

**SONICS & ULTRASONICS GROUP**

Newsletter Editor - Dr. John E. May, Jr.  
 Bell Telephone Labs.  
 Allentown, Pa.

August 1966

No. 30

**ADCOM**

As a result of the ballot circulated to the membership in May 1966, the following new members were elected to the Administrative Committee:



Dr. D.I. Bolef  
 Washington University  
 St. Louis, Missouri



Dr. R.W. Damon  
 Sperry Rand Research Center  
 Sudbury, Massachusetts



Dr. E.P. Papadakis  
 Bell Telephone Laboratories  
 Allentown, Pennsylvania

These new members are elected for three-year terms expiring in 1969. These replace the following whose terms of office expired in 1966:

Dr. John V. Bouyoucos  
 Dr. T.R. Mecker  
 H.E. Van Valkenburg

J.H. Rowen Elected Chairman

At the annual meeting of the G-SU Administrative Committee held on March 21, 1966, John H. Rowen was elected Chairman of the AdCom for the 1966-1967 year. Donald L. White was elected Vice Chairman.



◆  
1966 Ultrasonics Symposium Planned

Plans are developing rapidly for the 1966 Ultrasonics Symposium to be held in Cleveland, Ohio on October 12-15, 1966. General Chairman Dr. Hans Jaffe has arranged for all technical sessions and a social hour to be held in the Statler Hilton Hotel. Preliminary registration information, hotel reservation forms and advance copies of the technical program will be mailed to the membership soon.

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G-SU Transactions to be  
Published on Quarterly Basis

Chairman J. H. Rowen and Editor O. E. Mattiat have completed arrangements with the IEEE Editorial Staff for publication of the G-SU Transactions on a quarterly schedule of January, April, July and October. To appear in the issue for one of these months, the completed manuscript must be received at IEEE Headquarters by the 20th of the month preceding in the above list. Authors should allow time prior to this for the manuscript to be reviewed by the Transactions Editorial Board. Editor Mattiat and his staff of Associate Editors are making a determined effort to minimize the time spent in review so that the total publication process from manuscript to printing is reduced to four or five months. Each author can help shorten the review period by (1) subjecting the manuscript to his own critical review and edit prior to submission and (2) sending the manuscript directly to the appropriate Associate Editor. (See the masthead of the G-SU Transactions for a current listing.)

International Convention Session to Feature  
"Ultrasonics in Modern Signal Processing"

E. K. Sittig, G-SU representative on the Program Committee for the IEEE International Convention in March 1967, has arranged a program of six invited speakers who will present a review of the state of the art in ultrasonics and its applications for performing the digital storage, pulse compression, filter functions in communication, sonar and radar systems.

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Coming Events

- Oct. 11-12, 1966 - Ultrasonics for Industry Conference and Exhibition, London, England, Mr. A. Standeven, Iliffe Industrial Publications, Ltd., Dorset House, Stamford St., London, S.E.1.
- Oct. 12-14, 1966 - 1966 Ultrasonics Symposium, Cleveland, Ohio, Dr. Hans Jaffe, Clevite Corp., Electronics Research Div., 540 E. 105th St., Cleveland, Ohio, 44108
- Nov. 2-5, 1966 - Acoustical Society of America, Los Angeles, California, Dr. I. Rudnik, University of California, Los Angeles, Calif., 90024

Correction: Pretersonics

In the last Newsletter, Dr. J. J. G. McCue's proposal for a term to replace "hypersonics" in describing the high frequency end of the sonic spectrum was misspelled. As Dr. McCue has pointed out, the anglicized version of the Latin praeter is now preter, therefore pretersonics.

The Missing 100,000 Members

A recent survey of IEEE Group membership patterns revealed that of the total IEEE membership of 140,000, less than 40,000 are associated with one or more Groups. Since the formation of the technical group system, the backbone of the technical activity in the IEEE has become increasingly centered in the Groups.

This shift has become the more complete by the gradual transfer to the Groups over recent months of the function of the numbered technical committees or standards committees. The small proportion of the total membership who belong to Groups suggests that only this proportion participate in the technical affairs of the Institute. This raises the question then of what do the other 100,000 derive from their membership.

"Ultrasonics for Industry Conference  
and Exhibition" in London

The "Ultrasonics for Industry Conference and Exhibition" will be held at St. Ermins Hotel, Caxton Street, London, S.W. 1. on October 11th and 12th, 1966. Papers are planned on industrial ultrasonics, medical and biological ultrasonics, non-destructive testing, sonar and delay lines. Further information may be obtained from Mr. A. Standeven, Distribution Manager, ILIFFE Industrial Publications, Ltd., Dorset House, Stamford Street, London, S.E.1.

Ed. Note: Since there are so few meetings on ultrasonics around the globe, the coincidence with the 1966 Ultrasonics Symposium is indeed unfortunate.



