PROJECT ON DESTRUCTION OF APM STOCKPILES IN SERBIA AND MONTENEGRO

Col. Vlado Radic, Ph. D., B. Sc. Eng.
national coordinator for SALW

Project goal

- Ultimate goal is destruction all of APMs in stockpile in Serbia and Montenegro
- High-level timing goals:
  - three years (realistic)
  - two years (optimistic)
General remarks on the project

- This is first project of APMs stockpile destruction in Serbia and Montenegro
- But, in technical sense, there are similarity with of SALW projects of destruction which we successfully realized
- Project conducted within Ministry of Defence and General Staff of Army
- Estimated costs whole project is 2 million USD

ELEMENTS OF THE DESTRUCTION PROJECT

<table>
<thead>
<tr>
<th>No.</th>
<th>Type</th>
<th>Quantity (pcs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>PMA-1, 1A</td>
<td>287,804</td>
</tr>
<tr>
<td>2.</td>
<td>PMA-2</td>
<td>145,185</td>
</tr>
<tr>
<td>3.</td>
<td>PMA-3</td>
<td>258,631</td>
</tr>
<tr>
<td>4.</td>
<td>PMR-2</td>
<td>74,072</td>
</tr>
<tr>
<td>5.</td>
<td>PMR-2A</td>
<td>465,089</td>
</tr>
<tr>
<td>6.</td>
<td>PMR-3</td>
<td>3,528</td>
</tr>
<tr>
<td>7.</td>
<td>PROM-1</td>
<td>52,547</td>
</tr>
<tr>
<td>8.</td>
<td>uncomplete, damaged, without fuzes</td>
<td>33,764</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,320,620</td>
</tr>
</tbody>
</table>
### PMA – 1, 1A

<table>
<thead>
<tr>
<th>Weight, g</th>
<th>400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosive, g</td>
<td>200</td>
</tr>
<tr>
<td>Method of destruction</td>
<td>separation of explosive fuzes - detonation</td>
</tr>
</tbody>
</table>

### PMA - 2

<table>
<thead>
<tr>
<th>Weight, g</th>
<th>135</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosive, g</td>
<td>100</td>
</tr>
<tr>
<td>Method of destruction</td>
<td>detonation</td>
</tr>
</tbody>
</table>
## PMA - 3

<table>
<thead>
<tr>
<th>Weight, g</th>
<th>183</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosive, g</td>
<td>35</td>
</tr>
<tr>
<td>Method of destruction</td>
<td>detonation</td>
</tr>
</tbody>
</table>

## PMR – 2A

<table>
<thead>
<tr>
<th>Weight, g</th>
<th>1700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosive, g</td>
<td>100</td>
</tr>
<tr>
<td>Method of destruction</td>
<td>separation of explosive metal body – melting initial devices – detonation</td>
</tr>
</tbody>
</table>
**PMR-3**

<table>
<thead>
<tr>
<th>Weight, g</th>
<th>2630</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosive, g</td>
<td>420</td>
</tr>
<tr>
<td>Method of destruction</td>
<td>separation of explosive, metal parts – melting initial parts - detonation</td>
</tr>
</tbody>
</table>

**PROM - 1**

<table>
<thead>
<tr>
<th>Weight, g</th>
<th>3000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosive, g</td>
<td>425</td>
</tr>
<tr>
<td>Method of destruction</td>
<td>separation of fuzes other parts - detonation</td>
</tr>
</tbody>
</table>
Team/Resources

- Project manager: col. V. Radic (MoD)
- Assistant project manager: director of TRZ Kg
- Members of team (5-7): MoD, GS Army
- Workers (engineers, technicians): about 50
- Location: Kragujevac
- Objects: exist in facility
- Equipment: for handling, manipulation, integral transport in facility, special tools

CHALLENGES

- Financial
- Logistical
- Technical
- Documentation (registration)
- Transparency
FINANCIAL CHALLENGES

➢ Main problem:

Lack of necessary funds

We could provide

- technical capacity and equipments,
- qualified manpower,
- high quality standards,
- full transparency all activities,
- excellent documentation about destruction APMs
- monitoring
Substantial international assistance needed for:

- organization for destruction (technical and human resources),
- registration equipment (computer and photo hardware, etc.),
- safety and security measures (protective suits, adaptation of objects in facility, objects for monitoring, preparation of destruction site ...)
- environment concerns ,
- transportation devices ,
- transportation fees (fuel, etc.) ,
- medical and fire protection , ...

LOGISTICAL CHALLENGES

- Storages manipulation
- Truck loading
- Transportation from 23 different locations to the destruction site in Kragujevac
- Fuel consumption and maintenance of trucks
- Unloading and re-packing
- Manual handling
- Preparation of destruction site
- Separation and registration by types of APMs
- De-assembling process (fuses – explosives)
TECHNICAL CHALLENGES

- Existing resources
- Capacity building
- Equipment needs
- Organization and evaluation of destruction
- Safety and environmental factors
- Collecting and recycling of plastic/metal parts, explosives
- Identification, registration and documentation about destruction of APMs

TRANSPARENCY

Full transparency and media covering through the multi-layers verification ensured
Documentation

- All documents will be transparent and completed with photographs
- All destruction procedures will be recorded on electronic and other media
- All steps in registration and identification will be separately recorded for each type of APMs

DESTRUCTION SITE

TEHNIČKI REMONTNI ZAVOD (TECHNICAL REPAIR FACILITY) KLAGUJEVAC
DESTRUCTION SITE

CONCLUDING REMARKS

- The realization of the project will start as soon as the necessary funds are obtained.
- Project will be oriented dynamically and each phase will be supported by necessary documentation.
- To this end, any interest of the potential donors to provide necessary assistance would be most welcome.

Thank you for your attention.