

# Newsletter

**MULTI-GROUP JOINT CHAPTER**

**FETAL MONITORING**

**WEDNESDAY, APRIL 21; 8:00 P.M.**

**ITT AUDITORIUM**

**500 WASHINGTON AVENUE**

**NUTLEY, N. J.**

## Learning and Control: Unexploited Synthesis

On Wednesday, April 21, 1971, the Automatic Control Group will sponsor a talk entitled, "Learning and Control: An Unexploited Synthesis." The speaker will be Dr. I. J. Shapiro of Bell Telephone Laboratories.

### About the Talk

The advent of Control Theory as a distinct discipline exhibits an expanding repertoire of mathematical techniques. More importantly, a variety of points of view have been brought to bear on the synthesis of suitable "controls," particularly in the presence of uncertainty. Some interesting developments have been made in the application of Stochastic Learning Theory to control systems. The minicomputer may provide the opportunity for exploiting the learning approach in complex and large systems and approaches.

### About the Speaker

Joseph Shapiro is a member of the Control Systems Research Department at Bell Laboratories, Whippany, New Jersey. Since joining Bell Laboratories in 1970, he has been engaged in research on learning control systems and communication networks.

He received the B.S. degree in Electrical Engineering and the M.S. degree in Instrumentation from the University of Witwatersrand, Johannesburg, South Africa, and the M.S. and Ph.D. degree in Engineering and Applied Science from Yale University in 1960, 1965, 1966 and 1969, respectively. From 1962 to 1965, he was a Development Engineer at B-H Electronics Ltd. and at Associated Rectifier and Electronics Ltd., Johannesburg, specializing in the design of stabilized rectifier equipment.

A native of Brakpan, South Africa, Dr. Shapiro has authored several technical articles dealing with control theory and semiconductor components and applications. He is a member of the IEEE.

**Time:** Wednesday, April 21; 8:00 P.M.

**Place:** Room 1H-009, Bell Telephone Laboratories, Whippany, N.J.

**Pre-Meeting Dinner:** Rod's 1890's Ranch House, Madison Avenue (Route 24), Convent Station, N.J.; 6:00 P.M.

**Further Information:** Contact G. A. Ford, Bell Telephone Laboratories, Whippany, N.J., (201) 386-5103.

Thursday, April 8

The City University of New York, the IEEE Metropolitan New York Section on Electron Devices and the New York Section of the New Technical & Scientific Activities Committee, Joint Symposium — MOS Devices and Integrated Circuits — C.U.N.Y. Graduate Center, 33 West 42nd St., New York City. April 8, 9:00 A.M. to 4:00 P.M.

Tuesday, April 13

Communication Technology and Aerospace and Electronic Systems Groups, Joint Meeting — Domestic Satellite Systems — Robert D. Briskman, Speaker. ITT Laboratories, 500 Washington Avenue (Tower Building), Nutley, N.J. 8:00 P.M. Pre-Meeting Dinner: Copperhood Restaurant, 1 Park Avenue, Lyndhurst, N.J.; 6:00 P.M. (Dutch treat)

Wednesday, April 14

Professional Group in Engineering Medicine and Biology — Future Directions in Artificial Organs — Dr. E. F. Leonard, Speaker. Rockefeller University, South Lab. Building, Rm. 204, York Avenue and 66th Street, New York City. 8:00 P.M. Pre-Meeting Dinner: Abby Aldrich Hall, Rockefeller University; 6:00 P.M.

Thursday, April 15

Instrumentation and Measurements Group — Time Shared Computer as an Engineering Aid — James Mason, Speaker. American Electric Power Service Corporation, Room 1141, 2 Broadway, New York City. Pre-Meeting Dinner: George's Restaurant, 80 Broad Street, New York City; 5:30 to 6:30 P.M.

Wednesday, April 21

Multi-Group Joint Chapter — Fetal Monitoring — Charles V. Lundeen and Philip S. Green, M.D., Speakers. Auditorium, ITT, 500 Washington Avenue, Nutley, N.J. 8:00 P.M. Ladies invited.

