

## **Antennas and Propagation Society Chronology**

The AP-S Chronology through 2005 was compiled by K. D. Stephan. The information that follows is extracted from the AP-S Digital Archive Update (2006). The contents of this document include:

- A list of Presidents, Vice-Presidents, Secretary-Treasurers, Transactions Editors
- A list of Annual AP-S Symposia
- A list of Distinguished Achievement Award Winners
- The AP-S Chronology

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**Presidents, Vice-Presidents, Secretary-Treasurers, Transactions Editors**

<b>Year</b>	<b>President</b>	<b>Vice-President</b>	<b>Secretary-Treasurer</b>	<b>Transactions Editor</b>
1949	L. C. Van Atta	Newbern Smith	D. C. Ports	
1950	Newbern Smith		D. C. Ports	
1951	George Sinclair		D. C. Ports	
1952	A. H. Waynick	P. S. Carter	D. C. Ports	J. B. Smyth
1953	P. S. Carter		P. H. Smith	J. B. Smyth
1954	D. C. Ports	H. G. Booker	P. H. Smith	J. B. Smyth
1955	D. C. Ports	H. G. Booker	R. L. Mattingly	J. B. Smyth
1956	D. C. Ports	H. G. Booker	R. L. Mattingly	J. B. Smyth
1957	J. I. Bohnert	R. L. Mattingly	C. Goatley	J. B. Smyth
1958	R. L. Mattingly	A. Dorne	K. S. Kelleher	J. B. Smyth
1959	A. Dorne	E. C. Jordan	K. S. Kelleher	J. B. Smyth
1960	E. C. Jordan	H. Fine	K. S. Kelleher	S. Bowhill
1961	H. Fine	S. Bowhill	K. S. Kelleher	S. Bowhill
1962	S. Bowhill	R. C. Hansen	K. S. Kelleher	H. V. Cottony
1963	R. C. Hansen	W. E. Gordon	P. E. Mast	H. V. Cottony
1964	W. E. Gordon	A. T. Waterman, Jr.	P. E. Mast	H. V. Cottony
1965	A. T. Waterman, Jr.	K. M. Siegel	P. E. Mast	H. V. Cottony
1966	K. M. Siegel	K. S. Kelleher	J. B. Damonte	J. Ruze
1967	K. M. Siegel	K. S. Kelleher	J. B. Damonte	J. Ruze
1968	K. S. Kelleher	D. R. Rhodes	J. B. Damonte	J. Ruze
1969	D. R. Rhodes	R. E. Hiatt	J. B. Damonte	A. C. Schell
1970	R. E. Hiatt	C. T. Tai	J. B. Damonte	A. C. Schell
1971	C. T. Tai	J. B. Damonte	T. Morita	A. C. Schell
1972	J. B. Damonte	C. J. Sletten	T. Morita	L. J. Ricardi
1973	C. J. Sletten	C. H. Walter	W. R. Crowell	L. J. Ricardi
1974	C. H. Walter	W. H. Kummer	W. R. Crowell	L. J. Ricardi
1975	W. H. Kummer	R. Mitra	C. T. Swift	W. Crowell
1976	R. Mitra	E. A. Wolff	C. T. Swift	W. Crowell
1977	E. A. Wolff	A. C. Schell	E. A. Kuhlman	W. Crowell
1978	A. C. Schell	L. J. Ricardi	G. A. Thiele	W. Kahn
1979	L. J. Ricardi	R. C. Johnson	G. A. Thiele	W. Kahn
1980	R. C. Johnson	R. C. Hansen	G. A. Thiele	W. Kahn
1981	R. C. Hansen	G. A. Thiele	R. E. McIntosh	W. Kahn/R. Mitra
1982	G. A. Thiele	R. J. Mailloux	R. E. McIntosh	R. Mitra
1983	R. J. Mailloux	A. W. Love	R. E. McIntosh	R. Mitra/R. L. Fante
1984	A. W. Love	R. E. McIntosh	D. H. Schaubert	R. L. Fante
1985	R. E. McIntosh	A. J. Simmons	D. H. Schaubert	R. L. Fante
1986	A. J. Simmons	G. H. Knittel	D. H. Schaubert	R. L. Fante
1987	G. H. Knittel	G. S. Brown	D. H. Schaubert	R. J. Pogorzelski
1988	G. S. Brown	I. C. Peden	D. H. Schaubert	R. J. Pogorzelski
1989	I. C. Peden	D. C. Chang	J. K. Schindler	R. J. Pogorzelski
1990	D. C. Chang	H. E. Schrank	J. K. Schindler	R. E. McIntosh
1991	H. E. Schrank	W. L. Stutzman	J. K. Schindler	R. E. McIntosh
1992	W. L. Stutzman	R. J. Pogorzelski	O. B. Kesler	McIntosh/ Marhefka
1993	R. J. Pogorzelski	D. G. Bodnar	O. B. Kesler	R. Marhefka
1994	D. G. Bodnar	Y. Rahmat-Samii	O. B. Kesler	R. Marhefka
1995	Y. Rahmat-Samii	S. A. Long	O. B. Kesler	Marhefka/Uslenghi
1996	S. A. Long	E. S. Gillespie	O. B. Kesler	P. L. E. Uslenghi
1997	E. S. Gillespie	R. J. Marhefka	O. B. Kesler	P. L. E. Uslenghi
1998	R. J. Marhefka	D. H. Schaubert	O. B. Kesler	Uslenghi/Pearson
1999	D. H. Schaubert	T. Milligan	O. B. Kesler	L. W. Pearson
2000	T. Milligan	P. L. E. Uslenghi	M. Shields	L. W. Pearson
2001	P. L. E. Uslenghi	M. Iskander	M. Shields	L. W. Pearson
2002	M. Iskander	L. W. Pearson	M. Shields	A. W. Glisson
2003	L. W. Pearson	J. L. Volakis	M. Shields	A. W. Glisson
2004	J. L. Volakis	R. W. Ziolkowski	M. Shields	A. W. Glisson
2005	R. W. Ziolkowski	A. F. Peterson	M. Shields	T. S. Bird

## Annual AP-S Symposia

Year	Dates	Location	General Chair	Technical Program Chair(s)
1951	Aug. 22-24	San Francisco, CA	(Sessions at IRE Wescon sponsored by PGAP)	
1952	Aug. 26-29	Los Angeles, CA	(Sessions at IRE Wescon sponsored by PGAP)	
1953	Mar. 23-26	New York, NY	(Sessions at IRE Natl. Conv. spon. by PGAP)	
1954	Mar. 22-25	New York, NY	(Sessions at IRE Natl. Conv. spon. by PGAP)	
1955	Mar. 21-24	New York, NY	(Sessions at IRE Natl. Conv. spon. by PGAP)	
1956	Mar. 19-22	New York, NY	(Sessions at IRE Natl. Conv. spon. by PGAP)	
1957	Mar. 18-21	New York, NY	(Sessions at IRE Natl. Conv. spon. by PGAP)	
1958	Mar. 24-27	New York, NY	(Sessions at IRE Natl. Conv. spon. by PGAP)	
1959	Mar. 23-26	New York, NY	(Sessions at IRE Natl. Conv. spon. by PGAP)	
1960	Mar. 21-24	New York, NY	(Sessions at IRE Natl. Conv. spon. by PGAP)	
1961	Mar. 20-23	New York, NY	(Sessions at IRE Natl. Conv. spon. by PGAP)	
1962	Mar. 26-29	New York, NY	(Sessions at IRE Natl. Conv. spon. by PGAP)	
1963	July 9-11	Boulder, CO	J. W. Herbstreit	H. V. Cottony
1964	Sept. 21-24	Brooklyn, NY	H. Jasik	N. A. Spencer
1965	Aug. 30-Sept.1	Washington, DC	E. A. Wolff	R. J. Adams
1966	Dec. 5-7	Palo Alto, CA	R. D. Egan	R. Leadabrand
1967	Oct. 17-19	Ann Arbor, MI	R. E. Hiatt	T. B. A. Senior
1968	Sept. 9-11	Boston, MA	E. A. Altshuler	L. J. Ricardi
1969	Dec. 9-11	Austin, TX	A. W. Straiton	A. H. LaGrone
1970	Sept. 14-16	Columbus, OH	C. H. Walter	C. A. Levis
1971	Sept. 22-24	Los Angeles, CA	W. H. Kummer	V. H. Rumsey
1972	Dec. 11-14	Williamsburg, VA	W. Crosswell	C. T. Swift
1973	Aug. 22-24	Boulder, CO	S. W. Maley	J. R. Wait
1974	June 10-12	Atlanta, GA	D. T. Paris	R. C. Johnson
1975	June 2-4	Urbana, IL	G. A. Deschamps	R. Mittra, S. W. Lee
1976	Oct. 11-15	Amherst, MA	R. E. McIntosh	C. S. Sletten, R. L. Fante
1977	June 20-22	Palo Alto, CA	J. B. Damonte	K. K. Mei
1978	May 15-19	College Park, MD	G. Hyde	W. K. Kahn, I. Katz
1979	June 18-22	Seattle, WA	I. Peden	A. Ishimaru
1980	June 2-6	Québec, Canada	J. A. Cummins	K. G. Balmain
1981	June 16-19	Los Angeles, CA	R. S. Elliott	V. Galindo-Israel, A. Villeneuve
1982	May 24-28	Albuquerque, NM	C. E. Baum	K. F. Casey, B. K. Singaraju
1983	May 23-26	Houston, TX	S. A. Long	L. C. Shen
1984	June 25-29	Boston, MA	A. C. Schell	H. R. Raemer
1985	June 17-21	Vancouver, Canada	K. S. McCormick	S. J. Kubina
1986	June 8-13	Philadelphia, PA	C. C. Allen	A. Afrashteh
1987	June 15-19	Blacksburg, VA	W. L. Stutzman	C. W. Bostian
1988	June 6-10	Syracuse, NY	A. T. Adams	T. Sarkar
1989	June 26-30	San Jose, CA	R. King	K. Mei
1990	May 7-11	Dallas, TX	S. Sanzgiri	O. Kesler
1991	June 24-28	London, Ont., Canada	A. R. Webster	S. J. Kubina
1992	July 18-25	Chicago, IL	P. L. E. Uslenghi	A. Taflove
1993	June 28-July 2	Ann Arbor, MI	J. L. Volakis	L. P. B. Katehi
1994	June 19-24	Seattle, WA	G. E. Miller	L. Tsang
1995	June 18-23	Newport Beach, CA	W. Imbriale	R. Pogorzelski, T. Cwik
1996	July 21-26	Baltimore, MD	J. Moellers	J. Frank
1997	July 13-18	Montreal, Canada	S. Kubina, G. Delisle	P. Bhartia
1998	June 21-26	Atlanta, GA	A. F. Peterson	W. Pearson, A. Martin
1999	July 11-16	Orlando, FL	C. Christodolou	P. F. Wahid
2000	July 14-19	Salt Lake City, UT	M. F. Iskander	O. P. Gandhi, M. A. Jensen
2001	July 8-13	Boston, MA	R. V. McGahan	R. Fante, A. Fenn
2002	June 16-21	San Antonio, TX	R. Nevels	K. Michalski
2003	June 22-27	Columbus, OH	J. D. Young, J. Volakis	R. Marhefka
2004	June 20-26	Monterey, CA	H.-Y. Pao	A. Poggio
2005	July 3-8	Washington, DC	A. I. Zogloul	O. Kilic

### Distinguished Achievement Award Winners

Year	Winner
1985	John D. Kraus
1986	Chen-To Tai
1987	Georges Deschamps
1988	Robert S. Elliot
1989	Roger F. Harrington
1990	James R. Wait
1991	Ronold W. P. King
1992	Harold A. Wheeler
1993	R. E. Collin
1994	Robert C. Hansen
1995	Akira Ishimaru
1996	Yuen Tze Lo
1997	Jean Van Bladel
1998	Leo B. Felsen
1999	Robert G. Kouyoumjian
2000	Thomas B. A. Senior
2001	Peter Clarricoats
2002	Raj Mittra
2003	John D. Kraus
2004	Allan W. Love
2005	Robert J. Mailloux

## Antennas and Propagation Society

### Chronology

Compiled by K. D. Stephan and updated through 2005 in December of 2006. For citation abbreviations, see end of chronology. Appendix I is a table of all AdCom meeting dates, locations and sources from 1949 to 2005.

<<1949>>

#### Officers and AdCom

Chairman:	L. C. Van Atta
Vice-Chairman:	Newbern Smith
Secretary-Treasurer:	D. C. Ports
Administrative Committee:	C. R. Burrows A. E. Cullum P. S. Carter S. Frankel D. E. Kerr W. E. Kock

This was the makeup of the AdCom of the Professional Group on Antennas and Propagation from its inception on June 1, 1949 to May 31, 1950. [H, 6]

#### AdCom Meetings

Mar. 29, 1949, Washington, D. C.; July 15, 1949, Washington, D. C.; Nov. 2, 1949, Washington, D. C. [IEEEArch]

#### Membership

56 charter members (see list below under Events). As of Oct. 30, 1949, there were 509 members (Ants. & Prop. Prof. Group Minutes for AdCom meeting of Nov. 2, 1949).

#### Symposia

The URSI (Union Radio-Scientifique Internationale, the International Union of Radio Science) Spring and Fall 1949 meetings were co-sponsored by the IRE Professional Group on Antennas and Propagation. [H, 6]

A note of explanation on URSI: URSI is one of a number of scientific organizations ("unions") belonging to the International Council of Science. The first General Assembly of URSI took place in Brussels, Belgium in July of 1922 with representatives from Brussels, France, the United Kingdom, Norway, and the U. S. [Bauer]. The various National Committees of URSI have held periodic National

Meetings since the organization's founding, as well as international General Assemblies. According to long-time URSI member W. Ross Stone, the U. S. National Committee of URSI has held its annual National Radio Science Meeting jointly with the Professional Group on Antennas and Propagation or its successor, the Antennas and Propagation Society, since 1949.

### Events

In late 1948 or early 1949, two petitions were sent to the Institute of Radio Engineers for the formation of Professional Groups, one on antennas and the other on wave propagation. It was suggested that the two petitions be combined to request the formation of one organization, and this was done. Here are the signatories of the original combined petition to form the Professional Group on Antennas and Wave Propagation:

R. J. Adams	R. L. Hammett	D. C. Ports
R. B. Adler	P. Hines	R. J. Renton
E. W. Allen, Jr.	A. G. Kandoian	D. L. Ringwalt
F. W. Albertson	M. Katzin	J. G. Rountree
R. E. Baluta	D. E. Kerr	B. Salzberg
T. M. Bloomer	W. E. Kock	M. W. Scheldorf
J. I. Bohnert	W. E. Lindenblad	J. P. Shanklin
A. K. Bohren	C. A. Martin	W. M. Sharpless
C. R. Burrows	R. L. Mattingly	W. Sichak
P. S. Carter	F. A. McIntosh	A. J. Simmons
L. J. Chu	J. M. Miller	B. I. Small
A. B. Crawford	J. F. Morrison	Newbern Smith
A. E. Cullum, Jr.	O. Norgorden	P. H. Smith
G. C. Davis	D. T. Olmstead	O. A. Tyson
Jess Epstein	J. D. Parker	L. C. Van Atta
R. M. Fano	D. A. Peterson	C. A. Warren
H. T. Friis	H. O. Peterson	W. E. Withrow
S. Frankel	J. F. P. Martin	H. J. Zimmerman
H. M. Hall	P. O. Portmann	

The IRE Executive Committee approved the new organization's name and constitution on August 9, 1949. [H, 6]

<<1950>>

#### Officers and AdCom

Chairman: Newbern Smith (1950-51) [H, 7]

Secretary-Treasurer: D. C. Ports (1950-51) [H, 11]

#### AdCom Meetings

Apr. 5, 1950, San Diego, CA [IEEEArch]

#### Membership

910 [H, 6]

<<1951>>

#### Officers and AdCom

Chairman: George Sinclair (1951-52) [H, 7]  
 Secretary-Treasurer: D. C. Ports (1951-52) [H, 11]

### AdCom Meetings

Feb. 17, 1951, Washington, D. C.; Mar. 20, 1951, New York, NY; Apr. 18, 1951, Washington, D. C.; Aug. 23, 1951, San Francisco, CA [IEEEArch]

### Membership

Approx. 1410 [H, 9]

### Symposia

IRE Wescon, San Francisco

At the IRE (Institute of Radio Engineers) Western Convention, San Francisco, CA, Aug. 22-24, 1951 the Professional Group on Antennas and Propagation sponsored three sessions on Propagation and Optics, Linear Array Antennas, and Antenna Applications. These papers were published under the designation "PGAP-1" in Feb. 1952. [H, 25]

URSI-IRE, Ithaca, NY

At a Joint URSI-IRE meeting at Cornell University, Oct. 8-10, 1951, the PGAP co-sponsored meetings of two Commissions: Tropospheric Radio Propagation and Ionospheric Radio Propagation. These papers were published under the designation "PGAP-2" in 1951 or 1952. [H, 25-26]

<<1952>>

### Officers and AdCom, 1952-53

Chairman: A. H. Waynick  
 Vice-Chairman: P. S. Carter  
 Secretary-Treasurer: Delmer C. Ports  
 Members at large: George Sinclair, J. B. Smyth, H. G. Booker, H. M. Wells, L. C. Van Atta, L. J. Chu  
 Ex-officio members: H. A. Finke, J. S. Brown, Robert B. Jacques [AP-1, 2]

### AdCom Meetings

Mar. 5, 1952, New York, NY; Apr. 21, 1952, Washington, D.C.; Oct. 25, 1952, New York, NY [IEEEArch]



## Membership

There were 980 paid members as of Dec. 31, 1952. [AP-6, 160]

## Symposia

URSI-IRE, Washington, DC

At a Joint URSI-IRE meeting at the National Bureau of Standards, Washington, DC, Apr. 21-24, 1952, the PGAP co-sponsored meetings of the following Commissions: Ionospheric Radio Propagation, Antennas and Waveguides, Tropospheric Radio Propagation, and Ionospheric Radio Propagation. These papers were published under the designation "PGAP-3" in 1952. [H, 26-27]

IRE Wescon, Los Angeles

At the IRE Western Convention, Los Angeles, Aug. 26-29, 1952, the PGAP co-sponsored sessions on Propagation, Antennas, Microwave Circuits, and Scanners and Antennas. These papers were published under the designation "PGAP-4" in 1952. [H, 27]

Tenth URSI General Assembly, Sydney, Australia

Members of the PGAP participated in the tenth URSI General Assembly held Aug. 11-24, 1952. [AP-1, no. 2, 55-57]

## Publications

PGAP-1, 2, 3, 4

Papers presented at IRE and joint URSI-IRE meetings in 1951 and 1952 were collected and published in three small multilithed volumes entitled "Transactions of the IRE-Professional Group on Antennas and Propagation." The lead author of one of these papers, Leo Felsen, was still publishing technical papers in 2003, over half a century later. John Smythe served as editor of these Transactions.

