Field Artillery

"The Mission of the Field Artillery is to destroy, defeat, or disrupt the enemy with integrated fires to enable maneuver commanders to dominate in unified land operations."

FM 3-09: Field Artillery Operations and Fire Support, April 2014

Role of the Field Artillery in the Deep Fight

There are two types of field artillery currently in use in our armed forces; cannon and rocket.

Cannon: FA battalions of towed and self-propelled howitzers are the primary providers of lethal and non-lethal fires to the BCT. Each BCT has one FA battalion in direct support (DS) of its operations The FA battalion commander also serves as the BCT commander's Fire Support Coordinator (FSCOORD) and along with the brigade fires cell develops the fires plan and integrates all joint fires in support of the brigade. An FA battalion consists of either three batteries of six guns or two batteries of eight guns depending of the type of BCT supported. These individual batteries may designated DS to individual maneuver battalions/squadrons or retained at brigade and maneuvered as a single battalion providing general support (GS).

Since cannon artillery is both DS to the maneuver brigade and has limited range there are only a few instances in which it may be utilized to shape the enemy in the deep area. With the protection of nearby maneuver forces the artillery can get relatively close to the forward line of troops (FLOT), and deliver fires beyond the forward edge of the battle area (FEBA) of the forward most unit. In the case of the cavalry squadron within the BCT, screening or guarding the FEBA towards the end of a particular phase of the operations, artillery can be positions close enough to extend well into the deep area. Cannon artillery is able to fire many types of munitions to generate different types of effects: High explosive and cluster for destroying and neutralizing, smoke for obscuring, marking and deceiving, scatterable mines for delaying and diverting, and precision munitions for kinetic strikes near collateral concerns.

Rocket: FA battalions of tracked or wheeled self-propelled rocket launchers are found within field artillery brigades (FAB) assigned to the division, and usually acts in a GS capacity to subordinate brigades. Their long-range and accurate guidance systems make these launchers well adept at shaping high-value and high-payoff targets (HVT/HPT) in the deep area. Because of their significant firepower many launchers may be retained at the division, and be ready to support corps and theater level HVTs, HPTs, and time-sensitive targets that require long-ranging lethal firepower. Individuals batteries may be assigned in DS capacity to the division's BCTs, but generally they are in a GS status so that division fires can have centralized control over the use of their rockets and missiles.

In addition to unguided rockets, these systems have the capability to launch the guided multiple launch rocket system (GMLRS) and the Army Tactical Missile System (ATACMS). With a max range of 70km for GMLRS and upwards of 270-300km for ATACMS the rocket artillery is predominantly used far beyond the FLOT and into the deep area of the division. Their impressive ability to product lethal effects, yet extremely limited ammunition availability, means that engagements with these systems need to be restricted to those important target sets; i.e. mission command nodes, air defense systems, specialty equipment, and large concentrations of maneuver forces. Munitions types include both cluster and unitary high explosive.





HIMARS Battalion Conducting Live Fire Training, US Air Force Senior Airman Duane Duimstra

Soldiers delivering fires against Taliban positions in Afghanistan. https://i.ytimg.com/vi/zYBgFeLCp3E/maxresdefault.jpg

How to Employ Field Artillery in the Deep Fight

In order to more effectively shape the deep fight with artillery the BCTs fire support plan should have a comprehensive employment of fire support coordination measures (FSCM) that makes fires more permissive to shaping in the deep area. The greater the separation between the BCT's coordinated fire line (CFL) and the division or corps fire support coordination line (FSCL) the greater the permissive area for surface-to-surface fires will be. Additionally, working with the air defense and airspace management (ADAM) cell and tactical air control party (TACP) to develop effective air corridors and airspace coordination areas (ACA) for rotary and fixed-wing aircraft will reduce the need to hold back artillery fires while awaiting air clearance. With permissive coordination measures established well in advance artillery can be free to shape the deep fight effectively by mitigating its biggest weakness; engagement times.

While rocket artillery has the range, cannon artillery has the flexibility. The many different types of munitions it can fire can create various types of effects that can suit any shaping plan. It can achieve effects beyond just using high explosive and dual-purpose improvised conventional munitions (DPICM), a cluster munition, to destroy trucks, equipment and personnel and neutralize armored vehicles and radars. With smoke you can not only obscure enemy observation you can also draw the enemy's attention elsewhere, behaviorally shaping them to think friendly forces may be maneuvering near that location, or mark targets for aircraft to strike with lethal munitions. You need to disrupt or delay enemy moving along a road or through a valley in order to enter the AO? Then consider using family of scatterable mines (FASCAM) at narrow canalizing points in order to break tracks and axels and destroy personnel. Have a high-value individual (HVI) that needs to be destroyed operating out of a single room within a densely populated town? Well with the GPS-guided, low-collateral M982 Excalibur precision guided munition and a mensurated grid you can destroy him, the equipment in his room, and nothing else.

