

# Newsletter

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

Volume 27

May 1981

No. 11

Publication No: USPS 580-500

"The IEEE Newsletter" is published monthly except June by the North Jersey Section of The Institute of Electrical and Electronics Engineers, Inc., a nonprofit scientific society dedicated to the advancement of electrical and electronic engineering and the allied arts and sciences. Headquarters: 345 E. 47 Street, New York, N.Y. 10017. Sent automatically and without additional cost to each member of the North Jersey Section. Printed in U.S.A. Second-class postage paid at New York, N.Y. and at additional mailing offices.

#### **NEWSLETTER STAFF**

Editor					N	1.	N	ſ.	Per	ugini
Managing Editor									В.	Blair
Business Manager						Α		M	B	eattie

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 Newsletter, c/o Girard Associates, Inc., 6 Robert Terrace, Mt. Arlington, N.J. 07856. (201) 398-5524.

Subscription: \$0.75 per year through dues for members: \$1.50 per year for non-members.

### REPORT ALL ADDRESS CHANGES TO:

IEEE Service Center 445 Hoes Lane Piscataway, N. J. 08854 (201) 981-0060

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.

### SECTION OFFICERS

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687-9226
Vice-Chairman - 1 Alex Brown
696-4695
Vice Chairman - 2 Frank Relotto
278-7759
Treasurer Anne Giedlinski
366-1100, X-221
Secretary Joseph Fink
621-7500, X-727
Member-At-Large John Abraham
Member-At-Large Robert DeLucia
Member-At-Large Eugene Niemiec
Jr. Past Chairman Ken Oexle

### Section Meet On Sexual Instrumentation

The May 14, 1981 meeting of the North Jersey Section will discuss "Sexual Instrumentation or Everything You've Always Wanted to Know About Sex. But Were Afraid to Measure." J. Lubowski, Ph.D., and special guests will cover approaches to quantify human sexual response utilize data obtained directly from the sexual organs, as well as indirect responses, usually related to the autonomic nervous system. Though originally motivated by research interests, sexual instrumentation is finding increased value in the diagnosis and treatment of sex disorders. An overview of sexual measurement devices and techniques will be presented, followed by specific applications including relevant underlying physiological processes.

The presentation will be led by Dr.

Jack Lubowski, Director of Scientific computing at Downstate Medical Center in New York and Dr. John Semmlow, Associate Professor of Surgery and Electrical Engineering. Both have extensive experience in the design and development of biomedical instruments, along with a working knowledge of sexual responses.

Time: 7:30 PM, Thursday, May 14, 1981.

Place: ITT Laboratories Conference Center, 500 Washington Ave., Nutley, N.J.

Directions: ITT is near the intersection of Routes 3 and 21. The Conference Center is located near the tall tower. Pre-Meeting Dinner: 6 PM, Jade Fountain Restaurant, River Road, Clifton (about 2 miles from ITT tower). For reservations call (201) 932-3262.

# Telecommunications Networks In The '80s

You are invited to an informative and entertaining presentation of "Telecommunications Networks in the 1980s" sponsored by the Computer/Communications Chapter of the North Jersey Section of the IEEE.

The speakers will illustrate where digital technology is penetrating the public telecommunications network, architectures based on the intelligent stored program controlled network with new data communications capabilities, and new services that could be provided

to our nation's homes and businesses.

You are also invited to a tour of the AT&T headquarters building. Bring your spouse and friends.

Speakers will be Wayne J. Felts and Roy P. Weber, Division Managers at AT&T Network Planning and Design.

Time: 6:30 — Tour; 7:30 - 8:30 — Program; Wednesday, May 13, 1981. Place: AT&T Multipurpose Room, 295 N. Maple Ave., Basking Ridge, N. J., (Basking Ridge — North Maple Ave., Exit of I287).

For Further Information: Dick Aiken (201) 221-8742.

