



> *Technology in Survey and Clearance operations*





> Conditions for the successful introduction of technology

- > Needed by the user**
- > Development of the technology must be complete**
- > A competent manufacturer must be involved**
- > It should be affordable**
- > Sustained quantities of the equipment as well as funding to operate it must be provided**



> Successful integration of COTS

- > GPS and GIS systems are greatly assisting in survey and post clearance documentation**
- > Testing and evaluation standards have now become normative and the results from tests are publicly available**
- > Metal detectors have improved both in terms of reliability and performance**



> Advantages in improved metal detector technology

- > Improvement in Probability of Detection (PoD)**
 - > Improved ground compensation capability**
 - > Improved discrimination of scrap metal**
 - > Reduced False Alarm Rate (FAR)**
- > = faster, safer and more efficient survey and clearance operations**

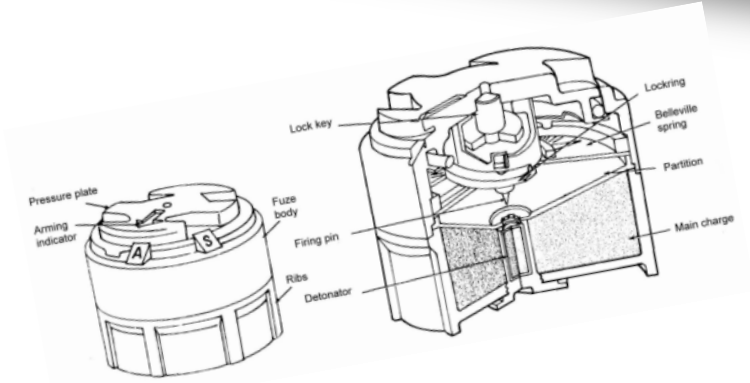
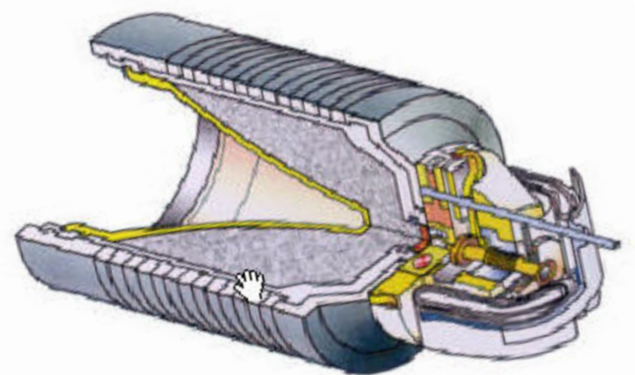
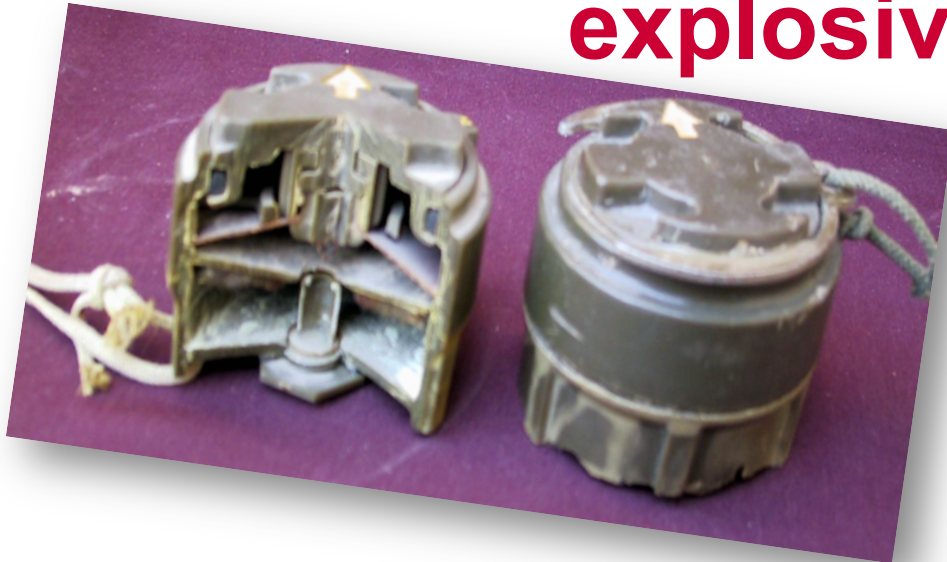


> Recommendations

- > Visit the field
- > Think systems and how the technology will be integrated into operations
- > Demining machines not necessarily appropriate for bomblet clearance
- > Focus on key issues that are achievable and appropriate
 - > Area Reduction
 - > Close in Detection
- > Collaborate effectively with donors, users, and manufacturers



> Minimum metal mines and explosive sub-munitions





> Typical UXO detectors





> ”Signature metal detectors”

- > Will not replace the existing fleet of EMI detectors, magnetometers and magnetic locators
- > Only for special circumstances
 - > Clearance of explosive sub-munition strikes
 - > Decommissioning of military firing ranges
 - > Technical Survey and Forensic investigations
- > Need to know what targets to expect
- > No AP mines present in SHA



> Results from calibration trials