The total number of pages published by PGAP in 1952 was 618. [H, 12]

## Chapters

Because there were so many Chapters at various times associated with the PGAP and its successors, we will not attempt an exhaustive listing of all Chapters and their activities over the years. In L. C. Van Atta's brief 1962 history of the PGAP, he mentions a total of twenty Chapters that had been organized by that time. The oldest two were the Chapters in Chicago and Los Angeles, organized "before 1952." [APN, Jan. 1962, "Special Letter to PGAP Members" dated Feb. 1962, 2]

<<1953>>

### Officers and AdCom

Chairman: P. S. Carter (1953-54) [H, 7]

Secretary-Treasurer: P. H. Smith (1953-54) [H, 11]

Members at large: H. G. Booker, J. T. Bolljahn, J. S. Brown, L. J. Chu, H. A. Finke, R. B. Jacques, D. C. Ports, George Sinclair, J. B. Smyth, L. C. Van Atta (honorary member), A. H. Waynick, H. W. Wells [AP-1, No. 2, inside front cover]

### AdCom Meetings

Mar. 23, 1953, New York, NY; Apr. 27, 1953, Washington, D. C.; Aug. 20, 1953, San Francisco, CA [IEEEArch]

### Membership

There were 1219 paid members as of Dec. 31, 1953. [AP-6, 160]

### Symposia

IRE National Convention, New York

Five sessions on Antennas, Mobile Communications, and Communications Systems were co-sponsored by the PGAP at the IRE National Convention held in New York City Mar. 23-26, 1953. [1953 IRE Natl. Conv. Record, Mar. 1953, front cover]

Microwave Optics Symposium, Montreal, Canada

Members of the PGAP participated in a symposium on Microwave Optics held at McGill University held June 22-25, 1953. [AP-1, no. 2, 58]

### Publications

The *Transactions of the IRE Professional Group on Antennas and Propagation* became a quarterly journal in its own right with the publication of volume AP-1, No. 1 in July of 1953. Only two issues of the journal were published in 1953. The editor was John Smyth. The total number of pages published by PGAP in 1953 was 72. [H, 12]

<<1954>>

### Officers and AdCom

Chairman: D. C. Ports (1954-55)

Vice-Chairman: H. G. Booker (1954-55)

Secretary-Treasurer: P. H. Smith

Members at large: J. T. Bolljahn, J. S. Brown, P. S. Carter, H. A. Finke, R. A. Helliwell, V. H. Rumsey, George Sinclair, J. B. Smyth, R. C. Spencer, A. W. Straiton, L. C. Van Atta, A. H. Waynick, H. W. Wells [AP-2, No. 3, inside front cover]

### AdCom Meetings

Mar. 23, 1954, New York, NY; May 4, 1954, Washington, D. C.; Aug. 27, 1954, Los Angeles, CA; Dec. 7, 1954, New York, NY [IEEEArch]

### Membership

There were 1276 paid members as of Dec. 31, 1954. [AP-6, 160]

### Symposia

IRE National Convention, New York

Four sessions on Antennas and Propagation were sponsored by the PGAP at the IRE National Convention held in New York City Mar. 22-25, 1954. [1954 IRE Natl. Conv. Record, Mar. 1954, front cover]

Joint URSI-PGAP Spring Technical Meeting, Washington, DC

PGAP jointly sponsored a Spring Technical Meeting with the USA National Committee of URSI at the National Bureau of Standards May 3-5, 1954. [AP-2, no. 2, 44]

IRE WESCON, Los Angeles

PGAP sponsored three sessions on antennas and propagation at the IRE West Coast Electronic Manufacturers' Association (WESCON), August 1954. [AP-2, no. 2, 44]

### Publications

AP-2

Four issues of the *Transactions of the PGAP* were published in 1954, with a total page count of 181. [H, 13] The editor was J. B. Smythe. [AP-2, No. 3, inside front cover]

<<1955>>

### Officers and AdCom

Chairman: D. C. Ports (1955-56)

Vice-Chairman: H. G. Booker (1955-56)

Secretary-Treasurer: R. L. Mattingly

Members at large: J. I. Bohnert, J. T. Bolljahn, H. A. Finke, R. A. Helliwell, D. D. King, V. H. Rumsey, George Sinclair, J. B. Smyth, R. C. Spencer, A. W. Straiton, L. C. Van Atta, H. W. Wells [AP-3, No. 3, inside front cover]

### AdCom Meetings

Mar. 27, 1955, New York, NY; May 4, 1955, New York, NY; June 24, 1955, Ann Arbor, MI [IEEEArch]

### Membership

There were 1470 paid members as of Dec. 31, 1955. [AP-6, 160]

### Symposia

Joint URSI-PGAP Spring Technical Meeting, Washington, DC

PGAP jointly sponsored a Spring Technical Meeting with the USA National Committee of URSI at the National Bureau of Standards May 3-5, 1955. [AP-3, no. 2, 47]

IRE National Convention, New York

Four sessions on Antennas and Propagation were sponsored by the PGAP at the IRE National Convention held in New York City Mar. 21-24, 1955. [1955 IRE Natl. Conv. Record, Mar. 1955, front cover]

### Publications

Four issues of the *Transactions of the PGAP* were published in 1955, with a total page count of 248. [H, 13] The editor was J. B. Smythe. [AP-3, No. 3, inside front cover]

<<1956>>

### Officers and AdCom

Chairman: D. C. Ports (1956-57)

Vice-Chairman: H. G. Booker (1956-57)

Secretary-Treasurer: R. L. Mattingly

Members at large: J. I. Bohnert, J. T. Bolljahn, H. A. Finke, R. A. Helliwell, D. D. King, V. H. Rumsey, George Sinclair, J. B. Smyth, R. C. Spencer, A. W. Straiton, L. C. Van Atta, H. W. Wells

Ex Officio members: P. S. Carter, A. H. Waynick [AP-4, No. 3, inside front cover]

### AdCom Meetings

Mar. 20, 1956, New York, NY; May 1, 1956, Washington, D. C. [IEEEArch]

### Membership

There were 1997 paid members as of Dec. 31, 1956. [AP-6, 160]

### Symposia

IRE National Convention, New York

Eight sessions, including a symposium on the U. S. Earth satellite program, were co-sponsored by the PGAP at the IRE National Convention in New York City Mar. 19-22, 1956. [1956 IRE Natl. Conv. Record, Mar. 1956, front cover]

URSI Spring Meeting, Washington, DC

PGAP members participated in the URSI Spring Meeting held in Washington, DC Apr. 30-May 3, 1956. [AP-4, no. 2, 102]

IRE WESCON, Los Angeles

PGAP sponsored technical sessions on antennas and propagation at the IRE WESCON in Los Angeles, Aug. 21-24, 1956. [AP-4, no. 2, 102-103]

### Publications

Four issues of the *Transactions of the PGAP* were published in 1956, with a total page count of 702. In that year, the name of the publication was changed to *IRE Transactions on Antennas and Propagation* [H, 13] The editor was J. B. Smythe. [AP-4, No. 3, inside front cover] The July 1956 issue was a special issue that contained papers from the Symposium on Electromagnetic Wave Theory held at the University of Michigan on June 20-25, 1955. In the October 1956 issue, the following notice appeared on p. 587:

“Because the cost of publishing the proceedings of the Electromagnetic Wave Theory Symposium (vol. AP-4, no. 3; July, 1956) exceeded expectations, the funds of the PGAP were temporarily depleted. As a result, six papers originally scheduled to appear in the present issue had to be withdrawn in order to maintain the year-end treasury balance in the black. The withdrawn papers will be added to the January, 1957 issue. We apologize to the authors for this unavoidable and unexpected delay. –*The Editor*”

<<1957>>

### Officers and AdCom

Chairman: J. I. Bohnert (1957-58)  
 Vice-Chairman: R. L. Mattingly (1957-58) [AP-5, No. 3, inside front cover]  
 Secretary-Treasurer: C. Goatley (1957-58) [H, 11]  
 Members at large: H. G. Booker, Arthur Dorne, J. W. Findlay, F. T. Haddock, Jr., J. W. Herbstreit, D. D. King, R. K. Moore, W. H. Radford, J. B. Smyth, O. G. Villard, Jr.  
 Ex Officio members: P. S. Carter, D. C. Ports, A. H. Waynick  
 Honorary member: L. C. Van Atta [AP-5, No. 3, inside front cover]

### AdCom Meetings

Jan. 11, 1957, Washington, D. C.; Mar. 20, 1957, New York, NY; May 24, 1957, Washington, D. C.; Aug. 29, 1957, Boulder, CO [IEEEArch]

### Membership

There were 2406 paid members as of Dec. 31, 1957. [AP-6, 160]

### Symposia

IRE National Convention, New York

Seven sessions were co-sponsored by the PGAP and the Professional Group on Microwave Theory and Techniques at the IRE National Convention in New York City Mar. 18-21, 1957. [1957 IRE Natl. Conv. Record, Mar. 1957, front cover]

IRE WESCON, San Francisco

Four sessions were sponsored or co-sponsored by the PGAP at the IRE Western Electronics Show and Convention (WESCON) in San Francisco Aug. 20-23, 1957. [1957 IRE WESCON Convention Record, Aug. 1957, 1-2]

### Publications

Four issues of the *IRE Transactions on Antennas and Propagation* were published in 1957, with a total page count of 432. [H, 13] The editor was J. B. Smyth. [AP-5, No. 3, inside front cover]

<<1958>>

### Officers and AdCom

Chairman: R. L. Mattingly (1958-59)  
 Vice-Chairman: Arthur Dorne (1958-59) [AP-6, No. 3, inside front cover]  
 Secretary-Treasurer: K. S. Kelleher (1958-59) [H, 11]  
 Members at large: S. Bowhill, J. W. Findlay, F. T. Haddock, Jr., J. W. Herbstreit, E. C. Jordan, S. M. King, R. K. Moore, W. H. Radford, K. M. Siegel, O. G. Villard, Jr.

Ex Officio members: J. I. Bohnert, D. C. Ports, H. G. Booker  
 Honorary member: L. C. Van Atta [AP-6, No. 3, inside front cover]

### AdCom Meetings

Mar. 25, 1958, New York, NY; Apr. 24, 1958, Washington, D. C. [IEEEArch]

### Membership

A chart published in the Hiatt history of the AP in 1982 listed the membership in 1958 as approx. 3079. [H, 9] A listing of paid memberships by year published in 1963 showed that membership in 1958 was 2667. [APN, Jan. 1963, 1] Membership numbers fluctuate during the year, and paid membership is a smaller figure than total membership, which includes members who are in arrears on dues payment.

### Symposia

IRE National Convention, New York

Three sessions were sponsored by the PGAP at the IRE National Convention in New York City Mar. 24-27, 1958. [1958 IRE Natl. Conv. Record, Mar. 1958, 1-2]

IRE WESCON, Los Angeles

Four sessions were sponsored or co-sponsored by the PGAP at the IRE Western Electronics Show and Convention (WESCON) in Los Angeles Aug. 19-22, 1958. [1958 IRE WESCON Convention Record, Aug. 1958, 1-2]

### Publications

Four issues of the *IRE Transactions on Antennas and Propagation* were published in 1958, with a total page count of 388. [H, 13] The editor was J. B. Smythe. [AP-6, No. 3, July 1958, inside front cover]

Until this year, a column called “News and Views” appeared periodically in the Transactions. It contained administrative and non-technical material such as election notices and results, awards, and news of members. Starting with the July 1958 issue, this column was dropped.

In November of 1958, the first issue of the *PGAP Newsletter* was published. Its three pages contained material that was formerly reserved for publication in the “News and Views” column, and was edited by Arthur Dorne. [APN Nov. 1958, 1-3]

### Awards

The first *PGAP Newsletter* published in November of 1958 reported that the PGAP Administrative Committee (AdCom) had voted the previous April to establish an annual best paper award. The award consisted of a certificate and \$200. [APN Nov. 1958, 1-2]

<<1959>>

### Officers and AdCom

Chairman: Arthur Dorne (1959-60)

Vice-Chairman: E. C. Jordan (1959-60) [AP-7, No. 3, inside front cover]

Secretary-Treasurer: K. S. Kelleher (1959-60) [H, 11]

Members at large: S. Bowhill, R. N. Bracewell, J. W. Findlay, H. Fine, R. C. Hansen, S. M. King, R. K. Moore, W. H. Radford, E. K. Smith, Jr., K. M. Siegel, O. G. Villard, Jr.

Ex Officio members: J. I. Bohnert, H. G. Booker, Arthur Dorne, F. T. Haddock, J. W. Herbstreit, R. L. Mattingly, D. C. Ports

Honorary member: L. C. Van Atta [AP-7, No. 3, July 1959, inside front cover]

### AdCom Meetings

Dec. 9, 1959, Boston, MA [APN Mar. 1960, 1]

### Membership

A chart published in the Hiatt history of the AP in 1982 listed the membership in 1959 as approx. 3693. [H, 9] A listing of paid memberships by year published in 1963 showed that membership in 1959 was 3318. [APN, Jan. 1963, 1] Membership numbers fluctuate during the year, and paid membership is a smaller figure than total membership, which includes members who are in arrears on dues payment.

### Symposia

IRE National Convention, New York

Three sessions were sponsored by the PGAP at the IRE National Convention in New York City Mar. 23-26, 1959. [*1959 IRE Natl. Conv. Record*, Mar. 1959, 1-2]

URSI Conference on Electromagnetic Theory, Toronto

On June 15-20, 1959, the University of Toronto and URSI Commission VI co-sponsored a conference on electromagnetic theory, the proceedings of which were published in a special fifth issue of the PGAP Transactions. [AP-7, No. 5, Dec. 1959]

IRE WESCON, Los Angeles



Three sessions were sponsored or co-sponsored by the PGAP at the IRE Western Electronics Show and Convention (WESCON) in Los Angeles Aug. 18-21, 1959. [1959 *IRE WESCON Convention Record*, Aug. 1959, 1-2]

### Publications

Five issues of the *IRE Transactions on Antennas and Propagation* were published in 1959 (Jan., Apr., July, Oct., and Dec.) , with a total page count of 917. [H, 13] The December issue was a special issue of papers from the Symposium on Electromagnetic Theory, edited by E. C. Jordan. [AP-7, No. 5, p. 2] The editor of the four regular issues was J. B. Smythe. [AP-7, No. 3, July 1959, inside front cover]

Five issues of the *Antennas and Propagation Newsletter* were published, with a total page count of 23. [H, 15]

### Awards

The first annual best paper award went to R. H. DuHamel for his paper "Logarithmically Periodic Arrays," published in the 1958 Wescon Convention Record, Part 1. The award was announced in the May 1959 *PGAP Newsletter*. [H, 21]

### Chapters

The first report of Chapter activities appears in the March 1959 *PGAP Newsletter*. Reports on activities were received from Chapters in Los Angeles, Philadelphia, San Francisco, and Syracuse. [APN, Mar. 1959, 3]

<<1960>>

### Officers and AdCom

Chairman: E. C. Jordan (1960-61)

Vice-Chairman: Harry Fine (1960-61)

Secretary-Treasurer: K. S. Kelleher (1960-61)

Members at large: R. J. Adams, S. A. Bowhill, R. N. Bracewell, H. V. Cottony, N. J. Gamara, R. C. Hansen, S. M. King, E. K. Smith, Jr., K. M. Siegel, L. G. Trolese

Ex Officio members: J. I. Bohnert, Arthur Dorne, J. W. Findlay, R. L. Mattingly, D. C. Ports, P. H. Smith

Honorary member: L. C. Van Atta [AP-8, No. 4, July 1960, inside front cover]

### AdCom Meetings

Mar. 23, 1960, New York, NY [APN May 1960, 1]

May 3, 1960, Washington, D. C. [APN July 1960, 1]

Sept. 13, 1960, University College, London [APN Dec. 1960, 1]

Dec. 13, 1960, Boulder, CO [APN Apr. 1961, 1]

### Membership

Total membership was 3712 as of Feb. 1960. [APN, May 1960, 1]

### Symposia

IRE National Convention, New York

Three sessions were sponsored by the PGAP at the IRE National Convention in New York City Mar. 21-24, 1960. [1960 IRE Natl. Conv. Record, Mar. 1960, 1-2]

IRE WESCON, Los Angeles

Two sessions were sponsored by the PGAP at the IRE Western Electronics Show and Convention (WESCON) in Los Angeles Aug. 23-26, 1960. [1960 IRE WESCON Convention Record, Aug. 1960, 1-2]

### Publications

In this year John Smythe, the founding editor of the *IRE Transactions on Antennas and Propagation*, resigned. He was replaced by Sidney Bowhill. The frequency of the journal was increased to bimonthly, and six issues were published in 1960, with a total page count of 639. [H, 13] Newsletter editor Arthur Dorne was replaced by Robert C. Hansen. [APN, Nov. 1959, 1] Five issues of the Newsletter were published with a total page count of 28. [H, 15]

### Awards

No awards for papers published in 1959 were made. [H, 21]

<<1961>>

### Officers and AdCom

Chairman: Harry Fine (1961-62)

Vice-Chairman: Sidney Bowhill (1961-62)

Secretary-Treasurer: K. S. Kelleher (1961-62)

Members at large: R. J. Adams, D. Adcock, R. N. Bracewell, H. V. Cottony, A. B. Crawford, N. J. Gamara, W. E. Gordon, R. C. Hansen, E. K. Smith, Jr., T. E. Tice, L. G. Trolese

Ex Officio members: J. I. Bohnert, Arthur Dorne, V. R. Eshleman, J. W. Findlay, E. C. Jordan, R. Justice, R. L. Mattingly, D. C. Ports, K. M. Siegel, P. H. Smith, L. C. Van Atta, A. T. Waterman, Jr. [AP-9, No. 4, July 1961, inside front cover]

### AdCom Meetings

Mar. 21, 1961, New York, NY [APN Apr. 1961, 1]  
 May 2, 1961, Washington, DC [APN Sept. 1961, 1]  
 Aug. 23, 1961, San Francisco, CA [APN Sept. 1961, 1]

### Membership

A chart published in the Hiatt history of the AP in 1982 listed the membership in 1958 as approx. 3886. [H, 9] A listing of paid memberships by year published in 1963 showed that membership in 1961 was 3272. [APN, Jan. 1963, 1] Membership numbers fluctuate during the year, and paid membership is a smaller figure than total membership, which includes members who are in arrears on dues payment.

