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THE PROFESSIONAL GROUP ON RADIO FREQUENCY INTERFERENCE

N E W S L E T T E R

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Number 2

March 1958

Appointment of NEWSLETTER Committee:

A NEWSLETTER Committee has been appointed of the following:

Rexford Daniels, Chairman; M. Kant, A. Zimbalatti,  
L. Thomas, S. Nellis, A. R. Kall and H. Schwenk (Ex-Officio)

This is the first issue under the direction of this committee and suggestions and material are urgently solicited. As your chairman was formerly editor of Quasies and Peaks, he is bringing out this issue in somewhat the same format and hopes that there will not be too much objection. It should be pointed out that the NEWSLETTER is entirely separate from the TRANSACTIONS of the RFI Group and, hence, will not carry complete papers or reports.

Meeting of Administrative Committee:

Albert R. Kall, Secretary, has called a meeting of all members of the Administrative Committee for Monday, March 24th at 9:00 A.M. at IRE Headquarters, 5 East 79th Street, New York.

Tickets Available for Joint IRE Luncheon:

Thirty tickets are available to members of RFI for the Joint Luncheon of the Professional Groups on March 27th, 1958. They are \$4.00 each and may be obtained by writing to Harold Schwenk, 240 Columbus Parkway, Mineola, New York or telephoning to Pioneer 2-6178.

Digests of Papers Presented at Signal Corps Symposium, November 1957:

Military Electronics, January 1958, carries digests of the following papers:

High-Frequency Crystal Filters, by G. K. Guttwein  
Precision Frequency-Control Devices, by Marvin Bernstein  
Characteristics and Applications of Components for the  
Reduction of Electromagnetic Interference, by  
Joseph Allen  
The Systems Approach, by J. J. Renner

In the same issue were additional items of interest:

Interference Reduction Aided by Feed-Through Electrolytic  
Capacitors, page 8  
Predicts Crystal Filters Will Aid Fight Against Interference,  
page 5

Impedance-matching Circuits:

RF instruments used for laboratory measurements are often designed for 50-ohm termination. Electronic Design, February 19, 1958 issue, page 104 contains a schematic and description of an impedance-matching circuit in a coaxial coupler, a "T" match in a coaxial coupler and a crystal detector circuit encased in a coaxial coupler.

New Air Force Manuals on Interference:

Two new manuals have been prepared by the Air Force, on interference, as follows:

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| T.O. 31-1-48 | Standard Practices Manual<br>Location, Identification, Suppression of<br>Communications Electronics Interference. |
| T.O. 31-1-49 | Standard Planning Manual<br>Engineering Interference-Free Communications-<br>Electronic Systems.                  |

These manuals were prepared by the Frederick Research Corporation under contract with RADC, Rome, New York.

Stable RF Transformer Package:

An article under the above title appears in the February 1958 issue of Electrical Manufacturing, on page 135, by D. M. Lisbin, Westinghouse Air Arm Division, Baltimore, Md.

How to Design Magnetic Shielding for Transformers:

In the same issue of Electrical Manufacturing, on page 138, is an article on Magnetic Shielding and how to specify and design magnetic shields for transformers, by W. S. Spring, of Magnetics, Inc., Butler, Pa.

Parallel Resistance Chart:

Electrical Design News, January 1958, page 54, contains an article by R. B. Cline, Martin Company, describing a chart which is useful for finding the total resistance of resistors connected in parallel. (Also see Air-Spaced Transmission Line Impedance article on page 56 by the same author).

Minimizing Mobile Interference:

Electronic News, February 17, 1958, page 19, has an article describing the testing of a new power control unit, designed to minimize interference of mobile radio communications by limiting transmitter signal power, by the General Electric Company.

West Virginia Passes Law Controlling Interference to Radio Astronomy:

The PROCEEDINGS of IRE, January 1958, page 35, carries an article by J. W. Findlay titled Noise Levels at the National Radio Astronomy Observatory, Green Bank, West Virginia. The article describes the law which was passed by the West Virginia legislature, and other measures taken to restrict interference from local sources.

Intrinsic Techniques for Interference Reduction in Radar and Ballistic Systems:

A 14 page booklet has been prepared by Emmons R. Radford on the above subject. Copies may be obtained by writing to: E. R. Radford, Room 17, Building 15, Electronics Park, General Electric Company, Syracuse, New York.

Interference-Reduced Switching:

Electronic Design, January 8, 1958, page 104, carries the description of a circuit, using a transistor, which will reduce noise 40 db or better. This circuit was supplied by R. G. Gray, Gray Electronics, Albertson, New York.

New Clearinghouse for Foreign Scientific Literature:

Research Reviews of NRL, February 1958 issue, describes the establishment of a new Foreign Technical Information Center within the Department of Commerce. It will be headed by John C. Green of the Office of Technical Services. Those engineers who wish to be placed on the mailing list should address the above.

Noise Figure and Its Measurement:

The Hewlett-Packard Journal, January 1958, contains a discussion of Noise Figure and Its Measurement by B. M. Oliver. The article is of three pages.

T, L and H Attenuation and Matching Networks:

Electrical Design News, March 1958, page 52 carries data on the above subject, courtesy of P. R. Mallory and Co. A monograph showing the relation between DB. loss and required resistance is also given.

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When sending in material for the NEWSLETTER, please check the spelling of proper names and give the title and address of each person mentioned. If news articles are to be mentioned, please give source and page. Editing a newsletter can get everybody in wrong if names are not spelled correctly, news items are incomplete and dates are as much as ten years off. Please send, until further notice, all items to:

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