridge, N.J. will be sponsoring a “Ham Radio/Computer” flea market on October 1st, 1983 at the school parking lot from 8:00 AM to 6:00 PM.

DeVry is located at 479 Green Street in Woodbridge. (Behind the Woodbridge Mall).

3-D Shape Recognition

“Global 3-D Shape Recognition” is the title of a presentation to be made by Dr. Frank P. Kuhl at the September 14 meeting of the NJ Chapter of the Systems Man & Cybernetics Society.

About The Talk
This talk concerns the identification of three-dimensional rigid objects when viewed by a two-dimensional imaging system. The images are obtained from digitized TV video data. Several straight-forward image enhancement procedures are used to remove noise and exaggerate edges and the resulting edge contours are then chain encoded. Once the contour of an object, perhaps an airplane, has been extracted, a normalized Fourier descriptor is calculated and is compared to a library of views of various airplanes.

A new method of storing the library data and making classifications has been developed that represents a differential encoding of the descriptors, which may require less storage while simultaneously increasing classification speed and accuracy. Simulations of the system for aircraft have yielded promising results in both recognition accuracy and attitude determinations.

About The Speaker
Dr. Frank P. Kuhl received his BS and MS Degrees from Columbia University, N.Y. in 1957 and 1958, respectively, and the Dr. Eng. Degree from Yale University in 1963. His primary interest is in pattern recognition in the areas of polarized, radar-backscatter classification of arbitrary targets in free space and also image processing of alphanumeric characters and raster-scanned pictures.

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ELECTRICAL ENGINEER

B.S.E.E. or equivalent education. Non-registered. Minimum 3 years experience in design of building electrical distribution systems. Familiarity with floor cell systems preferred. Basic knowledge of structures and HVAC desirable. Good verbal and written skills mandatory. Some travel required.
Send resume:
**J. Wilson, Suite 2000
260 Madison Avenue
New York, N.Y. 10016
or call (212) 685-3831**

He has done this work mostly at Raytheon Corporation Bedford, Mass. (1963-1965) and Union College, Schenectady, N.Y. (1965-1967) and the U.S. Naval Academy, Annapolis, MD (1968-1973). He has also worked at Singer Kearfott, Wayne, N.J. (1974-1977) and ITT, Nutley, N.J. (1977-1978) where he created and simulated Kalman Filters for TACAN and other navigational aids.
Dr. Kuhl is currently employed by the U.S. Army at ARRADCOM, Dover, N.J. where he is working on automated target recognition and trajectory estimation.

Time: 7:30 PM, Wednesday, September 14, 1983.
Place: ITT Auditorium, 500 Washington Ave., Nutley, N.J.
Additional Information: Dr. Allen Gorin (201) 757-1600, X-2472; Dr. Ben Ashjari (201) 420-5614.

SPECIAL NOTICE: Please note that the location for the meeting described below has been changed from that listed in previous issues!

Obtaining Defense Engineering Contracts

“How to Obtain Government Contracts for Engineering Services” is the subject of a joint meeting of the IEEE’s NY/NJ Chapter of the Engineering Management Society and the American Association of Cost Engineers. Speaker at September 21 meeting is Philip I. Johnson of Fort Monmouth.

About The Talk
Initially, the address presents an overview of DOD contracting for engineering services, the mechanisms of contracting, and the special emphasis placed by DOD on small business programs.

The body of the address deals with the techniques of actually obtaining contracts. Major emphasis is placed on how to work with the DOD, recognize and develop business possibilities, and then prepare winning proposals. Technical, management, personnel, and cost factors are considered.

Concluding remarks deal with how to work with the DOD once you have won the contract.

About The Speaker
Philip I. Johnson is a senior management official in the Army Communications Electronics Command at Fort Monmouth, New Jersey. He is Chief of the Technical Support

and Management Office; and manages engineering contracts amounting to many millions of dollars.

Prior to coming to Fort Monmouth, Mr. Johnson was an engineer in a select research and development group on the staff of the Secretary of Defense. In this capacity he was the inventor of highly classified electronic systems used to protect the life of the President of the United States. Immediately before joining the Department of Defense, he was head of the Computer Center at Illinois Institute of Technology.

Mr. Johnson’s background includes engineering management positions with the General Electric Company, Hughes Aircraft, and RCA. While with General Electric he developed a number of the basic concepts of the NATO air defense system in Western Europe.

