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and the impact of the trend towards virtual organizations will be discussed. Don't miss this opportunity to stay current in today's ever changing competitive environment.

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The IEEE

Newsletter

PUBLICATION OF THE NORTH JERSEY SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

In Memoriam Maitland McLarin

Maitland McLarin, long-time active member of the North Jersey Section Executive Committee, died suddenly on December 20, 1995 at the Denville campus of Northwest Covenant Medical Center of an apparent heart attack. He was 70.

Mr. McLarin served as Chair of many Section Committees including a stint of tens of years as Historian. He will be sorely missed at the regular monthly meeting of the Executive Committee.

Maitland was an engineer at Picatinny Arsenal for 18 years before retiring in 1985. He received his bachelor's degree in electrical engineering from Brown University in 1950.

Mr. McLarin served in the Marine Corps during World War II.

Leap At The Chance To Become A Senior Member

You may be qualified if you have ten years of active professional practice. A Bachelors degree counts for three of those years and Masters and Doctorate degrees each count for one more year.

Get information on becoming a Senior Member by contacting Don Weinstein, Kulite Semiconductor, One Willow Tree Rd., Leonia, NJ., 07605-2239, (201) 461-0900, ext. 234 mornings, or Amy Bissmeyer, Videx Equipment Corp., 170 Railroad Ave., Paterson, N.J. 07501, (201) 742-2381, ext. 24.

Access the IEEE North
Jersey Section World Wide
Web home page at:

<http://hertz.njit.edu/~ieeenj>

NJ MTT/AP Chapter: Microstrip Strip- Element Phased Arrays

On February 21, 1996, the IEEE NJ Section MTT-S/AP-S Chapter and the New Jersey Institute of Technology, will present a talk on "Microstrip Strip-Element Phased Arrays." The speaker will be Chandra P. Nehra of Polytechnic University, Brooklyn, NY.

About The Talk

Computer aided design of probe fed microstrip strip-element phased arrays for 3-D or conical scan is presented. The design is based on the novel approach of equalizing the unmatched active impedance at the upper and lower limits of the operating frequency band. This equalization can be achieved for a given substrate permittivity by a scan-dependent substrate thickness/strip-width combination or the element spacings such that effect of scan resonance is tolerable. Numerical results for scan frequency dependence of matched active reflection coefficient for substrate permittivity in the range 2.0 to 5.0, for bandwidth and maximum conical scan angle, of (1) +/- 15% and 40 degrees, and (2) +/- 10% and 50 degrees, that complies with SWR < or = 2 will be presented. The element is suitable for linear polarization applications.

About The Speaker

Chandra P. Nehra received his BSc in India, BS (EE) University of Alberta and

MS (Physics) from University of Calgary, Canada. He worked for 25 years at the Bendix Corporation, specializing in Real-Time Embedded Processor systems for applications in aircraft navigation, steering and guidance. Presently, he is completing his PhD requirements at Polytechnic University, Brooklyn, NY in the area of phased array antennas. Mr. Nehra is also an adjunct professor at Stevens Institute of Technology, teaching real time computer systems.

Election Of Officers

Nominations are invited for the election of chairperson and vice-chairperson for the above North Jersey MTT-S/AP-S chapter. Please submit your nominations to Dr. Chandra Gupta (201) 633-4469, or Mr. Willie Schmidt (201) 492-0371, **no later than February 15, 1996**. Officer elections will be voted on at the February 21 meeting.

All Welcome

You do not need to be an IEEE member to attend. All are welcome. Free pre-meeting buffet will be provided starting at 6:15 PM and the meeting will start at 7:00 PM.

Time: 7:00 PM, Wednesday, February 21, 1996.

Place: NJIT, Engineering & Computer Center, ECE C202, 2nd Floor Conference Room. (Building located corner of Warren and Summer Streets, Newark, N.J.).