# Instrumentation & Measurement Society THE ROLE OF SOUND AND VOICE IN MEASUREMENTS INSTRUMENTS OF THE 80's May 20, 1981; 9:30 AM - 4 PM

NJIT, Newark, N. J.

# Biological Effects Of High Voltage Lines

The Metropolitan New York Chapter of the IEEE Engineering in Medicine and Biology Society will hold a joint meeting with the New York-Long Island P&I Chapter on "Assessment of Risks of Biological Effects of High Voltage Transmission Lines." Speaker at the meeting to be held June 3, 1981 is Mr. Robert G. Harvey of Nixon, Hargrove, Devens, and Doyle, Rochester, NY.

The meeting will also feature the election of EMBS officers. Nominations are: Chairman – Arnold Benjamin; Vice-Chairman – Frank Pannizzo; Secretary – Annamarie Giongarra; and Membership—Eliezer Astrinski.

Time: 7:30 PM, Wednesday, June 3, 1981.

Place: Rockefeller University, Bronk Laboratory, Room 216, 66th Street and York Avenue, NYC.

**Pre-Meeting Dinner:** 6:00 PM, Tower Cafeteria, 64th Street and York Avenue, NYC.

For Further Information: Maryon J. Williams, Jr., PhD., P.E. at (609) 452-9280, Ext. 271, Biomedical & Engineering Shared Technology (EMBS) or Anthony Dutko, Jr. at (212) 760-8303 Gibbs & Hill, (P&I).

Background: From the familiar buzzer for checking out wiring through the Weston Roadrunner TM which "beeps" on precise voltages and resistances to the Franklin Institute's talking voltmeter" which announces its measurement voltages, sound and voice are beginning to play a larger role in effective measurement. As more complex tonal or voice-like devices become available as from T.1., National Semiconductor and others, it is up to the instrumentation engineers to employ these elements in ways to enhance our measurement capability. For example, one can imagine a "press to talk" voltmeter which gives answers when a technician is behind a console and can't see the meter. One can imagine a high voltage power supply which de-energizes on voice command or the sound of arcing. In fact in the interest of safety such a feature might be required on equipment of some types. Calibration requirements, temperature, unsafe voltages could all be vocalized.

This Seminar will bring together both instrument manufacturers and component manufacturers to discuss what's now, what's coming and what directions we should be going to use these expanded capabilities of sound and voice in the measurement process. Speakers will include companies like:

Franklin Institute Weston Instruments Fluke Simpson Hewlett Packard Votrax
National Semiconductor
Texas Instruments
Gulton
Mallory

Chairman: P. Emile, Jr., Chief Engineer, Digitals, Weston Instruments. Member IEEE Executive Comm., Instrumentation & Measurement.

For Further Information: Joseph Padalino (201) 645-5493/5472.

PRE-REGISTRATION: Send check payable to "IEEE I&M Joint Chapter" to Al Mindes, 20 Conkling Road, Flanders, NJ. 07836 before May 15, 1981 (Registration includes Lunch & parking at NJIT)

\$25.00 Members IEEE, \$30.00 Non-Members, \$5.00 Students (Registration receipts will be held at door).

Name			
Address	7018 1 197 Y		 7.10
Company	3.5	. W	 
Telephone			

Registration at door: \$30.00 IEEE Members, \$35.00 Non-Members, \$8.00 Students

## Changes In National Electrical Code

The North Jersey chapter of the Industrial Applications Society will discuss changes made in the 1981 National Electrical Code at its Wednesday, May 20 meeting.

Revised issues of the NEC are published every three years. Changes must be understood and complied with. Those in electrical design, engineering, construction and maintenance of industrial and commercial facilities already recognize the importance of the NEC in assuring a safe installation. Persons involved in the power generation field will also be interested in this talk.

One of the 1981 NEC changes removes the total exemption from NEC rules granted to electrical utility companies.

The May 20 meeting will be based on NEC changes presented by Joe McPartland at "Electrical Construction & Maintenance" magazine's educational conferences. Leading the discussion will be EC&M Associate Editor Al Berutti.

