

sponse time of the oscilloscopes in use (85 MHz frequency response).

The geometrical tilt required is thus a function of projectile velocity and varies between 0.2 mrad at a projectile velocity v of 0.1 mm/ μ sec to 2.0 mrad at $v=1.0$ mm/ μ sec.

Our experience to date shows that, with a few exceptions probably attributable to errors in initial alignment or to faulty target construction, the tilts achieved are frequently 0.1 to 0.2 mrad and are consistently below 0.5 mrad. This degree of tilt could arise solely from the allowed clearance (7.6 to 8.9×10^{-3} cm) between the projectile and the barrel. Thus the tilt is adequate for most experiments and, where it is demanded by an unusual experiment, improvements in tilt can probably be achieved with tighter fitting or longer projectiles.

* Research sponsored by the U. S. Air Force Office of Scientific Research (ARPA) under Contract No. F44620-67-C-0087.

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¹ Assistance with the design and construction was provided by Utah Research and Development Co., Salt Lake City, Utah. The barrel and breeches were machined by Clark & Wheeler Engineering Co., Paramount, Calif.

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