The range of cannon artillery has been its biggest problem in shaping the deep fight, but this can be mitigated through the execution of an artillery raid. Artillery raids are generally conducted beyond the security area in order to range high-payoff targets, and is generally executed for a short duration due to the risk involved. For towed howitzers; i.e. M119A3 and M777A2 that can be air lifted by helicopters, or for self-propelled howitzers; i.e. M109A6 Paladin that can travel by ground alone or with a security escort, forward firing positions are preplanned to support with fires a particular objective before retrograding back to the BCT's AO as soon as possible.

The fires provided by rocket artillery in either a GS or DS status will need to be carefully planned out as the limited number of rounds available provide less flexibility than cannon artillery. This can be alleviated through properly developed target selection standards (TSS) and an attack guidance matrix (AGM) from the BCT targeting cell.

By CPT Jonathan Janiszewski 2nd ABCT, 1st AD Air Defense and Airspace Management Officer

Air Defense Artillery



"Air Defense Artillery is defensive measures designed to destroy attacking enemy aircraft or missiles in the atmosphere, or to nullify or reduce the effectiveness of such attack either through surveillance actions or active engagements of aerial threat."

ADRP 3-09: Fires, May 2012

Role of the Air Defense Artillery

When Air Defense Artillery (ADA) is discussed, the role which garners the most attention tends to be its ability to provide deterrence and defense against enemy air and missile threats targeting critical strategic or operational objectives. However, ADA is equipped with a wide variety of additional capabilities specifically designed to support the maneuver force. The Air Defense Airspace Management (ADAM) Cell at the brigade level allows the Division Joint Air Ground Integration Cell (JAGIC) to delegate the management of airspace beneath the Coordination Level (CL) to the Brigade Combat Team. This distribution of management responsibility enables near real-time procedural management of airspace, allows the Brigade Commander the flexibility to execute fires, and facilitates rapid employment of organic and attached assets without coordination through external entities. The results of effective airspace management at the brigade level include rapid fires and flexible implementation of rotary wing assets throughout the area of operations (AO).

In addition to airspace management, the ADAM Cell plays a pivotal role in the planning and implementation of passive and active air defense measures. Passive defense measures such as camouflage, concealment, deception, dispersion, detection and warning systems, and hardening improve unit survivability and counter enemy surveillance efforts. Active defense measures such as defense counter air (DCA) aircraft, air defense weapons, and electronic warfare assets defeat, destroy, or neutralize enemy weapons and platforms reducing the effectiveness of hostile air and missile threats. As enemy tactical ballistic missile threats and Unmanned Aerial Systems (UAS) become more advanced and prevalent, orchestration of passive defense will continue to provide a critical counter for threats which a brigade is unable to effectively counter with its organic capabilities.

A third major role of the ADAM is to connect the brigade with ADA and joint assets in the AO. For example, the realtime air picture from organic radars can be augmented by joint Tactical Data Links. In addition to providing the commander with enhanced situational awareness in the third dimension, this capability facilitates early warning against enemy aviation and tactical ballistic missile threats. Using both joint and local feeds, the cell detects and identifies enemy aircraft and UAS in the AO. The ADAM implements both active and passive identification measures, enabling engagement with attached ADA systems or Combined Arms for Air Defense. ADA units are equipped to digitally identify enemy platforms and, depending on the weapons control status and identification authority, can prosecute their own engagements. However, when combined arms are used to engage enemy aircraft, units are unable to observe air corridors digitally or to interrogate targets through IFF. BDE ADA assets can augment their ability to engage targets by identifying enemy aircraft and sending the information directly to the ground units.



https://www.msl.army.mil/Pages/C-RAM/cram.html

How to Employ Air Defense Artillery in the Deep Fight

Air Defense capabilities must be drawn upon heavily in order to enable a unit to successfully shape the deep fight. First, the ADAM Cell establishes the Airspace Coordinating Measures (ACMs) which support the ground scheme of maneuver and collaborates with the BDE Fires Cell as well as the Brigade Aviation Element in order to build the unit Airspace plan. This plan provides the mobility architecture required to employ Army Aviation and Fires assets against enemy forces, establishes the Air Defense plan, and resources maneuver units with the requisite aviation assets. Ultimately, the ADAM Cell facilitates synchronization of all airspace users including fires, UAS and Aviation against enemy forces.

