

Correspondence

Reports of International Organizations

Chairmen

IRE Technical Committees and Professional Groups

In the interest of improving co-ordination of the activities of the IRE with those of international organizations (such as CCIR, URSI and IEC), the Office of the Technical Secretary will distribute from time to time lists of the material received from these organizations. We are enclosing the first set of such lists herewith.

If your Technical Committee or Professional Group desires to make use of any of the material listed, it is available for their inspection at this office or may be borrowed upon request.

Will you please advise me whether you are interested in receiving the supplementary lists which will be distributed in the future? I would also appreciate any suggestions you may have which would assist us in bringing this information to the attention of other interested IRE members.

L. G. CUMMING
Technical Secretary

February 7, 1955

Dear Mr. Cumming:

In answer to your letter of January 7, 1955 concerning the availability of CCIR, URSI and IEC reports, the PGMTT would appreciate receiving from you in the future the acquisition lists to which you refer.

We plan to look over these lists and to pick out the titles of the reports which would be of interest to PGMTT members and to publish these titles in our transactions together with information on where and how the reports are available.

W. W. MUMFORD
Chairman, PGMTT

February 22, 1955

Listed below are two of the reports which may be of interest to the members of the PGMTT.

Study Group No. II of the CCIR Question 76 (II). Sensitivity and noise factor. 53 CIR II.0.

Study Group No. IX of the CCIR Report No. 31. Wide-band radio systems operating in the vhf (metric), vhf (decimetric) and shf (centimetric) bands. 53 CIR-IX.0.

The Editor

Addenda to "Bibliography on Directional Couplers"

December 6, 1954

The Editor

TRANSACTIONS OF THE IRE-PGMTT

The following items seem worth adding to the very comprehensive "Bibliography on Directional Couplers," by R. F. Schwartz

(TRANS. I.R.E., vol. MTT-2, No. 2, pp. 58-63; July, 1954):

"A Note on the Measurement of Impedance with the Impedometer," W. Sichak, *Proc. IRE*, vol. 38, p. 951; August, 1950.

"On Bethe's Theory of Diffraction by Small Holes," C. J. Bouwkamp, *Philips Res. Rep.*, vol. 5, pp. 321-332; October, 1950.

"On the Diffraction of Electromagnetic Waves by Small Circular Disks and Holes," C. J. Bouwkamp, *Philips Res. Rep.*, vol. 5, pp. 401-422; December, 1950.

There seems to be some confusion in two of the entries at the top of p. 61 of the Bibliography. The second item from the top does not, I think, exist as such. The page numbers and date given there should be transferred to the fifth item from the top. An addition should be made to the third item from the top, to state that the *Electrical Communication* version is a reprint from *PROC. IRE*, vol. 37, pp. 1208-1211; October, 1949.

R. G. MEDHURST
Research Labs.
The General Electric Co., Ltd.
Wembley, England

January 4, 1955

Dear Mr. Saad:

Thank you for your letter together with the copy of the letter from R. G. Medhurst.

There are actually a number of errors and omissions that have shown up since the "Bibliography on Directional Couplers" was published. Most of these were caused by the limitations of time at the moment that the data was collected.

I am indebted to Mr. Medhurst, to W. W. Mumford of Bell Telephone Laboratories, to Dr. P. P. Lombardini of the University of Pennsylvania, and to others for calling my attention to errors and additions.

I am enclosing for publication the following list of additions and corrections to the original article.

1941

Additions:

"Coupled Networks in Radio Frequency Circuits," Andrew Alford, *PROC. IRE*, vol. 29, pp. 55-70; February, 1941.

1942

Additions:

"A Stationary Standing-Wave Detector and Power Monitor," W. W. Mumford, Bell Telephone Labs. Memo.; October, 1942.

1944

Additions:

"The Reflectometer," G. B. Meyers and B. P. Charles, Navy Report No. 521; August 25, 1944.

"Directional Transmission Line Taps," R. S. Julian, Bell Tel. Lab. Rep. MM-44-170-6; January 26, 1944.

1945

Additions:

"Carrier Current Communications Over High Voltage Transmission Lines," E. Hancess, *Brown Boveri Rev.*, vol. 31, pp. 335-339; October, 1945.

"Dielectric Guide Signaling," W. W. Hansen and R. H. Varian, U. S. Patent No. 2,375,223; May 8, 1945.

1946

Additions:

"Theory and Design of Several Types of Wave Selectors," N. I. Korman, *Proc. NEC*, vol. 2, p. 404; 1946.

1947

Corrections:

8th entry: author is Glinski not Glenski.

7th entry: should be deleted; belongs under 1948.

Additions:

"Reflectometer for Waveguide Transmission," C. G. Sontheimer and N. I. Korman, U. S. Patent No. 2,423,526; July 8, 1947.

"Reflectometer for Transmission Lines and Waveguides," N. I. Korman, U. S. Patent No. 2,423,390; July 1, 1947.

"The Physical Principles of Waveguide Transmission and Antenna Systems," W. H. Watson, Clarendon Press, Oxford, Eng., pp. 107-121; 1947.

British Patent No. 592,224, G. E. F. Fertel, R. W. L. Batt, J. A. Barrable, C. S. Wright; September 11, 1947.

1948

Additions:

"Reflectometer For Waveguide Systems," J. R. Ford, U. S. Patent No. 2,445,348; 1948.

Corrections:

1st entry: Authors' names are J. F. Morrison and E. L. Younker.

