# TABLE ERRATA

**405.**—N. W. McLachlan, P. Humbert & L. Poli, *Supplément au Formulaire pour le Calcul symbolique*, Mémorial des Sciences Mathématiques, fasc. 113, Gathier-Villars, Paris, 1950.

On p. 16, in the fifth formula from the bottom, the right side should read

$$-\frac{1}{2} (\pi/2t)^{1/2} \int_0^\infty H_{1/4,1/2}(3x^{4/3}/4^{4/3}t^{1/3})f(x) \, dx.$$

This relation appears in correct form in P. Humbert, "Nouvelles correspondances symboliques," *Bull. Sci. Math.*, (2), v. 69, 1945, p. 121.

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**406.**—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., fourth printing, with corrections, December 1965.

On p. 744 the entries on lines 5, 6, 7, and 8 under the column headings indicated below should be replaced by the following comparative notations:

| line | [20.58] NBS | [20.59] Stratton-Morse, etc. | [20.36] Meixner and Schäfke |
|------|-------------|------------------------------|-----------------------------|
| 5 | $A^r Se_r(s, x)$ | $A_r Se_r^{(1)}(c, \cos x)$ | $ce_r(z, h^2)$ |
| 6 | $B^r So_r(s, x)$ | $B^r So_r^{(1)}(c, \cos x)$ | $se_r(z, h^2)$ |
| 7 | $A^r De_m{}^r(s)$ | $A^r D_m{}^r$ | no correction |
| 8 | $B^r Do_m{}^r(s)$ | $B^r F_m{}^r$ | no correction |

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This note is to clarify a discrepancy, correctly observed by H. E. Salzer (Math. of Comp., 20, 1966; p. 469, erratum 393), between the asymptotic formulas for the complex zeros of the error function erf($z$) as given by Laible [1], and as given in the NBS Handbook. The latter formula was obtained by the writer independently of Laible's work. Starting from the asymptotic expression $1 - \text{erf}(z) \sim \pi^{-1/2}z^{-1} \exp(-z^2)$, valid for large $|z|$, the writer employed a perturbation argument to find approximations to the complex zeros of $\exp(-z^2) = \pi^{1/2}z$. It appears that the formulas so obtained are slightly more accurate than Laible's formulas. If erf($z_n$) = 0, $z_n = x_n + iy_n$, and $x_n{}^a$, $y_n{}^a$ denote the approximate values of $x_n$, $y_n$, obtained from the respective asymptotic formulas, the table below displays the respective errors $d_n = x_n{}^a - x_n$, $e_n = y_n{}^a - y_n$ for $1 \leqq n \leqq 10$.

| $n$ | Laible $d_n$ | $e_n$ | Handbook $d_n$ | $e_n$ | $n$ | Laible $d_n$ | $e_n$ | Handbook $d_n$ | $e_n$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | .1311 | $-.1467$ | .0789 | $-.0945$ | 6 | .0523 | $-.0546$ | .0322 | $-.0344$ |
| 2 | .0910 | $-.0982$ | .0553 | $-.0625$ | 7 | .0485 | $-.0504$ | .0298 | $-.0317$ |
| 3 | .0741 | $-.0788$ | .0452 | $-.0499$ | 8 | .0453 | $-.0470$ | .0279 | $-.0296$ |
| 4 | .0641 | $-.0676$ | .0392 | $-.0427$ | 9 | .0428 | $-.0442$ | .0263 | $-.0278$ |
| 5 | .0573 | $-.0601$ | .0352 | $-.0379$ | 10 | .0406 | $-.0419$ | .0250 | $-.0263$ |

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1. T. LAIBLE, "Hökenkarte des Fehlerintegrals," *Z. Angew. Math. Phys.*, v. 2, 1951, pp. 484–486.