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Garrison Artillery	Artillery units assigned to a base or area for defence operations (eg. Coast Artillery batteries).
Graphical Control Instruments	Command post instruments for manually predicting firing data for the guns to fire on. They included a plotter, a displacement graph, Tabular Firing Tables and Graphical Firing Tables (see: <i>Field Artillery Back-up System, Firing Tables and Graphical Firing Tables</i>).
Graphical Firing Table	A command post device (similar to a slide rule) used in predicting firing data for the guns. Its contents included map ranges and it had a sliding plastic piece onto which current meteorological data was applied; this assisted in turning a map range to a predicted range for the guns to fire on.
Grid Magnetic Angle	The angle measured between the direction of grid north (ie. north on a map) and magnetic north (ie. north on a compass).
Grid North	North as given on a map (see: <i>Magnetic North</i>).
Grid Reference	The reference to a position on a map using 'eastings' (longitude) and 'northings' (latitude).
Grid Square	A square kilometre area marked-out as a square on a map.
Ground Based Air Defence	Land based surface-to-air weapons systems designed to defeat or reduce the effectiveness of hostile air action. Weapon systems may comprise of guided weapons, anti-aircraft artillery or non-lethal weapons, and integral surveillance and target acquisition devices.
Ground Based Air Defence Battery	The role of ground based air defence batteries is to defeat enemy low level air attacks and tactical un-manned aerial systems, targeting designated defence force assets.
Ground Clearance	A procedure undertaken to ensure that friendly fire is not directed into any area occupied by friendly troops or civilians.
Guided Missile Ammunition Technician	A (Royal Australian Army Ordnance Corps) ammunition technician officer (ATO) who is qualified to dispose of malfunctioning guided missiles. There is a requirement to have an ATO present at a firing position during ground based air defence 'live-fire' exercises.
Gun	A comparatively long range, high muzzle velocity and low trajectory equipment firing a relatively small projectile (see: <i>Howitzer</i>). The term is also loosely applied to describe all artillery pieces (ie. both guns and howitzers).
Gun Aiming Point (GAP)	(see: <i>Aiming Point</i>)
Gun Angles	Vertical and horizontal angles that are directly or indirectly, set onto a gun or that are associated with a gun. Vertical angles include:

- * Quadrant elevation (see: *Quadrant Elevation*).
- * Tangent elevation (see: *Tangent Elevation*).
- * Angle of sight (see: *Ballistic Angles*).
- * Jump (see: *Jump*).

Horizontal angles include:

- * Bearing (see: *Bearing*).
- * Switch (see: *Switch*).
- * Lead (see: *Lead*).

Gun Area	An area (on operations, or in training exercises) that contains one or more gun positions; an Area may be either battery (normally six guns) or regimental (normally 18 guns) in size. A battery area is commanded by the unit's battery captain (BK) and a regimental area is commanded by the regiment's second-in-command (2IC) (see: <i>Battery Area</i>).
Gun Battery	A unit, commanded by a major, consisting of a group of guns, command posts, observation parties, communication groups and supporting administration and logistic sections. In the field the observation parties deploy with the units the battery is supporting (eg. infantry companies, etc).
Gun Data	The information that is passed to the guns, from the command post, for application to the relevant pieces. The data includes bearing, elevation, angle of sight, type of ammunition (including fuze type), fuze setting and charge.
Gun Bays	(see: <i>Gun Park</i>)
Gun Detachment	The personnel that serve a gun. The number of personnel within a detachment depends on the size of the piece; however, each member is identified by a number. The detachment commander is the gun's 'Number 1', the layer (the gunner who operates the sights) is the 'Number 3' and the gun's second-in-command is the last number (eg. in a detachment of seven the second-in-command is the 'Number 7').
Gun Display Unit	A target engagement system with a numeric keypad and additional 'acknowledgement keys' which enables the gun detachment commander to transmit fire discipline acknowledgements and digital information (eg. ammunition states and charge temperatures) to the command post.
Gun Drill	The actions carried-out by a gun detachment to bring the equipment into action (ie. the setting-up of a gun to be ready to engage targets) and out-of action, and the actions and procedures to lay, load and fire the piece.
Gun History	A Gun History book is maintained for each gun. It provides a record of wear measurements, repairs and modifications, maintenance and the number of rounds fired by the current barrel (see: <i>Equivalent Full Charge</i>).
Gun Laying	The application of the ordered bearing and elevation, and associated drills (eg. re-laying the gun's sights onto the relevant

aiming point), to a gun to engage a target.