Mr. Johnson holds a degree in electrical engineering from the University of Minnesota. His most recent graduate work is in computer science at Princeton University. He has done graduate work at Oslo University and American University.

Time: 7:15 PM, Wednesday, September 21, 1983.
Place: Swiss Bear Restaurant, 20 East 41st St., NYC.
Pre-Meeting Dinner: 5:30 PM, Swiss Bear Restaurant.

Reservations Required: \$17.50 per person, includes dinner, two cocktails, tax and gratuities. Call Al Bottani (212) 393-3797; Barry Gourary (201) 783-5570 or Harry Stokes (914) 696-6775.

Set NJ Computers & Communications Dates

The Joint Chapter of the Computer and Communications Societies of the North Jersey Section has planned the following meetings for next year:

- 9/28/83 — C versus PASCAL
- 10/26/83 — Fault-tolerant UNIX System
- 11/30/83 — Software Survey
- 1/25/84 — Computer Buying Decision Process
- 2/29/84 — Superminis
- 3/28/84 — Robotics
- 4/25/84 — Cellular Radio
- 5/23/84 — Teleport

Information: Dick Aiken (201) 428-7842.
Mark your calendar now. Details will follow in subsequent issues of this publication.

Scene Labeling In Computer Vision

The second meeting of the Systems, Man & Cybernetics Chapter will be held on Thursday, October 13, 1983. Dr. Robert A. Hummel of the Courant Institute will speak on “Scene Labeling in Computer Vision”.

About The Talk
Computers and robots can use vision to access information about the environment and to aid in making decisions. By processing digitized images, objects can be recognized and labeled according to their interpretation. How should knowledge be represented and learned by a computer vision system? In this talk, a local parallel iterative scheme, called relaxation labeling, will be presented. Using examples, it will be shown that relaxation labeling can be used to reduce ambiguity and achieve consistency in scene labeling.

About The Speaker
Robert A. Hummel (M’82) received the B.A. degree in mathematics from the University of Chicago and the Ph.D. degree in mathematics from the University of Minnesota. While in school, he spent summers at the Picture Processing Lab of the Computer

Science Center at the University of Maryland. He has also been employed at Stanford Research Institute and the Signal and Image Processing section of Honeywell’s Systems and Research Center in Minneapolis, Minnesota.

From 1980 to 1982 he was a Courant Institute Instructor in the mathematics department of New York University’s Courant Institute of Mathematical Sciences. He is currently an Assistant Professor of Computer Science in the Courant Institute, and a member of the Robotics and Vision Research Section there. He also serves as a consultant to Martin Marietta Aerospace in Orlando, and is an adjunct faculty member of IBM’s System Research Institute in New York.

In mathematics, Dr. Hummel’s research interests include variational methods for the study of partial differential equations, fluid mechanics, and foundations of thermodynamics.

In computer vision, Dr. Hummel is known as one of the co-developers of relaxation labeling methods for scene analysis. He has also worked in image enhancement, image representation and feature operator design.

Time: 7:30 PM, Thursday, October 13, 1983.
Place: ITT Auditorium, 500 Washington Avenue, Nutley, NJ.
Pre-Meeting Dinner: 5:30 PM, Jade Fountain Restaurant, Clifton, NJ.
Additional Information: Ben Ashjari (201) 420-5614, Allen Gorin (201) 757-1600, Andrew Meyer (201) 645-5468 and Ed Van Winkle (201) 939-8304.

Management Officers

The New York/North Jersey Chapter of the Engineering Management Society new officer installation dinner and workshop was held May 25, 1983, at the Robin Hood Inn, Clifton, New Jersey. The following previously nominated and elected officers slate was installed:

- Chairman: Martin Izaak
- Vice Chairman: Igal P. Sharett
- Secretary: Barry Gourary
- Treasurer: Al Batonni

The immediate past chairman, John Van Savage, attended the National Engineering Society ADCOM in New York City, during Electro/83.

Representatives Listed

In this issue you will find a list of the members of Congress and the U.S. Senate that represent the people of New Jersey. Their addresses and telephone numbers are for your convenience. Please save and use this material and make it available to your associates.
Our July issue included hints on contacting your representatives, (see pg. 3), “Legislation—A National Effort” by Sandra Blair.

