

ROYAL AUSTRALIAN ARTILLERY GLOSSARY

The following are glossaries, past and present, related of the Royal Regiment of Australian Artillery.

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Accuracy	<p>The location of gun positions and targets relative to each other are determined as precisely as time and equipment tolerances will permit. The bearing and distance from the gun to the target is then calculated and firing information to be used by the gun is obtained using firing tables. This information is then corrected to compensate for variations in meteorology, propellant, temperature and muzzle velocity to ensure that the first rounds are placed as close as possible to the target.</p> <p>Accuracy of Artillery fire will be affected by a number of factors:</p> <ul style="list-style-type: none">* The accuracy of the fixation and orientation of the guns.* The accuracy of the fixation of the target.* The accuracy with which the map bearing, map range and angle of sight between the gun and the target are calculated.* The accuracy of the corrections applied to the map data to compensate for any non-standard conditions.* The accuracy of sight tests and laying.* The care taken when sorting ammunition into groups of the same lot/batch number.* The care taken when storing ammunition with a view to maintaining uniformity of charge temperature.* With regard to separate loading ammunition; the uniformity with which the projectiles are rammed during loading.
Add	<p>A correction used by an observer to indicate that an increase in range along the observer-to- target line (Line OT) is required (see: <i>Forward Observer and Line Observer-to-Target</i>).</p>
Adjustment	<p>The procedure of engaging a target by observed artillery fire. The fire is adjusted (for line and range) until it falls near to the target. The fire is normally adjusted by the firing of one gun.</p>
Adjutant	<p>In Artillery the adjutant's additional duties include:</p> <ul style="list-style-type: none">* Being the commanding officer's (CO's) operations officer within the regimental gun area.* Responsible for both the organization of the regimental command post (RCP) and the implementation of any special orders, policies or control over the fire of the regiment as directed by the commanding officer.* Authorizing relevant fire missions as required.* Co-ordinating and controlling the fire for both regimental and

higher formation targets.

- * Sub-allotting tasks for fire plans.
- * Controlling the reporting of all regimental and higher formation targets.
- * The reception, passage and recording of tactical information; including advising the relevant headquarters divisional artillery (HQ Div Arty) of the availability of batteries within the regiment, and the maintenance of a tactical map showing the disposition of both friendly and enemy forces.
- * The passage of all counter battery (CB) adjustment reports and other related reports to the artillery intelligence staffs.
- * The maintenance of up-to-date records of survey grids within the regiment.

Adopted Muzzle Velocity	A gun's muzzle velocity for a particular charge, determined through wear of the barrel (see: <i>Muzzle Velocity</i>).
Advanced Post	A post set-up in front of a sound ranging base whose main task is to start and stop the sound ranging recording equipment.
Advanced Sound Ranging Programme	A portable, passive, acoustic sensing system for detecting and locating the source of artillery fire and loud detonations. Once the system is fully deployed, the microphones at the sensor post are able to detect any acoustic disturbance caused by gunfire. The sensor posts are accurately surveyed-in and are electronically connected to the relevant command post.
Aiming Point	<p>There are two types of aiming points, a battery aiming point and a gun aiming point:</p> <ul style="list-style-type: none">* Battery Aiming Point: A point selected by the gun position officer on arrival at a new position and used to ensure all the guns are on a common aligned bearing to the gun position's 'centre of arc' (see: <i>Centre of Arc</i>).* Gun Aiming Point: A point selected by the detachment commander, for his gun, after his gun has been laid in the battery's 'centre of arc'. All bearing applied to a gun during a fire mission are set onto the gun's dial sight and the gun is then traversed until the sight is realigned with the relevant aiming point; the gun's barrel is then 'pointing' to the target (see: <i>Dial Sight</i>). There are normally three types of points; distant distinctive topographical features, aiming posts (see: <i>Aiming Posts</i>) and parallelescopes (see: <i>Parallelescope</i>).
Aiming Posts	Two posts which are placed in-line from the gun's dial sight at approximately 50 and 100 metres from the gun. When a bearing is applied to the sight, during a fire mission, the sight moves off the posts, the gun is then traversed until the sight is realigned with the posts; the gun's barrel is then 'pointing' to the target.
Air Burst	Artillery fire in which the projectile is caused to burst in the air, so that fragments of the shell are driven-down and hit the target area that a direct attack would not reach. The accepted height of burst above the target being 20 metres.
Air Burst Ranging	Airburst fire may be used to verify the accuracy of a gun or to

determine any necessary corrections that may be needed due to meteorological conditions. With the use of survey equipment the exact point of burst may be determined and compared with the expected point of burst, thereby allowing the necessary corrections to be made to the gun's data.