Information/Reservations:

Chandra Gupta (201) 633-4469 (GEC-Marconi); Edip Niver (201) 596-3542 (NJIT); Willie Schmidt (201) 492-0371.

FEBRUARY, 1996

FEBRUARY 1996
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Editor..... M.M. Perugini
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Deadline for receipt of material is the 1st of the month preceding the month of publication. All communications concerning editorial and business matters, including advertising, should be addressed to: The IEEE Newsletter, c/o Girard Associates, Inc., 6 Robert Terrace, P.O. Box 455, Mt. Arlington, N.J. 07856 (201) 398-5524.

IEEE North Jersey Section Home Page
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http://hertz.njit.edu/~ieeenj

REPORT ADDRESS CHANGES TO:
IEEE Service Center, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08854-1331, (908) 981-0060.

It is not necessary to inform the North Jersey Section when you change your mailing address. "The IEEE 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.

SECTION OFFICERS
Chairman..... Vittal Rebbapragada (201) 460-6327
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The North Jersey Section Executive Committee usually meets the first Wednesday (except holidays and December) of each month at 7 PM. These meetings are open to all members. Information on meeting agenda is available from Sergei Bogaenko (201) 785-3673 (H).

NY/NJ/LI EMBS:
Introduction To
Computer
Programming In C

On February 15, 1996, the Metropolitan Section Engineering in Medicine and Biology Society will present a free tutorial "Introduction To Computer Programming In C." The speaker will be Professor Joel Levitt.

About The Tutorial
In this free tutorial session Professor Levitt will provide an introduction to the programming language C, as a special service to members (and others) wishing to stay up to date and/or re-train for a new position.

This session is intended for those who have had some programming experience with at least one language—BASIC, FORTRAN, PASCAL, etc. The session will NOT cover C++, graphical interfaces, or any esoteric advanced applications. It is an INTRODUCTION for those who want to START. Syntax of basic statements and calls to standard system routines such as scanf, printf, puts, gets, if, while, kbhit, getch, switch & case, strncmp etc. will be discussed. Some of the things to be emphasized will be: 1. How to manipulate

and test strings of characters; 2. How to write your own callable functions; 3. How to pass many numerical values to a function; 4. How a function can pass many numerical values back to the calling function.

About The Speaker
Professor Levitt holds four degrees from Columbia University and has been a member of the faculty of Pratt Institute for over 25 years. He is serving his fourth year as Chairman of this EMBS chapter. He has taught computer programming at Pratt Institute to Electrical Engineering undergraduates (FORTRAN) and to computer graphics graduate students (C language). He is the author of "Small Signal Analysis—By Computer, By Inspection" Haywood Press 1983, which may have been the first electronics text to fully integrate a presentation of electronics fundamentals with an introduction to computer programming in both BASIC and FORTRAN.

Time: 7:15 PM Registration (no charge, you need not be a member); 7:30 Lecture
Thursday, February 15, 1996.
Place: Rockefeller Univ., Room 305 Weiss (formerly known as Tower Bldg.), 1200 York Avenue, NYC.
Further Information: Joel Levitt (212) 479-7805; or Susan Baxt (516) 678-6563.

Engineer's Week Celebration
THE ENGINEER AS A LEADER THIS CENTURY AND BEYOND

On February 20, 1996, the Metropolitan Engineering Societies Council is sponsoring, as part of Engineer's Week Celebration, a talk on "The Role Of The Engineer As A Leader In This Century And Beyond." The keynote speaker will be Eugene Fasullo, Chief Engineer (Ret.) of The Port Authority of NY & NJ.
Reservations and Fee are required for meeting and buffet. Return coupon below.