### Symposia

IRE National Convention, New York

Three sessions were sponsored by the PGAP at the IRE National Convention in New York City Mar. 20-23, 1961. [1961 *IRE Natl. Conv. Record*, Mar. 1961, 1-2]

Up to this time, the activity of PGAP in symposia was limited to sponsorship of one or more sessions at more general meetings such as the IRE National Convention or the IRE Western Electronics Show and Convention. At a meeting held in August of 1961, the PGAP AdCom voted to hold its own national symposium and asked Arthur Dorne to organize it. These plans eventually bore fruit with the first PGAP symposium held in 1963. [H, 16]

### Publications

The *IRE Transactions on Antennas and Propagation*, edited by Sidney Bowhill, was published in six issues in 1961 with a total page count of 586. [H, 13] The January 1961 issue was a special issue on radio astronomy edited by Lloyd V. Berkner. The PGAP Newsletter, edited by R. C. Hansen, published two issues with a total page count of 26. The September 1961 issue featured an illustrated article on the large VLF transmitter in Cutler, ME, erected by the U. S. Navy, but did not mention the purpose of the station: to maintain communications with submerged nuclear submarines. [APN, Sept. 1961, 7-8]

### Awards

The annual best paper award went to G. Goubau and F. Schwering for their paper "On the Guided Propagation of Electromagnetic Wave Beams," published in T-AP May 1961. [H, 21]

<<1962>>

### Merger of AIEE and IRE to form IEEE

In 1962, the Institute of Radio Engineers (founded in 1912) and the American Institute of Electrical Engineers (founded in 1884) agreed to merge to form a new entity, the Institute of Electrical and Electronics Engineers (IEEE) on Jan. 1, 1963. The Professional Group on Antennas and Propagation became a part of the new entity on that date. [Ryder, 220-223]

### Officers and AdCom

Chairman: Sidney Bowhill (1962-63)

Vice-Chairman: Robert C. Hansen (1962-63)

Secretary-Treasurer: K. S. Kelleher (1962-63)

Members at large: R. J. Adams, D. Adcock, H. V. Cottony, A. B. Crawford, L. Felsen, N. J. Gamara, W. E. Gordon, R. C. Hansen, H. C. Ko, R. L. Leadabrand, Jr., T. E. Tice, L. G. Trolese

Ex Officio members: V. R. Eshleman, J. W. Findlay, H. Fine, J. W. Herbstreit, E. C. Jordan, R. Justice, D. C. Ports, K. M. Siegel, E. K. Smith, Jr., P. H. Smith, L. C. Van Atta, A. T. Waterman, Jr. [AP-10, No. 5, September 1962, inside front cover]

### AdCom Meetings

Mar. 26, 1962, New York, NY [APN Aug. 1962, 1]

Aug. 1, 1962, Boulder, CO [APN Aug. 1962, 1]

Oct. 15, 1962, Ottawa, Ontario [APN Jan. 1963, 1]

### Membership

A chart published in the Hiatt history of the AP in 1982 listed the membership in 1962 as approx. 4054. [H, 9] A listing of paid memberships by year published in 1963 showed that membership in 1962 was 3466. [APN, Jan. 1963, 1] Membership numbers fluctuate during the year, and paid membership is a smaller figure than total membership, which includes members who are in arrears on dues payment.

### Symposia

#### IRE National Convention

Three sessions were sponsored by the PGAP at the IRE National Convention in New York City Mar. 26-29, 1962. [1962 IRE Natl. Conv. Record, Mar. 1962, 1-2]

#### URSI Symposium on Electromagnetics and Antennas

A Symposium on Electromagnetics and Antennas was held in Copenhagen, Denmark, on June 25-30, 1962. J. R. Wait chaired the technical program committee. [APN, Jan. 1963, 5]

### Publications

Sidney Bowhill retired as Editor of the *PGAP Transactions* in 1962 and was replaced by Herman V. Cottony, who was now assisted by four associate editors. [AP-10, No. 5, September 1962, inside front cover] The total page count of the bimonthly *Transactions* was 808. [H, 13] The January 1962 issue was a special issue on plasma physics edited by K. M. Siegel. The *PGAP Newsletter* came out in two issues with a total page count of 20. [H, 15] In February of 1962, a special letter to PGAP members was sent out containing a five-page history of the PGAP by L. C. Van Atta [*PGAP Newsletter* Supplement, Feb. 1962, 1-5]

### Awards

The annual best paper award record for 1962 is missing pending an investigation of the original AdCom minutes for 1963. [H, 21]

The Institute-wide Morris N. Liebmann Memorial Prize for 1962 was awarded to Victor H. Rumsey “for basic contributions to the development of frequency-independent antennas.” [APN, Jan. 1962, 5]

<<1963>>

### Merger of AIEE and IRE Completed

As mentioned above, the Institute of Radio Engineers and the American Institute of Electrical Engineers formally merged on Jan. 1, 1963 to form the Institute of Electrical and Electronics Engineers (IEEE). [Ryder, 220-223] The IRE PGAP thereupon became known as the IEEE Professional Technical Group on Antennas and Propagation (PTGAP) and the titles of its publications were changed accordingly. [AP-11, No. 5, September 1963, inside front cover; APN, May 1963, 1]

### Officers and AdCom

Chairman: R. C. Hansen (1963-64)

Vice-Chairman: W. E. Gordon (1963-64)

Secretary-Treasurer: P. E. Mast (1963-64)

Members at large: D. Adcock, S. A. Bowhill, A. B. Crawford, G. A. Deschamps, A. Dorne, L. B. Felsen, H. Fine, E. C. Jordan, K. S. Kelleher, H. C. Ko, R. L. Leadabrand, P. H. Smith, T. E. Tice, J. R. Wait, A. T. Waterman, Jr.

Ex Officio members: R. J. Adams, H. V. Cottony, J. Damonte, J. W. Findlay, J. W. Herbstreit, W. H. Kummer, D. C. Ports, K. M. Siegel, E. K. Smith, Jr., N. A. Spencer [AP-11, No. 5, September 1963, inside front cover]

### AdCom Meetings

Mar. 26, 1963, New York, NY [APN May 1963, 2-4]  
 July 9, 1963, Boulder, CO [APN Oct. 1964, 2-3]  
 Dec. 10, 1963, Seattle, WA [APN Oct. 1964, 2]

### Membership

As of July 31, 1963, there were 3208 regular members, 342 student members, and 3 affiliates, for a total of 3553. [APN, Oct. 1964, 2]

### Symposia

Annual AP-S Symposium, Boulder, CO

For the first time, the Antennas and Propagation Society held its own Annual Symposium, rather than merely sponsoring sessions at the annual IRE symposium in New York City. The AP-S Symposium was held July 9-11, 1963 at the National Bureau of Standards in Boulder, Colorado. The General Chairman was J. W. Herbstreit, the Program Chairman was H. V. Cottony, there were 63 summaries of papers in the published Digest, and the registered attendance was 453. [H, 16]

### Publications

Six issues of the *IEEE Transactions on Antennas and Propagation*, edited by H. V. Cottony, were published with a total page count of 736. [H, 13] W. H. Kummer replaced R. C. Hansen as Editor of the *Antennas and Propagation Newsletter*, which came out in two issues with a total page count of 50. [APN, Jan. 1963, 1] The same *Newsletter* published a helpful guide to the new powers-of-thousands prefixes (e. g. “tera-“, “giga-“, etc.) recently adopted by the International Committee on Weights and Measures, complete with a pronunciation guide. The item was entitled “Adieux Kilomegacycles” and reported that the correct pronunciation of “giga-“ is “jig-a”, not “gig-a.” The frequency term “cycles” rather than “hertz” remained in use for a few more years. [APN, Jan. 1963, 8]

### Awards

The annual Best Paper Award went to D. R. Rhodes for his paper “The Optimum Line Source for the Best Mean-Square Approximation to a Given Radiation Pattern,” published in T-AP July 1963. [H, 21]

<<1964>>

### Officers and AdCom

Chairman: W. E. Gordon (1964-65)  
 Vice-Chairman: A. T. Waterman, Jr. (1964-65)  
 Secretary-Treasurer: P. E. Mast (1964-65)

Members at large: S. A. Bowhill, G. A. Deschamps, R. B. Dyce, L. B. Felsen, H. Fine, G. Goubau, R. F. Harrington, R. C. Hansen, R. E. Hiatt, E. C. Jordan, K. S. Kelleher, H. C. Ko, R. L. Leadabrand, P. H. Smith, J. R. Wait  
 Ex Officio members: R. J. Adams, H. V. Cottony, J. Damonte, J. W. Findlay, J. W. Herbstreit, W. H. Kummer, D. C. Ports, K. M. Siegel, E. K. Smith, Jr., N. A. Spencer, T. E. Tice, E. A. Wolff [AP-12, No. 5, September 1964, inside front cover]

### AdCom Meetings

Mar. 24, 1964, New York, NY [APN Oct. 1964, 1-2]  
 Sept. 22, 1964, Long Island, NY [APN Apr. 1965, 1-2]

### Membership

A chart published in the Hiatt history of the AP in 1982 listed the membership in 1964 as approx. 3863. [H, 9]

### Symposia

Annual AP-S Symposium, Brooklyn, NY

The 1964 PTGAP International Symposium was held on Sept. 21-24 at the JFK International Airport Hotel, Brooklyn, NY. The general chair was H. Jasik, the program chair was N. A. Spencer, and the registered attendance was 446. [H, 16]

### Publications

Seven issues of the *IEEE Transactions on Antennas and Propagation*, edited by H. V. Cottony, were published with a total page count of 946. [H, 13] The March 1964 issue was a special issue on active and adaptive antennas, edited by R. C. Hansen. The December 1964 issue was a special issue on radio and radar astronomy published in cooperation with the Military Electronics Group and edited by J. D. Kraus. Only one issue of the *Antennas and Propagation Society Newsletter* was published in 1964, owing to editor W. H. Kummer's excessive workload. [APN, Oct. 1964, 1]

### Awards

Two papers tied for the 1964 Best Paper Award: "A Mathematical Theory of Antenna Arrays," by Y. T. Lo, published in T-AP May 1964, and "An Accurate Absolute Gain Calibration of Antennas for Radio Astronomy," by E. V. Jull and E. P. Deloli, which appeared in T-AP July 1964. [H, 21]

<<1965>>

### Officers and AdCom

Chairman: A. T. Waterman, Jr. (1965-66)

Vice-Chairman: K. M. Siegel (1965-66)

Secretary-Treasurer: P. E. Mast (1965-66)

Members at large: S. A. Bowhill, K. Bowles, G. A. Deschamps, R. B. Dyce, H. Fine, W. E. Gordon, G. Goubau, R. C. Hansen, R. F. Harrington, R. E. Hiatt, H. C. Ko, D. R. Rhodes, C. J. Sletten, P. H. Smith, J. R. Wait

Ex Officio members: R. J. Adams, H. V. Cottony, A. B. Crawford, J. B. Damonte, J. W. Findlay, J. W. Herbstreit, W. H. Kummer, D. C. Ports, J. Ruze, E. K. Smith, Jr., T. E. Tice, E. A. Wolff [AP-13, No. 5, September 1965, inside front cover]

### AdCom Meetings

Mar. 24, 1965, New York, NY [APN May 1965, 1-2]

Apr. 20, 1965, Washington, DC [APN June 1965, 2-4]

Aug. 30, 1965, Washington, DC [APN Nov. 1965, 2]

Oct. 4, 1965, Hanover, NH [APN Feb. 1966, 2-3]

### Membership

Membership as of March 1965 was 3449. [APN, May 1965, 1]

### Symposia

Annual AP-S Symposium, Washington, DC

The 1965 IEEE AP-S International Symposium was held on Aug. 30-Sept.1 at the Sheraton Park Hotel, Washington, DC. The general chair was E. A. Wolff, the program chair was R. J. Adams, and the registered attendance was 373. [H, 16]

### Publications

Six issues of the *IEEE Transactions on Antennas and Propagation*, edited by H. V. Cottony, were published with a total page count of 1,048. [H, 13] Five issues of the *Antennas and Propagation Society Newsletter* were published, with a total page count of 24. The editor was W. H. Kummer. [APN, Nov. 1965]

### Awards

The 1965 Best Paper Award went to M. Takada and M. Shinji, "An application of the diffractor grating to the 11-Gc/s microwave systems" which appeared in T-AP July 1965. [H, 21]

<<1966>>

### Officers and AdCom



Chairman: K. M. Siegel (1966-67)

Vice-Chairman: K. S. Kelleher (1966-67)

Secretary-Treasurer: J. B. Damonte (1966-67)

Members at large: S. A. Bowhill, K. Bowles, R. H. Duhamel, R. B. Dyce, G. Goubau, P. W. Hannan, R. C. Hansen, R. F. Harrington, R. E. Hiatt, E. M. T. Jones, H. C. Ko, C. A. Levis, D. R. Rhodes, C. J. Sletten, A. T. Waterman

Ex Officio members: R. J. Adams, H. V. Cottony, A. B. Crawford, W. H. Kummer, P. E. Mast, D. C. Ports, J. Ruze, E. K. Smith, Jr., T. E. Tice, M. S. Wheeler, J. R. Wait [AP-14, No. 5, September 1966, inside front cover]

### AdCom Meetings

Mar. 23, 1966 and Dec. 5, 1966, locations not stated [APN Oct. 1966, 3 and APN Mar. 1967, 2-3]

### Membership

Total membership as of Dec. 31, 1966 was 4599. [APN, Aug. 1967, 5]

### Symposia

Annual AP-S Symposium, Palo Alto, CA

The 1966 AP-S International Symposium was held Dec. 5-7, 1966, at the Cabaña Motor Hotel, Palo Alto, CA. The general chair was R. D. Egan, the program chair was R. Leadabrand, and the registered attendance was 513. [H, 16]

### Publications

On Aug. 1, 1965, John Ruze assumed the post of Editor of the bimonthly *IEEE Transactions on Antennas and Propagation*, replacing H. V. Cottony. [APN, June 1966, 1] The total page count in 1966 was 844. [H, 13] W. H. Kummer edited the three issues of the *Antennas and Propagation Society Newsletter* published in 1966, with a total page count of 28. The October 1966 issue carried the results of a questionnaire sent out to all members with regard to the *Transactions*. [APN, Oct. 1966, 1-2]

### Awards

The 1966 Best Paper Award went to two papers which tied for the award: "The Multiplate Antenna," by A. C. Schell, and "An Experimental Evaluation of Multiplate Antenna Properties," by G. R. Forbes, P. R. Franci, W. B. Groggins, and A. C. Schell, both published in T-AP September 1966. [H, 21]

<<1967>>

### Officers and AdCom

In 1967 IEEE changed its administrative year to coincide with the calendar year. [APN, Mar. 1967, 3] Accordingly, the Chairman and other officers elected in 1966 served eighteen-month terms ending Dec. 31, 1967, and other board members' terms were extended as well. [APN, Feb. 1968, 1]

Chairman: K. M. Siegel (1966-67)

Vice-Chairman: K. S. Kelleher (1966-67)

Secretary-Treasurer: J. B. Damonte (1966-67)

Members at large: S. A. Bowhill, K. Bowles, R. H. Duhamel, R. B. Dyce, G. Goubau, P. W. Hannan, R. C. Hansen, R. F. Harrington, R. E. Hiatt, E. M. T. Jones, H. C. Ko, C. A. Levis, D. R. Rhodes, C. J. Sletten, A. T. Waterman

Ex Officio members: R. J. Adams, H. V. Cottony, A. B. Crawford, W. H. Kummer, P. E. Mast, D. C. Ports, J. Ruze, E. K. Smith, Jr., T. E. Tice, M. S. Wheeler, J. R. Wait [AP-14, No. 5, September 1966, inside front cover]

### AdCom Meetings

Mar. 22, 1967, New York City [APN Aug. 1967, 3-6]

Oct. 18, 1967, Ann Arbor, MI [APN Feb. 1968, 3-5]

### Membership

Membership as of July 31, 1967 was 4655. [APN, Feb. 1968, 4]

### Symposia

Annual AP-S Symposium, Ann Arbor, MI

The 1967 AP-S International Symposium was held Oct. 17-19 at the University of Michigan, Ann Arbor. R. E. Hiatt was the general chair, T. B. A. Senior was the program chair, and the registered attendance was 568. [H, 16]

### Publications

John Ruze edited the bimonthly *IEEE Transactions on Antennas and Propagation*, which in 1967 had a total page count of 860. [H, 13] F. J. Zucker edited a special January issue devoted to partial coherence. [H, 14] W. H. Kummer edited the two issues of the *Antennas and Propagation Society Newsletter* which appeared in 1967, with a total page count of 20.

### Awards

The 1967 Best Paper Award went to P. D. Potter for his paper "Application of Spherical Wave Theory to Cassegrainian Fed Paraboloids," which was published in the November 1967 T-AP. [H, 21]

<<1968>>

### Officers and AdCom

Chairman: K. S. Kelleher

Vice-Chairman: D. R. Rhodes

Secretary-Treasurer: J. B. Damonte

Members at large: K. Bowles, A. Dorne, R. H. DuHamel, W. E. Gordon, P. W. Hannan, R. C. Hansen, E. M. T. Jones, H. C. Ko, C. A. Levis, K. M. Siegel, C. J. Sletten, C. T. Tai, C. H. Walter, A. T. Waterman

Ex Officio members: R. J. Adams, E. E. Altshuler, S. A. Bowhill, G. C. Chadwick, H. N. Chait, R. E. Hiatt, R. B. Mack, J. Ruze, P. H. Smith, W. V. Tilston, J. R. Wait [AP-16, No. 2, Mar. 1968, inside front cover]

### AdCom Meetings

Mar. 20, 1968, New York City [APN May 1968, 8-11]

Sept. 11, 1968, Boston, MA [APN Feb. 1969, 3-5]

### Membership

Total membership as of Jan. 31, 1968 was 4889. [APN May 1968, 2]

### Symposia

Annual AP-S Symposium, Boston, MA

The 1968 AP-S International Symposium was held Sept. 9-11 at Northeastern University, Boston. E. A. Altshuler was the general chair, L. J. Ricardi was the program chair, and the registered attendance was 665. [H, 16]

### Publications

John Ruze edited the bimonthly *IEEE Transactions on Antennas and Propagation*, which in 1968 had a total page count of 804. [H, 13] Following the February issue of the *Antennas and Propagation Society Newsletter*, Herman N. Chait took over from Wolf Kummer as editor and produced the remaining three issues of the year. The total newsletter page count for 1968 was 43.