Wednesday, April 21

North Jersey Automatic Control Group — Learning and Control: An Unexploited Synthesis — Dr. I. J. Shapiro, Speaker. Room 1H-009, Bell Telephone Laboratories, Whippany Road, Whippany, N.J. 8:00 P.M.

Wednesday, April 21

Power Group — The Consultant, Utility and Contractor in Harmony — Robert Bloch and Herbert Vuolo, Speakers. Punch Bowl Room, Jersey Central—New Jersey Power & Light Company Headquarters, Route 24, Morristown, N.J. 7:00 P.M.

Thursday, April 22

Metropolitan Chapter on Instrumentation and Measurements — Spring Study Series — First Meeting — Con Edison, 14th Street and Irving Place, New York City, Room 1425. 7:00 P.M. to 9:00 P.M.

Thursday, April 22

Computer Group — Microprogramming — Dr. Ivan Flores, Speaker. Auditorium, Bell Laboratories, Whippany, N.J. 8:00 P.M. Pre-Meeting Dinner: Rod's Ranch House, Convent Station, N.J.

Friday, April 23

Power and Industrial Division — Ecology and the Engineer — Stuart F. Millendorf, Gerald Halvorsen, Dr. Hugo Freudenthal, Speakers. Consolidated Edison Co., 19th Floor, 4 Irving Place, New York City. 6:30 P.M.

Wednesday, May 5

New York, North Jersey and Long Island Joint Chapter on Instrumentation and Measurement — Field trip to the Freeport Power Plant No. 2, Freeport, N.Y. 7:00 P.M.

*Calendar Continued on Page 3*

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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.

## NORTH JERSEY SECTION OFFICERS 1970-1971



H. E. Blaicher, Jr.



Robert G. Sokalski

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## Cover Story: Fetal Monitoring

The April meeting of the Multi-Group will feature a discussion of one of the newer applications of electronic technology in the field of medicine. The speakers will be Mr. Charles Lundeen of the Hewlett-Packard Company, Paramus, N.J., and Dr. Philip Green who is associated with the Muhlenberg Hospital in Plainfield, N.J. Dr. Green has helped to develop and to use this technique in fetal monitoring.

The engineering problems encountered in the design of this system and the problems involved in interpreting the data obtained during its use should be interesting to the electronics engineer and the medical practitioner, as well as the recipients of all this attention, the women.

*(Cover Photo courtesy of Hewlett-Packard Company).*

**Time:** Wednesday, April 21; 8:00 P.M.

**Place:** Auditorium, ITT, 500 Washington Ave., Nutley, N.J. (Ladies invited).

## Microprogramming

The April meeting of the North Jersey Section of the IEEE Computer Group will feature a talk on, "Microprogramming," by Dr. Ivan Flores.

### About the Talk

This lecture will examine the principles of microprogramming and their popularity in computer design. The subject is introduced by examining what microprogramming is and the relation between microprogram memory and the rest of the computer. Next some computer designs using microprogramming will be briefly examined. Next the role of the en-

gineer will be discussed where microprogramming is provided in the computer which he is designing. The big advantage of microprogramming is that the apparent architecture of the computer can be changed with only a small physical change in the microprogram memory. However, in practice, the user generally does not make use of this facility and the speaker will examine why this is so. Economical tradeoffs available to the manufacturer will also be explored.

### About the Speaker

Professor Flores holds a B.A. from Brooklyn College, an M.A. from Columbia University and a Ph.D. from New York University. He has been working in the computer field since 1950. In 1960 he established Flores Associates, which has done consulting in computer design, programming, software and systems design for many firms. He has taught in the Electrical Engineering Department of Polytechnic Institute of Brooklyn, New York University and Stevens Institute of Technology, and is presently Professor of Statistics at Baruch College, City University of New York.

Author of forty papers, he has done research in many areas, including mass memories, the latter being supported by a grant from the Atomic Energy Commission. He has published several texts.

Dr. Flores is a reviewer for several scholarly journals in the computer field. He is a consultant to the U.S. Army Scientific Advisory Panel. Professor Flores is a member of Sigma Xi.

