Ballistic Trajectory Timer

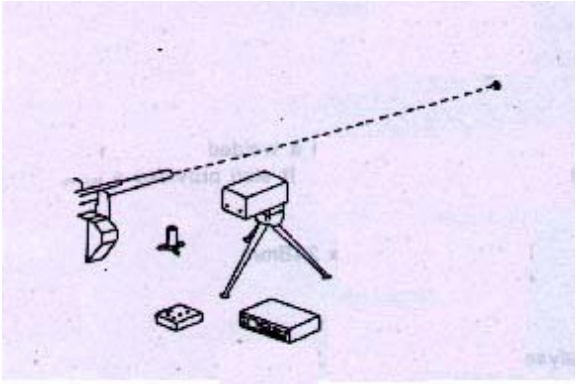
The Ballistic Trajectory Timer has been developed by SABRE Ballistics from an earlier Milligan design. It is designed to measure the time of flight of a projectile from muzzle exit until it detonates.

The equipment is portable and sufficiently robust to withstand the rough conditions encountered on proof ranges in different parts of the world.

The time interval between the projectile leaving the muzzle of the gun and the explosion of the charge in the projectile is measured on a SABRE Ballistics Field Portable Chronometer or Velocity and Firing Rate Analyser. The chronometer is started by a pulse from a Solid State Blast Switch when the projectile leaves the muzzle of the gun and is stopped by a Long Range Flash Sensor, which senses the flash of the explosive charge of the projectile.

Generally the Ballistic Timer is used on ranges which may be 20K, or more, in length. The range of the Stop Optical Transducer depends upon the ambient light and is typically 7 km. To convey the stop signal back to the Amplifier Junction Box, cables may be used but it is usually preferable to use the VHF Radio Link, which has been specifically designed for this purpose.

When configured for this application, the SABRE Chronometer includes a stop signal blocking arrangement so that spurious events such as muzzle flash do not prematurely terminate the time measurement. The system includes facilities for display and print out of results.



ROBUST

EASY TO SET UP

OPTIONAL LONG RANGE RADIO LINK

FIELD PORTABLE CHRONOMETER

SABRE Ballistics

The Village, Caterham Barracks, Coulsdon Road, Caterham, Surrey CR3 5QX UK Tel:+44(0)1883 33 22 00 Fax:44(0)1883 33 22 10
Web:sabreballistics.com Email:info@sabreballistics.com