Invited Speakers Announced  
for 1966 Ultrasonics Symposium

Dr. Norman S. Shiren, Program Committee Chairman, announced at a meeting of the Program Committee on August 8 a total of 75 contributed papers were reviewed and arranged into a program of 14 sessions to be held over the three-day period. In addition to the contributed papers a number of authors have been invited to present papers on their specialties. As of this date, those who have agreed to present invited papers are as follows:

Focusing of Microwave Acoustic Beams	M. G. Cohen E. I. Gordon	Bell Telephone Laboratories, Murray Hill, New Jersey
A design for an Anechoic Tank	S.J.Caprette, Jr. E.E.Dennison H.F.Neff D.B.Thrasher	B. F. Goodrich Research Center Brecksville, Ohio
Shock Waves in Ferroelectrics and Quartz	G.E.Seay	Sandia Corp. Albuquerque, New Mexico
Magnetoelastic Effects at Sonic and Ultrasonic Frequencies	R.L.Comstock	Lockheed Palo Alto Research Lab. Palo Alto, California
Spin-Phonon Interactions of Rare Earth Ions	W.I. Dobrov	Lockheed Palo Alto Research Lab. Palo Alto, California
Interaction of Acoustic Waves and Jahn-Teller Ions	E.M.Gyorgy	Bell Telephone Laboratories Murray Hill, New Jersey
Ultrasonic Properties of Lithium Niobate, Lithium Tantalate and Bismuth Germanium Oxide	E.G.Spencer P.V.Lanzo	Bell Telephone Laboratories Murray Hill, New Jersey
Ultrasonic Investigation of Chemical Relaxation in Electrolyte Solutions	K. Tamm	Institute fur Angerwandte Physik Der Universitat Heidelberg Heidelberg, Germany
Magnetoacoustic Effects for the Oblique Angle Geometry	Y. Eckstein	Argonne National Laboratory Argonne, Illinois
Energy Trapping: An Explanation for the Behavior of AT-Cut Quartz Resonators	D. J. Koneval	Clevite Research Center Cleveland, Ohio
Thermal Conductivity and Ultrasonic Attenuation	M. G. Holland	Raytheon Research Division Waltham, Mass.
Phonon Breakdown	R. Orbach	University of California Los Angeles, Calif.
Some Recent Results in the Study of Heat Pulses	R.J.vonGutfeld A.H.Nethercot, Jr.	I.B.M. Watson Research Center Yorktown Heights, New York
Laser Modulation by Acoustic Waves	A.J.DeMaria	United Aircraft Laboratories East Hartford, Connecticut
The Acoustoelectric Effect and the Nonohmic Behavior of PbTe	C. A. Nanney	Bell Telephone Laboratories Murray Hill, New Jersey
Electronic Contributions to the Elastic Properties of Semiconductors	J. J. Hall	I.B.M. Watson Research Center Yorktown Heights, New York
Measurement of the Ultrasonic Attenuation of Sound in Liquid He	J. B. Ketterson B. M. Abraham Y. Eckstein J. Vignos	Argonne National Laboratory Argonne, Illinois
Phonon Spectra in Alloys from Superconductive Tunneling	B.S.Chandrasekhar	Western Reserve University Cleveland, Ohio
Magnetoacoustic Attenuation in High Field Superconductors	Y. Shapira L. J. Neuringer	National Magnet Laboratory

Continued

Real Metal Defects in the Ultrasonic Attenuation of Superconductors	C. K. Jones	Westinghouse Research Labs. Pittsburgh, Pa.
Measurements of Vibrational Relaxations in Liquids at Very High Frequencies	J. L. Hunter	Department of Physics John Carroll University Cleveland, Ohio
Scattering of Light for Coherent Acoustic Beams in Transparent Crystals	C. F. Quate	Stanford University Stanford, California
Problems of Two Dimensional Soft Tissue Scanning by Ultrasound	A. Sokollu	Western Reserve University Cleveland, Ohio
The Design and Application of a Reliable Ultrasonic Atomizer	R. Perron	A. D. Little, Inc. Cambridge, Mass.
Optical Generation of $29 \text{ cm}^{-1}$ ( $10^{12}$ cps) Acoustic Phonons in Ruby	S. Geschwind	Bell Telephone Laboratories Murray Hill, New Jersey

Quarterly Publication of Transactions

As described elsewhere, plans are in effect to publish the G-SU Transactions on a regular quarterly schedule and to reduce the publication time to four or five months. Success of this program will depend partly on the availability of high quality papers. Before submitting a paper for publication, authors should give careful consideration to the advantages offered by the G-SU Transactions under this new editorial policy. To assure the successful implementation of this program, G-SU members can help by submitting manuscripts on current work promptly and by urging their fellow workers also to contribute to the G-SU Transactions.



New G-SU Membership List

Names of many members of the G-SU were inadvertently omitted from the listing in the last Newsletter because of difficulties with the new bookkeeping machines at headquarters. These difficulties are now all shaken out and a new listing is herewith represented as the most correct available.

IEEE SONICS AND ULTRASONICS GROUP  
MEMBERSHIP ROSTER AS OF AUGUST, 1966

REGION 1

Berkshire

Samsel, R. W.  
Santos, P. J.  
Walters, T. R.

Binghamton

Knudson, L. I.  
Nordby, K. S.  
Urban, H. E.  
Willis, G. R.

Boston

Adams, G. J.  
Alford, A.  
Arenberg, D. L.  
Barnes, R. P. Jr.  
Batchelder, L.  
Beaudette, C. G.  
Beranek, L. L.  
Bennett, H. W.  
Blanchard, R. L.  
Block, M. J.  
Burwen, R. S.  
Button, K. J.  
Chaffee, R. E.  
Cohler, E. U.  
Cole, A. D.  
Damon, R. W.  
Dundon, T. M.  
Eddy, F. N.  
Edwards, L. C.  
Elliott, E. A.  
Erb, D. R.  
Fernald, O. H.  
Fulton, David A.  
Garber, Thomas  
Goldner, R. B.  
Goor, D.  
Hickman, K. E.  
Holland, M. G.  
Hunt, Frederick V.  
Johanson, A. E.  
Karosas, R.  
Knight, G. Jr.  
Krawiec, J. P.  
Lees, S.  
Lorant, L.  
Lynnworth, L. C.  
McCarthy, S. E.  
McCue, J. J. G.  
McNamara, T. J.  
MacGregor, D. F.  
Mapes, T. J.  
Massa, F.  
Mingins, C. R.  
Morgenthaler, F. R.  
Olsen, K. H.  
Parke, N. G. III  
Perron, R. R.  
Pfaelzer, A. G.  
Pyle, R. W. Jr.  
Reitlinger, A.  
Renner, Gerard W.  
Ross, G. A.  
Russell, Lindsay  
Sheftelman, E. H.  
Sinclair, D. B.