Both members of IAS and nonmembers are welcome to attend. The meeting is free and refreshments will be served.

For any information on IAS or its meetings please call Gerald P. Bellsey,



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ENGINEER, R/D
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CHIEF ENGINEER, R/D
SUBJECT: YOUR SUGGESTION
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SAVINGS OF OVER \$500,000.
THANKS."

Reprinted with Permission from "EDN" October 5, 1980. Copyright Cahners Publishing Company. Chairman (201) 335-8803 or Kao Chen, Vice-Chairman (201) 429-3334.

Time: 7 PM, Wednesday, May 20, 1981.

Place: AT&T, 5 Woodhollow Rd., Parsippany, N. J.

Directions: Take Rte. 80 west to exit 47 (Route 46). Take Rte, 46 west to Smith Rd., Parsippany. Go to Woodhollow Rd. AT&T is at #5 Woodhollow Rd. (bldg. on left). See security guard at entrance on right. Take main elevator to second floor to conference Room 2N18 (Behind elevator).

# Real-Time Flood Forecasting

The North Jersey Section Control Systems Society Chapter will hold a May 14 meeting on "Real-Time Flood Forecasting". Dr. Eric F. Wood of Princeton University will be the guest speaker. About The Talk

Every year the United States suffers approximately \$2 billion in flood damages. An overview of flood forecasting problems facing the country will be given. The approach used by the National Weather Service will be discussed as well as other proposed modeling approaches. Recent developments in applying systems theory (model identification, Kalman filtering, maximum likelihood estimation) to realtime flood forecasting will be presented with some illustration examples.

### **About The Speaker**

Dr. Eric F. Wood is currently Director of the Water Resources Program at Princeton University. Dr. Wood joined Princeton from Vienna where he worked at the International Institute for Applied Systems Analysis (IIASA). His degrees are in Civil Engineering and he does research into state estimation and parameter estimation applied to hydrological problems, stochastic hydrology and water resource planning.

Time: 8 PM, Thursday, May 14, 1981. Place: Bell Laboratories, 600 Mountain Avenue, Murray Hill, N.J.

Pre-Meeting Dinner: 6:15 PM, Marco Polo, 527 Morris Avenue, Summit. Information And Dinner Reservations: John F. Van Savage (201) 328-4667/4843 (days) or (201) 985-2084 (nights) and Fred Aminzadeh (201) 582-7242 (days) or (201) 273-7078 (nights).

### **A Time For Cogeneration**

The May Meeting of the North Jersey Section IEEE Power Engineering Society will feature a slide presentation entitled, "A time for Cogeneration."

Mr. James J. Zimmerman will describe various cogeneration systems; the engineering options which they incorporate; and the option best suited for a given potential application. The speaker will further describe the ownership options available and the impact on energy savings.

Mr. Zimmerman is a consultant on power plant design. He is a graduate of Harvard University, with extensive experience in the design and development of power generating plants. In addition, he has published several technical papers and given many presentations on energy related topics.

Attendance at the meeting is free and open to all interested parties. Refreshments will be served.

Time: 7:30 PM, Thursday, May 28, 1981.

Place: Jersey Central Power & Light Co., Madison Avenue (Rt. 24) & Punch Bowl Rd., Morristown, N.J. 07960. Further Information: John A. Baka (455-8534), Gene Opdyk (688-1300), Ed Griffith (455-8313).

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# PROFESSIONAL ENGINEERING REVIEW COURSES MORRISTOWN, NEW JERSEY SEPTEMBER, 1981

The North Jersey Section IEEE will sponsor review courses for Part "F" (Engineering Fundamentals) and Part "P" (Electrical Engineering) of the Professional Engineer Examination to be administered by the State in November and December of 1981.

PE Registration in New Jersey requires successfully passing written examinations in both Engineering Fundamentals and Electrical Engineering (EE Graduates). Members who are just starting the PE registration process should enroll in the Engineering Fundamental Course (Part F). Those who have current Engineer-In-Training (EIT) registration should enroll in the Electrical Engineering Course (Part P). We plan to offer the Part P review course in the future for the benefit of those only taking the Engineering Fundamental portion of the exam in Fall, 1981.

