# RBC-A2 ROCKET BALLISTIC COMPUTER

# **MAIN CHARACTERISTICS**

The **Rocket Ballistics Computer RBC-A3** provides automated firing elements computation, and display capabilities for the 107 mm, and 122 mm rockets for MLRS. It is a handheld, lightweight, battery powered unit capable of rapidly computing ballistic trajectories and firing elements for rockets. The hardware is a ruggedized tablet. It is equipped with integrated GPS, blue tooth, Wi-Fi and WWAN 2G,3G, 4G/LTE. The display screen is an 8" VGA ( 1280 x 800 pixel) capacitive multi-touch sunlight readable, 600 nits. Objects displayed on the screen may be selected, opened, launched, or depressed by tapping directly on the screen with the finger or stylus. The computer operates in environmental extreme conditions and in the electromagnetic environment.

#### SOFTWARE CHARACTERISTICS

- Calculate firing data (deflection, elevation) for the 107 mm M63 rocket and 122 mm rocket based on five DoF and modified point mass model.
- Any weapon and ammunition of these calibers with known characteristics can be implemented.
- Simplicity of operation a little training is needed.
- Support both NA TO (6400 mils) and Russian (6000 mils) sight units.
- Accept grid coordinates (Geodetic, UTM, MGRS), local coordinates (polar, cylindrical shift).
- Capability of storing data for 6 weapons, two observers, commander, 20 targets, known points, protected areas and crests.
- Capabllity of storing and/or changing stored data in files.
- Capabllity of storing ballistic data for different ammunition.
- Computation time in the most complex situation is less than 5 sec.
- Position determination by built in GNSS receiver.
- Firing data accurate to within 5 m in both range and lateral direction.
- Graphical presentation of combat deployment on plain map, on Google map or user supplied map (optional).
- · Accepting different types of meteorological data standard, and real ground and altitude data.
- Supporting of various mission types and various sheaves.
- Corrections (adjustment) of fire (up to 10).
- Calculation of maxima! ordinate and impact point characteristics.
- Checking violation of crest and protected areas and mechanical limitations.
- Program can be upgraded easily with any known rocket ballistic data, or existing firing tables.
- · Menus are written in English, but other languages with Latin alphabet can be implemented.

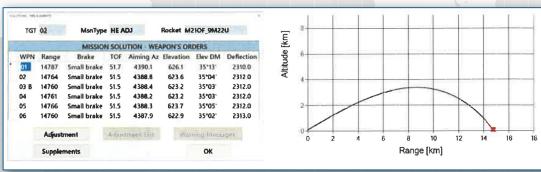


Figure shows some of the program screens for an example of six weapons platoon.

## **ENVIRONMENTAL CHARACTERISTICS**

**OPERATING TEMPERATURE RANGE:** -20°C/+60°C **STORAGE TEMPERATURE RANGE:** -40°C/+70°C

VIBRATION & DROP RESISTANCE: MIL-STD-8 Method 514.5 Procedure 1, 0.5 m

HUMIDITY: MIL STO 810G method 507-1 Proc. 4

**ENCLOSURE RATING: IP65** 

## PHYSICAL CHARACTERISTICS

DIMENSIONS (APROX): 225 mm x 147 mm x 24 mm

WEIGHT (APROX): 1.0 kg
EXPLOITATION CHARACTERISTICS

Long time of operation - 12 hours with one battery.

But extra buttery can be ordered.