Strandberg, M. W. P.  
Thompson, W. Jr.  
Zeldes, P.

Buffalo

Antonevich, J. N.  
Earshen, J. J.  
Gronquist, R. J.  
Rowe, R. G.

Connecticut

Aas, H. G.  
Anderson, W. C.  
Belford, J. F.  
Berry, Edward W.  
Boland, E. J.  
Bozak, R. T.  
Branson, N. G.  
Brech, K. H.  
Campbell, C. A.  
Chatfield, G. F.  
Chen, Vallon W. L.  
Clarke, J. G.  
Corson, D. E.  
Crofut, W. A.  
Doll, H. G.  
Ellinthorpe, A. W.  
Eveleth, J. H.  
Greenwood, I. A. Jr.  
Hannon, R. J.  
Hettinger, M.  
Holland, J. P.  
Hon, E. H. G.  
Jacke, S. E.  
Johnson, J. K.  
Krautkramer, W. C. Minton  
Krenicki, J.  
Moore, George  
Mull, H. R.  
Murphy, Desmond F.  
Neill, G. W.  
Ott, O. J.  
Parssinen, Edwin J.  
Plouffe, R. L. Jr.  
Reid, P. Z. Jr.  
Rittenburg, S. E.  
Sammelink, A.  
Spisak, J. A.  
Sussman, H.  
Thayer, D. C.  
Utting, G. R.  
Van Valkenburg, H. E.  
Wellman, C. E. Jr.  
Woollett, R. S.

Long Island

Bauer, P. A.  
Chubb, C. F. Jr.  
Damast, M. A.  
Dimatteo, P.  
Ditoro, M. J.  
Emberson, R. M.  
Feldmann, H.  
Forsyth, P. C.  
Friedlander, M. O.  
Garrett, B. R.  
Goldmuntz, Lawrence A.

Goldstein, H.  
Hana, T. C.  
Holcomb, W. O.  
Johnson, A. C.  
Kritz, J.  
Landow, I. S.  
La Rosa, R.  
Loughren, A. V.  
McGeeney, J. J.  
Marsteller, D. M.  
Mautner, R. S.  
Monahan, Donald P.  
Okrent, J. J.  
Olson, C. W.  
Porto, E. J.  
Rand, G.  
Ruderfer, M.  
Shaper, Harry B.  
Skeist, S. M.  
Staros, B.  
Stemmer, C. P.  
Tolles, W. E.  
Veit, F. Sr.  
Wild, J. J.  
Wolfe, M. L.  
Yuni, W.

Maine

Ogg, R. D.  
Tibbetts, G. C.  
Wilkinson, A. F.

Mid-Hudson

Maling, G. C. Jr.  
Smith, T. C.

Mohawk Valley

Adhav, R. S.  
Deane, Jr.

New Hampshire

Messier, R. F.  
Ryder, A. V.  
Stewart, C. W.  
Weiss, B. J.  
Whitney, D. J.

New Jersey Coast

Bady, Isidore  
Baugher, J.  
Bechmann, Rudolf  
De Bretteville, A. P. Jr.  
Domidion, W. G. Jr.  
Guttwein, Gunter K.  
Hafner, E.  
Horzepa, J. J.  
Hunt, L. E.  
Kreuter, J.  
Lindsay, T. E. Jr.  
Martinson, F. L.  
Patyk, D. G.  
Rand, D. L.  
Rice, D. W.  
Shaw, R. C.  
Sproat, R. H.

New York

Altman, N. G.  
Archbald, R. W.  
Balamuth, L.  
Batchelor, J. C.  
Berman, Philip  
Bradbury, J. T. Jr.  
Carlotz, J. Jr.  
Cassedy, E. S. Jr.  
Castagna, D. M.  
Chapman, H. W.  
Christopher, A. C.  
Cotter, M. A.  
Dewey, G. C.  
Diamond, J. E.  
Eargle, J. M.  
Eisele, William A.  
Epstein, Sidney  
Espersen, G. A.  
Feinerman, B. A.  
Finkel, E.  
Goldsmith, A. N.  
Gronner, A. D. J.  
Gross, L.  
Gross, Robert I.  
Guercio, P. A.  
Hanke, Peter E.  
Harriman, T. J.  
Harris, C. M.  
Hershler, A.  
Hoffman, E.  
Hubbard, A. C.  
Keyes, W. J.  
King, K. L.  
Klahr, Carl N.  
Konig, W. F.  
Larson, C. A.  
Layton, H. M.  
Levitan, O. B.  
Mason, W. P.  
Navin, R. E.  
Neale, B. J.  
Pearson, Harry A.  
Pintell, R. H.  
Plager, M. M.  
Podaras, S.  
Polin, H. S.  
Renteria, E. R.  
Rosenberg, A.  
Ross, Alan  
Rothbart, Arthur  
Schadt, F. R.  
Schiller, Michael  
Schwartz, E. I.  
Sheldon, E. E.  
Shiren, N. S.  
Smith, A. V.  
Soreny, E. V.  
Taylor, W. H. Jr.  
Tellerman, J.  
Van Rennes, A. B.  
Wald, Herman  
Walton, J. S. V.  
Watkins, J. E.  
Watson, G. F.  
Williams, H. D.  
Zinsser, Hans H.