### Awards

The 1968 Best Paper Award went to G. Hyde and R. C. Spencer for a set of three papers: “Studies of the Focal Region of a Spherical Reflector: Geometrical Optics” (T-AP May 1968), “Studies of the Focal Region of a Spherical Reflector: Polarization Effects” (T-AP July 1968), and “Studies of the Focal Region of a Spherical Reflector:

Stationary Phase Evaluation” (T-AP November 1968). [H, 21] Also, twelve papers published in T-AP in 1968 were given Special Recognition Awards. [APN, May 1969, 1-2]

<<1969>>

### Officers and AdCom

Chairman: D. R. Rhodes

Vice-Chairman: R. E. Hiatt

Secretary-Treasurer: J. B. Damonte

Members at large: H. V. Cottony, A. Dorne, R. H. DuHamel, W. E. Gordon, P. W. Hannan, R. C. Hansen, E. M. T. Jones, K. S. Kelleher, R. W. P. King, C. A. Levis, T. Morita, K. M. Siegel, C. T. Tai, C. H. Walter, A. T. Waterman, E. A. Wolff  
[AP-17, No. 2, Mar. 1969, inside front cover]

### AdCom Meetings

Mar. 26, 1969, New York City [APN May 1969, 2-5]

Dec. 10, 1969, Austin, TX [APN Feb. 1970, 3-6]

### Membership

1969 total membership was approximately 5053. [H, 9]

### Symposia

Annual AP-S Symposium, Austin, Texas

The 1969 AP-S International Symposium was held Dec. 9-11 at the University of Texas at Austin. A. W. Straiton was the general chair, A. H. LaGrone was the program chair, and the registered attendance was 377. [H, 16]

### Publications

Allen Schell took over as editor of the *IEEE Transactions on Antennas and Propagation* from John Ruze in 1969. The bimonthly *Transactions* had a total page count of 868, including a special issue in July on spacecraft antennas, guest-edited by L. J. Ricardi. H. N. Chait edited the three *Antennas and Propagation Society Newsletters* published in 1969, with a total page count of 36.

### Awards

The 1969 Best Paper Award went to L. D. Scott and B. R. Rao for their paper “A Short Cylindrical Antenna as a Diagnostic Probe for Measuring Collision Frequency in a Collision-Dominated Non-Maxwellian Plasma,” which was published in the November

1969 T-AP. Also, five papers in 1969 were cited for Special Recognition Awards. [H, 21]

<<1970>>

### Officers and AdCom

Chairman: R. E. Hiatt

Vice-Chairman: C. T. Tai

Secretary-Treasurer: J. B. Damonte

Members at large: R. J. Adams, H. V. Cottony, A. Dorne, R. C. Hansen, K. S. Kelleher, R. W. P. King, T. Morita, D. R. Rhodes, L. J. Ricardi, K. M. Siegel, E. M. Turner, C. H. Walter, A. T. Waterman, E. A. Wolff [AP-18, No. 2, Mar. 1970, inside front cover]

### AdCom Meetings

Mar. 25, 1970, New York City [APN May 1970, 3-9]

Sept. 13, 1970, Columbus, OH [APN Nov. 1970, 7-10]

### Membership

A chart published in the Hiatt history of the AP in 1982 listed the membership in 1964 as approx. 4994. [H, 9]

### Symposia

Annual AP-S Symposium, Columbus, Ohio

The 1970 AP International Symposium was held on Sept. 14-16, 1970 at Ohio State University, Columbus, Ohio. The general chair was C. H. Walter, the program chair was C. A. Levis, and the registered attendance was 453. [H, 16]

### Publications

Six issues of the *IEEE Transactions on Antennas and Propagation*, edited by A. C. Schell, were published with a total page count of 884. [H, 13] The July 1970 issue was a special issue on millimeter wave antennas and propagaion, edited by A. W. Straiton. Four issues of the *Antennas and Propagation Society Newsletter* were published with a total page count of 65. The editor was H. N. Chait. [APN, Nov. 1970]

### Awards

The 1970 Best Paper Award went to C. C. Bantin and K. G. Balmain for their paper "Study of Compressed Log Periodic Dipole Antennas" which appeared in T-AP Mar. 1970. [H, 21]

<<1971>>

### Officers and AdCom

Chairman: C. T. Tai

Vice-Chairman: J. B. Damonte

Secretary-Treasurer: T. Morita

Members at large: R. J. Adams, H. V. Cottony, G. A. Deschamps, R. C. Hansen, R. E. Hiatt, K. S. Kelleher, D. R. Rhodes, L. J. Ricardi, A. C. Schell, K. M. Siegel, E. M. Turner, J. R. Wait, C. H. Walter, Jr., A. T. Waterman, E. A. Wolff [AP-19, No. 2, Mar. 1971, inside front cover]

### AdCom Meetings

Mar. 24, 1971, New York City [APN May 1971, 10-14]

Sept. 23, 1971, Los Angeles, CA [APN Nov. 1971, 2-3]

### Membership

On June 30, 1971, total AP-S membership was 4,336. [APN, Nov. 1970, 2]

### Symposia

Annual AP-S Symposium, Los Angeles, California

The 1971 AP International Symposium was held on Sept. 22-24 at the University of California, Los Angeles. The general chair was W. H. Kummer, the program chair was V. H. Rumsey, and the registered attendance was 540. [H, 16]

### Publications

Six issues of the *IEEE Transactions on Antennas and Propagation*, edited by A. C. Schell, were published with a total page count of 836. [H, 13] In July of 1971, Leon Ricardi replaced Allen C. Schell as editor. [H, 12] Four issues of the *Antennas and Propagation Society Newsletter* were published with a total page count of 52. The editor was H. N. Chait. [APN, Nov. 1971]

### Awards

The 1971 Best Paper Award went to R. F. Harrington and J. R. Mautz for their paper "Theory of Modes for Conducting Bodies" which appeared in T-AP September 1971. [H, 21]

<<1972>>

### Officers and AdCom

President: J. B. Damonte

Vice-President: C. J. Sletten

Secretary-Treasurer: T. Morita

Members at large: R. J. Adams, D. K. Cheng, G. A. Deschamps, R. C. Hansen, R. E. Hiatt, A. Ishimaru, K. S. Kelleher, R. Mitra, D. R. Rhodes, L. J. Ricardi, A. C. Schell, C. T. Tai, E. M. Turner, J. R. Wait, A. T. Waterman [AP-20, No. 2, Mar. 1972, inside front cover]

### AdCom Meetings

Mar. 22, 1972, New York City [APN June 1972, 5-7]

Dec. 11, 1972, Williamsburg, VA [APN Mar. 1973, 4-5]

### Membership

As of Dec. 31, 1972, total membership stood at 4158 [APN, Mar. 1973, 3]

### Symposia

Annual AP-S Symposium, Williamsburg, Va.

The 1972 AP International Symposium was held on Dec. 11-14, 1972 at the College of William and Mary and the Williamsburg Conference Center in Williamsburg, Va. The general chair was W. Crosswell, the program chair was C. T. Swift, and the registered attendance was 579. [H, 16]

### Publications

Six issues of the *IEEE Transactions on Antennas and Propagation*, edited by L. J. Ricardi, were published with a total page count of 856. [H, 13] Four issues of the *Antennas and Propagation Society Newsletter* were published with a total page count of 56. In December of 1971, Ralph E. Hiatt replaced Herman Chait as newsletter editor. One of Hiatt's first acts was to call for a volunteer historian to update the history of the very earliest stages in A-PS history penned by L. Van Atta. Hiatt eventually wrote an account of the organization's history himself, covering the years 1949 to 1982. [APN, Mar. 1972]

### Awards

The 1972 Best Paper Award went to D. E. Barrick for his paper "First Order Theory of MF, HF, and VHF Scatter from the Sea" which appeared in T-AP January 1972. [H, 21]

The first Ronold W. P. (Wyeth Percival) King Award was presented in 1972 by a committee of former students of the well-known Harvard professor in honor of his

retirement from the University. (His retirement was nominal. As of this writing, 2004, Prof. King was still publishing papers.) The first R. W. P. King Award went to C. Elachi for his paper "Dipole Antenna in Space-Time Periodic Media" which appeared in T-AP May 1972. The administration of this award was taken over by the A-PS AdCom in 1974. [H, 22]

<<1973>>

### Officers and AdCom

President: C. J. Sletten

Vice-President: C. H. Walter

Secretary-Treasurer: W. R. Croswell

Members at large: D. K. Cheng, G. A. Deschamps, J. D. Dyson, R. C. Hansen, R. E. Hiatt, A. Ishimaru, W. K. Kahn, W. H. Kummer, K. K. Mei, R. Mitra, D. R. Rhodes, A. C. Schell, C. T. Tai, J. R. Wait, A. T. Waterman [AP-21, No. 2, Mar. 1973, inside front cover]

### AdCom Meetings

Mar. 28, 1973, New York City [APN June 1973, 3-5, 8]

Aug. 23, 1973, Boulder, CO [APN Dec. 1973, 3-5, 7]

### Membership

Total membership in 1973 was approximately 4229. [H, 9]

### Symposia

Annual AP-S Symposium, Boulder, Col.

The 1973 AP-S International Symposium was held Aug. 22-24 at the University of Colorado Boulder. S. W. Maley was the general chair, J. R. Wait was the program chair, and the registered attendance was 695. [H, 16]

### Publications

Six issues of the *IEEE Transactions on Antennas and Propagation*, edited by L. J. Ricardi, were published with a total page count of 960. [H, 13] Four issues of the *Antennas and Propagation Society Newsletter*, edited by R. E. Hiatt, were published with a total page count of 92. [APN, Dec. 1973]

### Awards

The 1973 Best Paper Award went to A. W. Love for his paper "Scale Model Development of High Efficiency Dual Polarized Line Feed for the Arecibo Spherical



Reflector," which appeared in T-AP September 1973. [H, 21] The R. W. P. King Award went to F. Tesche for the paper "Transient Response of Thin-Wire Antenna or Scatterer Near a Conducting Ground Plane," which appeared in T-AP March 1974. [H, 22]

<<1974>>

### Officers and AdCom

President: C. H. Walter

Vice-President: W. H. Kummer

Secretary-Treasurer: W. R. Crosswell

Members at large: K. G. Balmain, D. E. Barrick, D. K. Cheng, J. B. Damonte, J. D. Dyson, R. C. Hansen, R. E. Hiatt, A. Ishimaru, W. K. Kahn, K. K. Mei, R. Mitra, C. J. Sletten, C. T. Swift, C. T. Tai [AP-22, No. 2, Mar. 1974, inside front cover]

### AdCom Meetings

Mar. 27, 1974, New York City [APN June 1974, 3-5]

June 10, 1974, Atlanta, GA [APN Sept. 1974, 3-5]

### Membership

Total membership (students plus higher grades) as of Jan. 31, 1974 was 4344. [APN June 1974, 4]

### Symposia

Annual AP-S Symposium, Atlanta, Ga.

The 1974 AP-S International Symposium was held June 10-12 at the Georgia Institute of Technology in Atlanta. The general chair was Demetrius T. Paris, the program chair was R. C. Johnson, and the registered attendance was 502. [H, 16]

### Publications

Six issues of the *IEEE Transactions on Antennas and Propagation*, edited by L. J. Ricardi, were published with a total page count of 884. [H, 13] W. H. Kummer guest-edited the special January issue on conformal arrays. Four issues of the *Antennas and Propagation Society Newsletter* were published with a total page count of 97. [APN, Dec. 1974]

### Awards

The 1974 Best Paper Award went to J. Shapira and L. B. Felsen for their paper "Ray Analysis of Conformal Antenna Arrays," which appeared in T-AP January 1974. The R. W. P. King Award went to L. Marin for the paper "Natural Mode Representation

of Transient Scattering from Rotationally Symmetric Bodies," published in T-AP March 1974. [H, 22]

In 1975, an annual Best Application Paper Award was instituted for the year 1974. The first such award went to J. S. Ajoika, D. M. Joe, H. Tang, and N. S. Wong for their paper "Arbitrarily Polarized Slot Radiators in Bifurcated Waveguide Arrays," published in T-AP March 1974. [H, 22]

<<1975>>

### Officers and AdCom

President: W. H. Kummer

Vice-President: R. Mittra

Secretary-Treasurer: C. T. Swift

Members at large: K. G. Balmain, D. E. Barrick, W. F. Croswell, J. B. Damonte, J. D. Dyson, G. Hyde, W. K. Kahn, K. K. Mei, D. T. Paris, L. J. Ricardi, C. J. Sletten, C. T. Tai, C. H. Walter, E. A. Wolff [AP-23, No. 2, Mar. 1975, inside front cover]

### AdCom Meetings

June 2, 1975, Urbana, IL [APN Aug. 1975, 3-5]

### Membership

Total membership as of May 1, 1975 was 3863 (including 686 student members). [APN Aug. 1975, 4]

### Symposia

Annual AP-S Symposium, Urbana, Ill.

The 1975 AP-S International Symposium was held June 2-4 at the University of Illinois at Urbana-Champaign. The general chair was G. A. Deschamps, the program chairs were R. Mittra and S. W. Lee, and the registered attendance was 490. [H, 16]

### Publications

Six issues of the *IEEE Transactions on Antennas and Propagation*, edited by W. Croswell, were published with a total page count of 912. [H, 13] An unprecedented six issues of the *Antennas and Propagation Society Newsletter*, edited by R. C. Johnson, were published in 1975, with a total page count of 118. [APN, Dec. 1975]

### Awards

The 1975 Best Paper Award went to G. A. Thiele and T. H. Newhouse for their paper "A Hybrid Technique for Combining Moment Methods with Geometric Theory of Diffraction," which appeared in T-AP Jan. 1975. [H, 21] The R. W. P. King Award went to W. D. Burnside, C. L. Yu, and R. J. Marhefka for their paper "A Technique to Combine the Geometrical Theory of Diffraction and the Moment Method," published in T-AP July 1975. The Best Application Paper Award went to W. D. Burnside and M. G. Gilreath for their paper "A Study of KC-135 Aircraft Antenna Patterns," published in T-AP May 1975. [H, 22]

<<1976>>

### Officers and AdCom

President: R. Mittra

Vice-President: E. A. Wolff

Secretary-Treasurer: C. T. Swift

Members at large: K. G. Balmain, D. E. Barrick, C. M. Butler, W. F. Croswell, J. B. Damonte, G. Hyde, W. H. Kummer, R. J. Mailloux, D. T. Paris, L. J. Ricardi, W. V. T. Rusch, C. J. Sletten, G. A. Thiele, C. H. Walter, [AP-24, No. 2, Mar. 1976, inside front cover]

### AdCom Meetings

Apr. 5, 1976, Chicago, IL [APN June 1976, 7-10]

Oct. 12, 1976, Amhers, MA [APN Dec. 1976, 3-5]

### Membership

Total membership as of Mar. 1, 1976 was 4024. [APN June 1976, 9] Total membership as of Dec. 31, 1976 was 4634. [IEEEArch]

### Symposia

Annual AP-S Symposium, Amherst, Mass.

The 1976 AP-S International Symposium was held October 11-15 at the University of Massachusetts, Amherst, Mass. The general chair was R. E. McIntosh, the program chairs were C. S. Sletten and R. L. Fante, and the registered attendance was 898. [H, 16]

### Publications

Six issues of the *IEEE Transactions on Antennas and Propagation*, edited by W. Croswell, were published with a total page count of 956. [H, 13] Six issues of the *Antennas and Propagation Society Newsletter*, edited by R. C. Johnson, were published in 1976, with a total page count of 102. [APN, Dec. 1976]

## Awards

The 1976 Best Paper Award went to J. C. Bennet, A. P. Anderson, P. A. McInnes, and A. J. T. Whitaker for their paper "Microwave Holographic Metrology of Large Reflector Antennas," which appeared in T-AP May 1976. [H, 21] The same paper also received the Best Application Paper Award for that year. [H, 22] The R. W. P. King Award went to J. T. Mayhan for the paper "Nulling Limitations for Multiple-Beam Antennas," published in T-AP November 1976.

<<1977>>

## Officers and AdCom

President: E. A. Wolff

Vice-President: A. C. Schell

Secretary-Treasurer: E. A. Kuhlman

Members at large: C. M. Butler, E. S. Gillespie, G. Hyde, H. S. Jones, W. H. Kummer, R. J. Mailloux, R. Mittra, R. E. Munson, D. T. Paris, L. J. Ricardi, W. V. T. Rusch, C. J. Sletten, G. A. Thiele, A. T. Villeneuve, C. H. Walter [AP-25, No. 2, Mar. 1977, inside front cover]

## AdCom Meetings

June 20, 1977, Palo Alto, CA [APN Apr. 1978, 7-8]

## Membership

Total membership as of Dec. 31, 1977 was 4732. [IEEEArch]

## Symposia

Annual AP-S Symposium, Palo Alto, Ca.

The 1977 AP-S International Symposium was held June 20-22 at Stanford University, Palo Alto, Ca. This meeting was held in conjunction with the U. S. National Committee of URSI and the URSI-sponsored International Electromagnetic Symposium. The general chair was J. B. Damonte, the program chair was K. K. Mei, and the registered attendance was 762, including URSI participants. [H, 16; AP-25, Jan. 1977, back cover]

## Publications

Six issues of the *IEEE Transactions on Antennas and Propagation*, edited by W. Crosswell, were published with a total page count of 952. At mid-year, Walter Kahn became the new editor. [H, 12-13] The January special issue on radio oceanography was

guest-edited by C. T. Swift. Six issues of the *Antennas and Propagation Society Newsletter*, edited by R. C. Johnson, were published in 1977, with a total page count of 89. [APN, Dec. 1977]

### Awards

The 1977 Best Paper Award went to V. Galindo-Israel and R. Mittra for their paper "A New Series Representation for the Radiation Integral with Application to Reflector Antennas," which appeared in T-AP September 1977. [H, 21] The R. W. P. King Award went to G. S. Brown for the paper "The Average Impulse Response of a Rough Surface and Its Applications," published in T-AP January 1977. The Best Application Paper Award went to D. E. Weismann and J. W. Johnson for "Dual Frequency Correlation Radar Measurements of the Height Statistics of Ocean Waves," published in T-AP January 1977. [H, 22]

<<1978>>

### Officers and AdCom

President: A. C. Schell

Vice-President: L. J. Ricardi

Secretary-Treasurer: G. A. Thiele

Members at large: C. M. Butler, E. S. Gillespie, W. A. Imbriale, R. C. Johnson, H. S. Jones, W. H. Kummer, R. J. Mailloux, R. Mittra, R. E. Munson, W. V. T. Rusch, J. P. Shelton, F. M. Tesche, A. T. Villeneuve, C. H. Walter, E. A. Wolff [AP-26, No. 2, Mar. 1978, inside front cover]

### AdCom Meetings

Jan. 11, 1978, Boulder, CO [APN June 1978, 7-8]

Nov. 7, 1978, Boulder, CO [APN Aug. 1979, 22-23]

### Membership

Total membership as of Dec. 31, 1978 was 4454. [IEEEArch]

### Symposia

Annual AP-S Symposium, College Park, Md.

The 1978 AP-S International Symposium was held May 15-19 at the University of Maryland, College Park, Md. The general chair was G. Hyde and the program chairs were W. K. Kahn and I. Katz. [H, 16]

### Publications

Six issues of the *IEEE Transactions on Antennas and Propagation*, edited by W. Kahn, were published with a total page count of 936. [H, 13] A January special on the nuclear electromagnetic pulse was guest-edited by E. F. Vance. Six issues of the *Antennas and Propagation Society Newsletter*, edited by R. C. Johnson, were published in 1978, with a total page count of 92.

