## BOJHOTEXHUYKU UHCTUTYT MILITARY TECHNICAL INSTITUTE

# МИНИСТАРСТВО ОДБРАНЕ РЕПУБЛИКЕ СРБИЈЕ REPUBLIC OF SERBIA MINISTRY OF DEFENCE



### **MORTAR FIRE CONTROL SYSTEM**





Upgrade of mortars has been carried out on 120 mm M75 and 82 mm M69 models in order to improve precision, speed and make handling easier. Accordingly, the following changes have been made:

- Introduction of digital devices for directing mortars and determining their position based on inertial sensors,
- Introduction of digital observation devices with improved software support applications used in the mortar fire control process,
- Use of Matrice 300 RTK drone for more efficient and reliable determination of target position,
- Use of UPAS (Universal Movement Artillery Station) software application that enables planning, receiving and processing data necessary for the execution of the mortar fire process. Also, one part of it is a ballistic module that serves for the calculation of the basic shooting elements, corrected shooting elements and forwarding calculated data to the mortars.

#### **TECHNICAL CHARACTERISTICS:**

#### Observation device:

- eye-safe laser rangefinder with range up to 7 km,
- thermal imaging camera with uncooled detector, resolution 640x480 pixels, maximum detection distance of a tank-sized target in a narrow field of view up to 5 km.

#### Digitalized device for directing:

- accuracy of determining the position (X Y Z) up to 5 m,
- accuracy of determining azimuth: 0.2° RMS