North Jersey

Bagno, S. M.  
 Berger, F. B.  
 Bluhm, R.  
 Breunig, J. J.  
 Bucklin, K. G.  
 Chambers, R. P.  
 Coquin, G. A.  
 Davis, E. Stuart  
 Di Stadio, Dominic  
 Douglas, E. B.  
 Dranetz, A.  
 Edson, A. P.  
 Foster, N. F.  
 Goldbach, H. T.  
 Grower, B. B.  
 Lohrenz, Carl  
 Lupi, A. M.  
 McSkimin, H.  
 Meitzler, A. H.  
 Mount, B. E.  
 Neill, C. L.  
 Ofarrell, J. J.  
 Rieker, J.  
 Ross, R. G.  
 Rowen, J. H.  
 Ryan, W.  
 Sittig, E. K.  
 Spaulding, Harold K.  
 Thurston, R. N.  
 Tint, Gilbert  
 Tongue, B. H.  
 Verner, S. S.  
 Warner, A. W.  
 White, Donald L.

Princeton

Brandinger, Jay J.  
 Bunker, B. D.  
 Carlin, B.  
 Kingsley, B.  
 Leschek, W. C.  
 Lupfer, D. A.  
 Pickard, W. R.  
 Scarpa, T. J.  
 Schnitzler, Paul  
 Scoble, Wm. R. Jr.  
 Welkowitz, W.

Providence

Anderson, G. P.  
 Cady, W. G.  
 Chick, B. B.  
 Dandreta, W.  
 Ehrlich, S. L.  
 Hervey, J. P.  
 Jackson, O. H. III  
 Kroenert, J. T.  
 Kyle, J. W.  
 Mattiat, O.  
 Merriam, R. W.  
 Middleton, F. H.  
 Pierce, C. C.  
 Serotta, Norman  
 Stroup, L. G.  
 Truell, R.  
 Westneat, A. S. Jr.

Rochester

Bartles, S. P.  
 Bouyovcos, John V.  
 Buehler, C. M.  
 Corey, L. S.  
 Flynn, H. G.  
 Judson, J. F.  
 Kwiatkowski, T. F.  
 O'Connor, R. J.  
 Rogofsky, M.  
 Slaymaker, F. H.  
 Veal, T. G.  
 Wiedemann, W. C.

Schenectady

Rocha, H. A. F.  
 Rosenberg, P.  
 Sawada, F. H.  
 Schrom, E. C.  
 Siegert, R. H.

Syracuse

Blodgett, A. R.  
 Garber, S. M. Jr.  
 Ittenbach, L. J. Jr.  
 Jackson, James M. C.  
 Rodems, J. D.  
 Springer, L. E. 2nd  
 Tehon, S. W.  
 Wanuga, S.  
 Young, J. D.

Vermont

Nyborg, W. L.  
 Roth, W.  
 Sachs, T. D.

Worcester County

Wadsworth, Wm. B.

REGION 2Akron

Diamantides, N. D.  
 Pojefko, J. Jr.

Baltimore

Bennett, J. L.  
 Bridges, R. J.  
 Britt, R. P.  
 Campaigne, H. H.  
 Eberhardt, F. J.  
 Farah, O. G.  
 Gillis, J. A. Jr.  
 Houston, D. R.  
 Jeanne, C. E.  
 Lawson, W. M. Jr.  
 Leahy, F. N.  
 Levine, Sol  
 Markwalter, J. L. Jr.  
 Smeltzer, R. F.  
 Stroh, W. R.  
 Thomas, C. E. Jr.  
 Upright, D. E.  
 Webb, D. C.  
 Wells, D. R.  
 Wood, E. F.

Central Pennsylvania

Baker, W. L.  
 Bastuscheck, C. P.  
 Dickey, C. W.  
 Maris, E. H. Jr.  
 Miller, N. B.  
 Reeser, F. H.  
 Visnovsky, Andrew J.  
 Walker, E. A.  
 Walker, R. C.  
 Wilson, G. L.

Cincinnati

Dieterly, D. C.  
 Norman, E.  
 Rasmussen, L. E.

Cleveland

Berlincourt, D. A.  
 Boczek, P. J.  
 Chruski, D. D.  
 Curran, D. R.  
 Germano, C. P.  
 Holasek, E.  
 Jaffe, Hans  
 Karbo, D. J.  
 McKibben, W. E.  
 McLaughlin, W. R.  
 Mraz, S. J. Jr.  
 Proctor, T.  
 Sawyer, B.  
 Scott, E. P.  
 Sherman, H.  
 Whalen, P. P.

Columbus

Chope, H. R.  
 Golis, M. J.  
 Hsu, H.  
 Libby, C. C.  
 Lubell, A. H.  
 McMaster, R. C.  
 Toth, L. S.

Dayton

Baker, E. C.  
 Field, J. O.  
 Koon, N. M.  
 Kopell, L.  
 Rose, L. H.  
 Simopoulos, N. T.

Delaware Bay

Huang, H.  
 McClure, R. W.

Emporium-Ridgway

Greenlaw, A. F.  
 Johnson, Richard E.  
 Marafioti, J. J.

Erie

Brown, G. G.  
 Spurlin, R. A.  
 Wolfskill, J. M.

Lehigh Valley

Armstrong, J. H.  
 Cressman, R. N.  
 Fair, I. E.  
 Leaf, P. M.  
 May, J. E. Jr.  
 Meeker, T. R.  
 Miller, J. H.  
 Papadakis, E. P.  
 Reiber, R. W.  
 Risse, J. A.  
 Spencer, W. J.  
 Sykes, R. A.  
 Woodmansee, B. S.