### Awards

The 1978 Best Paper Award went to J. P. Shelton for his paper "Focusing Characteristics of Symmetrically Configured Bootlace Lenses," which appeared in T-AP July 1978. [H, 21] The R. W. P. King Award went to J. T. Mayhan for the paper "Adaptive Nulling with Multiple-Beam Antennas," published in T-AP March 1978. The Best Application Paper Award went to J. S. Ajioka and V. W. Ramsey for their paper "An Equal Group Delay Waveguide Lens," published in T-AP July 1978. [H, 22]

<<1979>>

### Officers and AdCom

President: L. J. Ricardi

Vice-President: R. C. Johnson

Secretary-Treasurer: G. A. Thiele

Members at large: G. S. Brown, T. E. Charlton, R. S. Elliott, R. L. Fante, E. S. Gillespie, W. A. Imbriale, H. S. Jones, W. H. Kummer, R. Mittra, R. E. Munson, A. C. Schell, J. P. Shelton, F. M. Tesche, A. T. Villeneuve, E. A. Wolff [AP-27, No. 2, Mar. 1979, inside front cover]

### AdCom Meetings

June 20, 1979, Palo Alto, CA [APN Oct. 1979, 19-21]

Nov. 6, 1979, Boulder, CO [APN Feb. 1980, 15-16]

### Membership

Total membership as of Dec. 31, 1979 was 4661. [IEEEArch]

### Symposia

Annual AP-S Symposium, Seattle, Wash.

The 1979 AP-S International Symposium was held June 18-22 at the University of Washington, Seattle, Wash. The general chair was I. Peden and the program chair was A. Ishimaru. [H, 16]

### Publications

Six issues of the *IEEE Transactions on Antennas and Propagation*, edited by W. Kahn, were published with a total page count of 920. [H, 13] With the February 1979 issue of the *Antennas and Propagation Society Newsletter*, R. E. McIntosh took over from R. Johnson as editor. [APN, Feb. 1979] Six issues of the *Newsletter* were published in 1979, with a total page count of 135.

### Awards

The 1979 Best Paper Award went to Y. T. Lo, T. D. Solomon, and W. F. Richards for their paper "Theory and Experiment on Microstrip Antennas," which appeared in T-AP March 1979. [H, 21] The R. W. P. King Award went to R. J. Pogorzelski for the paper "Electromagnetic Propagation Along a Wire in a Tunnel," published in T-AP November 1979. The Best Application Paper Award went to V. D. Agrawal and W. A. Imbriale for their paper "Design of a Dichroic Cassegrain Subreflector," published in T-AP July 1979. [H, 22]

<<1980>>

### Officers and AdCom

President: R. C. Johnson

Vice-President: R. C. Hansen

Secretary-Treasurer: G. A. Thiele

Members at large: G. S. Brown, T. E. Charlton, R. S. Elliott, R. L. Fante, W. A. Imbriale, A. Ishimaru, Y. T. Lo, A. W. Love, R. Mittra, L. J. Ricardi, A. C. Schell, J. P. Shelton, A. J. Simmons, F. M. Tesche, A. T. Villeneuve, E. A. Wolff [AP-28, No. 2, Mar. 1980, inside front cover]

### AdCom Meetings

June 3, 1980, Quebec City, Canada [APN Dec. 1980, 26-27]

### Membership

Total membership as of Dec. 31, 1980 was 5096. [IEEEArch]

### Symposia

Annual AP-S Symposium, Québec, Canada

The 1980 AP-S International Symposium was held June 2-6 at the Université Laval, Québec, Canada. The general chair was J. A. Cummins and the program chair was K. G. Balmain. [H, 16]

### Publications

Six issues of the *IEEE Transactions on Antennas and Propagation*, edited by W. Kahn, were published with a total page count of 995. [H, 13] Six issues of the *Antennas and Propagation Society Newsletter*, edited by R. E. McIntosh, were published in 1980, with an unprecedented page count of 200. [APN, Dec. 1980]

### Awards

The 1980 Best Paper Award went to W. D. Burnside, N. Wang, and E. L. Pelton for their paper "Near Field Pattern Analysis of Airborne Antennas," which appeared in T-AP May 1980. [H, 21] The R. W. P. King Award went to S. E. El-Khamy for the paper "Matched Swept-Frequency Digital Modulation for Binary Signaling in Inhomogeneous Dispersive Media," published in T-AP January 1980. The Best Application Paper Award went to G. N. Sandoulas for the paper "Unidimensionally Scanned Phased Arrays," published in T-AP January 1980. [H, 22]

<<1981>>

### Officers and AdCom

President: R. C. Hansen

Vice-President: G. A. Thiele

Secretary-Treasurer: R. E. McIntosh

Members at large: G. S. Brown, T. E. Charlton, R. S. Elliott, R. L. Fante, A. Ishimaru, R. C. Johnson, H. E. King, Y. T. Lo, A. W. Love, G. H. Millman, I. C. Peden, L. J. Ricardi, C. E. Ryan, Jr., A. C. Schell, A. J. Simmons, E. A. Wolff [AP-29, No. 2, Mar. 1981, inside front cover]

### AdCom Meetings

Jan. 13, 1981, Boulder, CO [APN Apr. 1981, 25-28]

June 15, 1981, Los Angeles, CA [APN Oct. 1981, 32-34]

### Membership

Total membership as of Dec. 31, 1981 was 5459. [IEEEArch]

### Symposia

Annual AP-S Symposium, Los Angeles, Cal.

The 1981 AP-S International Symposium was held June 16-19 at the Bonaventure Hotel, Los Angeles, Cal. The general chair was R. S. Elliott and the program chairs were V. Galindo-Israel and A. Villeneuve. [H, 16]

### Publications



Six issues of the *IEEE Transactions on Antennas and Propagation* were published with a total page count of 1009. [H, 13] The March issue was a special issue on inverse methods in electromagnetics, guest-edited by W.-M. Boerner. With the May issue, Raj Mittra took over from W. Kahn as general editor. Six issues of the *Antennas and Propagation Society Newsletter*, edited by R. E. McIntosh, were published in 1981, with an unprecedented page count of 259. [APN, Dec. 1981]

### Awards

The 1981 Best Paper Award went to L. B. Felsen and A. H. Kamel for their paper "Hybrid Ray-Mode Formulation of Parallel Plane Waveguide Green's Functions," which appeared in T-AP July 1981. [H, 21] The R. W. P. King Award went to S. Coen for the paper "Inverse Scattering of a Layered and Dispersionless Dielectric Half-Space," published in T-AP September 1981. The Best Application Paper Award went to R. S. Elliott and G. J. Stern for the paper "The Design of a Multistrip Dipole Array Including Mutual Coupling; Part 1: Theory; Part 2: Experiment," published in T-AP September 1981. [H, 22]

<<1982>>

### Officers and AdCom

President: G. A. Thiele

Vice-President: R. J. Mailloux

Secretary-Treasurer: R. E. McIntosh

Members at large: R. C. Hansen, A. Ishimaru, R. C. Johnson, H. E. King, Y. T. Lo, S. A. Long, A. W. Love, G. H. Millman, A. C. Newell, I. C. Peden, Y. Rahmat-Samii, L. J. Ricardi, C. E. Ryan, Jr., D. H. Schaubert, A. C. Schell, A. J. Simmons [AP-30, No. 2, Mar. 1982, inside front cover]

### AdCom Meetings

Jan. 12, 1982, Boulder, CO [APN Apr. 1982, 19-21]

May 23, 1982, Albuquerque, NM [APN Aug. 1982, 13-15]

### Membership

Year-end total membership in 1982 was 5761. [KC]

### Symposia

Annual AP-S Symposium, Albuquerque, New Mexico

The 1982 AP-S International Symposium was held May 24-28 at the University of New Mexico in Albuquerque, in conjunction with the URSI U. S. National Committee and the biennial Nuclear EMP Meeting. The general chair was C. E. Baum and the

program chairs were K. F. Casey and B. K. Singaraju. [1982 AP-S Symposium Digest, i-2; APN, Feb. 1982, 13]

### Publications

At its April 1982 meeting the AP-S AdCom voted to increase the annual page count of the society's *Transactions* to 1200, in order to deal with a large backlog of papers. [APN, Apr. 1982, 20] Six issues, edited by R. Mittra, were published that year with a total page count of 1295. [AP-30, Nov. 1982] Dan Schaubert took over from Robert E. McIntosh as editor of the *Antennas and Propagation Society Newsletter*. Six issues were published in 1981, with a total page count of 188. [APN, Dec. 1982]

### Awards

The 1982 Best Paper Award went to G. Goubau, N. N. Puri, and F. K. Schwing for their paper "Diakoptic Theory of Multielement Antennas," which appeared in T-AP January 1982. The R. W. P. King Award went to D. Lesselier for his paper, "Optimization Techniques and Inverse Scattering Problems: Reconstruction of Conductivity Profiles in the Time Domain," which appeared in T-AP January 1982. The Best Application Paper Award went to B. Widrow, K. M. Duvall, R. P. Gooch, and W. C. Newman for their paper "Signal Cancellation Phenomena in Adaptive Antennas: Causes and Cures," which appeared in T-AP May 1982. [APN Aug. 1983, 17]

<<1983>>

### Officers and AdCom

President: R. J. Mailloux

Vice-President: A. W. Love

Secretary-Treasurer: R. E. McIntosh

Members at large: K. R. Carver, W. F. Gabriel, R. C. Hansen, R. C. Johnson, H. E. King, S. A. Long, G. H. Millman, A. C. Newell, W. T. Patton, I. C. Peden, Y. Rahmat-Samii, L. J. Ricardi, C. E. Ryan, Jr., D. H. Schaubert, C. T. Swift, G. A. Thiele [AP-31, No. 2, Mar. 1983, inside front cover]

### AdCom Meetings

Jan. 4, 1983, Boulder, CO [APN Apr. 1983, 19-20]

May 22, 1983, Houston, TX [APN Aug. 1983, 13-16]

### Membership

Year-end total membership in 1983 was 5978. [KC]

### Symposia

Annual AP-S Symposium, Houston, Texas

The 1983 AP-S International Symposium was held May 23-26 at the University of Houston, Houston, Texas. The general chair was Stuart A. Long and the program chair was Liang C. Shen. [1983 AP-S Symposium Digest, i-2]

### Publications

At its Jan. 4, 1983 meeting, the AP-S AdCom voted to make the *IEEE Transactions on Antennas and Propagation* a monthly publication, beginning with the January 1984 issue. Six issues were published in 1983, with a total page count of 1024. Ron L. Fante took over from Raj Mittra as editor. [AP-31, Nov. 1983] Six issues of the *Antennas and Propagation Society Newsletter*, edited by Dan Schaubert, appeared in 1983, with a total page count of 192. [APN, Dec. 1983]

### Awards

The 1983 Best Paper Award went to R. S. Elliott for his paper "An Improved Design Procedure for Small Arrays of Shunt Slots," which appeared in T-AP January 1983. The R. W. P. King Award went to P. D. Einziger for the paper, "Rigorous Asymptotic Analysis of Transmission Through a Curved Dielectric Slab," which appeared in T-AP November 1983. The Best Application Paper Award went to E. C. Dufort and H. Uyeda for their paper "A Wide Angle Scanning Optical Antenna," which appeared in T-AP Jan. 1983. [APN Aug. 1984, 10]

<<1984>>

### Officers and AdCom

President: A. W. Love

Vice-President: R. E. McIntosh

Secretary-Treasurer: D. H. Schaubert

Members at large: K. R. Carver, P. J. B. Clarricoats, L. J. Cooper, W. F. Gabriel, R. C. Hansen, R. C. Johnson, G. H. Knittel, S. A. Long, R. J. Mailloux, A. C. Newell, W. T. Patton, Y. Rahmat-Samii, H. E. Schrank, C. T. Swift, G. A. Thiele [AP-32, No. 3, Mar. 1984, inside front cover]

### AdCom Meetings

Jan. 10, 1984, Boulder, CO [APN Apr. 1984, 22-23 (incomplete)]

June 24, 1984, Boston, MA [APN Oct. 1984, 17-19]

### Membership

Year-end total membership in 1984 was 6452. [KC]

## Symposia

Annual AP-S Symposium, Boston, Mass.

The 1984 AP-S International Symposium was held June 25-29 at the Westin Hotel, Boston, Mass. The general chair was Allan C. Schell and the program chair was Harold R. Raemer. [1984 AP-S Symposium Digest, vi]

## Publications

The *IEEE Transactions on Antennas and Propagation*, edited by R. L. Fante, was issued monthly for the first time in 1984. Its twelve issues had a total page count of 1433 (including the four cover sides per issue). [AP-32, Dec. 1984] In January of 1984 W. Ross Stone took over from Dan Schaubert as editor of the *Antennas and Propagation Newsletter*, which had a total page count of 224. [APN, Dec. 1984]

## Awards

The S. A. Schelkunoff Transactions Prize for the year 1984 was awarded to P. B. Katehi and N. G. Alexopoulos for their paper, "On the Modeling of Electromagnetically Coupled Microstrip Antennas—The Printed Strip Dipole," which appeared in T-AP November 1984. At its meeting of Feb. 2, 1985, the A-P Society AdCom voted to rename the Best Applications Paper Award the H. A. Wheeler Applications Paper Award. [APN, Apr. 1985, 18] The H. A. Wheeler Applications Prize went to R. E. Clapp for his paper "Extending the R-2R Lens to 360°," which appeared in T-AP July 1984. The R. W. P. King Award went to Per-Simon Kildal for his paper, "Radiation Characteristics of the EISCAT VHF Parabolic Cylindrical Reflector Antenna," published in T-AP June 1984.

<<1985>>

## Officers and AdCom

President: R. E. McIntosh

Vice-President: A. J. Simmons

Secretary-Treasurer: D. H. Schaubert

Members at large: D. G. Bodnar, K. R. Carver, P. J. B. Clarricoats, L. J. Cooper, R. K. Crane, W. F. Gabriel, R. C. Hansen, G. H. Knittel, A. W. Love, R. J. Mailloux, W. T. Patton, H. E. Schrank, W. L. Stutzman, C. T. Swift, G. A. Thiele, R. I. Wolfson [AP-33, No. 3, Mar. 1985, inside front cover]

## AdCom Meetings

Jan. 13, 1985, Washington, DC [APN Apr. 1985, 18-20]

June 16, 1985, Vancouver, BC [APN Oct. 1985, 13-15]

## Membership

Year-end total membership in 1985 was 6963. [KC]

### Symposia

Annual AP-S Symposium, Vancouver, Canada

The 1985 AP-S International Symposium was held June 17-21 at the University of British Columbia, Vancouver, Canada. The general chair was K. S. McCormick and the program chair was S. J. Kubina. [1985 AP-S Symposium Digest, vi]

### Publications

In 1985, the twelve issues of the *IEEE Transactions on Antennas and Propagation*, edited by R. L. Fante, had a total page count of 1332. [AP-33, Dec. 1985] The *Antennas and Propagation Newsletter*, edited by Ross Stone, had a total page count of 261. [APN, Dec. 1985]

### Awards

The S. A. Schelkunoff Transactions Prize for the year 1985 was awarded to G. C. McCormick and A. Hendry for their paper, "Optimal Polarizations for Partially Polarized Backscatter," which appeared in T-AP January 1985. The H. A. Wheeler Applications Prize went to C. M. Rappaport and A. I. Zaghoul for their paper, "Optimized Three-Dimensional Lenses for Wide-Angle Scanning," which appeared in T-AP November 1985. The R. W. P. King Award went to David M. Pozar for his paper, "General Relations for a Phased Array of Printed Antennas Derived from Infinite Current Sheets," published in T-AP May 1985. [1986 AP-S Symp. Dig., v. 1, p. ii] In addition, the first Distinguished Achievement Award, established by vote of the AdCom in 1983, went to John D. Kraus. [1985 AP-S Symp. Dig., v. 1, p. ii]

<<1986>>

### Officers and AdCom

President: A. J. Simmons

Vice-President: G. H. Knittel

Secretary-Treasurer: D. H. Schaubert

Members at large: D. G. Bodnar, D. C. Chang, P. J. B. Clarricoats, L. J. Cooper, D. C. Cox, R. K. Crane, E. V. Jull, G. H. Knittel, A. W. Love, R. J. Mailloux, R. E. McIntosh, E. K. Miller, H. E. Schrank, W. L. Stutzman, G. A. Thiele, R. I. Wolfson [AP-34, No. 3, Mar. 1986, inside front cover]

### AdCom Meetings

Jan. 12, 1986, Boulder, CO [APN Apr. 1986, 20-22]

June 8, 1986, Philadelphia, PA [APN Oct. 1986, 35-37]

### Membership

Year-end total membership in 1986 was 7507. [KC]

### Symposia

Annual AP-S Symposium, Philadelphia, Pa.

The 1986 AP-S International Symposium was held at the Wyndham Franklin Plaza Hotel, Philadelphia, Pa., on June 8-13. The general chair was Charles C. Allen and the program chair was Ali Afrashteh. [1986 AP-S Symp. Dig., v. 2, p. iv]

### Publications

The March 1986 issue of the *IEEE Transactions on Antennas and Propagation* was a special issue on adaptive processing antenna systems, and the guest editor was William F. Gabriel. [AP-34, Mar. 1986, p. 273] The twelve issues comprising Volume 34, edited by R. L. Fante, had a total page count of 1521. [AP-34, Dec. 1986] The six issues of the *Antennas and Propagation Newsletter*, edited by Ross Stone, had a total page count of 287. [APN, Dec. 1986]

### Awards

The S. A. Schelkunoff Transactions Prize for the year 1986 was awarded to I. V. Lindell, E. Alanen, and H. Von Bagh for their paper, "Exact Image Theory for the Calculation of Fields Transmitted Through a Planar Interface of Two Media," which appeared in T-AP February 1986. The H. A. Wheeler Applications Prize Paper Award went to H. L. Southall and D. T. McGrath for their paper, "An Experimental Completely Overlapped Subarray Antenna," which was published in T-AP April 1986. The R. W. P. King Award went to H. Shirai and L. B. Felsen for their publication, "Modified GTD for Generating Complex Resonances for Flat Strips and Disks," which appeared in T-AP June 1986. [1987 AP-S Symp. Dig., v. 1, p. vii] In 1986, the Distinguished Achievement Award went to Chen-To Tai. [1986 AP-S Symp. Dig., v. 1, p. ii]

<<1987>>

### Officers and AdCom

President: G. H. Knittel

Vice-President: G. S. Brown

Secretary-Treasurer: D. H. Schaubert

Members at large: C. C. Allen, D. G. Bodnar, D. C. Chang, D. C. Cox, R. K. Crane, E. V. Jull, A. W. Love, R. J. Mailloux, R. E. McIntosh, E. K. Miller, J. K. Schindler, W. G.