The ADAM Cell gives access to resources from external entities which enhance the Brigade's warfighting ability. For instance, the ADAM Cell provides access to the Link 16 Tactical Data Link (TDL). This TDL provides the Brigade with situational awareness of air, land, and maritime platforms around its AO. In addition, the network provides access to sensor data from these platforms, vastly expanding the units digital field of view. Leveraging Link 16, the unit can maintain both awareness and understanding of enemy aviation movements and actions throughout the deep area and respond decisively.

Proximity to and integration with the Brigade's radar assets are critical considerations when employing the ADAM Cell during operations. The ADAM is able to provide localized warning to Soldiers at CPs and throughout the AO when provided the requisite radar feeds. However, this capability can only be leveraged effectively when the RAM Warn system receives data from Firefinder radars. Furthermore, when these radars are correctly integrated, the ADAM Cells system is able to pass counterfire data to the BDE AFATDS faster than it can move through the typical digital architecture.

The ADAM Cell contributes most effectively to the deep fight when it is fully integrated into the Brigade Command Post. The Cell must be established in a way that facilitates rapid communication with the Fires Cell, the S2 CUOPS, Brigade Aviation Element (BAE), and Tactical Air Control Party (TACP). Efficient information flow and shared understanding allows the ADAM to synchronize use of airspace among artillery, UAS, rotary wing aircraft, and fixed wing aircraft. Effective integration of these sections enhances planning ability, reduces the likelihood of error, and enables expedient action in support of the combat operations. As a result, artillery and aircraft can be used to strike deep targets with minimal constraints and reduced likelihood of fratricide.

Information Operations



"The integrated employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision-making of adversaries and potential adversaries while protecting our own."

FM 3-13: Inform and Influence Activities, January 2013

Role of Information Operations in the Deep Fight

The information operations (IO) officer's job is to coordinate, synchronize, and/or deconflict the various information-related capabilities available to the BCT. Some capabilities include but are not limited to: public affairs, military information support operations, combat camera, soldier and leader engagement, civil affairs operations, civil and cultural considerations, operations security and military deception. IO officers and those experienced with IO know the complexity of the environment makes it difficult to achieved the desired effects the commander is trying to create, and will require a detailed understanding of that environment and how effects compound and cascade throughout it. For the deep area, this will require working with S2, and the other enablers, in order to behaviorally shape the enemy.

The main goal for IO in the deep fight will be the determine the desired effects to shape the enemy, and determine which assets available to the BCT can be utilized to achieve that. The BCT's IO cell doesn't necessarily control any assets of its own, and will need to work with other cells in order to meet its mission. In this instance the enablers that shape the deep fight also directly support the mission of IO, because the lethal and non-lethal effects the achieve on the battlefield will undoubtedly have a psychological effects should there be someone to witness those stimuli. Therefore, IO planners have to be integrated into the COA development process alongside all other enablers to ensure their effects meets the commander's intent for inform and influence activities (IIA).

IIA follows two separate, yet related, lines of effort (LOE) during military operations; inform and influence. The inform LOE seeks to simply provide credible, factual and accurate information so that audiences can come to their own conclusions, and may result in a advantage to friendly forces or disadvantage to the enemy depending on the type of audience and the conclusion they have reached. The influence LOE attempts to actively shape the audience's behavior, through the use of means available to the force, to help meet operational and strategic objectives and/or weaken the enemy's position. An example of both LOEs would include radio broadcasts depicting friendly coalition victories on the battlefield in order to inform audiences, and non-lethal leaflet drops on enemy positions promising them proper treatment should they surrender in order to influence their subsequent action. The passive nature of the radio broadcast to inform may produce similar behavioral effects as the active nature of influencing the enemy through leaflets. The difference between the two is mainly in how attitudes and behaviors are shaped. Not inherently tide with any particular mean that can be employed. As a result, IIA needs to be planned out well in advance in order to determine how certain actions with shape the behavioral responses on actors in the operational environment, and to avoid producing negative second and third-order effects that would be counter-productive to the brigade operations. Operations in the deep area can provide the time necessary to produce these effects.



How to Employ Information Operations in the Deep Fight

The deep fight affords the BCT a considerable about of time and space that allows many behavioral and attitudinal changes to develop and permeate throughout the environment. As a result, the need for IIA to be planned for the deep fight has much greater benefits for the BCT than conducting them in the close fight. Working alongside long-range rocket artillery in order to strike enemy mission command nodes in the deep area can greatly influence the nature of their operations for subsequent days leading to the close fight. Supporting the distribution of newspapers that extol the activities of coalition forces and strengthen the legitimacy of the host-nation government may result in a more cooperative populous when the brigade enters a new township.