Loss For Words

Perhaps we should leave two column inches blank and dedicate them to the activities of both the USAB Pensions Task Force and the USAB Age Discrimination Task Force. RIP might be an appropriate title. Mal Drummond, the Pensions Task Force leader was fired by Jack Doyle for pushing RCA a little too hard for some answers to members pension questions.

Larry Dwon, a Discrimination Task Force leader was politically mugged for chastizing companies that placed want ads that he thought discriminated against older engineers.

It truly amazes me that some of our members get more upset about language, letters and activities defining problems than they do about the source of, cause of, and the problems themselves.

Meanwhile, we still need North Jersey Members to join these Task Forces to keep us on top of the problems. Even corresponding members of the Task Forces are aware and can advise our Membership on these important issues before it’s too late and only an obituary is appropriate.

Call me if any of you are interested in USAB Task Force activities. We sure could use some help.

PACE NEWS Professional Activities Committee for Engineers

By R. Tax

Social For Engineers

Friday evening, September 23, 1983 provides our members with an opportunity to socialize, meet other members of IEEE, relax and enjoy the hospitality of the Section. The North Jersey Executive Committee is encouraging each member to bring potential members as guests to introduce them to IEEE.

Guests will be given the opportunity to join IEEE’s North Jersey Section at a special year end rate.

NJ Backs Gruenwald

At its August meeting the Executive Committee of the North Jersey Section joined the Boston and New York Sections in endorsing Alex Gruenwald for Region I Director in this fall's election for the 1984-1985 term of office.

Background information on both candidates for Region I Director--Mr. Gruenwald and Mr. Michael J. Whitelaw--is printed in this issue.

Alex Gruenwald

Alex Gruenwald's background within the structure of IEEE starts with early work over many years within the New York and Long Island Sections of the Joint Power Engineering and Industrial Application Society Chapters where his leadership was recognized when he rose to the position of Chairman of the Educational Committee (1962-64), and finally to the position of Chapter Chairman in 1969-70. Parallel to work in the local chapter, Gruenwald also gave much time and work to the PES Insulating Conductor Committee, where he ultimately served as Chairman of Accessories Committee between 1968-70. This latter was responsible for IEEE Standards on power cable joints and cable terminations. As part of this work, Gruenwald gave lectures at conferences, and made presentations of technical papers on cable subjects.

Broadening of his administrative background in IEEE came through work in the PES Winter Power Meeting. Here, he not only served as Secretary of the General Committee, which is responsible for the meeting, but was chosen as a technical session chairman for several years. He continues in voluntary work for PES, but has also expanded activities to now include work with SIT (Social Implications and Technology) of TOD where he serves with their AdCom, and is their convention chairman.

From the technical and local chapter levels, Mr. Gruenwald soon graduated to higher levels in the administrative structure of IEEE. Beginning in the early 1970's he became chairman of the New York Section Publications Committee, and was Section Chairman in 1977-78, having served the section with distinction in the elected positions from secretary through chairman. While as an active officer of the section, Mr. Gruenwald was instrumental in developing a sound and flourishing Student Activities organization not only for New York, but

for the Metropolitan New York area. He also served as chairman of METSAC (Metropolitan Sections Activities Council) for the period of 1977-79.

During his period of Section leadership, Mr. Gruenwald became active in the work of Region I. In 1976-77 he served Region I on its Priorities and Planning Committee and as Region I Vice Chairman during 1980-81. He is currently serving as PACE Chairman for Region I.

Mr. Gruenwald has also made himself known at the national level in the IEEE organization in a number of ways. In 1979 he was chosen by METSAC to be a director for Electro where he is completing his four year term of office. Here he has displayed leadership in serving in various capacities during these years--as Chairman of the Electro Visitors Services Committee, as Convention Director for Electro '81, and now as Vice Chairman of the Board of Directors and Chairman of the Executive Committee for Electro '83.

He is Chairman of the Priorities and Planning Committee of the Regional Activities Board for 1982-83, and is a member of the Task Force on the makeup of the IEEE Board of Directors. Within USAB he is a leader examining manpower and age discrimination. He is serving the Region I and NY Section Committee on the IEEE Centennial (1984).

Mr. Gruenwald's principal, long-time professional experience has been as an engineer with the Long Island Lighting Company, mainly in the field of high-voltage transmission. He has also worked as a manager for Waterbury Cable Service, a Utilities Engineer for Cerro Wire & Cable Company, and as a consultant.