The Review Courses will be administered by Engineering Enterprises under the direction of John Gregorits, P.E. and will cover subject matter included in the National Council of Engineering Examiners' (NCEE) uniform examination given in New Jersey.

Each course will consist of twelve 3-hour sessions on Wednesday evenings beginning on September 2, 1981. The meeting location will be the Jersey Central Power & Light Headquarters Building, Route 24, Morristown, N. J. Class will begin at 6:30 PM.

Cost of each Review Course is \$95.00 for IEEE members of the North Jersey Section. Non-member rate is \$135.00. Registration (including tuition payment) is required by July 20, 1981. IEEE Member registration rate after July 20, 1981 is \$130.00, while the non-member registration rate is \$170.00.

The Section is subsidizing each member enrollment in either of these courses. Enrollment will be limited to assure maximum student benefit. For additional information about the course contact John Baka at (201) 455-8534.

### PE REVIEW COURSE REGISTRATION

### **NORTH JERSEY SECTION IEEE**

**FALL - 1981** 

ENGINEERING FUNDAMENTALS (I ELECTRICAL ENGINEERING (PAR	
NAME	IEEE NO(See Mailing Label)
ADDRESS	PHONE

INCLUDE CHECK (\$95.00 — Member North Jersey Section IEEE; \$135.00 Non-Member) made payable to "NORTH JERSEY SECTION IEEE". Mail to JOHN BAKA, Chairman, Power Engineering Society Chapter, Jersey Central Power & Light Co., Madison Avenue. @ Punch Bowl Road, Morristown, N. J. prior to July 20, 1981.

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## AT THE 1981 SECTION BANQUET

















# M A Y

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
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3	4	5	6	7	8	9
10 Mother's Day	11	12	NJ COMP/COMM-ATGT; 6:30	NJ SECTION-ITT, Nutley;7:30 NJ CONTROL-BTL, Murray Hill;8:00	15	16
17	18 Victoria Day (Canada)	19	METRO I&M-NJIT, Newark; 9: 30-4:00 NJ IAS-AT&T, Parsippany; 7:00	21	22	23
24 31	25 Memorial Day	26	27	Ascension Day  NJ POWER-JCP&L, Morristown; 7:30	29	30



## JUNE

1981

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	METRO EMBS-NYC;7:30	4	5	6
Pentecost Sunday	8	9	10	11	12	13
14	15	16	17	18	19	20
21 Father's Day	22	23	24	25	26	27
28	29	30			MAY  S M T W T F S  1 2  3 4 5 6 7 8 9  10 11 12 13 14 15 16  17 18 19 20 21 22 23  24 25 26 27 28 29 30  31	S M T W T F S I 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

## 1981-82 SECTION OFFICE NOMINATIONS

The following information is provided concerning the individuals proposed by the Nominating Committee for Section officers including Member-At-Large candidates.

#### ALEX T. BROWN - Chairman

Alex is a Section Head in the Transmissions Equipment Design Department at ITT Defense Communications Division in Nutley, N.J. At present, he is engaged in the Test Integration of the digital military Unit Level Switch. He has been Project Engineer for the AN/GRC-143 Digital Troposcatter Radio, Troposcatter systems, and a shipboard satellite transmitter. He has supervised and participated in the development of microwave systems, a ground satellite transmitter, a digital processor, low-noise front ends, Tacan ground receiver, and microwave components. He is a co-inventor of ITT's first radio predetection combining system using automatic phase control.

Mr. Brown graduated cum laude from N.C. State University with a BEE, and from Stevens Institute of Technology with a MS in Electrical Engineering. He is a member of Eta Kappa Na and Phi Kappa Phi.

