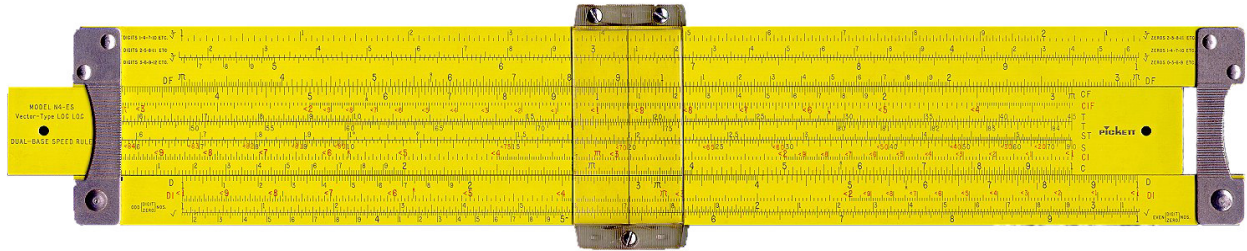


Maintaining Sharp Instincts



Pickett Model N4-ES

Engineers educated before the early 1970's used slide rules rather than electronic calculators (or personal computers). Few, if any would return to the slide rule, but most will admit one advantage of working problems the old-fashioned way.

Slide rules do not supply the decimal point of a calculational result. When multiplying 0.854 times 0.344 on a slide rule, it is up to the user to develop a feel that the answer is about 0.3 – not 0.03. Students were expected to estimate a calculation's order of magnitude, and to develop a feel for numerical problems.

Electronic calculators and digital computers can create a false sense of security with their precise-looking results. These results must be tested by intuitive judgement and common sense. In the same manner, personal computer spreadsheet (and other) models must be validated, to make sure that results are being calculated as the user intended.

Author Unknown