**Time:** Thursday, April 22; 8:00 P.M.

**Place:** Auditorium, Bell Laboratories, Whippany, New Jersey.

**Pre-Meeting Dinner:** Rod's Ranch House, Convent Station, N.J.

**For Reservations:** Call Clarence A. Ellis, Telephone: (201) 386-5120.

## CALENDAR CONTINUED FROM PAGE 2

**Wednesday, May 12**

Metropolitan New York Chapter Professional Group in Engineering in Medicine and Biology — Transient Perturbations in Biosystems Analysis — Dr. T. W. Murphy, Speaker. Rockefeller University, South Lab Building, Room 204, York Avenue and 66th Streets, New York City. 8:00 P.M. Pre-Meeting Dinner: Abby Aldrich Hall, Rockefeller University. 6:00 P.M. (Details next month)

**Thursday, May 20**

New York Metropolitan Area Chapter, Electron Devices Group — Recent Advances in Millimeter-Wave Impatt Diodes — R. Edwards, Speaker. Bell Telephone Labs., United Engineering Center, 345 East 47th St., New York City. 8:00 P.M. Pre-Meeting Dinner: Copain Restaurant, 1st Avenue at 50th St., NYC. 6:00 P.M. (Details next month)

## The Consultant, Utility & Contractor

The theme of this meeting will be, "The Consultant, Utility and Contractor in Harmony."

The program will center around the discussions, negotiations and problems associated with the successful completion of the Cherry Hill Towers office building as seen from the viewpoint of a consulting engineer, a contractor and an electric utility.

Refreshments will be served following the program.

Attendance at the meeting is not limited to IEEE members but is open to all interested parties.

Speakers at the meeting will be, *Robert Bloch—Engineering Consultants; Herbert Vuolo—Cherry Hill Road Associates; Jack Sicsko—Jersey Central Power & Light Company.*

*Time:* Wednesday, April 21; 7:00 P.M.

*Place:* Punch Bowl Room, Jersey Central—New Jersey Power & Light Company Headquarters, Route 24, Morristown, N.J.

## Domestic Satellite Systems

The Communication Technology and Aerospace and Electronic Systems Groups will host a joint April meeting which should be of interest to both the communications and network planners and electronic engineers concerned with new aerospace developments. The speaker will be Mr. Robert D. Briskman of COMSAT.

**About the Talk**

Several applications are pending at the Federal Communications Commission (FCC) for implementing domestic satellite systems. These systems would provide various communications services within the United States. The technical parameters, basic characteristics and limitations of such communications satellite systems will be discussed, including a brief look at certain economic factors. The current FCC applications will be reviewed. Also, projections of possible future domestic satellite systems will be made.

### About the Speaker

Robert D. Briskman received his B.S. in E.E. from Princeton, and an M.S. in E.E. from the University of Maryland. In

1954 he joined I.B.M. to work on computer development. In his military service which followed, he distinguished himself as an electronic countermeasures analyst. Subsequently, he worked for the Army Security Agency.

He joined NASA in 1959 where he served as Chief of Program Support for the Office of Tracking and Data Acquisition. Mr. Briskman received the Apollo Achievement Award from NASA.

Since January 1964 Mr. Briskman has been employed by the Communications Satellite Corporation where he worked with INTELSAT I (Early Bird). He is currently manager of the Domestic and Special Project Office.

Mr. Briskman is a senior member of IEEE and has served as a chapter President and Professional group chairman.

*Time:* Tuesday, April 13, 8:00 P.M.

*Place:* ITT Laboratories, 500 Washington Avenue (Tower Building), Nutley, N.J.

*Pre-Meeting Dinner:* Copperhood Restaurant, 1 Park Avenue, Lyndhurst, N.J.; 6:00 P.M. (Dutch treat).

For dinner reservations, contact Mr. N. Hettinger (201) 529-4600 X2477. For further information about the talk, contact Mr. G. Parowski (201) 529-4600 X2463, or Mr. Irving Meltzer (201) 256-4000 X829, Plant 10.

## Transducer Study Series

A Spring Study Series sponsored by the Metropolitan Chapter on Instrumentation and Measurements will cover electrical transducers for power system measurements. A basic knowledge of their principles of operation, circuit components, test methods and applications will be discussed at this seminar. This study series will provide the electrical engineer with the knowledge he needs for today's electric power measuring systems.

