Doppler Radar Muzzle Velocity System

The SABRE Doppler Radar Muzzle Velocity System is a compact portable system for all calibres of weapons including small arms up to base bleed ammunition, including discarding sabot and tracer types. It designed for fitting on weapons or tripod mounting.

The system consists of an X Band planar Antenna Unit, Display Unit and connecting cables. The Antenna has shock mountings and may be fitted onto weapons, even in a Naval environment.

The system is designed to measure the muzzle velocity from measurements of velocity in the first part of the trajectory. Measurement of velocity and deceleration of the projectile is used to predict the actual velocity at the muzzle. Figures for trend (predicted MV for next shot) and figure of merit of the measurement are also recorded in the Display Unit.

The system may be attached to a Fire Control system via factory selectable RS232, 422 or 485 interfaces.

Further processing of the radar data is possible using an attached PC. The following basic data is then available: velocity versus time; acceleration versus time; velocity and acceleration versus distance; raw Doppler signal; signal strength versus time. In addition, graphics and tabular print out with waterfall plots are possible.

Special to type brackets may be required to fit directly onto weapons. SABRE is pleased to assist in this.



MEASURES ALL CALIBRES

EASILY FITTED ON GUNS OR TRIPOD

RUGGED AND COMPACT SYSTEM

X BAND SYSTEM

FIRE CONTROL / PC INTERFACE

