

## **The Slide Rule and How To Use It, Sommers et al., 1943**

As to intended audience, the Preface states that the book has been designed as teaching material, "...for the training of technical workers and junior engineers, and altho (sic) the authors assume that the student beginning the slide rule has had the equivalent of two years of high school mathematics, including a year of algebra, the basal propositions of plane geometry and a knowledge of the simple rules of mensuration, a continuous review of the above material accompanies the introduction of the various scales of the slide rule." The book is intended as a "text-work book" classroom tool, in a variety of settings as described by the authors but not particularly as an aid for self-study.

There is no theory in this text, either with respect to how a slide rule works (well, maybe a sentence or two, here and there), or in the exercises and problems used in the chapters. The book is designed as a 'text-work book' in which the information is presented in small segments, then followed by a 'workbook' page of problems which may be completed by the student, removed from the book and graded by the instructor. All the problems are simple algebraic or purely numeric in nature; no applied or practical problems are included.

The book came with one of the infamous Lawrence Engineering Service 'Deluxe' 10-B wooden slide rules, with its simple A [B, CI, C] D, K, scale set. The rule is of the usual Lawrence quality and useful only as an artifact of the times. Although they are not included on this rule, the text discusses and provides exercises for the use of the S, T, L, CF, DF, CIF, and Log Log scales.

The book includes a table of 5-place logarithms and a table of 5-place trig (sin, cos, tan) functions. Answers to all the problems in the book are provided. There is no index.

Overall, this book provides a simple, non-threatening, and easy-to-understand set of instructions on how to read and use a slide rule for a surprisingly wide range of mathematical operations (considering the limitations of the rule that is packaged with the text). A very large number of exercises are provided for student understanding and practice.