

data are recorded in Table V. Further description of the contents of Tables IV–V requires much more space and so is omitted here. Suffice it to say that with the aid of these tables, the entries in Tables I–III can with a few exceptions be evaluated to at least eight significant figures for $20 \leq n < \infty$, $1 \leq s < \infty$.

There is a good set of references. The printing and typography are excellent, and the present volume upholds the eminent tradition of British table-makers.

Y. L. L.

51[L, V].—J. W. MILES, "The hydrodynamic stability of a thin film of liquid in uniform shearing motion," *J. Fluid Mech.* 8, Pt. 4, 1960, p. 593–610. (Tables were computed by David Giedt.)

Let

$$\mathfrak{F}(z) = [1 - F(z)]^{-1} = w [A_i'(-w)]^{-1} \left[\frac{1}{3} + \int_0^w A_i(-t) dt \right], \quad w = ze^{i\pi/6}.$$

$$\mathfrak{F}'(z) = z^{-1}\mathfrak{F}(z) + we^{i\pi/6}[A_i'(-w)]^{-1}A_i(-w)[1 - \mathfrak{F}(z)].$$

$$\mathfrak{F}^{(k)}(z) = \mathfrak{F}_r^{(k)}(z) + i\mathfrak{F}_i^{(k)}(z), \quad k = 0, 1; \quad F(z) = Fr(z) + iFi(z).$$

The paper contains tables of $\mathfrak{F}(z)$, $\mathfrak{F}'(z)$, $F(z)$ and $z^3F_i(z)$ for $z = -6(.1)10, 4S$. The tables were obtained on an automatic computer by numerical integration of an appropriate differential equation. It can be seen from the above that the tables depend on values of the Airy integral $A_i(z)$, its derivative and integral along the rays $\pi/6$ and $-5\pi/6$ in the complex plane. Tables of $A_i(z)$ and its derivative are now available for complex z in rectangular form, but not in polar form. Also, tables of $\int_0^z A_i(\pm t) dt$ are available for z real. Thus, the given tables depend on values of some basic functions which, if available, would cut new ground. Unfortunately, the basic items were swallowed up in the automatic computation of $F(z)$. We have here a poor example of table making,—a practice which should not be emulated.

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52[P].—HELMUT HOTES (Compiler), *Wasserdampf tafel der Allgemeinen Elektrizitäts-Gesellschaft*, R. Oldenbourg, Munich, 1960, 48 p., 30 cm. DM 16 (Paperback).

There are two tables in this collection. Table I is a four-place table giving the temperature, the specific volume, the specific enthalpy, and the specific entropy as functions of the absolute pressure p . The last three dependent variables are given both for the fluid state and the gaseous state. The variable p ranges from 0.010 to 225,650 atmospheres, and the interval varies from 0.001 to 2000. Table II gives the specific volume, specific enthalpy and specific entropy as functions of temperature for constant pressure. Here p has the values 1, 5, 10 (10) to 400 atmospheres, and t varies from 0 (10) to 330 degrees centigrade.

The tables were calculated by expressing each of the dependent variables as polynomials in the pressure with coefficients as functions of the temperature or in some cases functions of the temperature and pressure. The error bounds given by