Registration: Advance Fee \$25 per person if Post Marked by February 7, 1996; \$35 per person if mailed after February 7.
Date: Tuesday, February 20, 1996.
Time: Buffet 5:30 - 7:00 PM. Program: 7:00 - 9:00 PM
Place: United Engineering Center, 345 E. 47th Street, NYC.
For Additional Information: j.p.barbera@ieee.org

ENGINEER'S WEEK CELEBRATION
February 20, 1996
To: Fred Ebel
M&M Protection Consultants
37th Floor, 1166 Ave. of the Americas, New York, NY 10036
Name (First)_____ (Last)_____
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Please enclose your check made payable to "Metropolitan Engineering Societies Council"

How To Get Your Own IEEE e-mail Alias
The following is reprinted from the file "info.aliases" made available by IEEE headquarters and is provided here to help you get your own easy to remember IEEE alias which allows the forwarding of mail to your service provider and then to you, all transparently.

"The IEEE maintains a "Directory Service" in which active IEEE volunteers can register their Internet address. They are assigned an "E-Mail name" (alias), usually "i.name", where "i" is the first initial, and "name" is the last name. To resolve ambiguities, we may have to assign two initials or use some other means of making names unique.
Messages addressed to "i.name@ieee.org" will automatically be forwarded to the actual Internet address.
This forwarding service is provided for IEEE members and staff in order to simplify the myriad of computer mailbox addresses. Our intent is to assist members to use their most convenient local electronic mail capability and, as simply as possible, exchange messages with any other member or staff person, or request services electronically. This forwarding service makes use of several types of aliases. IEEE aliases are dummy addresses of the form "xxx.yyy@ieee.org". When a message arrives at the IEEE Internet node "ieee.org", the message is automatically redirected (or forwarded) to the appropriate mailbox—whether it be at the IEEE Service Center or around the other side of the world.
PERSONAL ALIASES—these are of the form "i.name@ieee.org"—IEEE members and volunteers can request a personal alias. There are three advantages to having such an alias:
(1) You will be listed in the IEEE E-mail Directory so that other people can find you.
(2) You have only one place to send future changes in your e-mail address.
(3) These aliases are usually much easier to remember and simpler to use than the real address.

However, please note that your IEEE alias should NOT be used for subscriptions to mailing-lists from outside entities. Such traffic only impedes the performance of IEEE's E-Mail system.
OTHER ALIASES—All IEEE Sections, Student Branches, and Societies are being encouraged to set up a general e-mail contact address and register with IEEE so that they can be contacted via e-mail using the IEEE Forwarding Service and be listed in the IEEE E-Mail Directory. To find out how to register your IEEE Section, Student Branch, or Society e-mail contact address send a message to "info.startup@ieee.org".
You can obtain a copy of these directories by sending a message to:
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"directory.sb@ieee.org" for IEEE Student Branches, or
"directory.soc@ieee.org" for IEEE Societies.

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(e) your FAX number (if available, otherwise a BLANK line)
(f) your IEEE member number (if you are a non-member volunteer e.g. working on a Standards group—please ask your group chair who will be an IEEE member to process your request)
(g) your current major IEEE volunteer activity involvement (if applicable—committee positions, etc.)

If you wish to have your Section, Student Branch, or Society listed, please obtain and read a copy of the text file available as "info.startup".
Please do *NOT* send mail to 'postmaster' asking how to contact "so-and-so", or regarding what services are available. Send such requests to <nisc@ieee.org> which is a 'mailing-list' of our volunteers who can answer such questions. If you send such things to 'postmaster' or 'admin' it just has to be re-forwarded to the list before it will receive attention."
Mel Lewis, IEEE North Jersey Section Internet Coordinator

Student
Presentation Night
WEDNESDAY, MARCH 20TH AT 7:00 PM.
STEVENS INSTITUTE OF TECHNOLOGY

Once again the North Jersey Section will host an evening for area student members to present electrical engineering related papers. Any undergraduate student member of IEEE is eligible. Researching, writing, and presenting a paper provides a student with invaluable early experience in expressing ideas relating to engineering. Subject matter should cover technical, engineering, management, or social aspects of electrical engineering. Students will be asked to submit an abstract no later than Monday, March 18th to Amy Bissmeyer. No student should be discouraged from entering the contest due to a false requirement of technical sophistication. The important thing is that students get the chance to practice presentation skills in front of an astute, supportive audience of local IEEE members from many fields and backgrounds.

