

ITOP 4-2-814

RICOCHEM OF DIRECT-FIRE PROEJCTILES

SCOPE

This ITOP describes procedures for determining the ricochet pattern of direct-fire projectiles and any projectile fragments that are produced after striking earth at angles up to approximately 10°. The collected data (impact angle and velocity, ricochet angle and velocity, and total deflection angle) are used with ballistic models and safety factors to develop ricochet data that can be used to establish range danger areas. Ricochet tests are conducted against earth (turf) as a minimum; they are also sometimes conducted against stone, concrete, compacted sand, water, or armour plate. Although this ITOP is based upon proven procedures for large-caliber tank projectiles, the same basic procedures, modified for scale affects, can be used for small-caliber projectiles.