WANTED!
JOB SHOPPERS
NEW YORK
LONG ISLAND
SOUTHEAST
CONNECTICUT
MARYLAND

To $42/hr.

ELECTRONIC ENGINEERS
Analog & Digital Circuit Design; Microprocessor Hardware & Software
Low Voltage Power Supplies – Switching & Linear Regulators
RF, Microwave & ECM/EW Systems; Radar, Antennas & Receivers
Test, Automatic Test Equipment; Software Test Programming, ATLAS, VITAL
Reliability, Maintainability, Component Specifications, Logistics

MECHANICAL ENGINEERS
Airborne, Spaceborne & Shipboard Military Systems
High Density Electronic Packaging Techniques
Computer-Aided Thermal, Stress & Vibration Analysis

PROGRAMMERS
Intel 8086, 8088; Motorola 6800, 68000; Zilog Z80; HP-1000, 3000; PDP-8,11
Assembly, FORTRAN, BASIC, PASCAL, PL/1, “C”, UNIX
Software Documentation per MIL-STD-483, 490, 1679

—ALSO—
MANUFACTURING ENGINEERS, DESIGNERS, TECHNICAL WRITERS,
& ELECTRONIC TECHNICIANS

Rush Resume in Confidence to:
T P CONSULTANTS, INC.
P.O. BOX 184 – DEPT. IEEE
FRANKLIN LAKES, N.J. 07417
(201) 891-3447

The IEEE Newsletter
PUBLICATION OF THE NORTH JERSEY SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
NOVEMBER, 1983
Volume 30, Number 5

Engineers Legal Rights & Duties

Mr. Martin Fleit will speak on the legal rights and obligations of engineers to their technological developments at the November 15, 1983 meeting of the North Jersey Section of the Control Systems Society.

About The Talk
Technological developments can be guarded through patent protection, copyright protection, trademark or by keeping the development a secret. Dr. Fleit will share his expertise on who owns developments that are the result of an engineer’s intellect, and the relative merits of the basic mechanisms for protecting property rights in technology. His talk promises to be of wide interest to all members of the engineering profession.

About The Speaker
Martin Fleit is Senior Partner in the law firm of Fleit, Jacobson, Cohm & Price, Washington, D.C., whose members specialize in Patent, Trademark, Unfair Competition, Copyright, and Antitrust law. Mr. Fleit received his B.S. in Chemical Engineering from Tufts University and the University of New Hampshire in 1948, and his J.D. from Georgetown University in 1962. He is a member of the District of Columbia Bar, the Florida Bar, the American Bar Association, and several national and international law associations. His firm writes the patents column for the IEEE-EMB Magazine.

Update On Fuses
On November 9, 1983, the meeting of the North Jersey Chapter of the Industry Applications Society will hear a talk on “Fuses.” The guest speaker will be Mr. Edward T. Gimbult, a partner of Tri-Tech Sales Associates, Inc.

Mr. Gimbult has spent the last 12 years in the application and sale of low voltage current limiting fuses. He has conducted seminars and taught courses on “overcurrent protection” for Industrial, Contractor and Engineering groups. His prior experience includes working as an electrical engineer for Armstrong-Whiteley, Inc., Parsons-Jurds Corp., Allied Chemical Corp., and the N.Y. Naval Shipyard.

Attendance is free. Members and non-members are invited.

Time: 7:30 PM, Wednesday, November 9, 1983.
Place: Jersey Central Power & Light Co., Madison Avenue (Route 24), at Punch Bowl Rd., Morristown, N.J.
Directions: Via Interstate Route 287, take Exit 31 in Morristown and proceed East on Route 24 (Madison Ave.). JCPL is on the left shortly after the third traffic light. Further Information: Irwin West (201) 288-4485.
## Engineering Opportunities

**Military**

- Bruce Palmer
  - C³ Prod. Line Mgr. $65K
  - Prog. Mgr. EW $60K
  - A.I. Unit Head $58K
  - E.E.W. Sys. Engrs. $50K
  - R.F. Sctt. Mgr. $55K
  - P.A. Mgr. $55K
  - E.E. Dept. Mgr. $60K
  - Sr. Rel. Engrs. $55K
  - SW Engrs. $55K
  - ETE Engrs. $55K
  - EMI Engrs. $55K
  - Tech Writers $35K
  - IE/Mfg. $40K

