TABLE ERRATA


On p. 284, in formula (1) of Section 16.4, for \( \Gamma(\alpha + n + 1) \), read \( \Gamma(\alpha + 1) \).

This formula will then agree with the result of putting \( \rho = \alpha \) in formula (3), p. 284, and using Vandermonde's theorem [1] to sum the hypergeometric series \( _2F_1 \).

On p. 286, in formula (12) of Section 16.4, for \( \Gamma(\sigma - \beta + m + 1) \), read \( \Gamma(\sigma - \beta + m - n + 1) \). When \( \beta = 0 \), the resultant expression agrees with formula (13) of the same section. In the special case \( \sigma = \beta, m = n \), it agrees with certain special cases of formulae (5), (7), (10), (16), (17), and (20); when \( \sigma = \beta, m \neq n \), it gives the zero result of formula (9).

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In formula 7.391 (3), for \( \Gamma(\alpha + n + 1) \) read \( \Gamma(\alpha + 1) \).

In formula 7.391 (9), for \( \Gamma(\sigma - \beta + m + 1) \) read \( \Gamma(\sigma - \beta + m - n + 1) \).

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Equation 10.4.76, p. 449, should read

\[
(M^2)^{'''} + 4x(M^2)'' + 2M^2 = 0.
\]

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536.—ALBERT EAGLE, The Elliptic Functions as They Should Be, Galloway & Porter, Ltd., Cambridge, 1958.

Table I in Supplement B, pp. 476–479, has been completely checked by a calculation briefly described in [1].

A total of 24 last-figure corrections are required in the values of the modulus \( k \) as a function of the period-ratio \( \mu = K'/K \); namely, increase \( k \) by a final unit when \( \mu = 1.30, 1.32, 1.36, 1.52, 1.54, 1.82, 1.92, 1.94, 1.96, 1.98, 2.04, 2.14, 2.20, 2.24, 2.32, 2.34, 2.36, 2.40, 2.80, 2.84, 2.88; decrease by a unit when \( \mu = 1.18, 1.78, 2.96 \).

The following 21 last-figure corrections are required in the complementary
TABLE ERRATA

modulus $k'$: increase by a final unit when $\mu = 1.06, 1.74, 1.80, 1.88, 1.90, 2.00, 2.02, 2.04, 2.06, 2.20, 2.44, 3.20$; decrease by a similar amount when $1.16, 1.36, 1.38, 1.50, 1.52, 1.58, 1.94, 2.60$.

Twenty corrections are required for the complete elliptic integral of the first kind, $K$; namely, increase the final digit by a unit when $\mu = 1.26, 1.38, 1.60, 1.62, 1.64, 1.70, 1.94, 2.38, 2.76$; decrease by a like amount when $\mu = 1.02, 1.46, 1.76, 1.88, 1.98, 2.02, 2.24, 2.44, 3.25, 3.40$; and for 914, read 194 when $\mu = 1.04$.

Thirty-three corrections are required for the associated complete elliptic integral of the first kind, $K'$. Of these, 28 are of a unit in the last place; namely, increase by that amount when $\mu = 1.06, 1.26, 1.52, 1.60, 1.62, 1.64, 1.68, 1.70, 2.38, 2.50, 2.62, 2.82, 3.50$; decrease when $\mu = 1.14, 1.56, 1.78, 1.88, 1.90, 2.00, 2.02, 2.20, 2.22, 2.26, 2.28, 2.44, 3.20, 3.25, 3.35$. The remaining corrections are as follows: increase by two final units when $\mu = 1.72$; decrease by three units when $\mu = 1.76$; decrease by six units when $\mu = 1.74$; when $\mu = 2.58$, for 476 read 576; and when $\mu = 2.64$, for 410 read 511.

The 18 values of $k$ and $k'$ as functions of $\mu$ in Table 3.31, p. 76 were found to be free from error.

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A complete check of Table II, pp. 171–173, revealed a total of 78 terminal-digit errors (none exceeding a unit) of which 70 are new.

In addition to the eight errors noted by Gerber [1], the values of $j_{0,s}$ are too low by a final unit when $s = 105, 115,$ and 145.

Of the 150 tabulated values of $j_{1,s}$ a total of 38 require correction in the last place. Thus, increase the values of $j_{1,s}$ each by a final unit for $s = 56, 57, 58, 64, 66, 70, 74, 76, 87, 90, 93, 94, 96, 98, 103, 106, 113, 115, 119, 134, 135, 136, 142, 146, and 147, and decrease by a similar amount for $s = 61, 69, 72, 78, 82, 83, 91, 92, 101, 128, 137, 140, and 141.

The following 20 corrections are required in the values of $J_1(j_{0,s})$: increase by a final unit for $s = 2$ and 94, and decrease by the same amount for $s = 34, 35, 43, 46, 54, 60, 73, 82, 88, 102, 105, 110, 125, 127, 133, 134, 140, and 148.

Similarly, for $J_0(j_{1,s})$ increase by a final unit when $s = 90$, and decrease by a similar amount when $s = 54, 80, 94, 98, 99, 109, 113,$ and 126.

The first 100 zeros $j_{0,s}$ were checked against the table in [1] and the remaining values of $j_{0,s}$ were computed from the first five terms of Mc Mahon's expansion. The first five values of $j_{1,s}$ were checked by using a table of Luke [2, p. 233], and the remainder were computed from the first eight terms of the appropriate Mc Mahon expansion.

The values of $J_1(j_{0,s})$ and $J_0(j_{1,s})$ were calculated to 15S by means of a PI/I version of BESLRI [3].

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On p. 775, in the sixth line of the text, *for $3^{2·5·7}$, read $3^{2·5·7}p$ ($11 \leq p \leq 41$)*, and at the end of the eleventh line, *for $3^{4·5·13}$, read $3^{4·5·13}p$ ($17 \leq p \leq 23$)*.

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