

AMMUNITION MANAGEMENT IN THE CROATIAN ARMED FORCES (CAF)

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Types of Ammunition Storages in the CAF

Above Ground Magazine (AGM)



Type "M"
non-perspective



Type "S"
temporarily perspective;
pallet system



Types of Ammunition Storages in the CAF

Underground storages



- ❑ Good conditions for long-term storing
- ❑ Used for storing of Navy and Army perspective ammunition

Types of Ammunition Storages in the Depots

Earth Covered Magazine (ECM)



- Good conditions for long-term storing
- Used for storing of all perspective ammunition

Types of Ammunition Storages in the CAF

- ❑ **Building new storage facilities for long-term storage with technical protection**
 - ❑ Video surveillance storage facilities
 - ❑ Centralized double-authorization entry system
 - ❑ Automatic temperature and humidity measurement system
 - ❑ Motion detectors
 - ❑ Automatic fire alarm systems



Stockpiles Storing and Managing

Concept of Ammunition Surveillance

- ❑ Visual Inspection
- ❑ Disassembly
- ❑ Chemical Analysis
- ❑ Functional testing of components
- ❑ Live firing



Disposal of Surplus and Unserviceable Stocks

- ❑ Disposal in three ways:
 - ❑ Sale
 - ❑ Donation
 - ❑ Industrial demilitarization
- ❑ Sales of surplus ammunition through the Governmental Agency ALAN
- ❑ Donation of surplus ammunition by ministerial decisions
- ❑ Sales and donations in accordance with the national and international legislation
- ❑ Surplus and obsolete stocks, including the types and quantities, defined by ministerial decisions

Disposal of Surplus and Unserviceable Stocks

Industrial demilitarization of obsolete stocks

- ❑ By the private company “ISL Spreewerk” in Gospic
- ❑ Established in 2007, as a “sister company” of Spreewerk Lübben GmbH (DE)
- ❑ Disposal of different types of the CAF obsolete stocks



Disposal of Surplus and Unserviceable Stocks

- ❑ Technique OB/OD (Open Burning/Open Detonation)
- ❑ Disposal by military capacities
- ❑ In accordance with the national legislation
- ❑ 1st step - disassembling in the Support Command workshop
 - ❑ separation of cartridge and warhead, defusing, taking out propellant



Disposal of Surplus and Unserviceable Stocks

Technique OB/OD (Open Burning/Open Detonation)

- ❑ Open Burning technique
 - ❑ Burning old and unstable propellant, gun powder, pyrotechnics
 - ❑ Burning obsolete ammunition for small arms (pistols and rifles to 7,62 mm)
 - ❑ Controlled burning of air bomb by deflagration technique



Disposal of Surplus and Unserviceable Stocks

Technique OB/OD (Open Burning/Open Detonation)

- ❑ Open Detonation technique
 - ❑ Destruction of ammunition explosive's components upon disassembly
 - ❑ The current capacity by OB/OD technique in the CAF is 500 tons/year
 - ❑ Destroyed in the pre-adjusted pits
 - ❑ Defined NEQ/pit in according with environment limitations (50 kg/pit)



Sponsored Disposal of Surplus and Unserviceable Stocks

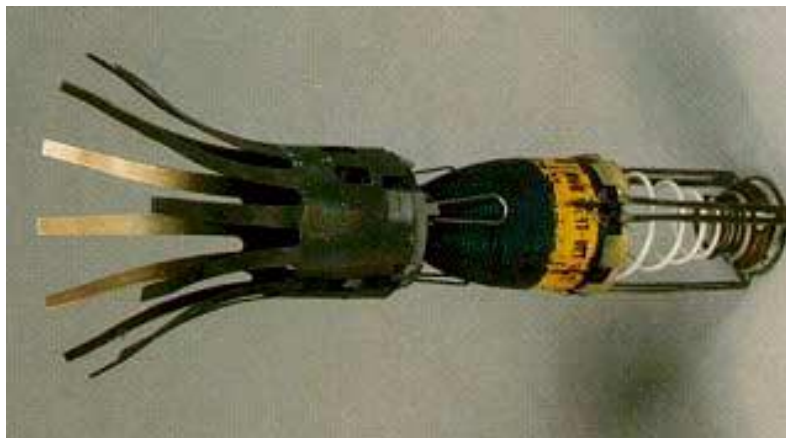
- ❑ Financial support by the US Government through PM/WRA Agency
- ❑ MANPADS Program, CWD (Conventional Weapon Destruction and PSSM (Physical Security and Stockpile Management)
 - ❑ Industrial demilitarization (cluster ammo, ammo filled with WP, obsolete stocks)
 - ❑ Surplus MANPADS and Anti Tank Weapons
- ❑ Financial support used for upgrading physical security of perspective ammunition depots with technical protection



Disposal of Cluster Stocks in 2015

Industrial Demilitarization – sponsored by US Government

Cluster munition type	Quantity	Explosive submunition type	Total quantity of explosive submunitions
Mortar, 120 mm M93	586 (x23)	KB-2	13.478
MRLS M87 ORKAN, 262 mm	26 (X288)	KB-1	7.488
Air bomb BL-755	20 (X147)	MK-1	2.940
Air bomb RBK-250 PTAB-2,5M	7 (X42)	PTAB-2,5M	294
Air bomb RBK-250 275 AO-1 SČ	0 (X150)	AO-1 SČ	0
Air bomb RBK-250 ZAB-2,5M	0 (X48)	ZAB-2,5M	0
Total:	639	Total:	24.200



Plan for disposal Cluster Stocks to 2018

Cluster munition type	Quantity	Explosive submunition type	Total quantity of explosive submunitions
Mortar, 120 mm M93	6.541 (x23)	KB-2	150.443
MRLS M87 ORKAN, 262 mm	1 (X288)	KB-1	288
Air bomb BL-755	3 (X147)	MK-1	441
Air bomb RBK-250 PTAB-2,5M	2 (X42)	PTAB-2,5M	84
Air bomb RBK-250 275 AO-1 SČ	5 (X150)	AO-1 SČ	750
Air bomb RBK-250 ZAB-2,5M	44 (X48)	ZAB-2,5M	2.112
Total:	6.596	Total:	154.118

- Disassembly and destruction by OB/OD technique - military capacity
- Disposal and destruction by Industrial demilitarization - Sponsored by a foreign Government

The Way Ahead

- ❑ Improved risk assessment and reducing of the risk of accidents in the Ammunition Depots (external and internal threats)
- ❑ Building of new storages for long-term storage with technical protection
- ❑ Disposal of surplus, obsolete, and dangers ammunition
 - ❑ Military capacity (OB/OD)
 - ❑ Industrial demilitarization
 - ❑ Sponsored by a foreign Government or International Foundation
 - ❑ Sale and Donation
- ❑ Development of guidelines, manuals and regulations for storage, handling and transportation of ammunition and explosives in accordance with the NATO and EU procedures
- ❑ Permanent personnel education for Ammunition Life Cycle Management

Thank you for your attention