**Communications**

- Lydia Thomas
  - Telecomm. Sys. Engrs. $55K
  - Data Comm. Sys. $55K
  - Comm. Switching $55K
  - Sat. Comm. Sys. $55K
  - Dig/Analog/Micro $50K
  - Speech Proc. $50K
  - Test Sys. Des. $48K

**Commercial/IC. 5S**

- Marsha Scott
  - Asst. Tech Mgr. $55K
  - Auto. Office Sys. $60K
  - VLSI/VHSSIC Des. $55K
  - AI Engrs. $55K
  - IC Processing $45K
  - Test Engrs. $45K
  - S.W. Bio Med. $45K
  - REL/QA/QC $50K
  - Dig/Analog $48K

---

**ATTENTION!**

If you are interested in attending our North Jersey Job Fair with over 20 major corporations attending and a chance to win a free personal computer, please mail in this coupon!

**NAME**

**ADDRESS**

**OCCUPATION**

**PHONE #**

---

**Dues By Credit Card**

All higher grade members in Region one (above Student grade) will have the option to pay their 1988 dues renewal by credit card with the dues bill mailed to them in late September. A form will be enclosed with the mailing that allows for payment through Visa, Master Card, or American Express. The credit card number and credit card expiration date should be clearly printed on the form or this may delay processing of the Member's renewal and increase administrative costs to process these renewals.

If the Member wishes to delete or add Society memberships, subscriptions or needs to alter the fees being remitted, these alternatives should be clearly printed on the portion of the renewal invoice being returned. The correct amount being remitted should be indicated both on the renewal invoice and credit card payment form.

---

**Employment Agreement Study**

The USAB has provided funding to the North Jersey Section for a Contract/Employment Agreement project. As reported earlier this year in THE NEWSLETTER your PACE committee is collecting employment/inventory agreement contracts from members.

Purpose of this project is to provide feedback to members on the legal ramifications of these employment agreements. Hopefully, a legal review of relevant prototype contracts will aid members in knowing the limits of their contracts and establishing limits of intellectual property provisions of these contracts. Copies of members contracts are needed to make the project successful.

As a part of a later phase of the project, the PACE committee plans to have a practicing attorney specializing in contract law make a presentation to the membership. Results of the project and a final report project will be made at that time.

Now, copies of employment agreements/contracts are required for this study. You can help by sending in a copy of your employment agreement/contract. If you like, you may black out names or titles and these will still be of great value to the project.

Please send your copies to our PACE Chairman: Mr. M. McLain, 17 Briarcliff Rd., Mountain Lakes, N.J. 07046.

---

**IEEE**

Recruit a new member above Student grade and win* a gift certificate to claim valuable IEEE centennial gifts. WIN IEEE centennial ties, scarves, digital clocks, mugs and other commemorative items.

What to do - Just complete the form below and mail it with the application and payment of person you recruit.

**NAME OF APPLICANT**

**RECRUITERS NAME**

**IEEE #**

**ADDRESS**

---

*Applications must be received at IEEE by December 31, 1983 to be eligible to receive prize.

Additional recruiter forms are available from IEEE MD, 445 Hoes Lane, Piscataway, NJ 08854.
Engineer Outlook: Not Rosy

Dick:

Perhaps your Section’s newsletter might like to quote from this article.

There are many reports to be paid off.

IRWIN FEERST

The following report by the Knight Ridder newspapers appeared in the “Chicago Tribune,” September 11, 1983.

ENGINEER OUTLOOK NOT ALL ROSY

Reports that a shortage of engineers in the 1980s will help guarantee high pay and job security for engineering graduates are highly exaggerated, according to recent studies by experts at the Bureau of Labor Statistics.

While it’s true there’s a favorable job market for engineers (27 percent of on-campus job offers went to engineering majors, who accounted for 6 percent of all graduates) there is a significant shortage of engineers in the 1980s, 1980s.

Moreover, experienced engineers may face problems of “salary compression” and obsolescence as they move into middle age, the study says.

The outlook for engineers isn’t all rosy, in other words, even though newly-graduated electronics, computer design and petroleum engineers are in high demand.

