$Y_p(\alpha)J_q(k\alpha) = 0$ is derived in Appendix 2. Two supplementary tables are included therein. The first table consists of floating-point 14S approximations to the first 20 coefficients in the asymptotic expansion of the phase angle of the Hankel function $H_p^{(1)}(x) = J_p(x) + iY_p(x)$ when $p = 0$ and 1. The second table gives floating-point 15S values of the coefficients of the first 15 partial quotients in the continued-fraction expansion of $H_0^{(1)}(x)$ and $H_1^{(1)}(x)$. This expansion was used by the authors in their evaluation of the Bessel functions $J_p(x)$, $Y_p(x)(p = 0, 1)$ for x exceeding 5; otherwise the standard power series were used.

An insert sheet clarifies a number of illegibly printed tabular entries and corrects one erroneous table title (on p. 79).

These extensive tables constitute a significant contribution to the relatively limited tabular literature relating to this class of transcendental equations.

J. W. W.

1. B. P. Bogert, "Some roots of an equation involving Bessel functions," *J. Math. and Phys.*, v. 30, 1951, pp. 102–105.
2. M. Abramowitz & I. A. Stegun, Editors, *Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables*, National Bureau of Standards, Applied Mathematics Series No. 55, Washington, D. C., 1964.
3. *Math. Comp.*, v. 20, 1966, pp. 469–470, MTE **393**.
4. H. F. Bauer, "Tables of zeros of cross product Bessel functions $J_p'(\xi)Y_p'(k\xi) - J_p'(k\xi)Y_p'(\xi) = 0$," *Math. Comp.*, v. 18, 1964, pp. 128–135.

65[L].—Henry E. Fettis & James C. Caslin, *Jacobian Elliptic Functions for Complex Arguments*, ms. of 75 computer sheets deposited in the UMT file.

These tables of the Jacobian elliptic functions $\mathrm{sn}(u + iv)$, $\mathrm{cn}(u + iv)$, and $\mathrm{dn}(u + iv)$ consist of 5D values of these functions for the ranges $u/K = 0(0.1)1$, $v/K' = 0(0.1)1$, and $\sin^{-1}k = 5°(5°)80°(1°)89°$, where K and K' represent the complete elliptic integral of the first kind for modulus k and complementary modulus k', respectively.

These tabular data resulted from a test run of an IBM 1620 subroutine prepared by the authors.

Entries corresponding to a given function and a prescribed value of $\sin^{-1}k$ are arranged on a single page of computer output. No provision has been made for interpolation in the tables. Beneath the heading of each page appears a 7D approximation to the Jacobi nome, $q = \exp(-\pi K'/K)$, for the corresponding value of k.

These new tables supplement both in precision and in range the published tables of Henderson [1].

J. W. W.

1. F. M. Henderson, *Elliptic Functions with Complex Arguments*, The University of Michigan Press, Ann Arbor, 1960. [See *Math. Comp.*, v. 15, 1961, pp. 95–96, RMT **18**.]

66[L].—M. I. Zhurina & L. N. Karmazina, *Tables and Formulae for the Spherical Functions* $P^m_{-1/2+i\tau}(z)$, Pergamon Press, New York, 1966, vii + 107 pp., 26 cm. Price $3.50.

This is an English translation of the Russian edition previously reviewed in these annals (*Math. Comp.*, v. 18, pp. 521–522, 1964, item b). The former reviewer noted a major error in the table for arc cosh x at $x = 11$ where final 689 should read 699. This error is retained in the English translation. The previous reviewer