The series will be held on six consecutive Thursday evenings from 7:00 P.M. to 9:00 P.M. at Con Edison, 14th Street and Irving Place, New York City, Room 1425. The fee is \$20.00 for IEEE members, \$30.00 for non-members, \$5.00 for students. For further information call Mr. Karl Sommer at 212-460-6176, or Mr. Henry Oltzmann at 201-465-2285.

### Program

April 22—Ampere and Voltage Transducers and Measurements—*Mr. Foster D.*

*Lasher, Products Engineering Manager, Rochester Instrument Systems, Inc.*

April 29—Watt Transducers and Measurements—*Mr. G. H. Pieterston, Magnetic Circuits Division, F. W. Bell, Inc.*

May 6—VAR, Phase Angle and Power Factor Transducers and Measurements—*Mr. Donald Gebhardt, Director of Engineering Transdata, Inc.*

May 13—Frequency Transducers and Measurements—*Mr. J. T. Wintermute, Senior Design Engineer, Westinghouse Electric Corporation.*

May 30—Magnetic Field Transducers and Measurements—*Mr. Jack M. Janicke, Vice President, RFL Industries, Inc.*

May 27—The Role of the Transducer in Measuring Electric Power in Data Acquisition and Control Systems—*Speaker from Quindar Electronics, Inc.*

## Time Shared Computer As an Engineering Aid

At the April 15 Instrumentation and Measurements Group general meeting, James Mason will present a talk of special interest to those interested in learning more about the usefulness of time-shared computers. Those who have used time-shared computers to solve engineering problems can vouch for the flexibility and powerful capabilities of this engineering tool. Mr. James Mason of the General Electric Company will introduce this portion of the meeting by discussing the operation of such a system and how it could benefit the Instrumentation and Measurements engineer. There will be a demonstration of solving several practical examples related to Instrumentation and Measurements problems using a time-shared computer terminal.

A Dutch Treat dinner will be held between 5:30 and 6:30 P.M. at George's Restaurant, 80 Broad Street, New York City, followed by the Meeting at 7:00.

Registrations for dinner and for the meeting should be made by calling Mr. David C. Roberts at (212) 422-4800, Ext. 634.

*Time:* Thursday, April 15; 7:00 P.M.

*Place:* American Electric Power Service Corporation, Room 1141, 2 Broadway, N.Y.C.

*Pre-Meeting Dinner:* George's Restaurant, 80 Broad Street, New York City; 5:30 to 6:30 P.M.

## MOS and IC Symposium Slated for NYC

The City University of New York, the IEEE Metropolitan New York Section on Electron Devices and the New York Section of the New Technical & Scientific Activities Committee will jointly sponsor a Symposium on MOS Devices and Integrated Circuits on April 8, 1971.

The field of MOS devices and integrated circuits has shown remarkable growth in recent years, to the point where a formidable challenge is being presented to bipolar device technology. The main reasons are higher packing density, simpler wafer processing with resultant higher yield and a better understanding of the stability of insulating films with aging. It is projected that MOS devices and IC's will capture an increasing share of the market in the next few years. This symposium has gathered six eminent researchers in this field to present a balanced program of recent advances in the state of the technology. There will be ample time for discussion with the speakers.

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### Program

Welcome by Dr. Egon Brenner, Dean of Graduate Studies, School of Engineering, City College of the City University of New York.

**SESSION I** — Chairman: Dr. Joseph Nadan, CCNY, Beam Lead Sealed Junction IGFET IC's—Dr. Richard Jacobs, Bell Telephone Laboratories, Allentown, Pa.; N-Channel MOS Dynamic Memory Circuits—Dr. Charles Allen, Cogar Corp., Wappinger Falls, N.Y.; MOS Transistors and IC's for Linear Systems—Mr. Robert Dawson, RCA, Somerville, N.J.

**SESSION II** — Chairman: Mr. Robert Dawson, RCA, MOS-LSI Memories—Mr. Leo Cohen, General Instruments, Hicksville, N.Y.; The Use of Ion Implantation in MOS Devices and Circuits—Dr. Francis

Harper, MOS Technology, Inc., Valley Forge, Pa.; An All-MOS Digital to Analog Converter—Mr. John Blank, GT&E Laboratories, Bayside, N.Y.