Air Clearance	A procedure required to ensure that the relevant flight path of a friendly aircraft does not cross the trajectory of the projectile or pass near to its point of burst (see: <i>Trajectory</i>).
Air Defence Action Area	An area and its airspace within which friendly aircraft or surface-to-air weapons are normally given precedence in operations, except under specified conditions.
Air Defence Area	A specifically defined airspace for which defence must be planned and provided.
Air Defence Liaison Officer	<p>A representative of the deployed air defence asset who is employed in the brigade, division and/or joint force headquarters to provide specialist advice to other battle operating system (BOS) liaison officers and service representatives. His tasks may include:</p> <ul style="list-style-type: none">* Liaising with all airspace users, including Air Force, Navy, Army surveillance and target acquisition, and Army Aviation, on Ground Based Air Defence (GBAD) control aspects as they affect the regiment.* Establishing and maintaining links robust enough to ensure the highest levels of control.* Coordinating the activities of the GBAD controllers of the regiment.* Liaising and coordinating all control aspects.* Acting as a GBAD controller in the Joint Force Air Operations Centre (JFAOC) when required.* Representing the commanding officer at the formation headquarters if he is unavailable. <p>(see: <i>Ground Based Air Defence</i>).</p>
Air Ground Operations Battery	The Battery provides command and control for joint air-land integration and the control of Close Air Support in order to support Australian Defence Force operations.
Air Land Integration	Air Land Integration is the coordination of joint fires, and friendly ground and air assets to permit timely and accurate engagement of enemy targets and reduce fratricide.
Air Observer	An Artillery observation officer operating from a light aircraft. During both the Second World War and the Korean War, and up until the early 1960s, air observation post pilots were, in the main, Artillery officers who had been trained to fly aircraft. Today Australian Army Aviation Corps pilots are trained to direct Artillery fire.
Air Observation Post	(see: <i>Air Observer</i>)
Air Portability Team Leader	A unit NCO who assists the unit's emplaning officer (UEO) in planning the layout of the unit's equipment and stores for

transportation within a service transport aircraft (see: *Unit Emplaning Officer*).

Air Warning Control Centre	Established in a Regional Observation Centre (ROC) and working in conjunction with the RAAF Air Defenders, the Air Warning Control Centre (AWCC) manages the long range airspace beyond the area of interest and issues airborne early warning control orders to the division, brigade, and/or joint force headquarters as the air threat escalates or de-escalates.
Airborne Early Warning & Control	<p>Control measures which are generated from the Air Warning Control Centre to increase, or decrease, the ground based air defence weapon systems' state of readiness. There are four states:</p> <ul style="list-style-type: none">* State 0: An attack is imminent.* State 1: An attack is probable.* State 2: An attack is unlikely.* Released until ... Hours: The detachment will not be called upon to engage a threat before the specified time. <p>There are also four weapon control orders:</p> <ul style="list-style-type: none">* Weapons Tight: Not to engage unless positively identified as hostile.* Weapons Free: Engage any target not positively identified as a friendly.* Weapons Hold / Safe: Not to engage any target unless in self-defence or in defence of a protected target.* Hold Fire: Not to engage.
Altitude	The altitude of a target (based on the sea level).
Altitude Corrections	Corrections that are made when there is an appreciable difference in altitude, between the gun and the target. It is applied to the gun-to-target map range and compensates the non-rigidity to the trajectory (see: <i>Non-rigidity</i> and <i>Trajectory</i>).
Ammunition	(see: <i>Fixed Ammunition</i> , <i>Semi-Fixed Ammunition</i> , <i>Separate Loading Ammunition</i> , <i>Separated Ammunition</i> and <i>Line Ammunition</i>)
Ammunition Control Point	An Artillery area/position where a unit positions its ammunition; usually controlled by the regimental sergeant-major.
Ammunition Point	An area/position within a sub-unit's area where the ammunition and produce (eg. used cartridge cases) are stored.
Ammunition State	A report which lists the amounts and types of ammunition both issued and expended since the previous report by the unit, and the amounts remaining (sometimes referred to as an 'Ammunition Return' and during the Vietnam War its 'code word' was "Excalibur").
Angle of Arrival	(see: <i>Ballistic Angles</i>)
Angle of Departure	(see: <i>Ballistic Angles</i>)

