On Saturday afternoon the members of the three societies were the guests of Miss Margaret Trumbull Corwin, Dean of the College, New Jersey College for Women, at an informal reception at the Dean's House. On Sunday evening an informal buffet supper for the mathematical organizations was served at Wood Lawn, the Alumnae House of the New Jersey College for Women. Later the same evening the Department of Music presented a Musicale in the Music Building.

EDWIN G. OLDS,
Secretary

REPORT ON THE SECOND MEETING OF THE PITTSBURGH CHAPTER OF THE INSTITUTE

The second meeting of the Pittsburgh Chapter of the Institute of Mathematical Statistics was held at Carnegie Union, Carnegie Institute of Technology, on Saturday, October 9, 1943. Thirty-four persons attended the meeting, including the following eight members of the Institute:

W. O. Clinedinst, G. G. Eldredge, K. L. Fetters, H. J. Hand, G. E. Niver, F. G. Norris, E. G. Olds, E. M. Schrock.

At the morning session Mr. Charles E. Young, Westinghouse Electric and Manufacturing Company, presented a paper entitled "Analysis of Cyclical Fluctuations." The program for the afternoon session consisted of a paper entitled "Use of orthogonal coordinates in linear regression," presented by Mr. W. O. Clinedinst, National Tube Company. Mr. F. G. Norris, President of the Pittsburgh Chapter, acted as chairman for both sessions.

HOWARD HAND,
Secretary of the Pittsburgh Chapter

ABSTRACTS OF PAPERS

(Presented Monday, September 13, 1943, at the New Brunswick Meeting of the Institute)

Asymptotic Distributions of Ascending and Descending Runs. JACOB WOLFOWITZ, Columbia University.

Let $a_1, a_2, \cdots, a_N$ be any permutation of N unequal numbers. Let there be assigned to each permutation the same probability. An element $a_i (1 < i < N)$ is called a turning point if a_i is greater than or less than both a_{i-1} and a_{i+1}. Let a_j and a_{j+k} be consecutive turning points; they are said to determine a "run" of length k. The author obtains the asymptotic distributions of a large class of functions of these runs. An example of his results is the following: It is proved that the following are asymptotically normally distributed: (a) the total number of runs; (b) $R(p)$, the number of runs of length p; (c) $R(p)$ and $R(q)$ jointly. Similar results are obtained for runs defined by any of a large set of criteria, of which the one given above is of value in statistical applications.