The North Jersey Section 1996 Student Presentation Night will be held 7:00 PM, Wednesday, March 20th at Stevens Institute of Technology. Each presentation will be judged on several things, including accuracy, use of visual aids, organization, and audibility, among others. Speakers will have ten minutes (+/- 1 minute) to make their point, and qualify for the prizes. The audience will then briefly critique each presentation. First place earns \$100, second place \$70, and third place \$30. Best of all, everyone gets to take home the comment sheets used to select our local winners.

New this year will be coordination with our Region 1 Student Paper Contest. The local contest rules will closely follow the Region 1 Contest Rules. Any student wishing to enter the next tier is welcome to do so.

The next step will be the Area B Contest, that covers the New York metropolitan area, North & Central Jersey, and Connecticut. This is tentatively scheduled at Polytechnic in New York City. This information will be in next month's newsletter. A month or so later, winners from Area B go on to the Region 1 Contest which includes winners from all four Areas of Region 1.

Complete rules for the North Jersey Section 1996 Student Presentation Night as well as the Region 1 Student Paper Contest are available. Students may indicate interest and request more information from IEEE North Jersey Section Student Activities Chairperson, Ms. Amy Bissmeyer, at (201) 742-2381, ext. 24, or (201) 239-5026, evenings.

Time: 7:00 PM, Wed., March 20, 1996.
Place: Stevens Institute of Technology, Hoboken, NJ.

IEEE NORTH JERSEY SECTION SEMINAR
OBJECT-ORIENTED C++ PROGRAMMING
TUESDAYS, APRIL 2 - JUNE 11, 1996

Jersey Central Power & Light Company, 300 Madison Avenue, Morristown, New Jersey

The North Jersey Section IEEE is offering an evening course entitled "Object-Oriented C++ Programming." Object-Oriented programming has been described as the biggest advance in computer programming since the creation of higher level languages 30 years ago. Instead of focusing on functionality (what the programs do) it focuses on the natural objects comprising the problem and how they, and their capabilities, are modeled in the program. C++ is, by far, the most widely used language today for object-oriented design and programming. This course will cover both the concepts of OOD and their implementation in C++ code. The course will begin with a review of common aspects of C and C++ but this time will be too brief to learn fundamentals of programming. **THEREFORE ONLY THOSE WHO ARE FAMILIAR WITH PROGRAMMING CONCEPTS SHOULD REGISTER FOR THE C++ COURSE.**

There will be ten weekly lectures and homework will be assigned and corrected. The topics listed below will be covered. The instructor is Dr. Edward (Ted) Byrne, owner of a software consultant business.

TOPICS

- (1) Review common elements of C and C++: punctuation and key words, variable naming, typing and scope, functions and subfunctions, arguments, operators and assignments, conditionals and logical variables, looping and testing, handling text strings, arrays and structures, pointers.
- (2) Concept of Object-Orientation: objects and classes of objects, methods and messages, encapsulation and abstraction, overloading of functions and operators, inheritance and polymorphism.
- (3) C++ improvements to C: new commands and operators, comments, stream I/O, function prototypes, more explicit typing and linking.
- (4) C++ implementation of objects: what is a C++ object, data and method functions within an object, public, private and friend, static and dynamic objects, constructors and destructors.
- (5) Encapsulation and abstraction within C++ objects: references and aliases, scope control operator, 'this' object, overloading, functions, operators.
- (6) Inheritance and polymorphism among C++ objects: parent class or object, extending classes, redefining object data and methods, multiple inheritance.
- (7) C++ I/O streams: standard I/O, formatted I/O with manipulators, disk and device I/O.
- (8) C++ library classes and their use: characteristics of a good library class, conversion base classes, video base classes, window base classes, database base classes.
- (9) Overall program structure with C++ objects: how to lay out a C++ program, how to reuse classes in a program, how to test and evolve a C++ program, how to find errors and debug C++ object programs.
- (10) Recent topics: object-oriented design methodologies, templates and the standard template library, namespaces and interactive program design.

