

Table II (pp. 106–269) lists 8S values of the same four functions, again with second differences in both arguments, for  $\beta = 3(0.02)4$ ,  $x = 2.5(0.1)10$ .

Table III (pp. 272–313) lists 8S values of the products of the same four functions by  $A(\beta, x) = (2x)^{3/2-\beta} \Gamma(\beta)$ , with second differences in both arguments, for  $\beta = 3(0.05)4$ ,  $x = 10(0.1)15$ . In the sub-title on p. 271, for  $\rho$  read  $\beta$ .

Table IV (pp. 316–318) lists 9S values of  $A(\beta, x)$ , without differences, for  $\beta = 3(0.05)4$ ,  $x = 10(0.1)15$ .

There is also (pp. 320–321) an 8D table of Everett interpolation coefficients, without differences, at interval 0.001.

ALAN FLETCHER

1. J. C. P. MILLER, "Note on the general solution of the confluent hypergeometric equation," *MTAC.*, v. 11, 1957, pp. 97–99.

2. A. ERDÉLYI, W. MAGNUS, F. OBERHETTINGER & F. G. TRICOMI, *Higher Transcendental Functions*, Vol. 1, McGraw-Hill, New York, 1953.

3. LUCY J. SLATER, *Confluent Hypergeometric Functions*, Cambridge University Press, Cambridge, 1960.

27[I, M].—J. E. KILPATRICK, SHIGETOSHI KATSURA & YUJI INOUE, *Tables of Integrals of Products of Bessel Functions*, Rice University, Houston, Texas and Tōhoku University, Sendai, Japan, 1966, ms. of 55 typewritten sheets deposited in the UMT file.

This unpublished report tabulates the integral

$$A \int_0^\infty t^\alpha J_{3/2+n_1}(at) J_{3/2+n_2}(bt) J_{3/2+n_3}(ct) f(t) dt$$

for the following cases: (1)  $A = 4(2\pi)^{1/2}$ ,  $\alpha = -5/2$ ,  $f(t) = 1$ ,  $a = b = c = 1$ , and  $n_i$  are nonnegative integers  $\leq 20$  such that  $n_1 + n_2 + n_3$  is even; (2)  $A = 2\pi$ ,  $\alpha = -4$ ,  $f(t) = J_{3/2+n_4}(t)$ ,  $a = b = c = 1$ , and  $n_i$  are nonnegative integers  $\leq 10$  such that  $n_1 + n_2 + n_3 + n_4$  is even; (3) same as the case (1) except that  $a, b$ , and  $c$  equal 1 or 2, and  $n_i \leq 16$ .

Although the tabulated data are given to 16S (in floating-point form), they are generally not that accurate. A short table of the estimated accuracy (6 to 14S), which depends on the maximum value of the integers  $n_i$ , is given on p. 3. For some entries the exact value of the integral, as a rational number or as a rational multiple of  $\sqrt{2}$ , is also given (pp. 10, 27, and 55).

The integrals were evaluated by transforming them into Mellin-Barnes integrals and then applying the calculus of residues. As a by-product of these calculations the authors include a 16S table of  $\ln [(-1)^s/(-s)!]$  for  $s = -25(1)0$  and of  $\ln \Gamma(s)$  for  $s = -24.5(1)0.5(0.5)45$ . A spot check revealed that several entries are accurate to only 14S.

Integrals of the type evaluated in this report have also been considered by this reviewer [1].

Y. L. L.

1. Y. L. LUKE, *Integrals of Bessel Functions*, McGraw-Hill, New York, 1962, pp. 331–332.

28[K, L].—L. S. BARK, L. N. BOL'SHEV, P. I. KUZNETSOV & A. P. CHERENKOV, *Tablitsy raspredeleniya Releia-Raissa (Tables of the Rayleigh-Rice Distribution)*,