He has lectured and written papers and manuals on cable-related subjects. He has authored several IEEE/International standards in the power area and is currently responsible for IEEE Standards as a Task Force Chairman. He has received a Region I Award for Electrical Engineering Management.

He is active in a number of other community projects including the Boy Scouts of America and its Exploring division, the Parent-Teachers Association, and religious organizations.

Michael J. Whitelaw

Mr. Whitelaw received the BSc (Eng.) Degree from Imperial College, London, England, and the MBA Degree from Rensselaer Polytechnic Institute, Troy, N.Y. He worked with Associated Electrical Industries,

England, from 1960 to 1968, where he held several positions in power systems generation; organizing and managing installation and testing of large rotating machinery, transformers, switchgear and relaying for the CEGB generating plants at Bankside, Berkeley and Cliff Quay. Further, his involvement includes design, construction and commissioning of some of the transmission substations of the British 400kV super grid system. He is a Chartered Engineer and a Member of the IEEE.

Since arriving in the U.S. in 1968, he held several positions in power systems transmission, managing installations of large substation projects for the Northeast Utilities (NU) system in Connecticut and Massachusetts. His technical interests have been in the areas of computerized construction management systems; health and safety aspects of EHV transmission lines and in the amelioration of environmental impacts of power facilities. He is currently employed in the NU Generation Electrical Engineering department dealing with the complexities of NRC's review of Appendix "R" - Fire Protection of Nuclear Generating Plants as well as with the evaluation of quality of construction work in nuclear power plants in New England. He is a Registered Professional Engineer.

Regarding IEEE activities, Mr. Whitelaw has been very active in the Regional Activities Board and as Chairman of the Admissions and Advancement Committee he has managed to expand the geographic base and meeting venues of his Committee's activities. He is constantly striving to improve the By-Laws' interpretations that allow his Committee to scan minimum qualifications requirements for admission and advancement of quality members of our Institute.

The following is a summary of Mr. Whitelaw's IEEE activities: Region I - Vice Chairman (1983); Regional Activities Board - Voting Member (1982); IEEE Admissions and Advancement Committee - Chairman (1982); IEEE Admissions and Advancement Committee - Member (1979-81); Region I - CT & RI SILAS - State Commissioner (1979-80); Connecticut Section - Chairman (1977-78); Treasurer (1976-77); Secretary (1975-76); MPA Committee - Chairman (1973-75); Career Guidance - Chairman (1972-73); Student Activities - Chairman (1971-72); Power Engineering Society - Member, Substation Committee/Environmental Subcommittee, Member Task Force W.G. 73-2 (1980-82).

Overhaul & Upgrade Of Oyster Creek Nuclear

The October, 1983 meeting of the Power Engineering Society, North Jersey Section, will host the ASME, Morris-Sussex sub-section. At the meeting, James Knubel of GPU will discuss "The Major Overhaul and Upgrade of the Oyster Creek Nuclear Station."

About The Talk

The Oyster Creek nuclear power station is one of the longest running facilities in the country. It has served the people of New Jersey for over thirteen years. The station is presently undergoing a major overhaul and upgrade which will require one year and cost \$105 million. This is an amount which is in excess of the original cost of the plant. Mr. Knubel will give us an overview of what is taking place at Oyster Creek.

About The Speaker

James Knubel, Manager of BWR Licensing, GPU Nuclear Corporation, is responsible for interaction with the Nuclear Regulatory Commission regarding the Oyster Creek Station. Jim is a graduate of the U.S. Naval

Academy and served in the Navy nuclear program for five years. He holds an MBA degree from F.D.U. He is also a licensed Senior Reactor Operator and has been employed by the General Public Utilities system since 1974.

Time: 7:30 PM, Wednesday, October 19, 1983.
Place: The Automatic Switch Company Auditorium, Hanover Road, Florham Park, N.J.
Additional Information: Edward Griffith (201) 455-8313.

MTT/AP Meeting Set

The first MTT/AP Chapter meeting of the season will be held September 12th at Rutgers University. Dr. George Matthaei will present a talk to the combined chapters from the Princeton, Jersey Coast and North Jersey Sections. Title of Dr. Matthaei talk is "Dielectric Waveguide Filter Techniques In Millimeter Waves."