North Central Ohio

Smith, W. A.

Philadelphia

Bachofer, H. L.  
 Beck, K. H. Jr.  
 Benjamin, J. M. Jr.  
 Berkowitz, R. S.  
 Bliss, W. R.  
 Bogush, A. J.  
 Chaika, E. D.  
 Chudleigh, W. H. Jr.  
 Clark, F. R.  
 Damato, R. J.  
 De Prisco, C. F.  
 Downing, T. J.  
 Edmonds, P. D.  
 Friend, A. W.  
 Garfield, E. E.  
 Gleiter, W. C.  
 Haner, L. P.  
 Hart, D. J.  
 Hayes, C. W.  
 James, John E.  
 Klein, S.  
 Koos, E. E.  
 Lightfoot, D. A.  
 O'flaherty, M. M.  
 Osbahr, B. F.  
 Radtke, J. F.  
 Rauch, R. M.  
 Reid, John M.  
 Robinson, A. S.  
 Roop, R. W.  
 Sandford, P. A.  
 Schrade, R. D. C.  
 Sheppard, C. B.  
 Starks, W. H.  
 Steinberg, B. N.  
 Stobbart, A. J.  
 Storey, Wm. T.  
 Sykora, G. E.  
 Visher, W. A.  
 Wood, R. F.

Pittsburgh

Acker, F. E.  
 Crawford, R. G.  
 De Klerk, John  
 Graf, V.  
 Gregory, A. R.  
 McCreanor, R. A.  
 Newell, W. E.  
 Panian, F. C.  
 Skinner, Da'e D.  
 Thompson, John H.  
 Ulrich, F. T.

Susquehanna

Enck, F. D.  
Scheetz, H. A.  
Scott, G. W. Jr.  
Swengel, R. C.  
Weaver, J. P.

Washington

Ahlgren, J. D.  
Algor, M. M.  
Allen, D. A.  
Altenburg, A. J.  
Anderson, C. D.  
Baker, H. L.  
Baker, H. M.  
Barbera, James T.  
Bateman, R.  
Bricout, P. A.  
Cooper, H. W.  
Cunnell, F. A.  
Dacus, R. W.  
Del Grosso, Vincent A.  
Distad, M. F.  
Eliot, F. C.  
Fisher, J. R.  
Gerber, H.  
Gleason, D. H.  
Green, W. C.  
Harper, J. R.  
Higgins, E. L.  
Hirl, J. P.  
Hocking, L. J.  
Jansen, J.  
Jaques, C. M.  
Johnson, E. K.  
Johnson, W. C.  
Katzin, Martin  
Kelly, Peter M.  
Lane, A. L.  
Lee, W. M.  
Leifer, J. C.  
Malm, R.  
Mayer, W. G.  
Miller, J. L. Jr.  
Mischler, E. F.  
Morrison, Claude O.  
Moss, G. J. Jr.  
Olson, S. K.  
Penninton, S. L.  
Petit, A. F.  
Preisman, Albert  
Salmon, D. K.  
Sann, K. H.  
Savory, W. A.  
Schwager, G. W.  
Serbyn, M. R.  
Shapiro, Gustave  
Smith, P. L.  
Spencer, J. V.  
Tschiegg, C. E.  
Varhus, H. P.  
Weinstein, M. S.  
West, R. G.  
White, D. R. J.  
Willig, D. E.

West Virginia

Thompson, W. R.

REGION 3Alabama

Strother, F. P.

Atlanta

Beaver, C. M.  
Bennett, A. L.  
Goodrich, D. B.  
Pippin, J. E.

Canaveral

Hallmark, C. E.

Central North Carolina

Slater, R. C.

Central Virginia

Bartley, W. P.  
Griffith, David E.  
Lee, K. O.

East Tennessee

Overley, J. P.

Eastern North Carolina

Willingham, T. 3rd

Evansville-Owensboro

Lovegren, P. B.

Florida West Coast

Blakeslee, K. L.  
Lampkin, G. F.  
Scott, L. E.  
Sloughter, G. S.

Hampton Roads

Arcuni, Philip  
Breed, W. L.  
Harrell, E. E.

Huntsville

Brenner, J. C.  
Filipowsky, R.  
Nichols, W. R.  
Seid, H. R.

Miami

Carduner, W.  
Condom, A.  
Cook, Herbert Austin  
Coulter, Wallace H.  
Martin, F. P.  
Williams, L. E.

Middle Tennessee

Morgan, C. C. Jr.

Mobile

Ivey, H. L.

Nashville

Benson, R. W.  
Schumann, F.

New Orleans

Cronvich, J. A.

Orlando

Bobber, R. J.  
Hawley, Donald T.  
Horton, W. H.

Palm Beach

Cohen, M. J.  
Dauer, F. W.  
Gibbs, N. E.

Panama City

Hammond, J. H. Jr.  
Haney, T. I.  
Lloyd, Bruce H.  
Murphree, F. J. Jr.  
Rogers, G. L.  
Wood, L. A.

Richmond

Burley, C. E.

South Carolina

Mix, Paul E.

Winston-Salem

Balden, J. M.  
Kjosnes, N. I.  
Thurstone, F. L.

REGION 4Central Illinois

Downing, W. C. Jr.  
Fry, W. J.  
Lechner, G. H.  
Tennery, V. J.

Chicago

Black, J. M.  
Burkhard, M. D.  
Carney, V. L.  
Colbert, J. R.  
Currey, C. H.  
Druz, W. S.  
Fetterman, D. M.  
Goldstein, R. (67)  
Grichnik, J.  
Grover, A.  
Hall, H. R.  
Hayes, W. R.  
Kazel, S.  
Kennedy, J. A.  
Kenney, M. W.  
Knowles, H. S.