Scott, A. J. Simmons, W. R. Stone, W. L. Stutzman, R. I. Wolfson [AP-35, No. 3, Mar. 1987, inside front cover]

### AdCom Meetings

Jan. 11, 1987, Boulder, CO [APN Apr. 1987, 26-29]

June 14, 1987, Blacksburg, VA [APN Oct. 1987, 21-24]

### Membership

Year-end total membership in 1987 was 7958. [KC]

### Symposia

Annual AP-S Symposium, Blacksburg, Va.

The 1987 Symposium was held June 15-19 at Virginia Polytechnic Institute and State University in Blacksburg, Va. The general chair was W. L. Stutzman and the program chair was C. W. Bostian. [1987 AP-S Symp. Dig., v. 1, p. iv]

### Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 1987 contained a total of 1548 pages (including covers). Ronald J. Pogorzelski took over the editorship from R. L. Fante in 1987. [AP-35, Dec. 1987] The six issues of the *Antennas and Propagation Newsletter*, edited by Ross Stone, had a total page count of 355. [APN, Dec. 1987]

### Awards

The S. A. Schelkunoff Transactions Prize for the year 1987 was awarded to R.-S. Chu and K.-M. Lee for their paper, "Analytical Model of a Multilayered Meander-Line Polarized Plate with Normal and Oblique Plane Wave Incidence," which appeared in T-AP June 1987. The H. A. Wheeler Applications Prize Paper went to A. R. Lopez for his paper, "Application of Wedge Diffraction Theory to Estimating Power Density at Airport Humped Runways," which was published in T-AP June 1987. The R. W. P. King Award went to David M. Pozar for his publication, "Radiation and Scattering from a Microstrip Patch on a Uniaxial Substrate," which appeared in T-AP June 1987. [1988 AP-S Symp. Dig., v. 1, p. viii] In 1987, the Distinguished Achievement Award went to Georges Deschamps. [1987 AP-S Symp. Dig., v. 1, p. vii]

<<1988>>

### Officers and AdCom

President: G. S. Brown

Vice-President: I. C. Peden

Secretary-Treasurer: D. H. Schaubert

Members at large: C. C. Allen, C. M. Butler, D. C. Chang, D. C. Cox, F. E. Gardiol, A. Ishimaru, E. V. Jull, G. H. Knittel, A. W. Love, R. E. McIntosh, E. K. Miller, Y.

Rahmat-Samii, A. J. Simmons, W. G. Scott, J. K. Schindler, W. R. Stone [AP-36, No. 3, Mar. 1988, inside front cover]

### AdCom Meetings

Jan. 4, 1988, Boulder, CO [APN Apr. 1988, 44-47]

June 5, 1988, Syracuse, NY [APN Oct. 1988, 19-22]

### Membership

Total membership as of Dec. 31, 1988 was 8337. [IEEEArch]

### Symposia

Annual AP-S Symposium, Syracuse, N. Y.

The 1988 Symposium was held June 6-10 at Syracuse University in Syracuse, N. Y. The general chair was A. T. Adams and the program chair was T. Sarkar. [1988 AP-S Symp. Dig., v. 1, p. iv]

### Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 1988 contained a total of 1875 pages (including covers). R. J. Pogorzelski was editor. [AP-36, Dec. 1988] The June issue was a special issue on near-field scanning techniques guest-edited by E. S. Gillespie. The six issues of the *Antennas and Propagation Newsletter*, edited by Ross Stone, had a total page count of 428. [APN, Dec. 1988]

### Awards

The S. A. Schelkunoff Transactions Prize for papers published in 1988 was awarded to A. C. Newell for his paper, "Error Analysis Techniques for Planar Near-Field Measurements," which appeared in T-AP June 1988. The H. A. Wheeler Applications Prize Paper Award went to A. D. Olver and J. Xiang for their paper, "Design of Profiled Corrugated Horns," which was published in T-AP July 1988. The R. W. P. King Award went to R. G. Rojas for his paper "Wiener-Hopf Analysis of the EM Diffraction by an Impedance Discontinuity in a Planar Surface and by an Impedance Half-Plane," which appeared in T-AP January 1988. [AP-37, No. 12, Dec. 1989, 1497-1500] In 1988, the Distinguished Achievement Award went to Robert S. Elliot. [1988 AP-S Symp. Dig., v. 1, p. viii]

<<1989>>



### Officers and AdCom

President: I. C. Peden

Vice-President: D. C. Chang

Secretary-Treasurer: J. K. Schindler

Members at large: C. C. Allen, C. W. Bostian, G. S. Brown, C. M. Butler, R. E. Collin, F. E. Gardiol, A. Ishimaru, R. J. King, G. H. Knittel, R. E. McIntosh, D. M. Pozar, Y. Rahmat-Samii, A. J. Simmons, W. G. Scott, W. R. Stone [AP-37, No. 3, Mar. 1989, inside front cover]

### AdCom Meetings

Jan. 7, 1989, Boulder, CO [APN Apr. 1989, 19-22]

June 25, 1989, San Jose, CA [APN Oct. 1989, 26-29]

### Membership

Total membership as of Dec. 31, 1989 was 8647. [IEEEArch]

### Symposia

Annual AP-S Symposium, San Jose, Calif.

The 1989 Symposium was held June 26-30 at the Red Lion Inn in San Jose, California. The general chair was R. King and the program chair was K. Mei. [1989 AP-S Symp. Dig., v. 2, p. vii]

### Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 1989 contained a total of 1692 pages (including covers). R. J. Pogorzelski was editor. [AP-37, Dec. 1989] The May issue was a special issue on radar cross-sections of complex objects, guest-edited by W. Ross Stone. The six issues of the *Antennas and Propagation Newsletter*, edited by Ross Stone, had a total page count of 376. [APN, Dec. 1989]

### Awards

The S. A. Schelkunoff Transactions Prize for papers published in 1989 was awarded to E. C. DuFort for his paper, "Pattern Synthesis Based on Adaptive Array Theory," which appeared in T-AP August 1989. The H. A. Wheeler Applications Prize Paper Award went to H. M. Aumann, A. J. Fenn, and F. G. Willwerth for their paper, "Phased Array Antenna Calibration and Pattern Prediction Using Mutual Coupling Measurements," which was published in T-AP July 1989. The R. W. P. King Award went to T. L. Krohn and Louis N. Medgyesi-Mitschang for their paper "Scattering from Composite Materials:

A First-Order Model," which appeared in T-AP February 1989. [AP-38, No. 12, Dec. 1989, 1903-1905] In 1989, the Distinguished Achievement Award went to Roger F. Harrington. [1989 AP-S Symp. Dig., v. 2, p. v]

<<1990>>

### Officers and AdCom

President: D. C. Chang

Vice-President: H. E. Schrank

Secretary-Treasurer: J. K. Schindler

Members at large: C. W. Bostian, G. S. Brown, C. M. Butler, R. E. Collin, F. E. Gardiol, A. Ishimaru, R. J. King, G. H. Knittel, S. A. Long, A. C. Ludwig, L. W. Pearson, I. C. Peden, R. J. Pogorzelski, D. M. Pozar, Y. Rahmat-Samii, A. J. Simmons [AP-38, No. 3, Mar. 1990, inside front cover]

### AdCom Meetings

Jan. 6, 1990, Boulder, CO [APM Apr. 1990, 31-35]

May 6, 1990, Dallas, TX [APM Oct. 1990, 43-44 (Treasurer's report only)]

### Membership

Total membership as of Dec. 31, 1990 was 9279. [IEEEArch]

### Symposia

Annual AP-S Symposium, Dallas, Tex.

The 1990 Symposium was held May 7-11 at the Dallas Convention Center in Dallas, Texas. The general chair was S. Sanzgiri and the program chair was O. Kesler. [1990 AP-S Symp. Dig., v. 2, p. vi]

### Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 1990 contained a total of 2026 pages (including covers). [AP-38, Dec. 1990] With the January issue, Robert E. McIntosh took over from Ron Pogorzelski as editor. In February, the *Antennas and Propagation Newsletter* became the *IEEE Antennas and Propagation Society Magazine*. The magazine's six issues, edited by Ross Stone, had a page count of 360, not including advertisements and non-editorial material. [APM, Dec. 1990]

### Awards

The S. A. Schelkunoff Transactions Prize for papers published in 1990 was awarded to P.-S. Kildal for his paper, "Synthesis of Multireflector Antennas by Kinematic and Dynamic Ray Tracing," which appeared in T-AP October 1990. The H. A. Wheeler Applications Prize Paper Award went to I. J. Gupta, K. P. Erickson, and W. D. Burnside for their paper, "A Method to Design Blended Rolled Edges for Compact Range Reflectors," which was published in T-AP June 1990. The R. W. P. King Award went to S. Hashemi-Yeganeh and R. S. Elliott for their paper "Analysis of Untilted Edge Slots Excited by Tilted Wires," which appeared in T-AP November 1990. [AP-39, No. 12, Dec. 1991, 1653-1657] In 1990, the Distinguished Achievement Award went to James R. Wait. [1990 AP-S Symp. Dig., v. 2, p. v]

<<1991>>

### Officers and AdCom

President: H. E. Schrank

Vice-President: W. L. Stutzman

Secretary-Treasurer: J. K. Schindler

Members at large: A. T. Adams, D. G. Bodnar, C. W. Bostian, G. S. Brown, D. C. Chang, R. E. Collin, D. W. Hess, Jr., O. B. Kesler, R. J. King, G. H. Knittel, S. A. Long, A. C. Ludwig, L. W. Pearson, I. C. Peden, R. J. Pogorzelski, D. M. Pozar [AP-39, No. 3, Mar. 1991, inside front cover]

### AdCom Meetings

Jan. 12, 1991, Baltimore, MD [APM Apr. 1991, 43-46]

June 23, 1991, London, Ontario, Canada [APM Dec. 1991, 39-43]

### Membership

Total membership as of Dec. 31, 1991 was 8957. [IEEEArch]

### Symposia

Annual AP-S Symposium, London, Ontario

The 1991 Symposium was held June 24-28 at the University of Western Ontario, London, Ontario, Canada. The general chair was A. R. Webster and the program chair was S. J. Kubina. [1991 AP-S Symp. Dig., v. 1, p. v]

### Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 1991 contained a total of 1840 pages (including covers). [AP-39, Dec. 1991] R. E. McIntosh was editor. The *IEEE Antennas and Propagation Society Magazine*, edited by

Ross Stone, had a page count of 378, not including advertisements and non-editorial material. [APM, Dec. 1991]

### Awards

The S. A. Schelkunoff Transactions Prize for papers published in 1991 was awarded posthumously to Jack H. Richmond for his paper, "On the Variational Aspects of the Moment Method," which appeared in T-AP April 1991. The H. A. Wheeler Applications Prize Paper Award went to W. Imbriale, V. Galindo-Israel, and Y. Rahmat-Samii for their paper, "On the Reflectivity of Complex Mesh Surfaces," which was published in T-AP September 1991. The R. W. P. King Award went to T. B. Hansen for his paper "Corner Diffraction Coefficients for the Quarter Plate," which appeared in T-AP July 1991. [AP-40, No. 12, Dec. 1992, 1445-1449] In 1991, the Distinguished Achievement Award went to Ronold W. P. King. [1991 AP-S Symp. Dig., v. 1, p. iv]

<<1992>>

### Officers and AdCom

President: W. L. Stutzman

Vice-President: R. J. Pogorzelski

Secretary-Treasurer: O. B. Kesler

Members at large: A. T. Adams, D. G. Bodnar, G. S. Brown, D. C. Chang, L. J. Cooper, D. W. Hess, Jr., I. V. Lindell, S. A. Long, A. C. Ludwig, L. W. Pearson, I. C. Peden, D. H. Schaubert, H. E. Schrank, D. R. Wilton [AP-40, No. 3, Mar. 1992, inside front cover]

### AdCom Meetings

Jan. 6, 1992, Boulder, CO [APM Apr. 1992, 59-62]

July 19, 1992, Chicago, IL [APM Dec. 1992, 33-37]

### Membership

Total membership as of Dec. 31, 1992 was 8986. [IEEEArch]

### Symposia

Annual AP-S Symposium, Chicago, Illinois

The 1992 Symposium was held July 18-25 at the Hyatt Regency Hotel, Chicago, Ill. The general chair was P. L. E. Uslenghi and the program chair was A. Taflove. [1992 AP-S Symp. Dig., v. 1, p. ix]

### Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 1992 contained a total of 1636 pages (including covers). [AP-40, Dec. 1992] With the November issue, Ron Marhefka took over from R. E. McIntosh as editor. The *IEEE Antennas and Propagation Society Magazine*, edited by Ross Stone, had a page count of 503, not including advertisements and non-editorial material. [APM, Dec. 1992]

### Awards

The S. A. Schelkunoff Transactions Prize for papers published in 1992 was awarded to R. E. Collin for his paper, "Electromagnetic Scattering from Perfectly Conducting Rough Surfaces," which appeared in T-AP December 1992. The H. A. Wheeler Applications Prize Paper Award went to R. M. Bards and W. L. Stutzman for their paper, "Modeling and Simulation of Mobile Satellite Propagation," which was published in T-AP April 1992. The R. W. P. King Award went to N. K. Das (with D. Pozar, co-author) for the paper "Multiport Scattering Analysis of General Multilayered Printed Antennas Fed by Multiple Feed Ports," which appeared in T-AP May 1992. [AP-41, No. 12, Dec. 1993, 1597-1600] In 1992, the Distinguished Achievement Award went to Harold A. Wheeler. [1992 AP-S Symp. Dig., v. 1, p. viii]

<<1993>>

### Officers and AdCom

President: R. J. Pogorzelski

Vice-President: D. G. Bodnar

Secretary-Treasurer: O. B. Kesler

Members at large: A. T. Adams, C. A. Balanis, D. C. Chang, L. J. Cooper, W. A. Flood, Jr., D. W. Hess, Jr., L. P. B. Katehi, I. V. Lindell, I. C. Peden, A. J. Repjar, D. H. Schaubert, H. E. Schrank, W. L. Stutzman, D. R. Wilton [AP-41, No. 3, Mar. 1993, inside front cover]

### AdCom Meetings

Jan. 4, 1993, Boulder, CO [APM June 1993, 37-42]

June 27, 1993, Ann Arbor, MI [APM Dec. 1993, 35-39]

### Membership

Total membership as of Dec. 31, 1993 was 8876. [IEEEArch]

### Symposia

Annual AP-S Symposium, Ann Arbor, Michigan

The 1993 Symposium was held June 28-July 2 at the University of Michigan, Ann Arbor, Mich. The general chair was J. L. Volakis and the program chair was L. P. B. Katehi [1993 AP-S Symp. Dig., v. 1, p. iii]

### Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 1993 contained a total of 1794 pages (including covers). [AP-41, Dec. 1993] R. Marhefka was editor. The *IEEE Antennas and Propagation Society Magazine*, edited by Ross Stone, had a page count of 532, not including advertisements and non-editorial material. [APM, Dec. 1993]

### Awards

The S. A. Schelkunoff Transactions Prize for papers published in 1993 was awarded to R. Luebbers, D. Steich, and K. Kunz for their paper, "FDTD Calculation of Scattering from Frequency-Dependent Materials," which appeared in T-AP September 1993. The H. A. Wheeler Applications Prize Paper Award went to H. Nakano, S. Okuzawa, K. Ohishi, H. Mimaki, and J. Yamauchi for their paper, "A Curl Antenna," which was published in T-AP November 1993. The R. W. P. King Award went to J. G. Maloney for the paper "Optimization of a Conical Antenna for Pulse Radiation: An Efficient Design Using Resistive Loading," which appeared in T-AP July 1993. [AP-42, No. 12, Dec. 1994, 1585-1590] In 1993, the Distinguished Achievement Award went to R. E. Collin. [1993 AP-S Symp. Dig., v. 1, p. v]

<<1994>>

### Officers and AdCom

President: D. G. Bodnar

Vice-President: Y. Rahmat-Samii

Secretary-Treasurer: O. B. Kesler

Members at large: C. A. Balanis, D. C. Chang, R. Compton, L. J. Cooper, D. G. Dudley, W. A. Flood, Jr., G. Hagn, L. P. B. Katehi, I. V. Lindell, R. J. Pogorzelski, A. J. Repjar, D. H. Schaubert, H. E. Schrank, W. L. Stutzman, P. L. E. Uslenghi, D. R. Wilton [AP-42, No. 9, Sept. 1994, inside front cover]

### AdCom Meetings

Jan. 4, 1994, Boulder, CO [APM June 1994, 60-64]

June 19, 1994, Seattle, WA [APM Dec. 1994, 37-42]

### Membership

Total membership as of Dec. 31, 1994 was 7990. [IEEEArch]

## Symposia

Annual AP-S Symposium, Seattle, Washington

The 1994 Symposium was held June 19-24 at the University of Washington, Seattle. The general chair was G. E. Miller and the program chair was L. Tsang. [1994 AP-S Symp. Dig., v. 1, p. iii]

## Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 1994 contained a total of 1718 pages (including covers). [AP-42, Dec. 1994] R. Marhefka was editor. The *IEEE Antennas and Propagation Society Magazine*, edited by Ross Stone, had a page count of 563, not including advertisements and non-editorial material. [APM, Dec. 1994]

## Awards

The S. A. Schelkunoff Transactions Prize for papers published in 1994 was awarded to T. B. Hansen and A. D. Yaghjian for their paper, "Planar Near Field Scanning in the Time Domain," which appeared in T-AP September 1994. The H. A. Wheeler Applications Prize Paper Award went to L. I. Williams, Y. Rahmat-Samii, and R. G. Yaccarino for their paper, "The Bi-Polar Near-Field Measurement Technique, Part I: Implementation and Measurement Comparisons," which was published in T-AP February 1994. The R. W. P. King Award went to R. Janaswamy for the paper "A Fast Finite Difference Method for Propagation Predictions over Irregular, Inhomogeneous Terrain," which appeared in T-AP Sept. 1994. [AP-43, No. 12, Dec. 1995, 1356-1359] In 1994, the Distinguished Achievement Award went to Robert C. Hansen. [1994 AP-S Symp. Dig., v. 1, p. v]

<<1995>>

## Officers and AdCom

President: Y. Rahmat-Samii

Vice-President: S. A. Long

Secretary-Treasurer: O. B. Kesler

Members at large: C. A. Balanis, D. G. Bodnar, R. Compton, D. G. Dudley, W. A. Flood, Jr., G. Hagn, L. P. B. Katehi, P. S. Kildal, T. A. Milligan, A. D. Olver, R. J. Pogorzelski, A. G. Repjar, D. A. Rutledge, H. E. Schrank, W. L. Stutzman, P. L. E. Uslenghi, [AP-43, No. 9, Sept. 1995, inside front cover]

## AdCom Meetings

Jan. 7, 1995, Boulder, CO [APM June 1995, 37-40]

June 18, 1995, Newport Beach, CA [APM Dec. 1995, 66-71]

## Membership

Total membership as of Dec. 31, 1995 was 8683. [IEEEArch]

## Symposia

Annual AP-S Symposium, Newport Beach, Calif.