Dr. Matthaei is one of the foremost personages in the microwave filter field and his talk covers a topic of great current in-

terest. His presentation will cover one hour, which will leave plenty of time for questions.


Time: 8 PM, Monday, September 12, 1983.
Place: Rutgers University, Busch Campus, Hill Center, Rm. 114, Piscataway, N.J.
Additional Information: Richard Snyder (201) 492-1207 or Hy Goldman (201) 284-3739.

PACE Sets Meeting Dates

The North Jersey Section Professional Activities Committee will sponsor its regular monthly meeting the third Wednesday of every month. Meetings will be held from 7:30 PM to 9:30 PM at Singer-Kearfott, Plant 3, 1250 McBride Avenue, Little Falls, N.J.

These meetings are open to all members and interested public professionals with refreshments free of charge.

Further Information: M. McLarin (201) 335-6847; H. Waters, (201) 785-6417.

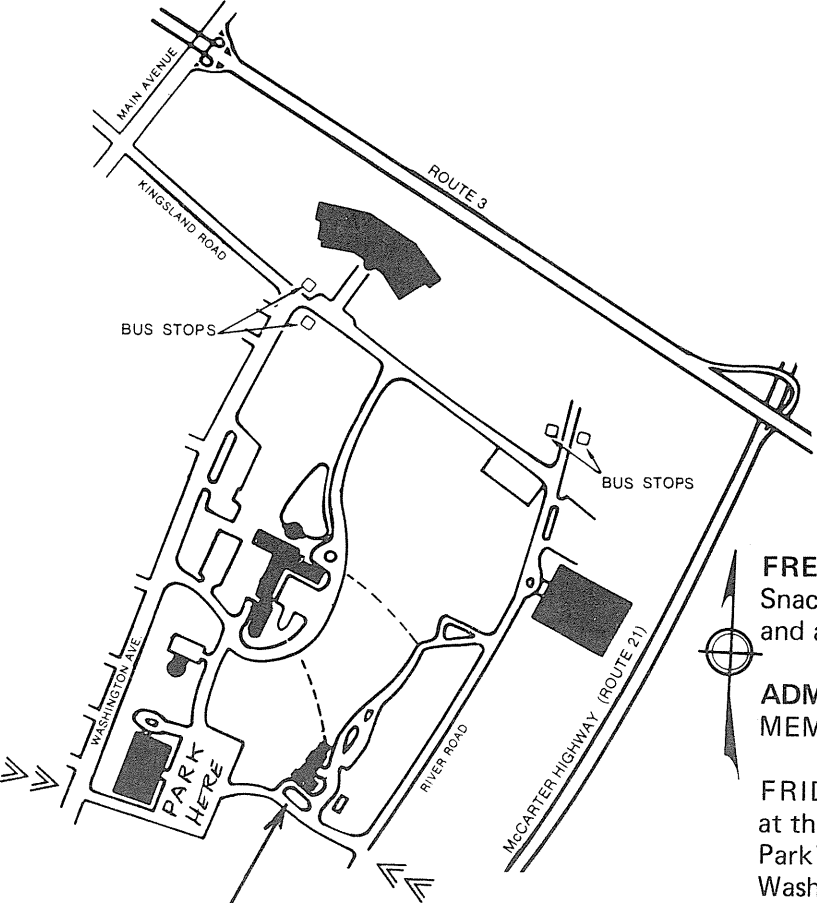


NORTH JERSEY SECTION SOCIAL

FREE — Beer, Wine, Soda, Coffee, Cheese, Sandwiches, Snacks and the opportunity to relax and meet with friends and associates.

ADMISSION: FREE to IEEE MEMBERS, and POTENTIAL MEMBERS.

FRIDAY, SEPTEMBER 23, 1983, 6:00 PM to 10:00 PM
at the ITT CLUB HOUSE, 417 River Road, Nutley, N.J.
Parking at rear of ITT AVIONICS DIV. BLDG., 390 Washington Avenue, Nutley, N.J.