Kocsis, L. L.  
Ludwig, J. T.  
Lund, Van Metre  
Maidak, A. M.  
Malinowski, S.  
Marks, M.  
Martino, L. J.  
McCarrell, S. G.  
Mittelmann, E.  
Naber, J. S.  
Padgitt, K. W.  
Premack, J.  
Price, M. I.  
Queen, D.  
Reed, E. E.  
Reese, F. D.  
Sad, G. F.  
Soria, R. M.  
Thomas, R. G.  
Thompson, A. C.  
Weber, E. W.  
Wojcik, T. J.  
Wolter, F. A.

Iowa-Illinois

Espelage, P. W.

Madison

Giarusso, D. P.

Milwaukee

Beady, J. A.  
Boettcher, H. P.  
Hyink, R.  
Richter, W.  
Santi, J. D.  
Wolff, R. L.

Nebraska

Edison, A. R.  
Farrall, W. R.  
Lauritsen, T. E.  
Schneider, A. A.  
Wycoff, K. H.

Northeast Michigan

Bauss, H. H.  
Currin, C. G.  
Steve, Wm. T.

Northeast Wisconsin

Godscha'x, A. T.

Rock River Valley

Busker, L. H.  
Larsen, P. W.

South Bend

Fiene, D. E.

Southeast Michigan

Brown, R. K.  
Cutrona, J. J.  
Herbert, R. T.  
Hiedemann, E. A.  
Kraus, D. R.

Southeast Michigan (Cont'd.)

Lyon, J. A. M.  
Pecar, A. J.  
Rautiola, N.  
Reiher, Harold F.  
Smith, H. R. Jr.  
Van Den Ende, H.

Southern Minnesota

Ulland, P. D.

Toledo

Gauthier, W. D.  
Ketcham, A. R.  
Klopfenstein, L. R.  
Muckenhirn, O. W.  
Rowe, H. N.

Twin Cities

Chiswell, E.  
Hanson, W. M.  
Moore, A. R.  
Motchenbacher, C. D.  
Ritter, A.  
Schiebe, F. R.  
Schmitt, O. H.  
Schuck, O. H.  
Warren, R. E.

REGION 5

Arkansas

Radley, E. T.  
Reid, J. D.

Central Texas

Gilmore, E. D.  
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Hixson, E. L.  
Lane, R. N.  
Lisman, P. H.  
Owen, T. E.  
Thomas, A. R. Jr.

Dallas

Aust, J. M.  
Austin, F. H.  
Bacher, W. A.  
Bondy, M. A.  
Burgen, J. G. Jr.  
Cawood, J. Lowell  
Gardner, C. B.  
Gillett, J. D.  
Goldberg, H.  
Lockhart, H. H.  
Mattingly, L. J.  
Penn, William D.  
Selby, P.  
Stanton, Austin N. 70  
Summers, Gerald C.  
Wilheim, E. S.  
Yancey, J. D. Jr.

Denver

Cross, B. T.  
Goble, R. W.  
Johnson, D. S. Jr.  
McGovern, C. E.

Morrone, T. J.  
Phelps, F. P.  
Posakony, G. J.  
Wyatt, D. E.

El Paso

Rojas, A. M. H.

Fort Worth

Hawkins, W. K.

Houston

Baldrige, B. H.  
Cornett, J. R.  
Daniel, J. T.  
Dix, M.  
Hopkinson, E. C.  
Hutson, D. E.  
Mazzagatti, R. P.  
Proctor, N. B.  
Schutz, T.  
Wood, F. M.  
Zill, F. W.

Kansas City

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Shontz, L. A. Jr.  
Stout, H. L.

Oklahoma City

Cohen, A. B.  
Yarbrough, L. A.

St. Louis

Lindenberg, E. C.

Shreveport

Davis, P. A. 2nd  
Wilson, C. R.

Tulsa

Hawkins, J. E.  
Labarthe, L. C.  
Mitacek, J.  
Norberg, H. A.  
Silverman, D.  
Westervelt, J. C.  
Winter, T. G.

REGION 6

Alamogordo-Holloman

Guy, S. A.

Alaska

Miller, K. E.

Albuquerque

Baerwald, H. G.  
Eer Nisse, E. P.  
Holland, R.  
Land, C. E.  
Schwarz, Alfred C.  
Stuetzer, O. M.  
Van Horn, O. B.

Buenaventura

Peringer, P.  
Phillips, J. F.

China Lake

Tkachuk, Julian J.

Foothill

Ellis, H. Jr.  
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Pennington, Arlin M.  
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Whitehouse, Harper J.

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Fujimoto, Frank S.  
Granborg, B. S. M.

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Larsen, G. R.

Las Vegas

Hanson, Bryant L.

Metropolitan Los Angeles

Blackman, Birt G.  
Cunningham, E. W.  
Imai, J. S.  
Parker, A. T.  
Stroud, S. G.  
Westman, S. E.  
Zeitlin, S.

Montana

Christie, J. W.

Orange County

Balogh, Franz S.  
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Martin, P. W.  
Morton, W.  
Reichert, D. G.  
Waniek, R. W.

Phoenix

Clar, P. L.  
Hickernell, F. S.  
Kaufman, Irving  
Kettler, E. W. Jr.

Minkel, V. I.  
Noble, D. E.  
Ward, D. D. Jr.  
Wolters, K. C.

Portland

Beck, R. M.  
Smithhisler, D. B.

Richland

Libby, H. L.

Sacramento

Hoeflich, A. F.