Angle of Descent	(see: <i>Ballistic Angles</i>)
Angle of Impact	(see: <i>Ballistic Angles</i>)
Angle of Incidence	(see: <i>Ballistic Angles</i>)
Angle of Projection	(see: <i>Ballistic Angles</i>)
Angle of Sight	(see: <i>Ballistic Angles</i>)
Appointment Title	<p>A title used when transmitting over radios to designate a specific appointment. Examples:</p> <ul style="list-style-type: none"> * Sunray: The commander of a unit/party (eg. CO / BC / FO). * Sunray Minor: The second-in-command (eg. unit 2IC / BK). * Seagull: The command post officer (GPO). * Manhole: The RSM / BSM. * Pronto: The signals officer / signals NCO. * Bluebell: The senior Royal Australian Electrical and Mechanical Engineer (RAEME) person on location (ie. officer, warrant officer or NCO) (see: <i>Royal Australian Electrical and Mechanical Engineers</i>).
Approach Angle	A horizontal angle between the line of sight and the path of the target. Used in anti-tank gunnery (the path of the target and the line of sight are assumed to be in the horizontal plane).
Area of Operations	The portion of an area of war necessary for military operations, either offensive or defensive, pursuant to an assigned mission, and for the administration incidental to such operations.
Area of Responsibility	A defined area of land in which responsibility is specifically assigned to the commander of the area for the development and maintenance of installations, control of movement and the conduct of tactical operations involving troops under his control along with parallel authority to exercise these functions.
Armour Piercing	A high explosive or kinetic energy solid shot used against armoured fighting vehicles.
Artillery Command Systems Operator	(see: <i>Operator Command Post</i>)
Artificer Sergeant-Major	The Royal Australian Electrical and Mechanical Engineers (RAEME) senior warrant officer in an artillery unit's workshop (see: <i>Royal Australian Electrical and Mechanical Engineers</i>).
Artillery Command Systems Operator	(see: <i>Operator Command Post</i>)
Artillery Intelligence	<p>The aims of the Artillery Intelligence are:</p> <ul style="list-style-type: none"> * To provide target acquisition data on the enemy's artillery (see: <i>Target Acquisition</i>). * To neutralize or destroy the enemy's artillery in accordance with the commander's counter battery policy (see: <i>Counter Battery</i>).

- * To provide for the G Staff (Intelligence Staff) intelligence deduced from any information gathered about the enemy artillery.

Artillery Tactical Headquarters	The Artillery commanding officer's headquarters made-up of signallers and operators command post from the regiment's headquarters battery, and commanded by the battery's commander. It accompanies the commanding officer at the brigade headquarters and provides the regiment with the necessary relevant tactical information (also referred to as: 'Arty-Tac').
Assistant Command Post Officer	A person who temporarily relieves and takes-up the duties of the gun position officer within the command post (eg. a section commander, the BSM, the BG, the operator command post sergeant). This normally occurs during the night.
Assistant Instructor-in-Gunnery	A term used up until early-1982, to identify a warrant officer class 2 (WO2) artillery instructor (often referred to as an 'Ack IG') (see: <i>Sergeant-Major Instructor-in-Gunnery</i>).
At My Command	The command used by an authorized call sign (eg. forward observer) when controlling the exact time of firing of the requested artillery fire (ie. the guns, when ready to fire, do not do so until ordered by the relevant call sign). The order is cancelled by the order 'Cancel at my command' or the call for a new fire mission.
Authorized Observer	An artillery observer (officer) who is authorized to order fire from other specific fire units, in addition to his own unit, for the engagement of any relevant target he needs to engage (normally the authorization is given for a particular operation, or phase of an operation). He may give the necessary fire orders directly to the units without reference to any higher authority. The authorization is granted by the regiment's commanding officer, however, it may also be granted, on the commanding officer's behalf, by the regimental command post (ie. the adjutant).
Azimuth	The horizontal angle measured clockwise from a fixed reference to another point.