Class size will be limited to a maximum of 25 with a minimum registration of 15. Early registration is recommended. Phone reservations will **NOT** be accepted. Reservations accepted after March 15, 1996 will require an additional late fee of \$25. No reservations will be accepted after March 22, 1996.

WHERE: Jersey Central Power & Light Company, 300 Madison Avenue, Morristown, N. J.
WHEN: Ten sessions, Tuesday evenings, starting April 2, 1996, 6:30 PM to 9:00 PM
COST: With Text Book and Borland Turbo C++ Compiler, IEEE Members \$300, Non-IEEE Members \$400
With Text Books only, IEEE Members \$200; Non-IEEE Members \$300
CONTACT: Mr. John A. Baka at (201)455-8534 (Business)

REGISTRATION "OBJECT-ORIENTED C++ PROGRAMMING"

TO: Mr. John Baka, Distribution Engineering, JCP&L Company, 300 Madison Avenue, Morristown, NJ 07962-1911

Name _____ IEEE No. _____

Affiliation _____ WorkPhoneNo. _____

Address _____

Check if Borland Turbo C++ Compiler is needed or not Yes [] No []

Please enclose required fee made payable to "NORTH JERSEY SECTION IEEE"

Signature _____

NJ Section PACE:

Wheelchairs For
The Brain?

The topic at the February 8, 1996 meeting of the NJ Section's Professional Activities Committee for Engineers will be "Wheelchairs For The Brain?" The speaker will be Max J. Schindler

About The Talk

Education in New Jersey's primary and secondary schools is trying to catch up with the computer age. To that end our Department of Education has issued a directive titled "Education for the 21st Century." Committees have been set up in most districts to implement it.

This talk will briefly review the track record of New Jersey's science education, and put it in context with the new plans. The "new math" of the 1960s began a slide that by now puts our children squarely at the bottom of all international tests. The "21st Century" directive seems designed to guarantee a further decline.

Engineers who (will) have kids in grades K-8 should be aware of what awaits their offspring. Since the local implementors are often computer illiterate, their plans reflect the "wow" factor more than real benefits, never mind potential harm.

Neither the "edutainment" industry (the prime mover in the effort) nor the Trenton educrats have a grasp of the child/machine interaction. Both could thus benefit from inputs from people who have been using computers as tools rather than toys. We must not furnish New Jersey's children with "Wheelchairs for the Brain."

About The Speaker

Max Schindler served on his local school board 25 years ago, and still plays an active advisory role. While working for the RCA Microwave Group he spearheaded CAE in electronic design, using both electron-beam and solid-state devices. He also published a book on software engineering.

All Welcome

You do not need to be an IEEE member to attend. All are welcome

Time: 7:30 PM, Thursday, February 8, 1996.

Place: JCP&L Co., 300 Madison Avenue and Punch Bowl Road, Morristown, N.J.

Information: Dr. Michael Liechenstein (201) 471-0721, or Dr. Robert Sinusas (201) 228-3941.

North Jersey Section Activities
February 1996

Feb. 7—"NJ Section Executive Committee Meeting"—7:00 PM, Plant 11, GEC-Marconi, 164 Totowa Road Totowa, NJ. Sergei Bogaenko (201) 785-3673 (H).

Feb. 8—"Wheelchairs For The Brain?"—NJ Section PACE, 7:30 PM, JCP&L Co. 300 Madison Ave. & Punch Bowl Rd., Morristown, NJ. Dr. Michael Liechenstein (201) 471-0721.

