



Recent Experience of US Safety Testing of Foreign Ammunition

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Report Documentation Page

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Foreign Items Tested

1. 40mm Practice Cartridge, MK 281 MOD 0 and MOD 1
 - Tested at Aberdeen (APG), NSWC Crane (MOD 0) and Rheinmetall Germany (MOD 1)

2. 40mm Practice Cartridge, M1110
 - Tested at Rheinmetall (Germany) and NTS Camden, AR

3. Diversionary Stun Grenade, MK 13 MOD 0
 - Tested at NSWC Dahlgren, Rheinmetall and NTS Camden

4. 66mm IR Screening Smoke, MK 1 MOD 0
 - Tested at NSWC Dahlgren and Rheinmetall (Germany)



40mm Practice Cartridge MK 281 MOD 0 and MOD 1



- Testing started in 1999, completed in 2002 (MOD 0)
- FCT and USMC Funding



40mm Practice Cartridge M1110



- ❑ Testing started in 2006, completed in 2009
- ❑ FCT and USMC Funding



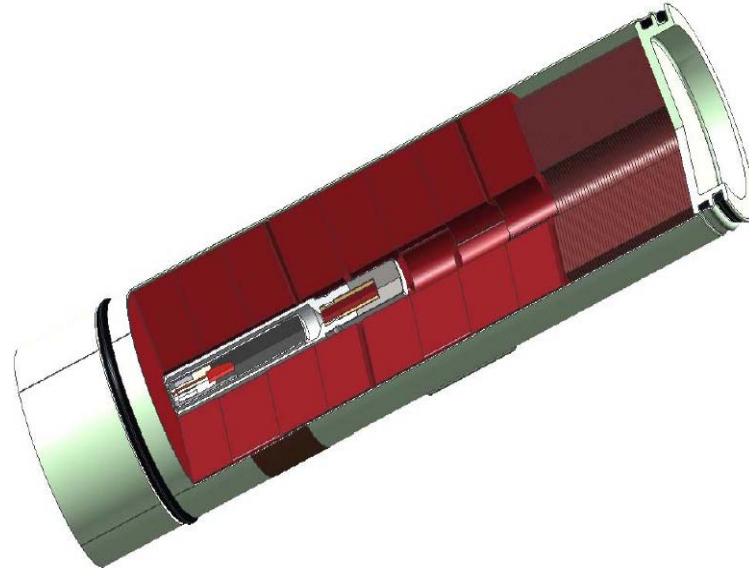
Diversionsary Stun Grenade MK 13 MOD 0



- ❑ Testing started in 2006, completed in 2008
- ❑ USN and USSOCOM Funding



66mm IR Screening Smoke MK 1 MOD 0



- ❑ Testing started in 2006, completed in 2009
- ❑ USMC Funding





US Government Agencies

- ❑ NSWC Dahlgren and Crane
 - ❑ Technical and Contractual Support
- ❑ NOSSA Indian Head
 - ❑ Approval of Foreign Energetic Materials and IHCs
- ❑ USMC Quantico
- ❑ DDESB – Safety Approvals
- ❑ WSESRB – Safety Approvals
- ❑ DCMA Southern Europe
 - ❑ Quality and FAT Support
 - ❑ Transportation to USA from Foreign Contractor



US Contractor Test Facilities



National Technical Systems (NTS), Camden AR



- MIL-STD-2105 / STANAG**
- Fast Cook-Off
 - Slow Cook-Off





Foreign Contractor Test Facilities

Testing Center Unterlues (EZU), Germany



Certified to ISO 9001:2000 and AQAP 110



Some of the Changes since 2000

- Defense Acquisition System Updates**
 - DODI 5000-02**
- Insensitive Munitions Updates**
- More severe Testing required, for example Helicopter Vibration Testing**
- Increased Attention to Design for Demilitarization**
- Increased Attention to Life Cycle Environmental Compliance**



Difficulties for Foreign Exporters of Ammunition

- Different Interpretation of Test Procedures between US and Europe**
 - NATO STANAGs and MIL-STDs**
- Compliance with US Requirements for Energetic Materials and Compositions**
 - NAVSEA SWO Compliance**
- FOB Origin and Destination Contracts**
 - Commercial Shipments need BATF Approval**



Overseas Testing of Foreign Ammunition

- 1. Can save a lot of Time and Money**
- 2. Needs constant Oversight to ensure detailed Compliance with US Testing Requirements**
- 3. Oversight Resources provided by US Technical / Program Managers and DCMA in Europe**