Much of the alarm over shortages of engineers was based on studies by the American Electronic Association. That group’s survey asked employers to project the number of engineers they would require in 1981, 1983 and 1985. While high demand was forecast, the Bureau of Labor Statistics study suggests that the projections overstated demand by basing them on overly optimistic sales growth estimates by the employers.

“In contrast to many predictions of shortages,” the bureau studies say, “requirements for engineers will be in rough balance with the rest of the 1980s.” However, the projected rate of growth in demand for engineers will continue to exceed that for the average of all occupations.

But it’s the mature engineer—the one with 15 to 20 years of experience—who will face the most serious job problems, the bureau says.

Many electrical engineers in their late 30s and 40s are dissatisfied with their careers, for instance, and report being assigned to less challenging and satisfying projects than their younger peers.

Older engineers also complain that their salaries often aren’t much higher than those of new graduates; that they are some—times laid off during slack periods, while younger engineers are retained; and that they have difficulty switching to jobs with comparable salaries and opportunities.

Engineering obsolescence is the cause of many of these problems. Unless he or she studies hard while at work, the engineer soon finds that new graduates actually have the edge with new technology. As this occurs, the older engineer’s value may peak and even decline.

Some engineers are more susceptible to obsolescence than others. Engineers in fields where technology is changing rapidly, such as electronics, probably are most vulnerable. So are engineers who allow themselves to become too narrowly specialized, and those who don’t continue their education throughout their careers.

In short, anyone who thinks he’s “got it made” because he’s becoming an engineer has better look beyond the short-run job prospects and consider the long-term pros and cons of this dynamic profession.

More On Rosy Outlook

Mr. Feerst’s note, I believe, is in reference to my efforts since 1977 and the efforts of the members of the latter formed USAB Occupational Outlook Task Force (OTF) to critique and revise

EMS Meet On Program Management

The NY/NJ Chapter of the Engineering Management Society will hear Mr. Arthur J. Scriveri, Vice-President and Director of Program Operations at ITT Defense Communications Division discuss “Engineering Program Management and Marketing—Kalaidoscopy Relationship” at its November 22, 1983 meeting.

About The Speaker

Prior to assuming his current position, Mr. Scriveri was Vice-President and Director for Program Management at Grum-Con. There he was responsible for all operations dealing with pressure, vacuum, velocity and float switches. Mr. Scriveri is a graduate of Stevens Institute of Technology, ME, Cum Laude. He has held membership in the ASME, AIAA, AMA, AFCEA and AUFA.

Time: 7:30 PM, Tuesday, November 22, 1983.

Place: ITT Auditorium, 500 Washington Avenue, Nutley, N.J.

Pre-Meeting Dinner: 6 PM, Jade Fountain, 321 River Rd., Clifton, N.J.

Further Information and Dinner Reservations: Al Bottone (212) 393-3797; Barry Garouri (212) 783-6970, and Harry Stokes (914) 698-6776.

Energy Efficient Motors

The New York & Long Island Section of the Joint Power Engineering Society & Industry Application Society will sponsor a meeting November 30, 1983 on “Application of Energy Efficient Motors.”

The speaker will be: Michael Politacos, Senior Electrical Engineer, Port Authority of N.Y. and N.J.

Time: 5:30 PM, Wednesday, November 30, 1983.

Place: Port Authority of New York & New Jersey, One World Trade Center, Room A81 North.

Information: Bert Kidoff, Port Authority of N.Y. & N.J. (212) 466-1184.

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 begin from 7:30 PM to 9:30 PM at Singer-Kearf Plant, 3-250 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. McCabe (212) 630-6987; H. Waters, (212) 785-6417.

New Control Officers

The New Jersey Control Systems Society Section has elected these officers for the 1983-84 year:


Vice-Chairman: Kushay Jain, Burns & Roe, (212) 265-2000.

Secretary/Treasurer: Daniel B. Turey, Ph.D., PharmaControl Corp., (212) 567-9004.

Heat-Shrinkable Cable Accessories

The NY/LI Joint PES and IAS Chapter will present a technical discussion and demonstration of “Heat-Shrinkable Power Cable Accessories for High Voltage Applications” on November 17, 1983.

Engineers from Raychem, Inc., will cover terminations: splices, switchgear connections, motor connections, transition joints, PULC to PULC (Paper Insulated Lead Covered Cable) “Y” splices.