Feb. 15—"Adjustable Speed Drive Systems Harmonics"—PES & IAS, New York & LI Chapter, 5:30-7:30 PM, Con Edison, 4 Irving Place, 19th Floor Auditorium, NYC. For information: Ralph Tapino (718) 904-4526.

Feb. 15—"Introduction To Computer Programming In C"—Metropolitan Sections EMBS NY/NJ & LI, 7:15 PM Registration, 7:30 Lecture, Rockefeller University, Weiss Room 305, 1200 York Ave., NYC. Joel Levitt (212) 479-7805.

Feb. 20—"The Engineer As A Leader In This Century And Beyond"—Metropolitan Engineering Societies Council, United Engineering Center, 345 East 47th Street, NYC. See article for details.

Feb. 20-March 26—"Seminar: Internet Users"—IEEE NJ Section, Five sessions, Tues. Evenings, JCP&L Co., 300 Madison Ave., Morristown, NJ John Baka (201) 455-8534.

Feb. 21—"Microstrip Strip-Element Phased Arrays"—NJ Section MTT-S/AP-S Chapter and NJIT, 7:00 PM, NJIT, Engineering & Computer Center, ECE C202, 2nd Floor Conference Room, Newark, NJ. Chandra Gupta (201) 633-4469.

Feb. 26—"Making Functional Programming A Reality: The Sisal Project"—IEEE NJ Computer Chapter, 2:30, NJIT, CIS Conf. Room, ITC-4415, Newark, NJ. Prof. Andrew Sohn, EE-C/S Dept. NJIT (201) 596-2315.

Upcoming Meetings

Mar. 6—"NJ Section Executive Committee Meeting"—7:00 PM, Plant 11, GEC-Marconi, 164 Totowa Road Totowa, NJ. Sergei Bogaenko (201) 785-3673 (H).

Mar. 20—"1996 Student Presentation Night"—NJ Section, 7:00 PM, Stevens Institute of Technology, Hoboken, NJ. Amy Bissmeyer (201) 742-2381, ext. 24 or (201) 239-5026 (eve.).

Apr. 2-June 11—"Seminar: Object-Oriented C++ Programming"—NJ Section, 10-Sessions, JCP&L Co., 300 Madison Ave., Morristown, NJ. John Baka (201) 455-8534.

April 30-May 2—"ELECTRO '96"—Sponsored by Region 1, METSAC and CNEC, IEEE; New York and New England Chapters, ERA, Garden State Convention Center, Somerset, NJ. (800) 322-9332.

Members and Non-Members Welcome

Access the IEEE North Jersey Section
World Wide Web home page at:

<http://hertz.njit.edu/~ieeenj>

NJ Computer Chapter:
**The Sisal Project:
Making It Work**

On February 26, 1996, the IEEE NJ Computer Chapter will present a talk on "Making Functional Programming A Reality: The Sisal Project." The speaker will be Jean-Luc Gaudiot IEEE Distinguished Visitor, Department of Electrical Engineering-Systems, at the University of Southern California.

About The Talk

Despite more than a decade of research and advanced development, the proponents of parallel processing have not yet delivered an efficient, portable, general-purpose, and user-friendly parallel programming environment.

This talk will introduce the functional language Sisal and demonstrate how it fits within the overall goal of providing an efficient interface to the high-level parallel programmer. He will discuss some of the performance results which demon-

strate the efficiency of Sisal on a number of parallel platforms. The current Sisal project is targeted to promoting the direct usability of Sisal in commercial environments. To this end, the speaker will introduce "foreign language interfaces," in order to allow the run-time exchange of parameters amongst programs written in different languages with possibly different strengths. Further, he will discuss the array partitioning work as well as other software cache systems to provide a latency run-time system.

This project is a collaboration of teams from the University of Southern California, Colorado State University, and the Lawrence Livermore National Laboratory.