San Diego

Bailey, David G.  
Chernish, G.  
Curl, Gilbert H.  
Ford, L. A.  
Franklin, D. L.  
Holcomb, D. E. Jr.  
Liddard, G. E.  
Martin, F. C. Jr.  
Martin, G. E.  
Mathews, A. E.  
Papineau, M. D.  
Pierson, K. E.  
Stewart, James L.  
Strauss, L.  
Ward, J. A.  
Ward, T. C.

San Fernando Valley

Baker, R. S.  
Bangs, George A Jr.  
Bolton, Marquis W.  
Borofka, Robert P.  
Caler, J. W.  
Camp, L. W.  
Cangel, J. A.  
Cochran, E. D.  
David, G. T.  
Dugan, John M.  
Goldbaum, C.  
Grossman, S. J.  
Hubbard, R. T.  
Johnston, E. B.  
Leach, H. L.  
Longerich, E. P.  
Marsh, Kirke W.  
Nollman, Mary F.  
Oltman, H. George Jr.  
Parry, F. J.  
Primozich, Frank G.  
Pro, S.  
Snell, W. A.  
Swenson, A. N. Jr.  
Woodcock, F. B.

San Francisco

Andresen, Sigurd  
Armstrong, D. B.  
Armstrong, R. W.  
Baer, M. H.  
Brown, A. E.  
Caddes, Donald E.  
Chodorow, M.  
Crumly, C. B.  
Dewey, D. C.



San Francisco (Cont'd.)

Dickinson, W.  
 Dobrov, W. I.  
 Eilers, George J.  
 Gates, W. F.  
 Goddard, E. G.  
 Haight, C. A.  
 Hoffman, J. D.  
 Karp, A.  
 Lambert, T. G.  
 Lindgren, G.  
 Medina, M. A.  
 Oliver, B. M.  
 Olson, F. A.  
 Pfost, R. F.  
 Rains, S. D.  
 Reynolds, Clifford D.  
 Roberts, T. E. Jr.  
 Robinson, L. P.  
 Ruggieri, D. J.  
 Sackman, G. L.  
 Salmon, V.  
 Segerstrom, R. J.  
 Sloan, D. H.  
 Sneed, R. C.  
 Spurlock, Eugene M.  
 Stewart, J. L.  
 Tracy, R. A.  
 Ullman, Peter J.  
 Watson, J. A.  
 Wauchope, S. E.  
 Wilson, O. B. Jr.  
 Yoshida, H.  
 Young, L.

San Gabriel Valley

Babeaux, A. G.  
 Bradley, W. Jr.  
 Cohn, G. I.  
 Erdman, Donald C.  
 Herrick, J. F.  
 Howard, R. C.  
 Locanthi, B. N.  
 Simmons, Edward Jr.  
 Stahl, F. A.  
 Walkey, E. M.  
 Wood, D. O.  
 Zeuschner, Raymond F.

Santa Barbara

Chalfant, D. A.  
 Gordon, B. E.  
 Kotzebue, K. L.  
 Palmer, J. K.  
 Reder, M. C.

Santa Monica Bay

Fein, A.  
 Gunny, Edmond R.  
 McNelis, D. D.  
 Nicholides, E. C.  
 Phillips, H. D.  
 Rod, R. L.  
 Rotberg, A. S.  
 Schanbacher, W. A.  
 Sepmeyer, L. W.  
 Snow, W. B.  
 Wolcott, C. F.

Seattle

Currie, W. E.  
 Foss, R. N.  
 Jones, P. J.  
 Kinnaman, R. L.  
 Miller, N. D.  
 Nordlund, L. H.  
 Leary, L. A. O.  
 Sage, G. E.  
 Sands, W. C.  
 Schlegel, William A.  
 Shook, W. A.

South Bay Harbor

Bein, G. E.  
 Dorr, W. B.  
 Justice, L. E.  
 Krupp, M. F.  
 Lafevre, L. M.  
 Loretz, N. F.  
 Silva, L. M.  
 Thorensen, R.

Tucson

Baldwin, H. A.  
 Conant, B. K.  
 Wilcox, W. G.

Utah

Ferre, R. G.

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Goba, F. A.  
 Maskell, R. F.  
 Sparrow, J.  
 Stonelake, D. A.

London

Inculet, I. I.  
 Jeffery, J.

Montreal

Adler, E. L.  
 Argue, T. A.  
 Beaudoin, G. G.  
 Bohm, J.  
 Boulet, J. L. L.  
 Fodor, N. J.  
 Horita, R. E.  
 Laszlo, C. A.  
 Rawlins, W. A.  
 Wagner, S.  
 Wall, E.

Niagara International

Waud, E. C.

Northern Alberta

Wirtanen, E. W.

Ottawa

Brach, E.  
 Cole, W. A.  
 Glinski, G.  
 Miles, J. F.

Quebec

Lortie, A. L.

Southern Alberta

Umbach, E. A.

Toronto

Ham, J. M.  
 McNeill, J. D.  
 Morin, R. E.  
 Stevens, A.  
 Yachimec, P.

Vancouver

Baron, H. D.  
 Breeze, J. E.

Victoria

Pirart, M. A.

Winnipeg

Bock, G. D.  
 Bullock, W. Ralph  
 Waldmo, G. D.

REGION 8Benelux

Bekkering, D. H.  
 Bijl, A.  
 Boxma, Y.  
 Brodersma, C. B.  
 Cogneaux, M.  
 De Graeve, J. E. C.  
 Desirant, M. C.  
 Hannesen, H. H.  
 Hecq, Y. V.  
 Heeroma, H. H.  
 Hendriks, J. H.  
 Limage, M. J.  
 Noel, Y. P.  
 Rideout, V. L.  
 Stolk, Jacobus  
 Van Bladel, J. G.  
 Van Der Burgt, C. M.  
 Van Egmond, A. J. L.  
 Vigneron, H.

