1. R. A. Fisher, "The general sampling distribution of the multiple correlation," *Proc. Roy. Soc., A.*, 1928, p. 654–673. See p. 665.

81[K].—G. J. Lieberman, "Tables for one-sided statistical tolerance limits," *Industrial Quality Control*, v. 14, No. 10, 1958, p. 7–9.

Given a sample of n from $N(\mu, \sigma^2)$, it is desired to determine from the sample a quantity a (or b) such that with probability γ, the interval $(-\infty, a)$ (or the interval (b, ∞)) will include at least the fraction $1 - \alpha$ of the population. The tables give values of K to 3D for $n = 3(1)25(5)50$, $\gamma = .75, .9, .95, .99$, and $\alpha = .25, .1, .05, .01, .001$, such that $a = \bar{X} - Ks$ and $b = \bar{X} - Ks$, where X is the sample mean and S^2 is the usual unbiased estimate of σ^2. For more extensive tables and a more complete discussion see [1].

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1. D. B. Owen, *Tables of Factors for One-sided Tolerance Limits for a Normal Distribution*, Office of Technical Services, Dept. of Commerce, Washington, D. C., 1958. [See RMT 82.]

82[K].—D. B. Owen, *Tables of Factors for One-sided Tolerance Limits for a Normal Distribution*, Sandia Corporation, SCR-13, 1958, 131 p., 28 cm. Obtainable from the Office of Technical Services, Dept. of Commerce, Washington 25, D. C. Price $2.75.

Given a sample of n from $N(\mu, \sigma^2)$, with $\bar{x}$ the sample mean and S^2 the usual unbiased estimate of σ^2, these tables give values of k for which

$$\Pr[\Pr(x \leqq \bar{x} + ks) \geqq P] = \gamma.$$

As stated, Table I is a reproduction of one given by Johnson & Welch [1] in which values of k are given to 3D for $\gamma = .95$, $n = 5(1)10, 17, 37, 145, \infty$ and $P = 0.7(.05).85, .875, .9, .935, .95, .96, .975, .99, .995, .996, .9975, .999, .9995$. It is also explained that Table II was obtained from Resnikoff & Lieberman's table of percentage points of the noncentral t-distribution [2] appropriately modified to give k values to 3D for $n = 3(1)25(5)50, \infty$ and $P = .75, .85, .9, .935, .96, .975, .99, .996, .9975, .999$ for $\gamma = .75, .9, .95$. For $\gamma = .99, .995$, $n = 6(1)25(5)50, \infty$, while P has the same range as before. The more extensive Table III gives values to 5D obtained by an approximative method due to Wallis [3] for $n = 2(1)200(5)400(25)1000, \infty$, $P = .7, .8, .9, .95, .99, .999$, and $\gamma = .7, .8, .9, .95, .99, .999$. For small n and the larger values of P and γ, the approximation breaks down and the entry is left blank or given with a warning sign that comparison should be made with neighboring values. (However it looks to the reviewer as if this sign has been omitted from the entries for $n = 2$, $P = .99, .999$, and $\gamma = .999$.) Finally Table IV is obtained from Bowker's table of two-sided tolerance limits [3] by an approximate procedure suggested by McClung [4] to give conservative values of k for one-sided limits. Here values are given to 3D for $n = 2(1)102(2)180(5)300(10)400(25)750(50)1000, \infty$, $P = .875, .95, .975, .995, .9995$, and $\gamma = .75, .9, .99$.

In an appendix auxiliary tables compare values in the four tables for selected values of the four parameters. The maximum difference shown between Tables I and II is .01. It is concluded that values in Table III will probably be underesti-