

## **FIRE SUPPORT AND AIRSPACE COORDINATION**

### **FORMAL COORDINATION**

The FSCoord establishes fire support and airspace coordination, with input from his ALO counterpart at the appropriate level of command and control. Formal measures are usually published in the fire support plan and the airspace coordination order (ACO). Formal coordination can be either permissive or restrictive.

#### **Permissive**

Permissive coordination consists of the following:

**Coordinated Fire Line.** A line beyond which conventional or improved conventional indirect fire weapons (mortars, field artillery, and naval gunfire) may fire at any time within the zone of the establishing headquarters without additional coordination.

**Fire Support Coordination Line.** A line beyond which any weapon system may attack targets without endangering troops or requiring additional coordination with the establishing headquarters.

**Free-Fire Area.** A designated area in which any weapon system can fire conventional or improved munitions without additional coordination and is normally established on identifiable terrain.

### Restrictive

Permissive coordination consists of the following:

**No-Fire Area.** An area in which no fires or the effects of fires are allowed without prior clearance from the establishing headquarters, except if the commander's force must defend against an engaging enemy force within the no-fire area.

**Restrictive Fire Area.** An area in which specific restrictions are imposed and in which fires that exceed those restrictions are prohibited without prior coordination from the establishing headquarters.

**Restrictive Fire Line.** A line established between converging forces. It prohibits fires or the effects of fires across the line without coordination from the establishing headquarters.

**Airspace Coordination Area.** A three-dimensional block of airspace in which friendly aircraft are reasonably safe from friendly surface fires.

### INFORMAL COORDINATION

Informal coordination consists of procedures to deconflict aircraft from other fire support assets, primarily artillery. The terminal air controller (FAC, ALO, ETAC) establishes informal measures in response to the FSCOORD's fire support plan and implements them for a short period of time to permit CAS operations. Informal measures are heavily dependent upon good FSCOORD-ALO interface.

### Heading Offset

The terminal air controller selects an IP and specifies a lateral offset from the IP-to-target run-in to deconflict fighters from other supporting fires. Item 2 of the J-Fire 9-line must include the words “*offset left/right*” as appropriate after the magnetic heading so that fighters understand the offset is a restriction. A distance to offset may be included, for example, “*270 degrees, offset left, 2 kilometers.*”

### Heading Direct

The terminal air controller selects an IP so that the IP-to-target run-in is deconflicted from other supporting fires by at least 2 nautical miles either side of the centerline. Item 2 of the J-Fire (-line must include the word “*direct*” after the magnetic heading so that fighters understand the heading is a restriction, for example, “*270 degrees direct.*”

### Informal Airspace Coordination Area

The terminal air controller establishes a two-dimensional area where fighters can operate and be reasonably safe from friendly surface fires. While the area should be established along easily identifiable terrain features, it can be established using grid lines. The Remarks section of the J-Fire 9-line must include ACA boundaries and effective times, for example, “*No arty fires south of the Green River; ACA in effect UFN*” or “*No arty fires west of the 20 or south of the 14 grid lines; ACA in effect for 10 minutes.*”

### Maximum Ordinate

The terminal air controller obtains the maximum ordinate of supporting fires and provides the fighters with an altitude mean sea level (MSL) to work above. The maximum ordinate can only be used for deconfliction when the artillery is firing low angle and threats or weather permit medium-altitude operations. The Remarks section of the J-Fire 9-line must include a maximum ordinate if used, for example, "*Max ord is 6000' MSL; work above.*"

### Target-to-Gun Line

The terminal air controller provides the fighters with both the artillery impact area and the target-to-gun line (TGL). Fighters are deconflicted from other supporting fires if they avoid both the artillery target and the TGL. The Remarks section of the J-Fire 9-line must include both the artillery impact coordinates and the TGL, for example, "*Arty impact at NK 414678; TGL is 100 degrees.*"

### Gun-to-Target Line

The terminal air controller provides the fighters with both the artillery location and the gun-to-target line (GTL). Fighters are deconflicted from other supporting fires if they avoid both the firing location and the GTL. The Remarks section of the J-Fire 9-line must include both the artillery location, via authentication tables or secure voice, and the GTL, for example, "*Arty location. . . in the clear, NK. . . I set AB . . . I send JOELDB; GTL is 100 degrees.*"

### Shift/Check Fire

The terminal air controller works with the FSCOORD to shift supporting fires for a short time to another area so that CAS operations can occur and be reasonably safe from friendly surface fires. Although uncommon, supporting fires may also be checked in order to permit cyclical operations between artillery and CAS assets, for example, "*C Battery, check fire. . . fighters inbound.*"