The 1995 Symposium was held June 18-23 at the Newport Beach Marriott Hotel, Newport Beach, Calif. The general chair was W. Imbriale and the technical program co-chairs were R. Pogorzelski and T. Cwik. [1995 AP Symp. Dig., v. 1, p. iv]

## Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 1995 contained a total of 1567 pages (including covers). [AP-43, Dec. 1995] On July 1, 1995, Piergiorgio L. E. Uslenghi took over from R. Marhefka as editor. [AP-43, Dec. 1995, 1353] The September issue was a special issue on packaging technologies for phased array applications, for which the guest editors were Rainee. N. Simons and Susan R. Taub. The *IEEE Antennas and Propagation Society Magazine*, edited by Ross Stone, had a page count of 655, not including advertisements and non-editorial material. [APM, Dec. 1995]

## Awards

The S. A. Schelkunoff Transactions Prize for papers published in 1995 was awarded to P. R. Rousseau and P. H. Pathak for their paper, "Time Domain Uniform GTD for a Curved Wedge," which appeared in T-AP December 1995. The H. A. Wheeler Applications Prize Paper Award went to W. Stutzman, T. Pratt, A. Safaai-Jazi, P. Remaklus, J. Laster, B. Nelson, and H. Ajaz for their paper, "Results from the Virginia Tech Propagation Experiment Using the Olympus Satellite 12, 20, and 30 GHz Beacons," which was published in T-AP January 1995. The R. W. P. King Award went to X. H. Yang and L. Shafai for the paper "Characteristics of Aperture Coupled Microstrip Antennas with Various Radiating Patches and Coupling Apertures," which appeared in T-AP January 1995. [AP-44, No. 12, Dec. 1996, 1538-1541] In 1995, the Distinguished Achievement Award went to Akira Ishimaru. [1995 AP-S Symp. Dig., v. 1, p. vi]

<<1996>>

## Officers and AdCom

President: S. A. Long

Vice-President: E. S. Gillespie

Secretary-Treasurer: O. B. Kesler

Members at large: D. G. Bodnar, R. Compton, D. G. Dudley, G. Hagn, P. S. Kildal, R. J. Marhefka, E. K. Miller, T. A. Milligan, J. W. Mink, A. D. Olver, R. J. Pogorzelski, Y.



Rahmat-Samii, D. A. Rutledge, W. L. Stutzman, P. L. E. Uslenghi, J. L. Volakis [AP-44, No. 9, Sept. 1996, inside front cover]

### AdCom Meetings

Jan. 8, 1996, Boulder, CO [APM June 1996, 66-71]  
 July 21, 1996, Baltimore, MD [APM Feb. 1997, 72-77]

### Membership

Total membership as of Dec. 31, 1996 was 9011. [IEEEArch]

### Symposia

Annual AP-S Symposium, Baltimore, Maryland

The 1996 Symposium was held July 21-26 at the Hyatt Regency Hotel, Baltimore, Maryland. The general chair was J. Moellers and the technical program chair was J. Frank. [1996 AP Symp. Dig., v. 1, p. iv]

### Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 1996 contained a total of 1693 pages (including covers). P. L. E. Uslenghi was editor. [AP-44, Dec. 1996] The *IEEE Antennas and Propagation Society Magazine*, edited by Ross Stone, had a page count of 626, not including advertisements and non-editorial material. [APM, Dec. 1996]

### Awards

The S. A. Schelkunoff Transactions Prize for papers published in 1996 was awarded to H. Y. Pao, S. L. Dvorak, and D. G. Dudley for their paper "An Accurate and Efficient Analysis for Transient Plane Waves Obliquely Incident on a Conductive Half Space (TE and TM Cases)," which appeared in T-AP July 1996. The H. A. Wheeler Applications Prize Paper Award was declared to be a tie. The two papers receiving this award were: D. H. Schaubert, "A Class of E-Plane Scane Blindness in Single-Polarized Arrays of Tapered Slot Antennas with a Ground Plane," published in T-AP July 1996, and J. F. Nye and W. Liang, "Theory and Measurement of the Field of a Pyramidal Horn," published in T-AP November 1996. The R. W. P. King Award went to D. M. Sullivan for his paper "Z-Transform Theory and the FDTD Method," which appeared in T-AP January 1996. [AP-45, No. 12, Dec. 1997, 1705-1709] In 1996, the Distinguished Achievement Award went to Y. T. Lo. [1996 AP-S Symp. Dig., v. 1, p. vi]

<<1997>>

### Officers and AdCom

President: E. S. Gillespie

Vice-President: R. J. Marhefka

Secretary-Treasurer: O. B. Kesler

Members at large: C. A. Balanis, D. G. Bodnar, M. F. Iskander, D. R. Jackson, P. S.

Kildal, S. A. Long, E. K. Miller, T. A. Milligan, J. W. Mink, A. D. Olver, R. J.

Pogorzelski, Y. Rahmat-Samii, D. A. Rutledge, D. V. Thiel, J. L. Volakis [AP-45, No. 9, Sept. 1997, inside front cover]

### AdCom Meetings

Jan. 4, 1997, The Woodlands, TX [APM June 1997, 56-60]

July 13, 1997, Montreal, Canada [APM Feb. 1998, 74-80]

### Membership

Total membership as of Dec. 31, 1997 was 9148. [IEEEArch]

### Symposia

Annual AP-S Symposium, Montreal, Canada

The 1997 Symposium was held July 13-18 at the Queen Elizabeth Hotel, Montreal, Canada. The general chairs were S. Kubina and G. Delisle and the technical program chair was P. Bhartia. [1997 AP Symp. Dig., v. 1, p. iii]

### Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 1997 contained a total of 1941 pages (including covers). P. L. E. Uslenghi was editor. [AP-45, Dec. 1997] The *IEEE Antennas and Propagation Society Magazine*, edited by Ross Stone, had a page count of 724, not including advertisements and non-editorial material. [APM, Dec. 1997]

### Awards

The S. A. Schelkunoff Transactions Prize for papers published in 1997 was awarded to C. Chen, W. E. McKinzie III, and N. Alexopoulos for their paper "Striplined Arbitrarily Shaped Printed Aperture Antennas," which appeared in T-AP July 1997. The H. A. Wheeler Applications Prize Paper Award was awarded to D. Pozar, S. Targonski, and H. D. Syrigos for their paper "Design of Millimeter Wave Microstrip Reflectarrays," which appeared in T-AP February 1997. The R. W. P. King Award went to G. Washington for his paper "Aperture Antenna Shape Prediction by Feedforward Neural Networks," which appeared in T-AP April 1997. [AP-46, No. 12, Dec. 1998, 1769-1772] In 1997, the Distinguished Achievement Award went to J. Van Bladel. The

Graduate Teaching Award for 1997 went to R. W. P. King. [1997 AP-S Symp. Dig., v. 1, p. v]

<<1998>>

### Officers and AdCom

President: R. J. Marhefka

Vice-President: D. H. Schaubert

Secretary-Treasurer: O. B. Kesler

Members at large: C. A. Balanis, D. G. Bodnar, E. S. Gillespie, M. F. Iskander, D. R. Jackson, J. J. Lee, S. A. Long, E. K. Miller, T. A. Milligan, J. W. Mink, M. Picket-May, R. J. Pogorzelski, Y. Rahmat-Samii, G. S. Smith, D. V. Thiel, J. L. Volakis [AP-46, No. 9, Sept. 1998, inside front cover]

### AdCom Meetings

Jan. 4, 1998, Boulder, CO [APM June 1998, 72-79]

June 21, 1998, Atlanta, GA [APM Dec. 1998, 50-56]

### Membership

Total membership as of Dec. 31, 1998 was 9450. [IEEEArch]

### Symposia

Annual AP-S Symposium, Atlanta, Georgia

The 1998 Symposium was held June 21-26 at the Renaissance Waverly Hotel, Atlanta, Georgia. The general chair was A. F. Peterson and the technical program chairs were W. Pearson and A. Martin. [1998 AP Symp. Dig., v. 1, p. iv]

### Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 1998 contained a total of 1947 pages (including covers). [AP-46, Dec. 1998] Two special issues were published that year. In January, G. S. Brown guest-edited an issue on low-grazing-angle backscatter from rough surfaces. The June issue, guest-edited by Y. Rahmat-Samii and W. L. Stutzman, was on wireless communications. In December 1998, L. Wilson Pearson took over from P. L. E. Uslenghi as editor of T-AP. The *IEEE Antennas and Propagation Society Magazine*, edited by Ross Stone, had a page count of 731, not including advertisements and non-editorial material. [APM, Dec. 1998]

### Awards

The S. A. Schelkunoff Transactions Prize for papers published in 1998 was awarded to J. Toporkov, R. Marchand, and G. Brown for their paper "On the Discretization of the Integral Equation Describing Scattering by Rough Conducting Surfaces," which appeared in T-AP January 1998. The H. A. Wheeler Applications Prize Paper Award went to E. Brookner, E. Ferraro, and G. Ouderkirk for their paper "Radar performance during propagation fades in the mid-Atlantic region," which appeared in T-AP July 1998. The R. W. P. King Award went to K. Whites for his paper "Resistive and Conductive Tube Boundary Condition Models for Material Wire-Shaped Scatterers," which appeared in T-AP October 1998. [1999 AP-S Symp. Dig., vol. 1, p. vi] In 1998, the Distinguished Achievement Award went to L. B. Felsen. [1998 AP-S Symp. Dig., v. 1, p. vi]

<<1999>>

### Officers and AdCom

Note: During the year 1999, the previous year's slate of officers (1998) was mistakenly listed in T-AP. The Jan. 3, 1999 AdCom minutes recorded the names of the 1999 president, vice-president, and new AdCom members, but did not list the names of members elected in earlier years. The following list is therefore probably incomplete.

President: D. H. Schaubert

Vice-President: T. Milligan

Secretary-Treasurer: O. B. Kesler

Members at large: C. A. Balanis, M. F. Iskander, D. R. Jackson, J. J. Lee, S. A. Long, R. J. Marhefka, R. McGahan, R. Nevels, A. Peterson, M. Picket-May, R. J. Pogorzelski, Y. Rahmat-Samii, G. S. Smith, D. V. Thiel, K. Virga

### AdCom Meetings

Jan. 3, 1999, Boulder, CO [APM Aug. 1999, 66-72]

July 11, 1999, Orlando, FL [APM Feb. 2000, 66-72]

### Membership

Total membership as of Dec. 31, 1999 was 9581. [IEEEArch]

### Symposia

Annual AP-S Symposium, Orlando, Fla.

The 1999 Symposium was held July 11-16 at the Renaissance Orlando Resort, Orlando, Florida. The general chair was C. Christodolou and the technical program chair was P. F. Wahid. [1998 AP Symp. Dig., v. 1, p. iv]

### Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 1999 contained a total of 1890 pages (including covers). L. W. Pearson was editor. [AP-47, Dec. 1999] R. J. Mailloux guest-edited the special March issue, which was devoted to phased arrays. The *IEEE Antennas and Propagation Society Magazine*, edited by Ross Stone, had a page count of 813, not including advertisements and non-editorial material. [APM, Dec. 1999]

### Awards

The S. A. Schelkunoff Transactions Prize for papers published in 1999 was awarded to G. Franceschetti, S. Marano, and F. Palmieri for their paper "Propagation Without Wave Equation Toward an Urban Area Model," which appeared in T-AP September 1999. The H. A. Wheeler Applications Prize Paper Award went to J. J. Schuss, J. Upton, B. W. Myers, T. Sikina, A. B. Rohwer, P. J. Makridakis, R. E. Francois, N. L. Wardle, and R. Smith for their paper "The IRIDIUM Main Mission Antenna Concept," which appeared in T-AP March 1999. The R. W. P. King Award went to P. M. Johansen for his paper "Time-Domain Version of the Physical Theory of Diffraction," which appeared in T-AP February 1999. [1999 AP-S Symp. Dig., vol. 1, p. vi] In 1999, the Distinguished Achievement Award went to R. Kouyoumjian. [1999 AP-S Symp. Dig., v. 1, p. vi]

<<2000>>

### Officers and AdCom

President: T. Milligan

Vice-President: P. L. E. Uslenghi

Secretary-Treasurer: M. Shields

Members at large: J. J. Lee, S. A. Long, R. McGahan, H. Nakano, R. Nevels, A. Peterson, M. Piket-May, C. Rhoades, R. J. Pogorzelski, G. S. Smith, K. Virga, R. W. Ziolkowski, and others [AP-48, Dec. 2000; APM, Aug. 2000, 63]

### AdCom Meetings

Jan. 6, 2000, Boulder, CO [APM Aug. 2000, 63-68]

July 16, 2000, Salt Lake City, UT [APM Dec. 2000, 56-61]

### Membership

Year-end total membership in 2000 was 9731. [KC]

### Symposia

Annual AP-S Symposium, Salt Lake City, Utah

The 2000 Symposium was held July 14-19 in Salt Lake City, Utah. The general chair was M. F. Iskander and the technical program chairs were O. P. Gandhi and M. A. Jensen. [2000 AP Symp. Dig., v. 1, p. iii]

### Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 2000 contained a total of 1920 pages (including covers). L. W. Pearson was editor. [AP-48, Dec. 2000] In September and October, a combined special issue was published in memory of James R. Wait, who died in 1998. This was guest-edited by D. G. Dudley, H.-Y. Pao, and D. A. Hill. The *IEEE Antennas and Propagation Society Magazine*, edited by Ross Stone, had a page count of 893, not including advertisements and non-editorial material. [APM, Dec. 2000]

### Awards

The S. A. Schelkunoff Transactions Prize for papers published in 2000 was awarded to J.-S. Zhao and W. C. Chew for their paper "Integral Equation Solution of Maxwell's Equations from Zero Frequency to Microwave Frequencies," which appeared in T-AP October 2000. The H. A. Wheeler Applications Prize Paper Award went to C. Granet, T. S. Bird, and G. L. James for their paper "Compact Multimode Horn with Low Sidelobes for Global Earth Coverage," which appeared in T-AP July 2000. The R. W. P. King Award went to F. Capolino for his paper "Time Domain Green's Function for an Infinite Sequentially Excited Periodic Line Array of Dipoles," co-authored with L. P. Felsen, which appeared in T-AP June 2000. [2001 AP-S Symp. Dig., vol. 1, p. vi] In 2000, the Distinguished Achievement Award went to Thomas B. A. Senior. The 2000 Graduate Teaching Award went to W. C. Chew. [2000 AP-S Symp. Dig., v. 1, p. v]

<<2001>>

### Officers and AdCom

President: P. L. E. Uslenghi

Vice-President: Magdy Iskander

Secretary-Treasurer: M. Shields

Members at large: S. D. Gedney, S. Gillespie, A. Glisson, J. S. Herd, R. J. Marhefka, A. Q. Martin, R. McGahan, T. Milligan, H. Nakano, R. Nevels, A. Peterson, C. M. Rhoades, D. H. Schaubert, K. Virga, P. F. Wahid, R. Ziolkowski [APM, Apr. 2001, 6]

### AdCom Meetings

Jan. 7, 2001, Boulder, CO [APM Apr. 2001, 64-69]

July 8, 2001, Boston, MA [APM Dec. 2001, 72-78]

### Membership

Year-end total membership in 2001 was 9792. [KC]

## Symposia

Annual AP-S Symposium, Boston, MA

The 2001 Symposium was held July 8-13 in Boston, MA. The general chair was Robert V. McGahan and the technical program co-chairs were Ronald Fante and Allen Fenn. [2001 AP-S Symp. Dig., v. 1, p. iv]

## Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 2001 contained a total of 1951 pages (including covers). L. W. Pearson was editor. [AP-49, Dec. 2001] The *IEEE Antennas and Propagation Society Magazine*, edited by Ross Stone, had a page count of 973, not including advertisements and non-editorial material. [APM, Dec. 2001]

## Awards

The S. A. Schelkunoff Transactions Prize for papers published in 2001 was awarded to R. A. Shore and A. D. Yaghjian for their paper "Shadow Boundary Incremental Length Diffraction Coefficients Applied to Scattering from 3-D Bodies," which appeared in T-AP February 2001. The H. A. Wheeler Applications Prize Paper Award went to R. Jorgensen, G. Padovan, P. de Maagt, D. Lamarre, and L. Costes for their paper "A 5-Frequency Millimeter Wave Antenna for a Spaceborne Limb Sounding Instrument," published in T-AP May 2001. The R. W. P. King Award went to P. Persson for his paper "Calculating the Mutual Coupling between Apertures on a Convex Circular Cylinder Using a Hybrid UTD-MoM Method," co-authored with L. Josefsson and published in T-AP April 2001. [2002 AP-S Symp. Dig. v. 1, p. vi.] The 2001 Distinguished Achievement Award went to Peter Clarricoats. The 2001 Chen-To Tai Distinguished Educator Award went to R. W. P. King. [2001 AP-S Symp. Dig., v. 1. p. vi]

<<2002>>

## Officers and AdCom

President: Magdy Iskander

Vice-President: L. Wilson Pearson

Secretary-Treasurer: M. Shields

Members at large: W. C. Chew, S. D. Gedney, A. Glisson, J. S. Herd, R. J. Marhefka, A. Q. Martin, T. Milligan, J. A. Moellers, H. Nakano, C. M. Rhoades, J. W. Rockway, P. L. E. Uslenghi, P. F. Wahid, J. L. Young, R. W. Ziolkowski [T-AP, Mar. 2002, inside front cover]

## AdCom Meetings

Jan. 12, 2002, Boulder, CO [APM June 2002, 68-73]  
 June 16, 2002, San Antonio, TX [APM Dec. 2002, 78-85]

### Membership

Year-end total membership in 2002 was 9085. [KC]

### Symposia

Annual AP-S Symposium, San Antonio, TX

The 2002 Symposium was held June 16-21 in San Antonio, Texas. The general chair was Robert Nevels and the technical program chair was Krzysztof Michalski [2002 AP Symp. Dig., v. 1, p. iv]

### Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 2002 contained a total of 1912 pages (including covers). A. W. Glisson was editor. [AP-50, Nov. and Dec. 2002] In May, a special issue was published on wireless information technology and networks, guest-edited by Magdy Iskander and J. W. Mink. The *IEEE Antennas and Propagation Society Magazine*, edited by Ross Stone, had a page count of 967, not including advertisements and non-editorial material. [APM, Dec. 2002]

### Awards

The S. A. Schelkunoff Transactions Prize Paper Award for papers published in 2002 went to R. J.-M. Cramer, R. A. Scholtz, and M. Z. Win for their paper, "An Evaluation of the Ultra-Wideband Propagation Channel," published in T-AP May 2002. The H. A. Wheeler Applications Prize Paper Award went to J. W. Wallace and M. A. Jensen for their paper, "Modeling the Indoor MIMO Wireless Channel," published in T-AP May 2002. The R. W. P. King Award went to H. Holter for his paper "On the Size Requirement for Finite Phased Array Models," co-authored with H. Steyskal and published in T-AP June 2002. The 2002 Distinguished Achievement Award went to R. Mittra, and the Chen-To Tai Distinguished Educator Award went to D. G. Dudley.