The IO cell's duty for the deep fight is to identify those IIA LOE that can support friendly objectives, weaken the enemy, and/or support the host-nation and international effort while mitigating the potential negative effects. They utilize and effects-based approach to shaping the enemy's behavioral responses by determining what responses support the LOEs then associate those effects with capabilities available to the BCT that can create them. If part of the influence LOE required weakening of the enemies chain of command then the IO cell may request the utilization of electronic warfare platforms to jam their communications while utilizing attack aviation to strike specific mission command nodes. If an element of the inform LOE entailed shaping the enemies attitude towards surrender then they may work with public affairs to develop stories that discuss the coalition's humane treatment of enemy prisoner's of war.

The IO cell must also be proactive in utilizing IIA to counter negative effects that are intentionally or unintentionally produced on the battlefield by coalition action, and to even forecast potential scenarios where such incidents might occur separate from military operations. There are times where military necessity permits the engagement of targets that would also subsequently produce negative collateral effects. In the deep area, the destruction of an enemy mission command node may also result in damaging a nearby collateral concern or taking the life of non-combatant. The IO cell foresees such negative effects, and works with the BCTs enablers to counter them. Destroying that mission command node may result in rupturing water lines to the immediate area so the IO cell may request the TACP to prepare the Air Force to provide an emergency air-drop of pallets of water for locals to use until coalition forces are able to enter the area and restore this essential service.

Shaping the deep fight utilizing IIA will invariable set conditions for the conduct of the close fight for the BCT. Therefore, throughout every step of MDMP, the IO cell must have representation present to evaluate how effects being produced in the deep fight will result in behaviorally shaping the adversary over space and time.

Electronic Warfare



The term EW refers to military action involving the use of EM energy and directed energy (DE) to control the EMS or to attack the enemy. EW consists of three divisions: electronic attack (EA), EP, and electronic warfare support (ES).

JP 3-13.1 : Electronic Warfare, 2012

Role of EW in the Deep Fight

Electronic Warfare (EW) is an essential element of joint fire non-lethal support that requires planning, preparation, execution, and assessment required for collective expertise from operations, intelligence, signal, and mission command. The EW cell integrates efforts across the warfighting functions to ensure EW operations support the commander's objectives.

The continued role of the EW cell within the deep fight will be to integrate EW capabilities to attack personnel, facilities, or equipment with the intent of degrading, neutralizing, or destroying enemy combat capabilities. The EW cell will synchronize and coordinate offensive and defensive actions within the overall operation; assess the effects of offensive and defensive EW throughout the operations process, and recommend EW adjustments as required. They will coordinate and synchronize tactical EW with theater, strategic, and operational-level EW, and continue coordinating EW elements and related activities to the commander. They will integrate intelligence from the G2 (S2) into EW, coordinate the attachment of specialized EW teams, and monitor execution of EW tasks to ensure friendly forces dominate the EW spectrum.

In direct reference to Deep Command and Control warfare, EW operations continue to play a significant role. The effects of EW during this phase in the fight, enable internal protections of friendly electronic systems, and allow for offensive attacks on enemy key C2 nodes. The main objectives within this phase are to allow for continued identification of high-value C2 nodes, IOT disrupt enemy electronics and communications activities. Additionally, the integration of EW capabilities to disrupt, degrade, and deny enemy usage of the electromagnetic spectrum, for the purpose of early warning, and allow for the opportunities of friendly freedom of movement to mission objectives remain at a high state of importance. These established priorities of denying enemy weapon control systems and electronic command capabilities from the commander are an essential piece within the deep fight.

Representatives within the Electronic Warfare Element, will continue to provide insight to the commander throughout the Deep Fight. The essential factors that fall under said updates, will be the Corps and National level assets available for tasking, which will enable the proper effects to meet the commanders intent. The EW aerial platforms that play an essential role, derive from both Airforce (C-130H Compass Call and C-130J Commando Solo) and Navy (EA 18G Growler) platforms; the capabilities within these electronic attack and electronic support aerial platforms, continue to assist in denying the opponent the advantage through the spectrum by targeting humans, communications, radar, and other assets, IOT enable friendly unimpeded access.



Referenced Images: FM 3-38 Cyber Electromagnetic Activities

How to Employ Electronic Warfare in the Deep Fight

The term EW refers to military action involving the use of EM energy and directed energy (DE) to control the EMS or to attack the enemy. EW consists of three divisions: electronic attack (EA), electronic protect (EP), and electronic warfare support (ES). DE is an umbrella term covering technologies that produce concentrated EM energy or atomic or subatomic particles. DE capabilities complement and optimize the use of EW because DE is an enabler for all mission areas.