**Registration for IEEE Members**—\$25.00; Non-Members—\$30.00; Full-time Students—\$5.00. Add \$5.00 for registration after April 1, 1971. Registration fee includes coffee and lunch.

Make checks payable to, "NTSAC," and remit to: C.C.N.Y., EE Dept. (Dr. J. Nadan), 140th St. and Convent Ave., New York, N.Y. 10031. Acknowledgments will be mailed to all registrants.

**Time:** Thursday, April 8; 9:00 A.M. to 4:00 P.M.

**Place:** C.U.N.Y. Graduate Center, 33 West 42nd St., New York City.

## Report From The Nominating Committee

### Nomination of Section Officers

The Nominating Committee is offering the following slate of individuals as candidates to serve as North Jersey Section IEEE officers for the period from July 1, 1971, to June 30, 1972:

Chairman	— R. G. Sokalski
Vice Chairman	— C. C. Torell
Treasurer	— H. J. Perlis
Secretary	— J. H. Gerth
Member-at-Large (1)	— James Gass
Member-at-Large (2)	— J. F. Kampschoer

### Independent Nominations

Additional nominations may be made by a petition signed by no fewer than 25 voting members of the Section and transmitted to the Secretary for submission to the Executive Committee not later than April 30. The petition must certify that persons nominated have agreed to serve if elected.

### Election of Officers

The election of officers shall take place at the May general meeting of the Section, unless the Executive Committee decides that a mail ballot is required. In case a mail ballot is used, it shall be sent out to all voting members no later than May 10 and shall be returned no later than one month from the date of mailing. In the case of a mail ballot, the Chairman shall appoint at least three tellers having the approval of the Executive Committee to count the mail ballot within one week after the closing date for returns.

### Institute Committees and Boards

In addition to recommending a slate of candidates for Section offices, the Nominating Committee is also charged with recommending to IEEE Headquarters the names of suitable individuals to serve on various Institute Committees and Boards. Any Section member who wishes to propose nominees for Section Committees and Boards should contact the Chairman of the Nominating Committee whose name and phone number are shown below.

*Section Nominating Committee Chairman*

*J. G. O'Grady, Public Service Electric and Gas Co.*

If there are questions related to any of the above material, or any aspect of the nomination process, those inquiries should be directed to: *Joseph G. O'Grady, Chairman, Section Nominating Committee, Public Service Electric and Gas Company, 80 Park Place, Newark, New Jersey 07101. Phone: 621-6800, Ext. 702.*

## Field Trip To Power Plant

The New York, North Jersey and Long Island Joint Chapter on Instrumentation and Measurement is sponsoring a field trip on May 5th, to the Freeport Power Plant No. 2, Freeport, Long Island.

The new Village of Freeport Municipal Power Plant is a 20,000 kilowatt unit which started operating in 1969. The plant is powered by twin 13,000 hp diesel engines.

The tour will start in the Control Room with a presentation by plant engineers concerning all phases of plant operation, with particular emphasis being placed on plant instrumentation.

A tour of the facilities will follow the presentation where instrument application and installations can be seen in operation.

Meet at Sea Breeze Restaurant for a Dutch Treat Supper at 5:45 P.M. The Sea Breeze is located at the intersection of Merrick Road and Mill Road.

Driving from New York City, take Southern State Parkway to Meadowbrook Parkway South. Exit from Meadowbrook Parkway onto Merrick Road West. Proceed on Merrick Road to first light and turn left onto Mill Road. Continue on Mill Road and turn left immediately after Freeport Stadium onto Buffalo Avenue. Follow Buffalo Avenue and Buffalo Avenue Extension to Power Plant.

**Time:** Wednesday, May 5; 7:00 P.M.

**Place:** Freeport Power Plant No. 2, Freeport, Long Island, N.Y.

### FIELD TRIP FREEPORT POWER PLANT NO. 2 May 5, 1971

**Send to:** Mr. H. Otzman  
c/o Westinghouse Elec. Corp.  
95 Orange Street  
Newark, New Jersey 07101

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

- ☐ I will  
☐ I will not be at the Dutch Treat Supper.