ITT CLUBHOUSE
417 River Road, Nutley, N.J. 07110

"The IEEE Newsletter" - September, 1983 - Page 3

IEEE SEMINAR
LOCAL NETWORKS – PRESENT STATUS, ISSUES AND FUTURE TRENDS
Thursday, October 13, 1983

by
Dr. Kenneth J. Thurber
at
UNITED ENGINEERING CENTER
345 East 47th Street, New York City

Sponsored by:
Computer Society, New York Chapter, IEEE

9:00	AM	Welcome	Dr. Richard T. Sha, Chairman IBM Internal Telecommunications	
9:05		INTRODUCTION PBX's Virtual Circuits	Topologies	Datagrams
10:00		Coffee Break		
10:20		BASEBAND EQUIPMENTS Ethernet Arcnet	Net/One IBM Offerings	HYPERproducts
11:20		BROADBAND EQUIPMENTS Localnet IS/3M Networks	Contelnet	Wangnet
12:20		Lunch		
1:30		PBX's AND PERSONAL COMPUTER LOCAL NETWORKS CBX Omninet	IBX Other Selected Systems	Nestar Products
2:30		Coffee Break		
2:50		NETWORK SELECTION Establishing Requirements Performance Reliability Growth	Basic Services Cables/Connectors/Installation Monitoring & Control	
3:50–4:30		ISSUES & FUTURE TRENDS Standards Future Systems	Cost & Market Projections	

FEE: \$195.00 – Non-Members; \$175.00 – Members, and a \$20.00 discount toward early registration before October 1, 1983, (fee includes textbook, lecture notes, lunch, two coffee breaks).

Registration for “LOCAL NETWORKS”

TO: Mr. James P. Barbera, New York Telephone Co., Room No. 8L4, 1166 Ave. of the Amer. New York, N.Y. 10036, (212) 956-5642 or Dr. Philip Yu, IBM T.J. Watson Research Center, P.O. Box 218, Yorktown Heights, N.Y. 10598, (914) 945-1793.

Name _____ IEEE No. _____

Affiliation _____ Phone No. _____

Address _____

Please enclose required fee made payable to Computer Society/NY.