<<2003>>

### Officers and AdCom

President: L. Wilson Pearson  
 Vice-President: J. L. Volakis  
 Secretary-Treasurer: M. Shields



Members at large: T. S. Bird, W. C. Chew, N. Engheta, S. D. Gedney, S. C. Hagness, J. S. Herd, A. Q. Martin, T. Milligan, J. A. Moellers, J. W. Rockway, D. H. Schaubert, M. Thorburn, P. F. Wahid, J. L. Young [T-AP, Mar. 2003, inside front cover]

### AdCom Meetings

Feb. 23, 2003, Columbus, OH [APM June 2003, 86-92]

June 22, 2003, Columbus, OH [APM Dec. 2003, 68-74]

### Membership

Year-end total membership in 2003 was 8302. [KC]

### Symposia

Annual AP-S Symposium, Columbus, OH

The 2003 AP-S International Symposium was held June 22-27 in Columbus, Ohio. The general co-chairs were Jonathan D. Young and John Volakis, and the technical program chair was Ron Marhefka. [2003 AP-S Digest, v. 1, p. iv]

### Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 2003 contained a record-setting total of 3350 pages (including covers). A. W. Glisson was editor. [AP-51, Dec. 2003] In October, a special issue was published on metamaterials, guest-edited by R. W. Ziolkowski and Nader Engheta. The *IEEE Antennas and Propagation Society Magazine*, edited by Ross Stone, had a page count of 1034, not including advertisements and non-editorial material. [APM, Dec. 2003]

### Awards

The S. A. Schelkunoff Transactions Prize Paper Award for papers published in 2003 was awarded to David M. Pozar for his paper "Waveform Optimizations for Ultrawideband Radio Systems," published in T-AP September 2003. The H. A. Wheeler Applications Prize Paper Award went to S. Weigand, G. H. Huff, K. H. Pan, and J. T. Bernhard for their paper "Analysis and Design of Broad-Band Single-Layer Rectangular U-Slot Microstrip Patch Antennas," published in T-AP Mar. 2003. The R. W. P. King Award went to T. W. Hertel for his paper "On the Dispersive Properties of the Conical Spiral Antenna and Its Use for Pulsed Radiation," co-authored with G. S. Smith and published in T-AP July 2003. [2004 AP-S Symp. Dig. v. 1, p. iv] The 2003 Distinguished Achievement Award went to John D. Kraus. The 2003 Chen-To Tai Distinguished Educator Award went to Chalmers M. Butler. [2003 AP-S Symp. Dig. v. 1, p. vii]

<<2004>>

## Officers and AdCom

President: J. L. Volakis

Vice-President: R. W. Ziolkowski

Secretary-Treasurer: M. Shields

Members at large: M. Ando, J. T. Bernhard, T. S. Bird, W. C. Chew, N. Engheta, S. C. Hagness, M. Iskander, T. Milligan, J. A. Moellers, L. W. Pearson, J. W. Rockway, M. Salazar-Palma, M. Thorburn, D. H. Werner, J. L. Young [APM, June 2004, 6]

## AdCom Meetings

Jan. 4, 2004, Boulder, CO [APM June 2004, 58-64]

June 20, 2004, Monterey, CA [APM Feb. 2005, 82-90]

## Membership

Total membership as of Dec. 31, 2004 was 8050. [IEEEArch]

## Symposia

Annual AP-S Symposium, Monterey, California

The 2004 AP-S International Symposium was held June 20-26 in Monterey, California. The general chair was H.-Y. Pao. [2004 AP-S Digest, v. 1, p. iii]

## Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 2004 contained a total of 3461 pages (including covers). [AP-52, Dec. 2004] The *IEEE Antennas and Propagation Society Magazine*, edited by Ross Stone, had a page count of 1055, not including advertisements and non-editorial material. [APM, Dec. 2004]

## Awards

The S. A. Schelkunoff Transactions Prize Paper Award for papers published in 2004 was awarded to M. Franceschetti, J. Bruck, and L. J. Schulman for their paper "A Random Walk Model of Wave Propagation," published in T-AP May 2004. The H. A. Wheeler Applications Prize Paper Award went to J. A. Encinar and J. A. Zornoza for their paper "Three-Layer Printed Reflectarrays for Contoured Beam Space Applications," published in T-AP May 2004. The R. W. P. King Award went to R. J. Adams for his paper "Physical and Analytical Properties of a Stabilized Electric Field Integral Equation," published in T-AP May 2004. [2005 AP-S Symp. Dig. v. 1, p. viii] The 2004 Distinguished Achievement Award went to Allan W. Love. The 2004 Chen-To

Tai Distinguished Educator Award went to Raj Mittra. The 2004 John Kraus Antenna Award went to V. H. Rumsey. [2004 AP-S Symp. Dig. v. 1, p. iv]

<<2005>>

### Officers and AdCom

President: R. W. Ziolkowski

President-Elect: A. F. Peterson (Note: the AdCom voted to change the title of this office from Vice-President to President-Elect in its Feb. 26, 2005 meeting [APM, Aug. 2005, 74].)

Secretary-Treasurer: M. Shields

Members at large: M. Ando, J. T. Bernhard, T. S. Bird, N. Engheta, S. C. Hagness, M. Iskander, M. Jensen, L. Kempel, E. Michielssen, L. W. Pearson, M. Salazar-Palma, T. Sarkar, M. Thorburn, G. Uslenghi, J. L. Volakis, D. H. Werner [APM, Aug. 2005, 6]

### AdCom Meetings

Feb. 26-27, 2005, Washington, DC [APM Aug. 2005, 74-82]

July 3, 2005, Washington, DC [APM Feb. 2006, 76-86]

### Membership

Total membership as of Dec. 31, 2005 was 8078. [IEEEArch]

### Symposia

Annual AP-S Symposium, Washington, DC

The 2005 AP-S International Symposium was held July 3-8 in Washington, DC. The general chair was A. I. Zaghoul. [2005 AP-S Digest, v. 1A, p. iii]

### Publications

The twelve issues of *IEEE Transactions on Antennas and Propagation* published in 2005 contained a total of 4186 pages (including covers) Trevor S. Bird replaced Allen W. Glisson as editor. [AP-53, Dec. 2005] The *IEEE Antennas and Propagation Society Magazine*, edited by Ross Stone, had a page count of 1081.25, not including advertisements and non-editorial material. [APM, Aug. 2006, 77]

### Awards

The S. A. Schelkunoff Transactions Prize Paper Award for papers published in 2005 was awarded to G. C. Hanson for his paper "A Random Walk Model of Wave Propagation," published in T-AP November 2005 [APM June 2006, 102]. The H. A. Wheeler Applications Prize Paper Award was awarded to the authors of two papers:

"Impedance Matching and Implementation of Planar Space-Filling Dipoles as Intraocular Implanted Antennas in a Retinal Prosthesis," by K. Gosalia, M. S. Humayun, and G. Lazzi, and "Spherical Near Field Facility for Characterizing Random Emissions," by B. Fourestié, J.-C. Bolomey, T. Sarrebourg, Z. Altman, and J. Wiart, both published in T-AP August 2005. The R. W. P. King Award went to D. W. Boeringer for his paper "Efficiency-Constrained Particle Swarm Optimization of a Modified Bernstein Polynomial for Conformal Array Excitation Amplitude Synthesis," by D. W. Boeringer and D. H. Werner, published in T-AP August 2005. [APM June 2006, 103] The 2005 Distinguished Achievement Award went to Robert J. Mailloux. The 2005 Chen-To Tai Distinguished Educator Award went to Constantine A. Balanis. The 2005 John Kraus Antenna Award went to Walter Rotman. [2005 AP-S Symp. Dig. v. 1A, p. viii]

### Abbreviations Used in References

[AP-*x*]: Transactions of the Antennas and Propagation Society, vol. *x*.

[H]: Ralph E. Hiatt, The IEEE Antennas and Propagation Society 1949-1982, (IEEE: Antennas and Propagation Society, 1984 (27 pages).

[KC]: Kathy Colabaugh, IEEE Archivist, private communication dated 20 January 2005.

[APN]: *PGAP Newsletter*, published Nov. 1958 through Dec. 1989.

[APM]: *IEEE Antennas and Propagation Magazine*, published Feb. 1990-present.

[*x* AP-S Symp. Dig.] *IEEE Antennas and Propagation Society Symposium Digest* for year *x*.

### References not listed above:

[Ryder] John D. Ryder and Donald G. Fink, *Engineers and Electrons*. New York: IEEE Press, 1984.

[Bauer] Pierre Bauer, "URSI - from 1922 until today" (1995), accessed June 24, 2005 from URSI website [www.ursi.org](http://www.ursi.org).

[IEEEArch] IEEE Archives, maintained at IEEE Headquarters. Electronic versions of the minutes of early AdCom meetings are in preparation, and will be made available soon.

## APPENDIX 1

## ADCOM MEETINGS: DATE, LOCATION, MINUTES

1949-2005

NOTE: Information on AdCom meetings prior to April 1958 was obtained from copies of the original minutes in files maintained at the IEEE Archives. The number of typewritten pages in each set of minutes is indicated in parentheses in the "Page nos." column.

AdCom meeting date	Location	Source	Page nos.
Mar. 29, 1949	Washington, DC	IEEE Archives	(2)
July 15, 1949	Washington, DC	IEEE Archives	(7)
Nov. 2, 1949	Washington, DC	IEEE Archives	(13)
Apr. 5, 1950	San Diego, CA	IEEE Archives	(4)
Feb. 7, 1951	Washington, DC	IEEE Archives	(6)
Mar. 20, 1951	New York City	IEEE Archives	(2)
Apr. 18, 1951	Natl. Bureau of Standards	IEEE Archives	(2)
Aug. 23, 1951	San Francisco, CA	IEEE Archives	(7)
Mar. 5, 1952	New York City	IEEE Archives	(2)
Apr. 21, 1952	Washington, DC	IEEE Archives	(2)
Oct. 25, 1952	IRE HQ, New York City	IEEE Archives	(3)
Mar. 23, 1953	New York City	IEEE Archives	(3)
Apr. 27, 1953	Washington, DC	IEEE Archives	(2)
Aug. 20, 1953	San Francisco, CA	IEEE Archives	(2)
Mar. 23, 1954	IRE HQ, New York City	IEEE Archives	(4)
May 4, 1954	Washington, DC	IEEE Archives	(2)
Aug. 27, 1954	Los Angeles, CA	IEEE Archives	(3)
Dec. 7, 1954	IRE HQ, New York City	IEEE Archives	(6)
Mar. 27, 1955	IRE HQ, New York City	IEEE Archives	(4)
May 4, 1955	Washington, DC	IEEE Archives	(2)
June 24, 1955	Ann Arbor, MI	IEEE Archives	(2)
Mar. 20, 1956	New York City	IEEE Archives	(5)
May 1, 1956	Washington, DC	IEEE Archives	(3)
Jan. 11, 1957	Washington, DC	IEEE Archives	(6)
Mar. 20, 1957	New York City	IEEE Archives	(5)
May 24, 1957	Washington, DC	IEEE Archives	(5)
Aug. 29, 1957	Boulder, CO	IEEE Archives	(3)
Mar. 25, 1958	New York City	IEEE Archives	(5)
Apr. 24, 1958	Washington, DC	APN Nov. 1958	1-3
Dec. 9, 1959	Boston	APN Mar. 1960	1
Mar. 23, 1960	New York City	APN May 1960	1

May 3, 1960	Washington, DC	APN July 1960	1
Sept. 13, 1960	University College, London	APN Dec. 1960	1
Dec. 13, 1960	NBS, Boulder, CO	APN Apr. 1961	1
Mar. 21, 1961	IRE HQ, New York	APN Apr. 1961	1
May 2, 1961	Washington, DC	APN Sept. 1961	1
Aug. 23, 1961	San Francisco, CA	APN Sept. 1961	1
Mar. 26, 1962	IRE HQ, New York	APN Aug. 1962	1
Aug. 1, 1962	NBS, Boulder, CO	APN Aug. 1962	1
Oct. 15, 1962	Ottawa, Ontario	APN Jan. 1963	1
Mar. 26, 1963	IEEE HQ, New York	APN May 1963	2-4
July 9, 1963	NBS, Boulder, CO	APN Oct. 1964	2-3
Dec. 10, 1963	Seattle, WA	APN Oct. 1964	2
Mar. 24, 1964	IEEE HQ, New York	APN Oct. 1964	1-2
Sept. 22, 1964	Long Island, NY	APN Apr. 1965	1-2
Mar. 24, 1965	New York, NY	APN May 1965	1-2
Apr. 20, 1965	Washington, DC	APN June 1965	2-4
Aug. 30, 1965	Washington, DC	APN Nov. 1965	2
Oct. 4, 1965	Hanover, NH	APN Feb. 1966	2-3
Date and location not stated	---	APN Oct. 1966	3
Dec. 5, 1966	---	APN Mar. 1967	2-3
Mar. 22, 1967	New York City	APN Aug. 1967	3-6
Oct. 18, 1967	Ann Arbor, MI	APN Feb. 1968	3-5
Mar. 20, 1968	New York City	APN May 1968	8-11
Sept. 11, 1968	Boston, MA	APN Feb. 1969	3-5
Mar. 26, 1969	New York City	APN May 1969	2-5
Dec. 10, 1969	Austin, TX (location and date stated in minutes of previous meeting)	APN Feb. 1970	3-6
Mar. 25, 1970	New York City	APN May 1970	3-9
Sept. 13, 1970	Columbus, OH	APN Nov. 1970	7-10
Mar. 24, 1971	New York City	APN May 1971	10-14
Sept. 23, 1971	Los Angeles, CA	APN Nov. 1971	2-3
Mar. 22, 1972	New York City	APN June 1972	5-7
Dec. 11, 1972	Williamsburg, VA	APN Mar. 1973	4-5
Mar. 28, 1973	New York City	APN June 1973	3-5, 8
Aug. 23, 1973	Boulder, CO	APN Dec. 1973	3-5, 7
Mar. 27, 1974	New York City	APN June 1974	3-5
June 10, 1974	Atlanta, GA	APN Sept. 1974	3-5
Oct. 16, 1974	Boulder, CO	APN Dec. 1974	2-5, 9
June 2, 1975	Urbana, IL	APN Aug. 1975	3-5
Apr. 5, 1976	Chicago, IL	APN June 1976	7-10
Oct. 12, 1976	Amherst, MA	APN Dec. 1976	3-5
June 20, 1977	Palo Alto, CA	APN Apr. 1978	7-8

Jan. 11, 1978	Boulder, CO	APN June 1978	7-8
Nov. 7, 1978	Boulder, CO	APN Aug. 1979	22-23
June 20, 1979	Seattle, WA	APN Oct. 1979	19-21
Nov. 6, 1979	Boulder, CO	APN Feb. 1980	15-16
June 3, 1980	Quebec City, Canada	APN Dec. 1980	26-27
Jan. 13, 1981	Boulder, CO	APN Apr. 1981	25-28
June 15, 1981	Los Angeles, CA	APN Oct. 1981	32-34
Jan. 12, 1982	Boulder, CO	APN Apr. 1982	19-21
May 23, 1982	Albuquerque, NM	APN Aug. 1982	13-15
Jan. 4, 1983	Boulder, CO	APN Apr. 1983	19-20
May 22, 1983	Houston, TX	APN Aug. 1983	13-16
Jan. 10, 1984	Boulder, CO	APN Apr. 1984	22-23 (incomplete)
June 24, 1984	Boston, MA	APN Oct. 1984	17-19
Jan. 13, 1985	Washington, DC	APN Apr. 1985	18-20
June 16, 1985	Vancouver, BC	APN Oct. 1985	13-15
Jan. 12, 1986	Boulder, CO	APN Apr. 1986	20-22
June 8, 1986	Philadelphia, PA	APN Oct. 1986	35-37
Jan. 11, 1987	Boulder, CO	APN Apr. 1987	26-29
June 14, 1987	Blacksburg, VA	APN Oct. 1987	21-24
Jan. 4, 1988	Boulder, CO	APN Apr. 1988	44-47
June 5, 1988	Syracuse, NY	APN Oct. 1988	19-22
Jan. 7, 1989	Boulder, CO	APN Apr. 1989	19-22
June 25, 1989	San Jose, CA	APN Oct. 1989	26-29
Jan. 6, 1990	Boulder, CO	APM Apr. 1990	31-35
May 6, 1990	Dallas, TX	APM Oct. 1990	43-44 (Treasurer's report only)
Jan. 12, 1991	Baltimore, MD	APM Apr. 1991	43-46
June 23, 1991	London, Ontario, Canada	APM Dec. 1991	39-43
Jan. 6, 1992	Boulder, CO	APM Apr. 1992	59-62
July 19, 1992	Chicago, IL	APM Dec. 1992	33-37
Jan. 4, 1993	Boulder, CO	APM June 1993	37-42
June 27, 1993	Ann Arbor, MI	APM Dec. 1993	35-39
Jan. 4, 1994	Boulder, CO	APM June 1994	60-64
June 19, 1994	Seattle, WA	APM Dec. 1994	37-42
Jan. 7, 1995	Boulder, CO	APM June 1995	37-40
June 18, 1995	Newport Beach, CA	APM Dec. 1995	66-71
Jan. 8, 1996	Boulder, CO	APM June 1996	66-71
July 21, 1996	Baltimore, MD	APM Feb. 1997	72-77
Jan. 4, 1997	The Woodlands (Houston), TX	APM June 1997	56-60
July 13, 1997	Montreal, Canada	APM Feb. 1998	74-80
Jan. 4, 1998	Boulder, CO	APM June 1998	72-79
June 21, 1998	Atlanta, GA	APM Dec. 1998	50-56
Jan. 3, 1999	Boulder, CO	APM Aug. 1999	66-72
July 11, 1999	Orlando, FL	APM Feb. 2000	66-72



Jan. 6, 2000	Boulder, CO	APM Dec. 2000	56-61
July 16, 2000	Salt Lake City, UT	?	
Jan. 7, 2001	Boulder, CO	APM Apr. 2001	64-69
July 8, 2001	Boston, MA	APM Dec. 2001	72-78
Jan. 12, 2002	Boulder, CO	APM June 2002	68-73
June 16, 2002	San Antonio, TX	APM Dec. 2002	78-85
Feb. 23, 2003	Columbus, OH	APM June 2003	86-92
June 22, 2003	Columbus, OH	APM Dec. 2003	68-74
Jan. 4, 2004	Boulder, CO	APM June 2004	58-64
June 20, 2004	Monterey, CA	APM Feb. 2005	82-90
Feb. 26-27, 2005	Washington, DC	APM Aug. 2005	74-82
July 3, 2005	Washington, DC	APM Feb. 2006	76-86