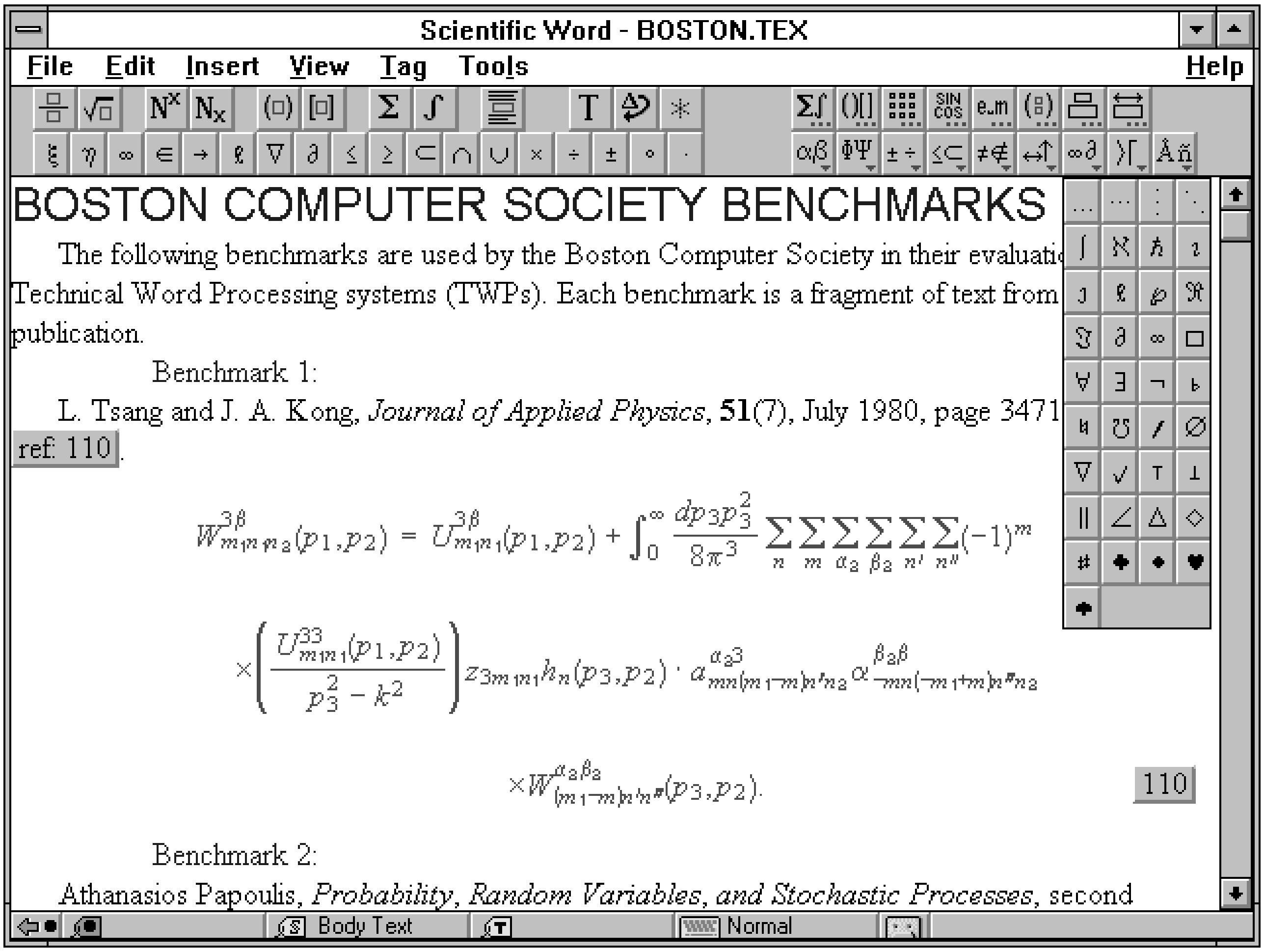

BOSTON COMPUTER SOCIETY BENCHMARKS

The following benchmarks are used by the Boston Computer Society in their evaluati
Technical Word Processing systems (TWPs). Each benchmark is a fragment of text from
publication.

Benchmark 1:

L. Tsang and J. A. Kong, *Journal of Applied Physics*, **51**(7), July 1980, page 3471
ref: 110.

$$W^{3\beta}_{m_1 n n_2}(p_1,p_2) = U^{3\beta}_{m_1 n_1}(p_1,p_2) + \int_0^\infty \frac{dp_3 p_3^2}{8\pi^3} \sum_n \sum_m \sum_{\alpha_2} \sum_{\beta_2} \sum_{n'} \sum_{n''} (-1)^m$$

$$\times \left(\frac{U^{33}_{m_1 n_1}(p_1,p_2)}{p_3^2 - k^2} \right) z_{3 m_1 n_1} h_n(p_3,p_2) \cdot a^{\alpha_2 3}_{mn(m_1-m)n'n_2} \alpha^{\beta_2 \beta}_{-mn(-m_1+m)n''n_2}$$

$$\times W^{\alpha_2 \beta_2}_{(m_1-m)n'n''}(p_3,p_2). \qquad 110$$

Benchmark 2:

Athanasios Papoulis, *Probability, Random Variables, and Stochastic Processes*, second