TABLE ERRATA

500.—MILTON ABRAMOWITZ & IRENE A. STEGUN, Editors, *Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables*, National Bureau of Standards, Applied Mathematics Series, No. 55, U. S. Government Printing Office, Washington, D. C., 1964, and all known reprints.

On p. 329, in Table 7.11 (Complex Zeros of Fresnel Integrals), terminal-digit corrections are necessary in the 4D values of x_3, x_4, y_3, y_5, y_1^*, and y_4^*.

These corrections are based upon a comparison of these data with 10-11D values of the roots as recently computed by the present authors, who extended their calculations to include the first hundred zeros to 10D (available from the authors on request).

The new values of the first five zeros are:

n	z_n: $C(z_n) = 0$	z_n: $S(z_n) = 0$
1	1.74366 74862 + 0.30573 506363i	2.00925 70118 + 0.28854 789733i
2	2.65145 95973 + 0.25290 395546i	2.83347 72325 + 0.24428 524077i
3	3.32035 93363 + 0.22395 345809i	3.46753 30835 + 0.21849 268049i
4	3.87573 44884 + 0.20474 747055i	4.00257 82433 + 0.20085 102506i
5	4.36106 35170 + 0.19066 973235i	4.47418 92952 + 0.18768 858914i

Furthermore, the asymptotic expressions at the end of the table are incorrect; they each require the addition of the quantity $\alpha^2/(8\lambda^{3/2})$ to the real part, where $\alpha = (2/\pi)\ln(\pi\lambda^{1/2})$, $\lambda = 4n - 1$ for x_n, and $\lambda = 4n$ for x_n^*. This correction can be obtained from the asymptotic estimate given by Kreyszig [1]; namely, $z_n^2 \sim \lambda - \alpha/\pi\lambda + i\alpha$, with α and λ as defined above, after expanding z_n by the binomial theorem and retaining only terms of order $\lambda^{-3/2}$ or lower.

HENRY E. FETTIS
JAMES C. CASLIN

Applied Mathematics Laboratory
Aerospace Research Laboratories
Wright-Patterson Air Force Base, Ohio 45433

1. E. O. KREYSZIG, "On the zeros of the Fresnel integrals," *Canad. J. Math.*, v. 9, 1957, pp. 118–131.

On p. 202, in Table 4.13 (Harmonic Analysis), a number of entries contain rounding errors. Thus, the 10D tabulated values of $\sin(2\pi r/s)$ should each be *increased* by a unit in the last decimal place for $s = 7$, $r = 1$; $s = 11$, $r = 1, 2, 4$; $s = 17$, $r = 3$; $s = 19$, $r = 3, 6$; $s = 21$, $r = 2$; $s = 22$, $r = 2, 3, 4, 7, 8, 9$; $s = 23$, $r = 1$. Also, the tabulated values of $\cos(2\pi r/s)$ should each be *numerically decreased* by

a unit in the last place for $s = 11$, $r = 4$; $s = 13$, $r = 2, 4$; $s = 19$, $r = 4$; $s = 22$, $r = 3, 8$; $s = 23$, $r = 1, 2, 4$; $s = 25$, $r = 2, 6, 9$.

H. H. DENMAN
B. D. EMAUS

Computer Sciences Department
Ford Motor Company
Dearborn, Michigan 48121

EDITORIAL NOTE: A partial check of these corrections has been made through comparison with corresponding entries in the 20D *Table of Cyclotomic Cosines* deposited in the UMT file by D. H. Lehmer (*MTAC*, v. 6, 1952, p. 102, UMT 145).