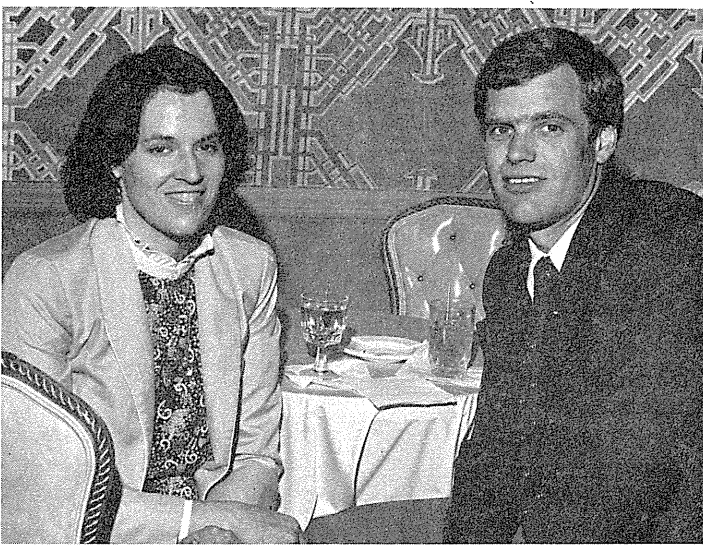
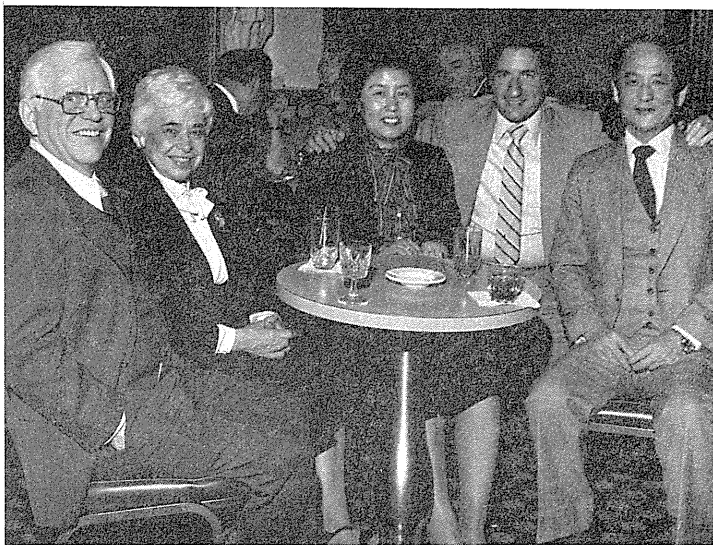
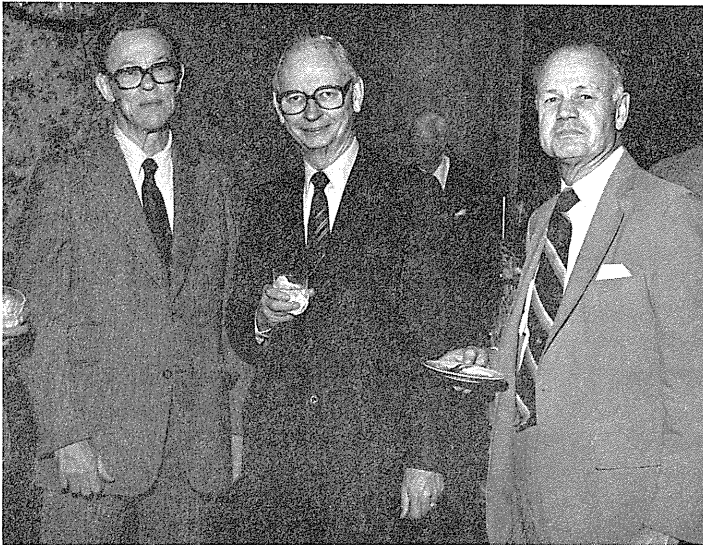
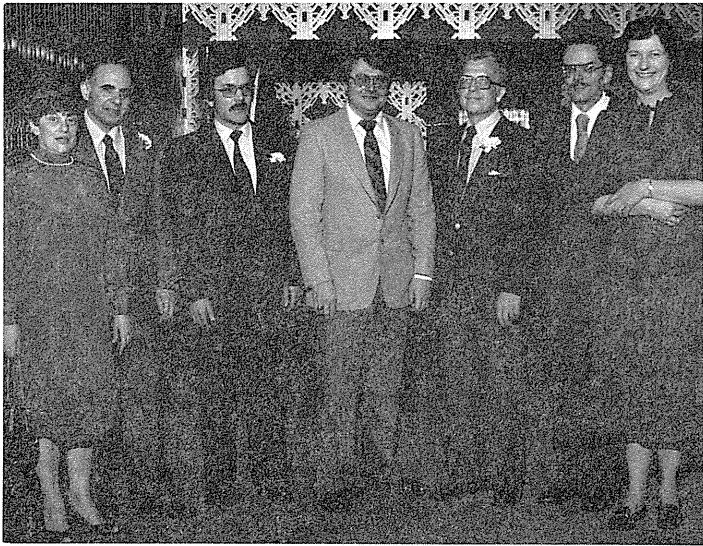
“C” Vs Pascal

Dr. Narain Gehani will present a comparison of the programming languages ‘C’ and Pascal at the September 28, 1983 meeting of the joint Computer and Communications Chapter of the North Jersey Section.

About The Talk
The languages ‘C’ and Pascal are growing in popularity, particularly among programmers of micro-, supermicro- and mini-computers. This talk summarizes and compares the two languages: their design philosophies, their handling of data types, the programming facilities they provide, the impact of these facilities on the quality of programs, and how useful the facilities are for programming for a variety of applications.

About The Speaker
Narain Gehani received his M.S. and Ph.D. in Computer Science from Cornell University in 1975, and taught at the State University of New York at Buffalo and New York University. Since 1978, Dr. Gehani has been with Bell Laboratories, Murray Hill, N.J. His research interests include programming methodology, programming language design, office automation formal specifications, compilers, databases and correctness of sequential and parallel programs.
Dr. Gehani is the author of “Ada: An Advanced Introduction” (Prentice-Hall, 1983); another book tentatively titled “Ada: Concurrent Programming,” is near completion. He is an editor of a collection of papers titled “Comparing and Assessing Programming Languages” (to be published by Prentice-Hall), and has published many papers in computer science journals. He is currently an ACM National Lecturer and is on the Editorial Advisory Board of Computer Languages.

Time: 7:30 PM, Wednesday, September 28, 1983.
Place: Jersey Central Power & Light Co., Madison Avenue (Route 24) at Punch Bowl Road, Morristown, N.J. From Route 287, take Route 24 eastward for approximately 1½ miles.
Information: Dick Aiken (201) 428-7842.



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