



This is a film showing how the Fighting Vehicles Design Establishment of the Ministry of Supply have achieved automatic gun stabilisation in a Centurion tank.

The object of this stabilising equipment is to enable the gunner to maintain his gun on a pre-selected target at all times despite erratic movement of the tank. It would be impossible for the gunner to fire with accuracy from a moving vehicle without this equipment.

It is the first time that any gun on any tank in the world has been fitted with this type of control.

#### SHOT 1

Here you see a Centurion tank, operating in open country, with its 20 pr. gun fitted with the stabilising unit trained on a target.

#### SHOT 2

The tank is now on test.

The hull of the tank moves in an anti-clockwise direction while the turret remains virtually stationary in space with its gun on target.

#### SHOT 3

The stabiliser has its first real test with the tank running over obstacles. Note how the gun remains stationary and on target despite the up and down movement of the tank.

#### SHOT 4

And now into the open country. Two tanks fitted with stabilisers show how the turret automatically remains on target.

#### SHOT 5

A view from the turret roof shows the ease with which a gunner can lay on target whilst the vehicle negotiates the test track. Note particularly the way the gun position is maintained by watching the target, the tree on the right-hand side of the screen, even when the vehicles takes a bend in the track.

#### SHOT 6

The equipment is now to undergo firing trials on the range; the final test of its efficiency. The crew are manning the tank before the start of a run.

#### SHOT 7

The tank crosses the range at speed with the stabiliser in operation. Note the very violent pitching of the hull over the rough country.

#### SHOT 8

and contrast it with this view from a camera on the gun which emphasises the degree of stabilisation achieved.

#### SHOT 9

The tank goes into action, engaging a target to the flank. In this case it is a derelict building, and the view of the target indicates the accuracy of the shooting. The tracer in the ammunition enables you to follow each round.

#### SHOT 10

The tank switches to a head-on attack, and the camera catches a round as it goes through the target. A point of interest is the speed at which the rounds follow one another. Watch for the switch of the attack to another target to the left.

#### SHOT 11

The tank turns away, preparatory to breaking off the engagement, but is still able to continue engaging the target as it turns.