His IEEE activities include serving as Vice Chairman, Treasurer, and Member-At-Large of the North Jersey Section. He has also served as Chapters Representative of the Communication Society of IEEE, and Chairman and Treasurer of the Communication Chapter of the North Jersey Section.

#### FRANK RELOTTO - Vice Chairman I

Frank Relotto received his BEE Degree from the University of Dayton, and MSEE from NJIT. He has been a member of IEEE since 1967. Active on the Education Committee since 1975, Mr. Relotto has also served as Member-At-Large, Secretary and Treasurer of the North Jersey Section. He has served as instructor of the highly successful microprocessor course offered by the Section's Education Committee. Mr. Relotto is an Application Engineer, specializing in microelectronics, microprocessors, and computer sub-system.

### ANNE M. GIEDLINSKI - Vice Chairman II

Anne M. Giedlinski graduated from Penn State in 1967 with a B.S. in E.E. She joined Jersey Central Power & Light in June, 1967, and has worked in the System Planning and Distribution Engineering Departments. In October, 1976, she was promoted to the position of Supervisor - Area Engineering.

A member of the Power Engineering Society, she was chairman of their North Jersey Chapter in 1976-77. For the North Jersey Section, she was elected Member-At-Large for 1978-79, Secretary for 1979-80, and Treasurer for 1980-81.

### JOSEPH W. FINK, JR. - Treasurer

Joseph W. Fink, Jr. received his BSEE Degree from the Newark College of Engineering in 1964. He has been associated with the Research and Testing Laboratory of the Public Service Electric and Gas Company for all his professional career.

Mr. Fink is currently responsible for the operations of the Metrology Laboratory involving the calibration and standardization of primary instrumentation. He is a senior member of the IEEE, and a member of the North Jersey Executive Committee, serving as Member-At-Large and Chairman of the Membership Development Committee for several years. He is the current chairperson of the ANSI C39.6 Digital Measuring Instruments Committee, and recently served on nine steering committees for the Edison Electric Institute in the development of the recently published Electric Power Plant Environmental Noise Guide.

At the present time, he is a member of the NJIT Division of Technology instructing staff and serves on a subcommittee for the State of New Jersey Department of Environmental Protection. Last year he served as Secretary of the North Jersey Section.

### **EUGENE W. NIEMIEC - Secretary**

Eugene W. Niemiec is a graduate of Newark College of Engineering, 1961, BSEE. After a 17-year career as Senior Member of the Technical Staff with the Microwave Advanced Development Department of ITT Defense Communications, Nutley, New Jersey, Mr. Niemiec joined Merrimac Industries, Inc. of West Caldwell, New Jersey as their Technical Director in June, 1979.

Mr. Niemiec presently holds the post of Chairman of the North Jersey MTT/AP Chapter, a post he also held in 1976, 1977, 1978. He is currently Member-At-Large for North Jersey Section and has held this post since 1978. He also is representative to IEEE CSIT Committee since 1978,

Mr. Niemiec holds 14 patents related to the microwave field and has authored numerous papers, most recent of which was presented at the IEEE sponsored National Telecommunications Conference (NTC-79) held in Washington, D.C. during November of 1979.

### CHARLES COULOMB - Member-At-Large

Charles A. Coulomb graduated from Bucknell University in 1954 with a B.A. Degree, and continued his education obtaining a B.S. in E.E. Degree from Fairleigh Dickinson University in 1968. After holding a position as electronic tube process engineer, he joined Jersey Central Power & Light Company in 1963. In 1968, he was promoted to Distribution Planning Engineer. In 1974, he was assigned to the position of Forecasts Engineer, returning to Distribution Planning in 1979.

He is a member of the Power Engineering Society, and has been Publicity Chairman of the North Jersey Section for the last two years.

### EDWARD ROELOFFS - Member-At-Large

Edward Roeloffs is Supervisor of Electrical Engineering Group in the Plant Engineering Department of Lederle Laboratories, a division of the American Cyanamid Co. Prior to joining Lederle over twenty years ago, he was with Sperry-Rand and the National Broadcasting Co.