1949

Corrections:

1st entry: Author is O. Norgorden.

5th entry: Publication is *PROC. IRE*, vol. 37, p. 163; February, 1949.

7th entry: Author's name is W. W. Ernst.

8th entry: Title should be: "Impedance Measurements with Directional Couplers and Supplementary Voltage Probe"; pages should be 1208-1211.

11th entry: Pages should be 1245-1246.

14th entry: Should be entirely deleted; does not concern directional couplers.

Additions:

"Line Tuning Equipment Used with Coaxial Cable for Carrier Current Installation on Power Lines," H. J. Sutton, *Trans. AIEE*, vol. 68, pt. 1, pp. 44-49; 1949.

"A Proposal for Broadband Coupling of

- Power Line Carrier Equipment," R. H. Miller, *Trans. AIEE*, vol. 68, pt. 2, pp. 1028-1031; 1949.
- "FTL-42A Impedometer," Bulletin FTL-42A, Federal Telecommun. Labs., Nutley, N. J.; 1949.

1950

Additions:

- "A Note on the Measurement of Impedance with the Impedometer," W. Sichak, *PROC. IRE*, vol. 38, p. 951; August, 1950.
- "On Bethe's Theory of Diffraction by Small Holes," C. J. Bouwkamp, *Philips Res. Rep.*, vol. 5, pp. 321-332; October, 1950.
- "On the Diffraction of Electromagnetic Waves by Small Circular Discs and Holes," C. J. Bouwkamp, *Philips Res. Rep.*, vol. 5, pp. 401-422; December, 1950.

1951

Corrections:

- 10th entry: should read—"A Recording Broadband Waveguide Reflectometer," A. L. Witten and R. B. Henning, *Proc. NEC*, vol. 7, pp. 173-180; 1951.

Additions:

- "Directive Pickup for Transmission Lines," W. W. Mumford, U. S. Patent No. 2,562,281; July 31, 1951.
- "Wave Signal Directional Coupler," H. A. Wheeler, U. S. Patent No. 2,575,571; November 21, 1951.
- "Loch- und Schlitz Kopplungen zwischen Koaxialen Leitung Systemen," *Zeitschrift für Angewandte Phys.*, Dritter Band, Heft 2; February 20, 1951.
- "Determination of Aperture Parameters by Electrolytic Tank Measurements," S. B.

Cohn, *Proc. IRE*, vol. 39, pp. 1416-1421; November, 1951.

- "Final Report on Improved Impedance Measuring Methods Over the Frequency Range 100-10000 Mc," Microwave Res. Inst. Rep., Air Force Contract W33-038-ac-18115; June 5, 1951.

1952

Corrections:

- 7th entry: Authors are S. E. Miller and W. W. Mumford.

Additions:

- "A Precision Directional Coupler using Multi-Hole Coupling," E. F. Barnett and J. K. Hunton, *Hewlett-Packard Jour.*, vol. 3, March April, 1952.
- "Transmission Line Directional Couplers," W. L. Firestone, Doctoral Dissertation, Northwestern University, Evanston, Ill.; May, 1952.
- "On the Scattering Matrix of Symmetrical Waveguide Junctions," A. E. Pannenberg, *Philips Res. Rep.*, vol. 7, pp. 270-302; 1952.

1953

Additions:

- "More About the hp Precision Directional Couplers," E. F. Barnett, *Hewlett Packard Jour.*, vol. 4; January February, 1953.
- "Use of *H*-field Coupling in Directional Couplers," C. W. Jones, M.I.T. Lincoln Lab. Tech. Rep. No. 13; March 5, 1953.
- "Directional Coupling with Transmission Lines," W. L. Firestone, *Proc. NEC*, vol. 9, p. 130; 1953.
- "Applications of Coupled Helices," Peter D. Lacy, Hewlett-Packard Company; paper

presented at the 1953 West Coast IRE Convention.

- "Directional Coupling With Transmission Lines," W. L. Firestone, *Tele-Tech*, p. 95; October, 1953.

1954

Additions:

- "R. F. Power and VSWR. Instruments," Catalog No. 11, M. C. Jones Electronics Co., Inc., Bristol, Conn., pp. 1-5; 1954.
- "Wide-Band Directional Coupler," Bulletin 101, Sierra Electronic Corp., San Carlos, Calif.; 1954.
- "Coupled Wave Theory and Waveguide Applications," S. E. Miller, *Bell Sys. Tech. Jour.*, vol. 33, p. 661; May, 1954.
- "Analysis of Transmission Line Directional Couplers," W. L. Firestone, *Proc. IRE*, vol. 42, p. 1529; October, 1954.
- "Impedance Measuring by Means of a Broadband Circular Polarization Coupler," S. B. Cohn, *Proc. IRE*, vol. 42, p. 1554; October, 1954.
- "Handbook of Microwave Measurements," M. Wind and H. Rapaport, Rep. R-352-53, PIB-286, Sig. Corps Contract No. DA-36-039-sc-5530, Polytechnic Inst. of Brooklyn, Microwave Res. Inst., Sections XII and XIII; 1954.
- "Directional Couplers," P. Sferrazza, *IRE CONVENTION RECORD*, Part 8, "Communications and Microwaves," vol. 2, pp. 115-124; 1954.
- "Power on a One Way Street," J. R. Pierce, *IRE STUDENT QUARTERLY*, vol. 1, p. 10; December, 1954.

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