*Taken at the Gov. Morris Inn, Feb. 13, Annual Section Dinner and Recognition of New Fellows, North Jersey Section. Raymond W. Sears, guest speaker (left), and Herb Blaicher, Chairman, North Jersey Section.*

## Artificial Organs

On April 14, 1971 the Professional Group in Engineering Medicine and Biology will present a talk by Dr. E. F. Leonard of Columbia University on the future developments of implantable artificial replacement organs, such as mechanical hearts and kidneys.

### About the Speaker

Dr. Leonard is in the Chemical Engineering Department of Columbia University and is acting chairman of the Committee on Bioengineering at Columbia. He is also Director of the Artificial Organ Research Laboratory at Columbia. Dr. Leonard is an active consultant and officer in the American Society for Artificial Internal Organs.

**Time:** Wednesday, April 14; 8:00 P.M.

**Place:** Rockefeller University, South Lab. Building, Rm. 204, York Avenue and 66th Street, New York City.

**Pre-Meeting Dinner:** Abby Aldrich Hall, Rockefeller University; 6:00 P.M.

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## Bell Telephone Labs Computer Center Tour

The North Jersey Section will hold a tour of the Computer Center at Bell Telephone Laboratories, Murray Hill, Tuesday, May 11, at 7:15 P.M.

Without doubt the advent of the computer has left a deeper impression on the contemporary scene than any other recent accomplishment of the engineering profession. While, for some of us, this marvelous machine is a routine tool, many never had the opportunity to observe it in its natural habitat. Our tour will take care of that, as evidenced by the following agenda.

7:15 to 7:30 — Sign-in at the main entrance, from where the participants will be escorted to a conference room.

The major applications of the Murray Hill Scientific Computation Center, and the specific demonstrations to be shown during the tour will be discussed.

The participants will then be divided into groups for several demonstrations. These will include the operation of large and small computers, various input-output devices such as plotters and graphic terminals, and the analysis and synthesis of speech using dedicated minicomputers.

The tours will be followed by an informal gathering of visitors and speakers, during which specific questions can be answered.

### Reservation Required

If you are interested, fill in the reservation slip below and mail it before May 1, enclosing a self-addressed envelope. The tour is limited to 50 persons, so don't delay!

### COMPUTER CENTER TOUR May 11, 1971

M. J. Schindler  
c/o RCA Corporation—100 So. 2nd St.  
Harrison, N. J. 07029

I intend to participate in the Computer Center Tour on May 11.

Name \_\_\_\_\_

Citizenship \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

Telephone \_\_\_\_\_

## Ecology & The Engineer

The Power and Industrial Division of the IEEE has planned a general meeting.

This meeting will also include the election of the Executive Committee for 1971-1972. Wives and children are invited.

The details for this meeting are as follows:

The topic at the meeting will be, "Ecology and the Engineer."

The speakers will be Mr. Stuart F. Millendorf, Assistant Coordinator of the Port of New York Authority's Office for Environmental Programs; Mr. Gerald Halvorsen, Con Edison; Dr. Hugo Freudenthal, Supervisor of the Department of Life Science at Republic Aviation Division of Fairchild Hiller Corporation.

**Time:** Friday, April 23; 6:30 P.M.

**Place:** Consolidated Edison Co. (19th Floor), 4 Irving Place, New York City.

**Refreshments:** 6:00 P.M.

## The Editor's Corner



We had hoped to stir up some interest by inviting readers to submit their comments on and opinions of the NEWSLETTER. Apparently we succeeded, to a degree. Although no formal letters were sent to us, which could have been reprinted, some long-hand notes were received, mostly in the form of notations on copies of previous issues.

Our correspondents pulled no punches. They laid their comments right on the line — some complimentary, some constructive, and some castigatory. We won't recite the flattery (we were happy to learn that we have been doing *something* right) but we do wish to present some excerpts from those that were critical.

One reader has come to the conclusion that the North Jersey Section is really one big Bell Telephone Laboratories club,

citing the prominence given in recent issues to IEEE awards made to BTL members. He comments, "If a person isn't BTL affiliated, why bother doing anything you are outrated (and) overruled . . ." He then adds, "Before you can get attendees and participants in local IEEE affairs you have to look within the (BTL) group." "A non-BTL couldn't possibly make a dent."

