

the authors claim to emphasize. The prose, always undistinguished, is sometimes incomprehensible.

In summary, it is difficult to imagine for what kind of reader this book has been written; the beginning mathematician or engineer should be referred to standard textbooks on numerical analysis or hydrodynamics, few of which, by the way, he will find in the authors' short bibliography.

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21 [7].—CHIH-BING LING & JUNG LIN, *A Table of Sine Integral*  $\text{Si}(n\pi/2)$ , Virginia Polytechnic Institute and State University, Blacksburg, Virginia, and Tennessee Technological University, Cookeville, Tennessee, November 1970, ms. of ii + 4 pp. deposited in the UMT file.

The table announced in the title of this manuscript actually consists of 25D values of  $(2/\pi) \text{Si}(n\pi/2)$  for  $n = 1(1)200$ .

For values of  $n$  not exceeding 7, full accuracy to 25D was attained on an IBM 1620 computer by use of the standard power series for the sine integral. The corresponding asymptotic series sufficed to yield the desired accuracy for values of  $n$  exceeding 35. For the intermediate values of  $n$ , recourse was had to power-series evaluation on an IBM 360 system, using a multi-precision arithmetical package supplied by Dr. T. C. Ting.

As a partial check, the values of  $\text{Si}(m\pi)$  for  $m = 1(1)3$  were deduced and successfully compared with the corresponding 15D values in a W.P.A. table [1] of the sine and cosine integrals.

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1. W. P. A., NEW YORK MATHEMATICAL TABLES PROJECT, *Table of Sine, Cosine and Exponential Integrals*, v. 2, 1940, pp. 206–207.

22 [7].—T. S. MURTY, *Tables of the Conical Functions*  $K_p(x)$ , Marine Sciences Branch, Department of Energy, Mines and Resources, Ottawa, Ontario, Canada, ms. of 2 pp. + 120 computer sheets deposited in the UMT file.

The body of this manuscript consists of two tables: the first consists of 8S values of  $K_p(x)$ , or  $P_{-1/2+i_p}(x)$  in the standard notation of Legendre functions, for  $p = 0.1(0.1)10$  and  $x = 1(0.1)10$ ; the second gives 8S values of the zeros, the corresponding first derivatives, and the coordinates of the bend points of  $K_p(x)$ , for  $p = 0.9(0.1)10$ .

An introductory note briefly describes the formulas used in calculating these tables by double-precision computer arithmetic, thereby insuring complete accuracy of the final tabular data, according to the author.

These tables were calculated in connection with the theoretical determination of frequencies for an annular regime of liquid in rotating paraboloidal basins.

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