



## RANGE CONTROL SYSTEM (RCS)

Meggitt's Range Control System (RCS) is a user-friendly computer command system. Providing simple target instructions selected from drop-down menus or keyboard commands, the RCS affords the operator a high level of situational awareness. The RCS' main window displays a graphical representation of up to 500 targets specific to the range layout using different symbols to depict each target type. Target status is conveyed in real time by the color of the target symbol, with device status messages displayed in a ribbon at the bottom of the screen.

Providing complete support for both manual and automatic control of the firing range, RCS programs automate complex or repetitive range and target control operations in time or event-driven scenarios. Commands can be simple, such as executing basic positioning and timed expose and conceal functions; or complex, including the employment of subroutines, jumps, cyclical execution and stepped execution. In addition, sections of programs can be skipped, repeated, or executed individually to provide customized training solutions to fit the operator's requirements.

### Single or Group Targets

Meggitt's RCS can designate up to 100 individual targets to become part of a group, acting individually or as a collective unit. The target actuators retain individual addresses so they can act individually or in concert with the group. Individual target attributes including hit sensitivity, hits to kill, hit reaction, hit-fall, hit-hold or hit-bob, all set via the RCS. Utilizing state of the art range control via Windows® based software, the RCS commands and controls all aspects of the system, including effects simulators.

### Hit Recording

Remotely set from the RCS, Meggitt's target systems are equipped with impact hit sensors attached to the target holder. The heightened responsiveness of the sensor allows consistency based on the ammunition being fired and mode of fire (single or burst). The RCS provides data collection and storage from the hit detection system for range personnel, allowing development of After Action Reviews (AAR). The data collected for each firing exercise is immediately available and can be transferred to an AAR computer. This real-time data allows range operators to make adjustments and correct the performance of their users, enhancing and improving the overall training experience.

### Virtual Devices

Battlefield effect simulators and target operations may be synchronized by the RCS, including the Armor Target Kill Simulator (ATKS); Muzzle Flash Simulator (MFS); Rifle Fire Simulator (RFS); Hostile Fire Simulator (HFS); Battlefield Effects Simulator (BES); Sound Effects Simulators (SES); and MILES Shoot-Back Device (MSD).

## Ruggedized Laptop

The Rugged Portable Laptop provides lightweight, convenient control of range operation, independent of a Range Control Computer (RCC) located inside a range control facility. The laptop converts from a powerful notebook PC with a backlit keyboard to a convenient tablet PC with one quick swivel of the monitor. The touchscreen display can be used in direct sunlight and communicates wirelessly to the individual range targets.

## Software Design

Utilizing the latest industry technologies, the system is a user friendly UI that runs on static, mobile and handheld platforms. WPF technology is easily adapted across a variety of screen sizes, accommodating both desktop and handheld systems. Software has been fielded on multi-screen desktops, laptops and tablet PCs, with prominent icons to help the operator identify the target and range status.

Desktop Specifications	
Specification	Value
Software	Windows® 10 Professional
CPU	Intel® Core i5 Processor or equivalent
Memory and Storage	4GB SDRAM (DDR3), 500GB hard drive
Display Size	24" screen
Display Resolution	1920 x 1200
Interface	VGA, Serial, USB, 10/100/1000 Ethernet, Wi-Fi
Power Supply	AC power and uninterruptable power supply backup
Temperature	41°F (5°C) to +95°F (+35°C) operation (must be controlled climate)
Panasonic Toughbook Specifications	
Specification	Value
Software / CPU	Windows® 10 Professional with Intel® processor
Display Size and Resolution	10.1" (25.6cm) XGA, sunlight viewable, touchscreen, 1024 x 768
Power Supply	Lithium ion, AC adapter
Battery Operation	10 hours (on-board battery only – time extended with use of external battery backpack)
Dual Battery	External backpack battery (additional 9 hours run-time or allows hot-swap of battery)
AC Adapter	100V – 240V 50/60Hz, auto sensing/switching worldwide power supply
Dimensions	8.5" L x 10.7" W x 1.9" H or 21.6 cm L x 27.2 cm W x 4.8 cm H
Weight	5.1 lbs (2.3 kg)
Watertight	IP65 compliant
Temperature	-20°F (-29°C) to +140°F (+60°C) operation -40°F (-40°C) to +140°F (+60°C) storage