To this, we'd like to make a courteous rebuttal, pointing out that in some respects the facts differ substantially from this reader's opinions. Let's consider the present Executive Committee of the North Jersey Section: Chairman—Jersey Central P&L Co.; Vice-Chairman—Aircraft Radio Corp.; Treasurer—Federal Pacific Electric Co.; Secretary—Newark College of Engineering. These are our top elected officers. We have two Members-At-Large, one with BTL, the other with Allis-Chalmers. Our Jr. Past Chairman is BTL affiliated. Continuing, there are ten members of the Standing Committee (not counting those members, referenced above, who are officers but who also serve on Committees). Their non-BTL affiliations include Jersey Central P&L, Public Service, Picatinny Arsenal, Burroughs, Newark College of Eng'g, Control Electronics. One is retired. None of the eight-member NEWSLETTER staff is BTL affiliated.

It should be obvious that these members of the Executive Committee, representing a rather broad spectrum of Industry and Education, *have* succeeded in making a "dent" in the organization, and an appreciable one at that. We invite this reader to attend our North Jersey Section meetings to see for himself. We assure him that on a business-affiliation basis, he or no one else will ever be "outrated" or "overruled." We *want* participation, by *all* business segments.

Apropos, the same reader's observation that four out of five recent Fellow Award recipients were BTLers, they were—but not because of their BTL affiliation. Each one *earned* his award, for specific contributions to the state-of-the-art in our industry. The Institute recognized the outstanding contributions made by these men and accordingly, justly rewarded their accomplishments by electing them to the grade of Fellow. BTL happens to employ some very prolific technical people.

Speaking of awards, a total of 124 men

were elected to the grade of Fellow last month, from 206 Sections. We're proud of our five recipients.

Another reader offered his critique, part of which referred to the January Report From The North Jersey Chapter of the Power Engineering Society. He asks, "Not being a power engineer, why should I read this?" Our answer is that the NEWSLETTER *does* try to present articles from many groups, representing a myriad of engineering disciplines. If we had nothing about Power Engineering activities, we'd certainly be criticized by *that* Society. Every effort is made to fairly represent the activities of *all* groups in the North Jersey Section, with favor towards none.

Other perceptive comments made were: the NEWSLETTER hasn't even an interesting name; you wouldn't have the nerve to print something controversial; the NEWSLETTER usually arrives too late for some of its programs. Let's consider these in order. (1) Name. If *anyone* has a better name to propose, send it in. We'll vote on these suggestions, *and* the desirability of changing our long-standing name. (2) Controversy. If it achieves a constructive purpose, primarily increased reader interest, controversy will be injected, consistent with good taste. (3) Late receipt of NEWSLETTER. We're well aware of this problem and have tried earnestly to get contributors to mail early. The submission deadline has been changed from the 25th to the 20th of the second month preceding month of publication. A new post office is being used to expedite delivery of the NEWSLETTER. We're trying!

To those who sent in comments, thanks. Only by knowing what you, the members, *want* can we be responsive in terms of improving the NEWSLETTER. Brickbats or bouquets, let's hear from more members.

Raymond Dusault  
Editor

JUNE  
NEWSLETTER  
DEADLINE  
APRIL 20

## STUDENT NEWS

### A New Student Chapter is in the Making

The Department of Electronics Technology at County College of Morris has petitioned the IEEE for the establishment of a local student branch. The initial charter, upon IEEE approval, will have 36 student members.

The County College of Morris is now in its third year of operation and its application for the branch comes under the recent change, January 6, of the Bylaws of the IEEE. Special provisions are provided for the consideration of new emerging schools who have not yet acquired, but are progressing toward, full regional accreditation such as Middle States. County College of Morris falls in this category as it is presently undergoing self-evaluation study toward Middle States Regional accreditation.

The Regional Activities Board and Student Activities Committee will evaluate the Technology curriculum to determine branch eligibility.

