IRE Professional Group on ULTRASONICS ENGINEERING EAST 79 STREET, NEW YORK 21, N. Y.

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# NEWSLETTER IRE Professional Group on ULTRASONICS ENGINEERING

, HE PROFESSIONAL GROUP ON ULTRASONICS ENGINEERING (PGUE) IS AN ASSOCIATION OF IRE MEMBERS WITH PROFESSIONAL INTEREST IN THE FIELD OF ULTRASONICS ENGINEERING. ALL IRE MEMBERS ARE ELIGIBLE FOR MEMBERSHIP AND WILL RECEIVE ALL PGUE PUBLICATIONS UPON PAYMENT OF THE PRESCRIBED ASSESSMENT.

per 20

September, 1961

### L FOR PAPERS

1962 IRE International Convention

The PGUE will sponsor two sessions in the 1962 IRE Intermal Convention, March 26-29, to be held in New York City. Meral call for papers is extended at this time. Papers on all sts of ultrasonics engineering, submitted by members or members of the IRE, are welcome. A prospective author must st, prepared in triplicate, a 100-word abstract and a 500-word mary. Indicate in the covering letter that the paper is intended resentation in one of the sessions sponsored by the PGUE. paterial should be sent to:

Dr. Donald B. Sinclair, Chairman 1962 Technical Program Committee The Institute of Radio Engineers 1 East 79th Street New York 21, New York.

The deadline for submitting papers in response to the general Gotober 20, 1961.

the event that the program is not filled by papers submitted sponse to the general call, it may be possible to have a paper wied in the program even through the abstract and summary are rady by the deadline date of October 20. If an abstract and tary can be prepared by December 1, then it may be possible when paper scheduled by contacting directly the session tizer and discussing the matter with him. The session organizer be PGUE is:

Dr. Allen H. Meitzler

Bell Telephone Laboratories

Whippany, New Jersey

Tel. No. TUcker 7-1000, Ext. 2536.

The activity and effectiveness of the PGUE depend to a large supon the quantity and quality of the papers submitted at sessions bred by our professional group. The PGUE administrative the would like to encourage increased participation in the stechnical meetings and in this connection invites all members on-members) who are doing research or development work in the s areas of ultrasonics engineering to report their results in papers ted at PGUE s essions.

IRE Professional Group on Ultrasonics Engineering Session at The Fall Meeting of the Acoustical Society of America Netherland Hilton Hotel - Cincinnati, Ohio - November 8-11 1961

The IRE Professional Group on Ultrasonics Engineering has "ated with the Acoustical Society of America's Technical "ated with the Acoustical Society of America's Technical "a on Ultrasonic Delay Lines at the fall Meeting of the "ical Society of America. The meeting will be held at the "and Hilton Hotel, Cincinnati, Ohio, November 8-11, 1961. "aber 9 is a scheduled trip to sessions and tours at Wright "ayton, Ohio). The Ultrasonic Delay Line session is

for Wednesday, afternoon, November 8. Other Acoustical sessions of particular interest to IRE-PGUE members are aesday morning symposium on Semiconductor Transducers, and Physical Acoustics sessions on Friday and Saturday (which will include papers on ultrasonics). For this meeting the regular Acoustical Society member registration fee of two dollars will apply also to IRE-PGUE members, instead of the non-member registration fee. The program for the Ultrasonic Delay Line session follows:

Wednesday Afternoon, November 8, at 2:00 P.M. North Hall

- Session E. Ultrasonic Delay Lines (in cooperation with IRE Professional Group on Ultrasonics Engineering David L. Arenberg, Chairman Invited Symposium Papers (25 min.)
- El Multiple Reflection Type Quartz Delay Lines
  W. F. Konig and L. B. Lambert
  Columbia Univ. Elec. Res. Labs., N. Y. 27 N.Y.
- E2 Magnetostrictive Delay Lines
  Arthur Rothbart
  98 Van Cortlandt Park S., Bronx 63, N.Y.
- E3 Guided-Wave Dispersive Delay Lines John E. May, Jr. Bell Telephone Labs., Inc. Whippany, N.J.
- E4 Applications of Delay Lines in Correlation Processing
   C. W. Hoover, Jr.
   Bell Telephone Labs., Inc., Whippany, N. J.

Contributed Papers (15 min.)

- E5 A Wide Band Variable Ultrasonic Delay Line
  O. R. Price, M. E. Pedinoff, E. Lax, E. Sittig
  Ultrasonic Systems, Inc., Los Angeles, Calif.
  and G. R. Crane and R. H. Duval
  Westrex Corp., Beverly Hills, Calif.
- E6 Ultrasonic Dealy Lines for Digital Data Storage Allen H. Meitzler
   Bell Telephone Labs., Inc., Whippany, N. J.
- E7 Low Loss Wide Bank Delay Line Using Multi-Element Ceramic Transducers
  C. E. Bieling and R. Hixenbaugh Bell Telephone Labs., Inc., Whippany, N. J.
- E8 Synthesis of Dispersive Delay Characteristics by Thickness Tapering in Ultrasonic Strip Delay Lines
  A. H. Fitch
  Bell Telephone Labs., Inc., Whippany, N. J.
- E9 Miniaturized Glass Delay Lines with Improved Electrical Characteristics
  C. A. Bieling and N. C. Thomas Bell Telephone Labs., Inc., Whippany, N. J.
- E10 Resonant Variations of Ceramic Rectangular Bar Transducers
  E. Larry Fabian
  Bell Telephone Labs., Inc., Whippany, N. J.
- Ell The Dependence of the Lowest Thickness Longitudinal Mode Resonant Frequencies of Long Rectangular Bars on the Width

and Thickness Dimensions T. R. Meeker Bell Telephone Labs., Inc., Whippany, N. J.

Note: No hotel commitment has been made by IRE-PGUE, so members wishing to attend should make their own arrangements for housing vell in advance.

#### NEXT MEETING OF ADMINISTRATIVE COMMITTEE

The next meeting of the Committee is scheduled for Tuesday evening at 7, November 7, 1961, in the Netherland-Hilton Hotel in Cincinnati, Ohio. This is the evening before the technical session on ultrasonic delay lines is to be held at the meeting of the Acoustical Society.

The proposed agenda is:

- 1. Finances
- 2. Papers Procurement
- 3. Membership Questionnaire
- 4. National Symposia

### RESULTS OF ATTEMPT TO FORM CHAPTER IN N.Y.C. AREA

Last April, the membership in the New York City Metropolitan area was asked to comment on the advisability of forming a PGUE chapter in that area. Since only about 25% of the members expressed an opinion, the Administrative Committee concluded that this was too small a show of support to warrant further action.

#### FINANCIAL STATEMENT

Period from January 1, 1961 to June 30, 1961

Balance at beginning of period Receipts during period		\$4, 949_21 2, 238. 84
	Total	\$7, 188.05
Expenses during period Balance at end of period		\$2,062.04 \$5,126.01

## MEMBERSHIP

As of June 30, 1961, we had the following number of paid members:

Regular Members	961	
Students	20	
Affiliates	5	
	986	