



## Qualification of the new practice ammunition for the 81 mm mortar

**Science and Technology (S+T) was tasked with monitoring and evaluating the development of the new explosive practice round 16 for our mortars. The ammunition has been subjected to a series of tests in various S+T establishments. The aim is provide units with a safe and reliable product.**

Qualification of the new practice ammunition for the 81 mm mortar was carried out in three phases. During the development phase, armasuisse S+T was actively involved in the project and also placed its test facilities and know-how at the developer's disposal. For the second phase, when the final product has to satisfy the requirements, the manufacturer supplied a certain number of rounds taken from a production unit (one batch) so that qualification testing could be conducted. Qualification includes live firing (in all configurations) under extreme environmental conditions, static testing (sensitivity, behaviour, effect on the target), dynamic testing (drop tests, simulated transportation) plus analysis of the energy components. The objective throughout was to provide units with an easy-to-use, safe and reliable product. Following the successful completion of the qualification process, one batch was made available to units for them to validate the suitability and correct functioning of the product by testing it in practical use. These troop trials have already taken place on the Hongrin (Vaud) firing range. As a result, procurement can proceed and production can shortly be started.

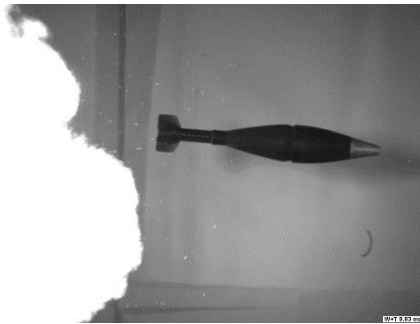


Figure 1 – The round leaving the barrel, Thun 2015



Figure 2 – "IRIS" trajectory tracking radar, Hinterrhein 2014



Figure 3 – The round cooled down to -30 [°C] ready-to-fire, Hinterrhein 2014.

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