Gun Laying System	A global positioning system receiver used by artillery sound ranging units to locate hostile artillery.
Gun Line	The area occupied by the guns within a gun battery position.
Gun Line Section Commander	(see: <i>Section Commander</i>)
Gun Park	The area within a unit's lines where the guns are housed. The guns, when not in use, are kept within the park's gun bays (similar to a garage), and maintenance is also carried-out in this area. Certain elements of gun drill (training) are also conducted in this area.
Gun Pit	A pit dug into the ground (either manually by the gun's detachment and / or using excavation equipment) to conceal or protect the gun and its detachment, from enemy fire.
Gun Platform	<p>The piece of ground onto which a gun is deployed and brought into action within a battery gun position.</p> <p>Some guns have a metal firing platform on which the piece is positioned when being brought into action. The platform makes it easier and quicker, to rotate the entire equipment for large changes in bearings to a target (eg. 25 Pounder and the British 105mm Light Gun (referred to in Australia as the Hamel Gun)).</p>
Gun Position	(see: <i>Battery Area</i>)
Gun Position Officer	<p>The gun position officer (GPO) is the officer (a lieutenant) who controls the battery command post. The GPO is responsible for the technical data produced by the command post (CP) for the firing of the battery's guns when engaging targets, for the recording of any relevant targets, maintaining the target records, the circulation to the battery commander (BC) and the forward observers (FOs) information on targets received from other batteries.</p> <p>He is also responsible for maintaining the parallel alignment of the guns; ordering the testing and adjustment of sights (at least once daily and after a redeployment); supervising the daily servicing (maintenance) of the guns; the measurement of charge temperatures; and implementing any change of grid orders and the unit's survey status.</p>
Gun Position Safety Officer	An officer or warrant officer, who is responsible, during training exercises, for checking that the initial information to engage a target (ie. bearing and elevation, or bearing, range and angle of sight) has been correctly applied to gun(s) sights; he also checks that the correct ammunition charge has been selected and if relevant, that the correct fuze setting has been applied. The gun(s) cannot fire the first round of an engagement until the safety officer has determined that the information has been correctly applied and has given the order 'safe'. The safety officer's assistant plots the relevant information (ie. bearing and range) onto a safety map to check that the rounds will not land outside the target safety zone.

Gun Programme	A form issued to guns detailing the necessary relevant data (eg. bearings, elevations, ammunition) for concentration or barrage fire missions.
Gun Rule	A circular (slide rule) instrument, used at the guns, to convert ranges to vertical angular elevations, taking into account the gun's various muzzle velocities. The rule's scale has cursors for each charge, which are set to the gun's current muzzle velocities, and the cursor for the ordered charge is aligned with the ordered range, that is marked on another scale, to produce the elevation to fire on.
Gun Tractor	Any vehicle that tows a gun. It also carries the gun's detachment, its stores and initial supply of ammunition.
Gun Troop	A gun battery's gun troop consists of the gun detachments (including the drivers), the section commanders and the battery guide (BG).
Gunner	The private rank of soldiers in the Royal Regiment of Australian Artillery is 'gunner'. However, all members of the Regiment, regardless of rank, are referred to as 'gunners'. Adding to the confusion, 'gunners' is also the term used to refer to the Regiment as a whole.
Gunners Quadrant	An instrument used for measuring the elevation of a gun barrel. The relevant elevation, for the gun to fire on, is set on the quadrant's scale (marked in mils); the piece is then placed onto the gun's breech block and the gun is elevated until the quadrant's bubble is level; this then indicates that the gun is laid at the correct elevation to engage the target.
Gunnery	The practical application of the science of ballistics to the engagement of targets. It falls into two divisions: firstly, the actual engagement of targets; secondly, the reduction of data obtained by shooting to a form suitable for the eventual engagement of targets.
Gunnery Problem	(see: <i>Field Gunnery Problem</i>)
Gunnery Staff	Artillery personnel posted as instructors at the School of Artillery.