France

Altovsky, V. A.  
 Barret, J. P.  
 Bernard, P. R.  
 Bruma, M.  
 Cahen, G. M.  
 Cerf, R.  
 De'ord, J. F.  
 Deschamps, J. D.

Deschamps, R. A.  
 Ferre, M. C.  
 Gouil'oud, M.  
 Grivet, P. A.  
 Labin, E.  
 Le Corre, Y.  
 Mayer, F.  
 Oudard, A.  
 Robieux, J. H.  
 Va'entin, F. F.

Geneva

Angehrn, T. W.  
 Bachmann, A. E.  
 De Chambrier, P.  
 Demieville, H.  
 Graemiger, G. A.  
 Guanella, G.  
 Klay, H.  
 Milz, Max J.  
 Sundstrom, K. E.  
 Thiemann, H. E.  
 Wellinger, R. P.

Israel

Bronstein, D.  
 Nunamaker, T. A.  
 Weinman, J.  
 Ziv, Ami

Middle-South Italy

Bardati, F.  
 Contartese, G.  
 Gommellini, G.  
 Leardini, T.

North Italy

Derossi, A. D.  
 De Vito, G.  
 Egidi, C.  
 Fagnoni, E.  
 Masotti, L.  
 Schiaffino, P.  
 Vergani, A.  
 Zanelli, C.

Norway

Hara'dsen, H. P.  
 Hiis, P. T.  
 Sostrand, K. A.  
 Tonning, Prof. A.

Sweden

Aido, L.  
 Faxo, E. L.  
 Gertzell, S. G.  
 Granqvist, C. E.  
 Ireneus, K. O.  
 Josephson, B. A. S.  
 Markesjo, G. A.  
 Nasstrom, L.  
 Nilsson, N. R.  
 Olsson, A. J. K.  
 Sundquist, A.

United Kingdom & Eire

Aldridge, Edward E.  
Arman, A. N.  
Ashby, D.  
Barlow, H. M.  
Crawford, A. E.  
Dawe, F. W.  
Edwards, John D.  
Fischbacher, R. E.  
Gordon, G. A. Douglas  
Griffiths, J. E.  
Harris, K. E.  
Karim, A.  
Oxley, Robert F.  
Parry, R. Y.  
Rantzen, H. B.  
Rowe, J. H.  
Shepherd, J. T.  
Smith, J. S.  
Smye-Rumsby, Bernard A. A.  
Szerlip, A.  
Thomas, A. J.  
Vilipsons, J.  
Wilson, A. G.  
Wood, J.

West Germany

Arlt, G.  
Busch, C. W.  
Dierstein, R.  
Duinker, S.  
Johnson, G. O. Jr.  
Meyer, E. W.  
Schoenfeld, W. H.  
Severin, H. K. F.

REGION 8

No Established Section

Austria

Zemanek, Heinz

Czechoslovakia

Szanto, L.

Denmark

Ingerslev, F. H. B.  
Rasmussen, Knud

Germany

Gundlach, F. W.

Greece

Vocolides, J. D.

Spain

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Colino, A. Lopez  
Lara, F. R.  
Segovia, R. T.

U. S. S. R.

Sorokin, A. A.

REGION 9

Chile

Feick, W.  
Oxman, G.

Mexico

Seeliger, J. C.

Tokyo

Akiyama, Morio  
Aoi, Sabure  
Fujimoto, Masao  
Fukata, Masao  
Harashima, Osamu  
Ibuka, Masura  
Ide, Massao  
Ihara, Yoshio  
Imayoshi, Bunkichi  
Inoue, Toshiya  
Iwase, S.  
Kagaya, Seiichi  
Kawachida, S.  
Kawano, T.  
Kikuchi, Y.  
Kimura, Hisao  
Kitamura, Z.  
Kumagai, Toshiro  
Kondo, H.  
Konno, Sataro  
Koomura, S.  
Kuroda, K.  
Matsuyuki, T.  
Miura, Y.  
Mikami, T.  
Miyaji, Kohichi  
Morita, Keitaro  
Nakagami, M.  
Nakahara, F.  
Nakahara, T.  
Nakahara, Yuichi  
Nemoto, T.  
Niwa, Yasujiro  
Nomoto, Otohiko  
Nomura, T.  
Numasaki, Nobuo  
Obata, Sukiro  
Ochiai, Noriomi  
Ogawa, T.  
Ohba, Y.  
Ohwadano, Hiroshi  
Okuyama, Daitaro  
Onde, M.  
Rokushima, Katsu  
Saburi, O.  
Sato, Takao  
Sawada, R.  
Sawamura, T.  
Seki, Takeo  
Sekiguchi, I.  
Sugi, Choksukey  
Suzuki, M.  
Suzuki, Tatsuo  
Takagi, Mikio  
Takao, Iwao  
Takeo, Okada  
Tanaka, Yoneji  
Taniguchi, Fusao  
Tomono, Masam  
Watanabe, Seiichi  
Yamano, Masaru

Yamazaki, T.  
Yang, Ping Kung  
Yoshida, Tsuguo  
Yoshino, Takeo

REGION 9

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Rajasekharan, R.

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Maginness, M. G.  
Williams, H. L.

Venezuela

Halpern, Manuel Flint

Overseas Military

Alpern, Joshua C.  
Abraham, D. D.  
Cobb, A. Donn  
Lester, D. H.  
Nelson, P. J. Jr.  
Palatini, G. L.  
Rorant, J. H.

*Handwritten notes:*  
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