Active in the Industrial Applications Society (IAS) of the IEEE, Mr. Roeloffs is a licensed Professional Engineer in New Jersey and New York.

Mr. Roeloffs is a resident of Wayne, where he is active in local politics.

### RICHARD TAX - Member-At-Large

Richard Tax, a Senior Member of the IEEE, received his BSEE degree from Fairleigh Dickinson University. He specializes in the design of precision power servos.

A resident of Park Ridge, Mr. Tax has served as Chairman of the North Jersey Section's Professional Activities Committee since 1976. He has also been active in section activities regarding intersociety relations and ethics.

He is responsible for the Section's Project EGO program and has been active nationally in professional activities programs.

RETURN THIS CARD BY MAY 31, 1981

Ballot Signature

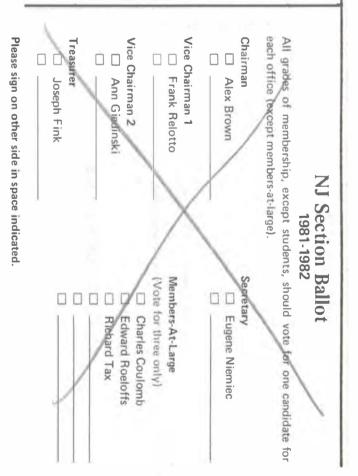
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NORTH JERSEY SECTION IEEE

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VOTE
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USE
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OTHER SIDE BEFORE
MAILING BY
MAY 31, 1981





Van Savage Accepts Section Award From Chairman Stolpen.

### JOHN F. VAN SAVAGE WINS AWARD

John F. Van Savage has received the 1981 North Jersey Section Meritorious Service Award. The award was announced at the Section's Annual Banquet.

The list of Mr. Van Savage's service to the IEEE includes: 1978-1979: Member, Educational Committee, North Jersey Section.

1978-1979: Vice Chairman, Control Systems Society, North Jersey Section,

1979-present: Chairman, Control Systems Society, North Jersey Section,

1979-present: Member, Admissions and Advancement Committee, IEEE,

1979-present: Member, Fellows and Field Awards Committee, IEEE,

1979-1980: Membership Chairman, New York/North Jersey Section, Engineering Management Society,

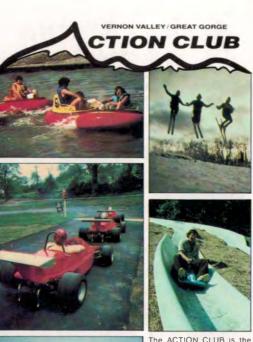
1980-1981: Secretary, New York/North Jersey Section, Engineering Management Society,

1981: Vice-President, New York/North Jersey Section, Engineering Management Society,

1979: Member, All Industry Reception for Electro '79, and 1981: Member, Host Committee, Electro '81.

Married to Philomena Beaton of Harbor View, Nova Scotia, Canada; he has two daughters, Joyce and Eleanor and one son, John Gerard.

Mr. Van Savage is employed at the United States Army Armament and Research and Development Command, Dover.



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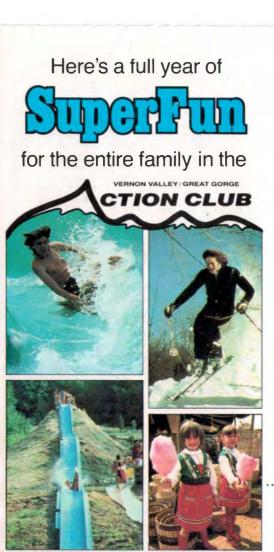
lew York City — Lincoln Tunnel — Route 3 Vest to Route 46 West to Route 23 North to loute 94 North, Turn right on Route 94 North or 4 miles

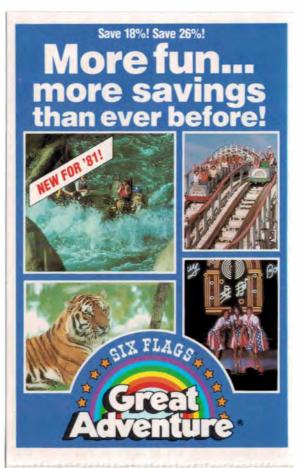
eorge Washington Bridge — Route 80 West Route 23 North to 94 North New Jersey Turnpike and Garden State Parkway — Exits for Route 80 West to Route 23 North to Route 94 North or Exit to Route 3 West to Route 46 West to Route 23 North to Route 94 North for 4 miles.

