

SABRE Fragment Velocity Analyser

The SABRE Ballistics Fragment Velocity Analyser is an economical and highly practical system for measuring the velocity distribution of fragments emitted by shell and bombs.

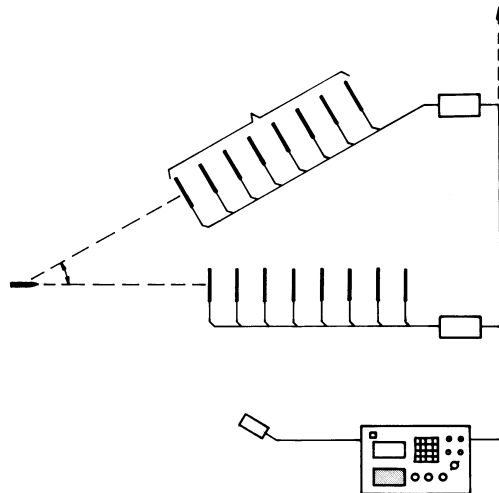
The system consists of a portable microcomputer based Control Unit which can be battery or mains powered. The Control Unit is connected via a single common cable to Target Processor Units which in turn connect directly to the velocity screens. Foil or printed circuit screens are normally used.

The Target Processor which performs the timing function required to determine fragment velocity, stores and transmits this information serially to the control unit. The Target Processor Unit is housed in a small cylindrical container which is readily protected and may be located relatively close to the experiment. As a consequence, cable requirements are kept to a minimum and the system is quickly set up.

A version of SABRE's Integrated Range Instrumentation System (IRIS) is used as the control unit. It is Pentium PC based and features a graphic display, printer and keyboard so that details of the geometry (distances and angles) of a particular experiment may be conveniently and simply entered together with the total number of Target Processors in use. In addition, the date and trial numbers are entered at the start of every session. When a new experimental arrangement is required, it may be recorded as a new configuration.

The shell burst event is detected by an optical flash detector which connects directly to the Control Unit.

Following a shell burst, the velocities are recorded at the various distances and angles are displayed and plotted. Other statistical data and histograms could be displayed/printed.



COST EFFECTIVE SYSTEM

RUGGED AND LOW COST SENSORS

SIMPLE INSTALLATION

BATTERY / MAINS OPERATION

STRAIGHTFORWARD TO OPERATE

SABRE
Ballistics