About The Speaker

Jean-Luc Gaudiot received his MSc and PhD degrees in Computer Science from the University of California, Los Angeles. Since graduating in '82 he has been on the faculty of the Department of Electrical Engineering-Systems, University of Southern California, where he is currently an Associate Professor.

His research interests include data-flow architectures, fault-tolerant multi processors, and implementation of artificial neural networks. In addition to his academic duties, he has consulted for several aerospace companies in the Southern California Area.

Dr. Gaudiot is a member of the ACM and is chairman of the IFIP Working Group 10.3 Parallel Processing. He has served as chairman and program chairman for numerous ACM and IEEE sponsored symposiums on Parallel Processing. He is currently serving as Editor of the IEEE Transactions on Computers and as Advisory Board member of the IEEE Technical Committee on Computer Architecture. Since 1994, he has been a Distinguished Visitor of the IEEE Computer Society.

All Welcome

You do not need to be an IEEE member to attend. Please bring your friends.

Time: 2:30 PM, Monday, February 26, 1996.
Place: NJIT, CIS Conference Room, ITC-4415, Newark, NJ.
Information: Prof. Andrew Sohn, EE-C/S Department, NJIT, (201) 596-2315.

NY Chapter IEEE Computer Society:

Call For Papers

Subject:

A case study of a successful implementation of:

- A. Windows NT 3.5 Client Server
- B. Novell Netware 4.1 Client Server
- C. OS-2 Warp Client Server

Time Frame:

June 27, 1996 or September 26, 1996

Place:

New York City (Midtown Manhattan)

Duration:

Full Day 9:00 AM - 4:30 PM

Organizer:

Mr. Jim Barbera, Chairman,
The New York Chapter of the IEEE
Computer Society, c/o Metro Services
Group Inc., 333 Fashion Avenue, 20th
Floor, New York, NY 10001

Phone: (212) 594-7688

Fax: (212) 465-8877

e-mail: j.p.barbera@ieee.org

Schedule:

Submit an outline of TALK by February 29, 1996

Notification of Acceptance by March 29, 1996

Completed Copy of Presentation by May 20, 1996

Submission:

Submissions are to be made to Jim Barbera at the above address. The 'Outline' can be sent via US mail, e-mail or Faxed. The completed presentation should be camera ready, or a floppy in Word, WordPerfect or PowerPoint.

**IEEE NORTH JERSEY SECTION SEMINAR
INTERNET USERS
TUESDAYS, FEBRUARY 20, 1996 - MARCH 26, 1996
JERSEY CENTRAL POWER & LIGHT CO.
300 MADISON AVENUE
MORRISTOWN, NEW JERSEY**

The North Jersey Section is offering an evening course entitled "Internet Users." The Internet is becoming increasingly popular to people and businesses alike. The role of personal computers in our society is changing from a means to increase personal productivity to a means of conveying and assimilating information. This information is being made available by the growth of the internet. This course will cover some of the underlying principles that allow the internet to operate, as well as the practical knowledge of how to use the required software to get connected and begin using the information resources the internet has to offer.

Students interested in taking this course should be computer literate, have access to an IBM compatible personal computer with at least a 9600 baud modem and be willing to subscribe to an internet access provider (most of the course material will be applicable to Macintosh users, however, the software requirements will differ). The course includes a suite of internet software products (SPRY's Internet in a Box) including a special edition textbook. *The Whole Internet Users Guide* by Ed Krol. The instructor will be Steven Morisse, an author and instructor of courses on internet usage.

There will be five weekly lectures and homework projects will be assigned and discussed in class. The topics listed below will be covered.

