



## FRATRICIDE AVOIDANCE

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Fratricide and civilian casualty avoidance is crucial to the effective employment of [close air support](#) (CAS). CAS operations are conducted in [close proximity](#) to friendly forces; therefore, CAS procedures, training, and scenario rehearsals require particular emphasis on the avoidance of fratricide and civilian casualties. Although occasionally attributed to weapons malfunction, fratricide and civilian casualties are most often the result of confusion on and over the battlefield. Civilian casualties may increase the risk of the ability to achieve strategic, operational, or campaign objectives. Causes include: misidentification of targets, target location errors, target or friendly locations incorrectly transmitted/received, or a loss of situational awareness by [joint terminal attack controllers](#) (JTACs), CAS aircrews, or [air support request](#) (ASR) agencies. Items that can significantly reduce the likelihood of fratricide and civilian casualties are: sound procedures for friendly force tracking; immediate air requests and clearance of [fires](#); detailed mission planning; realistic training/mission rehearsal; use of friendly tagging or tracking devices; and effective coordination. Civilian casualties should be considered a [critical vulnerability](#), and planners should consider [second](#) and [third order effects](#) during operational planning.

All participants in the CAS employment process are responsible for the effective and safe planning and execution of CAS. Each participant should make every effort possible to identify friendly units and enemy forces correctly prior to targeting, clearing fires, and weapons release. [Combat identification](#) (CID) is defined as “the process of attaining an accurate characterization of detected objects in the operational environment sufficient to support an engagement decision.” Performed in accordance with the [rules of engagement](#) (ROE), CID characterizations enable engagement decisions and the subsequent use, or prohibition of use of lethal and nonlethal weaponry to accomplish military objectives. It is critical for all involved in the CAS process to realize that their actions can either prevent or contribute to unintentional or inadvertent friendly fire incidents.

Risk assessment is a critical factor in preventing fratricide and civilian casualties. As the battlefield situation changes, commanders and staffs should make continuous tactical risk assessments. Risk assessments involve the processing of available information to ascertain a level of acceptable risk to friendly forces or noncombatants. Based on the current risk assessment, the [supported commander](#) will weigh the benefits

and liabilities of authorizing specific weapons types or a particular type of [terminal attack control](#) (TAC). Considerations during risk assessment should include, but not be limited to the following: capabilities of units involved, information flow, uncertainty, communications reliability, battle tracking, targeting information, weather, and ordnance effects. Proximity of friendly troops is also a key factor during risk assessment.

[Risk-estimate distances](#) (RED) allow commanders to estimate the danger to friendly troops from a CAS attack. The distances are defined by the [probability of incapacitation](#) (PI) to ground troops. Weapon size and distance of impact to ground troops affect PI. Moreover, different surroundings such as target elevation, terrain, buildings, trees, etc., can significantly reduce or increase PI. When there is a .1% (1/1000) chance of incapacitation, the distance is considered [danger close](#). The supported commander must accept responsibility for the risk to friendly forces when targets are inside danger close range. Risk acceptance is confirmed when the supported commander passes his initials to the attacking CAS aircraft through the JTAC, signifying that he accepts the risk inherent in danger close deliveries. When ordnance is a factor in the safety of friendly troops, the aircraft's axis of attack should normally be parallel to the friendly force's axis or orientation. This will preclude long and/or short deliveries from being a factor to friendly forces. See [JP 3-09.3, Close Air Support](#), and [AFTTP 3-2.6, Multi-Service Procedures for the Joint Application of Firepower \(JFIRE\)](#), for more detailed discussions of risk-estimate distance.

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