

7.0 COST IMPLICATIONS OF RETROFITTING EXISTING LANDMINES

The cost implications of retrofitting existing landmines are based on the information available on landmines in Canadian Forces inventory, the cost of new electronic fuse to incorporate a self destruct or self neutralizing feature, the development cost associated with the upgrade of the existing mine and where possible the cost of a new replacement mine. The cost is based on a quantity of 5000 units. At this time, the cost implication associated with passive self deactivation device is not provided due to lack of information on such devices. All costs are expressed in 1994 Canadian dollars.

The cost estimates of retrofitting existing landmines include the cost of redesign and modifications to the existing mine components, the cost involved in the evaluation of the modification, the cost of new packaging and the cost of testing and qualification of the modified product. The cost of new electronic fuse is obtained from the electronic fuse manufacturers. The cost also includes the material and manufacturing required to upgrade the mine at the manufacturers' facilities.

7.1 Anti-Personnel Mines

7.1.1 Single Impulse Pressure fused Anti-Personnel Mines

The technological implications of retrofitting C3A1 anti-personnel mine are discussed in section 5.1.1. The retrofitting would involve redesign of all components except the main charge in order to integrate an electronic fusing mechanism with a self destruct or self neutralizing device. In addition the upgraded mine will have to be qualified for safety and suitability for service. The current cost of the C3A1 mine is about \$40. It would be more realistic to replace the existing C3A1 mine with a new anti-personnel mine equipped with a self destruct device that will cost about \$130.

7.1.2 Pull fused Anti-Personnel Mines

In the case of M16A1/A2 pull fused jumping anti-personnel mine, the retrofit would involve redesign of all components. It is advisable to replace the M16A1/A2 mines with a new generation of pull fused jumping anti-personnel mine equipped with a safety and