- 1) The background and history of the internet. Who is responsible for administration of the internet? Who pays to maintain and improve the internet? What is the future of the internet?
- 2) How does the internet work? Including TCP/IP networking theory, the Domain Name System (DNS), Client/Server model and an introduction to common internet application software.
- 3) How do you get connected to the internet? Including the types of internet accounts available and a decision of on-line services. How to choose an internet access provider.
- 4) How to select, configure and use the software required including FTP, TELNET, EMAIL, USENET NEWS, GOPHER and World Wide Web browsers.
- 5) Using the World Wide Web and how to find information. Introduction to Hypertext Markup Language (HTML) and how to create your own Web Documents.

Class size will be limited to a maximum of 25 with a minimum of 15. Early registration is recommended. Phone reservations will NOT be accepted. Reservations accepted after February 9, 1996 will require an additional late fee of \$25. No reservations will be accepted after February 16, 1996.

WHERE: Jersey Central Power & Light Co., 300 Madison Avenue, Morristown, N.J.
WHEN: Five sessions, Tuesday evenings starting February 20, 1996, 6:30 PM to 9:00 PM
COST: With text book only: IEEE Members \$200; Non-IEEE Members \$300
CONTACT: Mr. John Baka at (201) 455-8534 (business)

REGISTRATION "INTERNET USERS"

To: Mr. John Baka, Distribution Engineering, JCP&L Co., 300 Madison Avenue, Morristown, NJ 07962-1911

Name _____ IEEE No. _____

Affiliation No. _____ Phone Number _____

Address _____

Please enclose required fee payable to North Jersey Section IEEE

Signature _____

**WRI International Symposium Sept. 11-13, 1996
Second Call For Papers**

Weber Research Institute along with technical co-sponsors, the IEEE Microwave Theory and Techniques Society, IEEE Antennas and Propagation Society in cooperation with IEEE Long Island and New York Metropolitan Sections is sponsoring a three-day WRI International Symposium on "Directions For The Next Generation Of MMIC Devices And Systems."

Microwave and millimeter-wave integrated circuits are becoming increasingly important in modern military and commercial communication systems. Current trends are towards low-cost, high-density, multilevel, and multifunctional integration, covering millimeter and submillimeter wave regions. The integration of diverse subfunctions, such as light-wave devices, superconductor circuits, digital circuits and ferrite devices, together with conventional microwave or millimeter-wave devices, circuits and antennas, would allow implementation of large systems on a single chip. Research on advanced device concepts, 3-D interconnects, high-performance packaging methods, advanced CAD-tools, measurement and testing techniques, as well as material and fabrication technologies, are being directed to meet the new challenges.

Continuing on our Weber Research Institutes's series of symposia, we will host an international symposium on the recent developments and new research directions for the next generation of microwave and millimeter wave integrated circuits and systems. It will be organized as a three-day symposium, running in a single-session format of regular papers, poster presentations and panel discussions. The symposium will be held in our CATT Auditorium located at the Metrotech Center, Brooklyn, New York. Hotel accommodations will be available in the Manhattan area, conveniently connected to the conference site by subways. The extended versions of the papers will be published as a bound volume by Plenum Press, New York.

The topics of interest cover various aspects of the following suggested areas: Components and Devices; Novel Transmission Media; Printed Antennas and Phased Arrays; Multilevel Integration; Interconnects and Packaging; Multifunctional Integration; Fabrication Technology; Measurement, Testing and Reliability; Application Systems; CAD Tools and Environment; Analytical/Computational Techniques; Guided Wave Effects and EM-Theory.

TIME TABLE:

- ° Final Call For Papers: February, 1996
- ° Submission of One-page Summary: March 30, 1996
- ° Notification of Acceptance: May 30, 1996
- ° Extended Manuscript for Publication: At the Conference Registration

Send two copies of one-page abstracts addressed to Prof. Nirod K. Das, Conference Co-Chair, 1996 WRI Symposium, Polytechnic University, Route 110, Farmingdale, NY 11735. For further information contact Tel: (516) 755-4228; Fax: (516) 755-4404; E-mail: ndas@prism.poly.edu.