Westchester area — New York Thruway to Suffern, Exit 15, Route 17 North to 17A West to Warwick, turn left on 94 West for 8 miles. Turn right at Vernon traffic light, continue for two

Central New Jersey — Major highways to Route 15 North (Dover) for 13 miles, Jurn right onto Route 94 North, Proceed to second traffic light and bear right to ski areas

f you have any questions or need more informaion call the Action Club Hot Line at (201) 827-2000.







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uary 15, February 12th, and February 15th thru February

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Keep this valuable card! It's good for more than a year of fun and action for you and your family. All discounts for both seasons listed above. Welcome to the club ... where the fun never sets!

### **Action Mania**

☆ Summer ☆

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The Action Club membership card entitles you to save \$1.50 on any concert ticket or special event during 1981 simply by showing your club membership card at the time of purchasing your ticket at the gate.

The Action Park opens May 2, 1981 and is open from 10:00 A.M. until 7:00 P.M. daily from May through June 14, 1981. See complete summer and fall schedule below on card.

The Action Park includes the following unlimited rides after the purchase of your General Admission ticket:

- The Kamikaze Water Slide
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- 1. New for '81 \$3.00 savings per person on Early-Bird Combination Tickets. Includes admission to all rides, all shows, plus Onve-Thru Safan. Good through May 22, 1981.
- 2. \$2.00 savings per person off regular price for Combination Ticket
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#### 1981 SCHEDULE

April 15-September 13: Open Daily September 19-October 12: Open Daily October 17, 18 & 24, 25: Open weekends only

Satari Hours: 9 a.m.-5 p.m.

### **SIX FLAGS FUNSEEKERS CLUB 1981**

Redeem card at Six Floor ticket window. No other discount offer can be combined with this card. Process are per person and subject to change without notice. This card expires March 1 1982

Type of Ticket	Regular Price	Funseekers Price	You Save
Early-8 ird Combination Ticket (Good through May 22, 1981)	\$13.95	\$10.95	\$3.00
Combination Ticket	\$13.95	\$11.95	\$2.00
Amusement Park Only	\$11.95	\$10.95	\$1.00
Drive-Thru Safari Only	\$ 5.25	\$ 4.25	\$1.00
Two-Day Combination Ticket	\$18.95	\$13.95	\$5.00
Season Pass	\$39.95	\$35.95	\$4.00

Charge It: American Express, VISA, and MasterCard are accepted. Use this card to enjoy similar savings at all Six Flags family entertainment centers from coast-to-coast

FOR FULL PARK INFORMATION, CALL: (201) 928-2000.

CTION	CLUB
1981-82 MEMBERSHIP CARD	00904-01
Name	
Address	

City/State/Zip.

1981-82 Ski Schedule Weekdays . . . . 9:00 am-10:45 pm Saturday/Sunday/Holidays/Holiday weeks\* . . . . 8:30 am-10:45 pm \*Holiday weeks: Dec. 19-Jan. 3, Jan. 15, Feb. 12 & 15-Feb. 21. No night skiing Christmas Eve & New Year's Eve. Lifts close 4:00 pm.

1981 Action Park Schedule May 2-June 14 10:00 am- 7:00 pm

June 15-Sept. 13 10:00 am-10:00 pm Weekends: Sept. 19 & 20, 26 & 27, Oct. & Nov. until Thanksgiving. This discount offer cannot be used in combination with any other discount, Void ofter April 1, 1982.

Operating schedule subject to change without notice.