Professor Woerner, Chairman of the Department of Electronics Technology, supports the student branch because he feels it can be an adjunct and complement to the students' program. It allows the student to gain additional knowledge about his special interest within electrical/electronics engineering as well as providing an opportunity to associate with professional engineers.

The IEEE student program is primarily intended to benefit the student members. County colleges applying for student branches should note branch formation approval falls within the jurisdiction of the Student Activities Committee to insure that schools having IEEE branches support worthwhile student activities.

### Fairleigh Dickinson University Student Chapter Report

This month's student chapter highlight is on Fairleigh Dickinson University. Officers for the present school year are: Michael Rosania, Chairman; Mario Cassabona, Vice Chairman; Gary Slawsky, Secretary; and Joseph De Paola, Treasurer. The branch's executive board also consists of an Inter-Club Council representative, Joseph Marscio, who acts as a liaison between the IEEE and all university operations.

Because of the large membership of

M. Rosania



the branch and active participation among members, committees have been formed to arrange this year's activities. The field trip committee directed by Mr. Cassabona has arranged trips to R.C.A. and U.S. Steel last semester and are planning trips to I.B.M. and Western Electric for the upcoming semester. The guest speaker committee directed by Mr. Slawsky and Mr. Marscio have hosted speakers from I.B.M. and UNIVAC during the fall semester and are planning to have a representative from Western Electric and General Electric for the spring semester. The activities committee under the direction of Mr. Rosania and Mr. De Paola were responsible for a chapter picnic and Christmas party thus far and are now planning the construction of an IEEE float for the University homecoming parade in the spring.

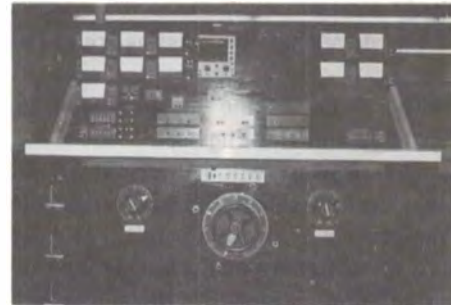
Aside from the normal IEEE activities of the branch the executive board members have had regular meetings with the Mechanical and Industrial engineering societies. The purpose of these meetings are to discuss the problems facing the present graduating student as well as the underclassmen. We have found that this provides for a more concentrated and well defined means toward solving the problems facing all engineers on campus.

For the upcoming semester the Fairleigh Dickinson University chapter of the IEEE plans to continue the practices of group planning and inter-club meetings in hopes of providing an interesting and fulfilling semester for all those students belonging to the society.

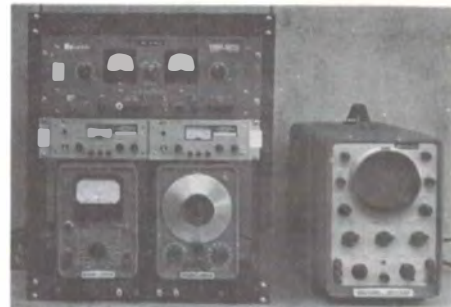
### Electrical Engineering Laboratories At Fairleigh Dickinson University

In the past few years the Electrical Engineering laboratories at Fairleigh Dickinson University have been upgraded with the aid of IEEE Student Chapter to their present status. These facilities include apparatus for general laboratory work in areas ranging from solid state circuitry to microwaves and ferrite research.

The first picture in this article is the new energy conversion bench. This bench consists of a general purpose oscilloscope, 3 variacs, and numerous other equipment essential to performing experiments in electrical energy conversion. The panels are constructed so that all monitoring equipment and parts needed are mounted on this panel so that plug-in patch cords are the only additional equipment needed,



The next picture shows the electronics laboratory test rack. This rack contains most of the equipment needed to perform written experiments and individual research in electronics circuits. Other equipment such as Transistor Curve Tracers are available when needed but are not part of the individual test rack.



The third picture is one of the entire electronics laboratory. This consists of bench space for experimenting and a lecture area. This proves particularly convenient when a lecture is immediately preceding or combined with the laboratory session. The lab's are designed to accommodate approximately 12 students.



These facilities have proven to be extremely useful in meeting the needs of the individual engineering student as well as fulfilling those of the faculty here at Fairleigh Dickinson University.