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Electronic Velocity Analyser	(EVA) An equipment used to measure a gun's muzzle velocity (see: <i>Muzzle Velocity</i>).
Electronic Counter Measures	Military action to exploit the electromagnetic spectrum encompassing the search for, interception and identification of, electromagnetic emissions, the employment of electromagnetic energy, including directed energy, to reduce or prevent hostile use of the electromagnetic spectrum, and actions to ensure its effective use by friendly forces.
Elevation	The upwards (or downwards) angular movement of an ordnance upon its carriage to an extent determined by the setting of the sights. The 'quadrant' elevation is the sum of the 'tangent' elevation (a measure of range to the target) and the angle of sight, and is the elevation at which the gun is 'laid'. The 'angle of projection' is the angle at which the projectile actually leaves the barrel after account is taken of 'jump' and 'droop' (see: <i>Jump</i> and <i>Droop</i>).
Empty Guns	<p>If 'At My Command' is in force and the gun is loaded and laid on a given bearing and elevation, the gun is to fire. Once the gun is fired the detachment commander reports back to the command post 'Number: Empty'.</p> <p>If the battery is given the order 'Cease Firing' (see: <i>Cease Firing</i>) the command post will first order 'Report Guns Empty'; the detachment commanders then order any loaded rounds and/or charges be un-loaded and then visually check to ensure that their equipment is 'empty'. The commanders then report back to the command post that the guns are empty (ie. "Number: Empty").</p>
End of Mission	<p>The order given by the observer to the command post meaning that the mission is terminated (any method of fire already ordered by the observer is completed before the order is passed onto the guns).</p> <p>When the firing is completed the order is passed onto the guns and the gun detachments withdraw from the guns.</p>
Enhanced Position Locating Radio System	Enhanced Position Locating Radio System (EPLRS) is a digital radio used predominantly for transmitting data (eg. it is the bearer which transmits/receives data from the portable surveillance target acquisition radar to the RBS70 detachments and the ground based air defence command post) (see: <i>Portable Surveillance Target Acquisition Radar</i>).
Equilibrator	A device on a gun to compensate for any unbalanced weight supported by the cradle forward of the equipment's trunnions.
Equipment State	Reports from the detachment commander to the GPO reporting the current state of the gun; these may include reports about the equipment such as: "Number Gun Loaded, Gun Hot", "Number Gun Out (coupled with the reason and an estimated time that the gun will be out of action)".

Equivalent Full Charge	<p>Each propellant charge fired causes a different amount of wear to the barrel's bore. A lower charge causes less wear than a higher charge (eg. 105 mm ammunition has seven charges (charge bags) in its cartridge case – if the projectile is to be fired at 'charge three' then the only charge bags used are numbers one, two and three. If the projectile is to be fired at 'charge seven' (the full charge) then all seven charge bags are used).</p> <p>If a gun is fired at 'charge seven' then the gun is fired at 'full charge'; if it is fired at a lower charge it would take a number of these firings to equal the wear of a full charge (hence the term 'equivalent full charge' (EFC)). The number of rounds fired, and at what charges, is recorded in the relevant gun's Gun History Book and this then indicates when a certain number of EFCs have been fired and when a new muzzle velocity check needs to be undertaken (see: <i>Electronic Velocity Analyser, Muzzle Velocity</i> and <i>Gun History</i>).</p>
Equipment	<p>A term to express a whole weapon; the gun, the carriage, the sights and associated gun stores.</p>
Explosive	<p>A 'low explosive' is a controlled and non-disruptive force (eg. propellants explode when set-off within a gun).</p> <p>A 'high explosive' detonates, due mainly to a shock wave, and is a disruptive force (see: <i>Detonation</i>).</p>
External Ballistics	<p>The sequence of events which occurs between the moment the projectile leaves the muzzle of the gun and the moment of impact or burst of the projectile (see: <i>Intermediate Ballistics</i>).</p>
Extractor	<p>A claw-like metal component at the entrance to the barrel's chamber. When the breech is opened it pulls the fired cartridge case loose from the chamber.</p>