

## Z

### Zero Line

An imaginary line, expressed as a compass bearing, running roughly up the centre of a battery's projected area of fire. In indirect firing the gun layer lays the gun, for a bearing, by noting an aiming point through the dial sight. If the barrel is pointing up the centre of its projected zone and the sight records zero mils, when laid-on the aiming point, the gun is then said to be laid at zero in the zero line. If a target is to be engaged at a bearing to the left or right of the zero line the layer applies the relevant angle to the sight and then re-lays onto the aiming point; the gun's barrel is then automatically pointing at the target.

### Zone

A rectangular pattern on the ground, around the target, into which fired projectiles will fall. For a given elevation a series of projectiles will not fall in the same 'spot', but will be spread around the theoretical impact point in accordance with the laws of distribution and probability.

The 50 percent zone is that rectangle into which 50 percent of the rounds will fall, and is tabulated in the relevant firing tables for every 91 metres (100 yards) of range. The 100 percent zone is four times the 50 percent zone and is that area into which all the rounds will fall.

This means that, with the best information, calculations and equipment, it is impossible to guarantee hitting a precise 'spot' with every projectile all the time and this must be taken into account when determining the range to a target.