They are of high quality. The organizers of the conference are to be congratulated on the papers solicited. The University of Wisconsin Press has produced a handsome volume by a photographic process which makes a very readable page. The relatively low cost of the volume is especially noteworthy.

A. H. T.

96[X].—W. L. WILSON, JR., "Operators for solution of discrete Dirichlet and Plateau problems over a regular triangular grid," May 1959, 29 cm., 191 p. Deposited in UMT File.

These tables list to 10D coefficients of a matrix operator for conversion of boundary values over an equilateral triangle to a discrete harmonic function over a regular triangular grid of 190 points in this triangle [1]. Sixty-three boundary values are involved, of which the three at the vertices do not influence the interior values of the function. The tables are useful in the approximate numerical solution of the Laplace equation over this triangular region.

Solutions for smaller triangles have been placed in the UMT File by the same author [2].

Also included are tables giving 10D coefficients of the analog of the Douglas functional over this same grid. Specifically, these are coefficients of a quadratic form (using scalar multiplication) of vector functions from the grid points of the bounding equilateral triangle to some euclidean space such that the value of the form is the Dirichlet integral

$$D = \frac{1}{2} \int (E + G) \, d\sigma$$

where E and G are coefficients of the first fundamental form of the surface got by linear interpolation of the discrete harmonic vectors resulting from application of the operator described above to the boundary values. This is a discrete analog of the functional used by J. Douglas [3] in his solution of the Problem of Plateau; it has application in the approximate numerical solution of that problem.

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1. L. V. KANTOROVICH & K. I. KRYLOV (translated by CURTIS D. BENSTER) *Approximate Methods of Higher Analysis*, Nordhoff, Gronigen, Interscience, New York, 1958, p. 187–188.
2. W. L. WILSON, JR., "Tables of inverses to Laplacian operators over triangular grids," UMT File, MTAC, No. 58, v. XI, 1957, p. 108.
3. J. DOUGLAS, "Solution of the problem of Plateau," Amer. Math. Soc. *Trans.*, v. 33, 1931, p. 263–321.

97[Z].—JACK BONNELL DENNIS, *Mathematical Programming and Electrical Networks*, John Wiley & Sons, Inc., New York, 1959, vi + 186 p., 24 cm. Price $4.50.

As the title indicates, the purpose of this little monograph is to explore the relationships of general programming problems and corresponding electrical networks, with a view towards gaining physical insight and developing computational algorithms. The contents of the book essentially comprise the author's doctoral