Also to be covered are: accessories for low voltage application to 1000 volts: branch circuit kits, cable jacket repair kits, portable cord repair kits, breakouts, end caps.

There will be a question and answer period and sample kits and engineering brochures will be supplied to attendees.

Time: 5:30 to 7:30 PM, Thursday, November 17, 1983.

Place: Gibbs & Hill, Inc.-Training Room 17th floor, 11 Penn Plaza, NYC, (212) Seventh Ave. between 31 & 32 Streets.

Further Information: Anthony Dutko & Uwe Enke - Gibbs & Hill, Inc. (212) 760-4000; John Arceri - Con Edison (212) 834-3318.

Teleconferencing Systems

Richard S. Cramer will survey types of teleconferencing systems at the November 30, 1983 meeting of the Joint Computer and Communications Chapter of the North Jersey Section of the IEEE.

About The Topic

The speaker will define types of systems ranging from conference telephones to boardroom systems having various levels of visual adjuncts. For each type of system, the speaker will present suitable customers, why the system is used, and generic advantages and disadvantages. The speaker will give a description of each type of teleconferencing system.

About The Speaker

Richard S. Cramer is Vice President of Engineering of Avtec Industries, a firm that provides turnkey teleconferencing systems. He has spent over 20 years in the fields of audio, visual, and teleconferencing systems.

Time: 7:30 PM, Wednesday, November 30, 1983.

Place: Jersey Central Power & Light Co., Madison Avenue (Route 24) at Punch Bowl Road, Morrisatown, N.J.

Additional Information: Fred Smith (212) 286-6906.

EMBS Officers

Due to a vacancy in the Executive Committee, the Metropolitan Chapter of the Engineering in Medicine and Biology Society has recommended a revised slate for 1983-84:

Chairman: Jeff Kizir

Vice Chairwoman: Nina Krause Secretary/Treasurer: Mark Restivo

Further nominations will be accepted until November 1, and can be forwarded to Dr. Maryn J. Williams, Jr., Hospital Engineering Logistics and Planning, Inc., 746-769 Alexander Rd., C1-Princeton, Princeton, N.J. 08540 (609) 693-1990. Elections will be held on November 2 at the scheduled monthly meeting.

**The IEEE Newsletter** - November, 1983 - Page 6

**The IEEE Newsletter** - November, 1983 - Page 3
TECHNOLOGIES FOR THE INFORMATION AGE

PHOTONICS
SOFTWARE
MICROWAVE
DIGITAL

Language
In The
Programming

BASIC

REGISTRATION— "PROGRAMMING IN THE LANGUAGE BASIC"
To: Mr. Arnold Bower, P.O. Box 623, Wyncott, N.J. 07481 (201) 314-1401 (Bala Cynwyd, PA 19004-1401)
Please mention required as made payable to "IEEE".

Affiliation
Name
Address
Phone No.
IEEE No.

30th Regional Conference
2nd Conference

February 19-20, 1980
Rutgers Conference Center, New Brunswick, N.J.

Monday, February 19, 1980
9:30 A.M. - 5:30 P.M.

52nd Section
62nd Joint Section Meeting

March 4-6, 1980
Rutgers Conference Center, New Brunswick, N.J.

Friday, March 6, 1980
9:30 A.M. - 5:30 P.M.

Program:
1. Microprocessor Fundamentals
2. Computer Organization
3. Computer Architecture
4. Computer Languages
5. Computer Software
6. Computer Hardware
7. Computer Applications

The North Jersey Section is offering an evening course, "Programming in the Language BASIC," for those interested in learning how to use this powerful language. The course will be held on Wednesday evening, February 7, 1980, from 7:00 P.M. to 9:00 P.M., at the Rutgers Conference Center, New Brunswick, N.J. The course is open to all members of the section and is free of charge. To register, please contact the North Jersey Section office at 201-447-3600, ext. 200, or directly by phone to (201) 314-1401.

In addition to the regular conference, the section is also hosting an evening social event on Tuesday, February 18, 1980, from 6:00 P.M. to 8:00 P.M. at the conference center. This event is open to all attendees and is a great opportunity to network with other professionals in the field. For more information, please contact the North Jersey Section office at 201-447-3600, ext. 200, or directly by phone to (201) 314-1401.