



Fig 2. PCT substitute for feedforward. A change in the velocity reference signal goes through the comparator and output function of upper controller, increasing the reference signal for acceleration before the velocity has begun to change. The lower acceleration control system makes the load accelerate rapidly at first, then less rapidly as the velocity error decreases. The effect is the same as if there were a feedforward path that sensed the rate of change of the reference signal as in Fig. 1. See Demo 5-1 in LCS3.

Note that the acceleration sensor can be located anywhere in the mass (for example tendons, vestibular sensors).