substantially, linear to 130 kilobars). For higher pressures the fractional change of pressure (from 100 kilobars) versus fractional change in applied pressure is shown in Table I. This was obtained by taking the fractional change in pressure with the fractional change in applied force from the x-ray data to 400 kilobars and extrapolating primarily by assuming the relative pressure is a linear function of the logarithm of the relative applied force at pressures above 400 kilobars. (This condition holds quite well in the range 300-400 kilobars.) Typical curves for the old and new calibration appear in Fig. 1, and the low pressure region is expanded in Fig. 2. The absolute values vary from bar to bar of pyrophyllite, and with the machining and loading technique of the operator. Ranges are indicated in Fig. 1. From a single six inch bar of pyrophyllite sufficient pellets can be made for half a dozen low pressure calibrations and high pressure runs.

In Table II appear the "old" and "new" pressures obtained from typical calibration curves for a number of transitions. These are not presented as standards. It is of interest to note that the transitions in the low pressure region generally agree reasonably well with recent values obtained in other laboratories.