The employment of all three divisions within EW, maintain an essential piece within the commanders repertoire. The supporting EW missions that will be initiated during this phase of the fight, will be in conjunction with other elements that support the warfighting functions. These reinforcing joint EW missions will be employed as follows:

Electronic Warfare and Physical Attack. EW supports physical attack by providing target acquisition through ES and by destroying or degrading susceptible assets with EA. EP supports physical attack by protecting friendly targeting sensors, navigation, and communications in a contested environment. Physical attack supports EW by destroying adversary C2 targets and EMS-dependent systems. "Precision strike" is an increasingly important aspect of physical destruction actions in joint operations. EW is an important part of precision strike. Frequency management and deconfliction must account for frequencies used by various types of precision strike weapons. ES assets are an important part of efforts to dynamically map the EMOE for targeting and threat avoidance planning. Standoff munitions and anti-radiation ordnance are major assets in any operation and may, for example, be used to selectively destroy adversary emitters in support of MILDEC, SEAD, OPSEC, and MISO efforts.

Electronic Warfare and Military Deception. EW supports MILDEC by using EA/ES as deception measures; degrading adversary capabilities to see, report, and process competing observables; and providing the enemy with information received by electronic means that is prone to misinterpretation.

Electronic Warfare and Civil-Military Operations (CMO). In support operations such as humanitarian operations, EW assets may be used to map the EMS and broadcast civil defense information similar to the way they have been used successfully to broadcast MISO messages. In all operations, CMO frequencies should be included on the JRFL to ensure deconfliction with EW assets' activities. As requirements for EW assets expand into peacetime contingency roles, it becomes more imperative that planners consider diplomatic clearance requirements of HNs as early as possible.

By CPT Brian Haley 3-6 Heavy Armored Reconnaissance Squadron, D Company Commander





"The mission of Army Aviation is to find, fix and destroy any enemy through fire and maneuver and to provide combat support and combat service support in coordinated operations as an integral member of the combined arms team fully integrated within joint operational framework."

FM 1-100: Army Aviation Operations, February 1997

Role of Aviation in the Deep Fight

Offensive Operations: As a highly mobile and lethal platform, attack aviation assets can be used to conduct movement to contact or attack missions against the enemy in the deep area, with the end state of defeating, destroying, or neutralizing the enemy prior to the BCT engaging with the enemy in the close fight. With a large variety of munitions available, the AH-64D can achieve a wide variety of effects on virtually any ground target in existence today, including the world's most advanced armor platforms. As a maneuver asset, attack aviation also has the unique capability to clear their own fires and conduct battle damage assessment following an attack, an important distinction to be made from their Air Force counterparts.

Reconnaissance: Both manned and unmanned attack aviation assets are capable of conducting reconnaissance in the deep area to feed the BCT's targeting cycle through reconnaissance of NAIs and TAIs, allowing the BCT commander to better predict the enemy's COA prior to engaging the enemy in the close fight. With advanced radar, IR, and EO sensors, attack aviation assets are capable of reconnaissance beyond the capabilities of the BCT commander's organic cavalry squadron, allowing the BCT commander to see the battlefield in the deep area. Through Manned-Unmanned Teaming (MUM-T) and the use of RQ-7B Shadow and Grey Eagle UAS now organic to the Combat Aviation Brigade, the BCT commander can conduct this reconnaissance without exposing aircrews to the threat of enemy fires.

Movement and Maneuver: Lift aviation provides flexibility, speed and responsiveness to any formation but must be fully integrated within the BCT planning cycles to be effective. UH-60 and CH-47 platforms when properly employed can have a powerful effect on the deep fight by executing air assaults or raids in areas well outside the BCTs usual area of influence. Vulnerable enemy assets or formations outside of BCT indirect fire range can in some conditions be targeted for an artillery raid where up to a battery of howitzers are airlifted to a forward firing point, and extracted immediately following the fire mission. Lift aviation can also be particularly beneficial in the deep fight when executing a deception plan, since it allows for rapid repositioning of assets thorough the battlefield.



Photo <u>http://www.lsijax.com/images/Army-Aviation.jpg</u> retrieved by Google

How to Employ Aviation in the Deep Fight

Attack aviation is most effective when utilizing the MUM-T capability newly available in the Combat Aviation Brigade. Unmanned platforms now live, train and operate with manned platforms on a consistent basis, allowing attack aviation assets to develop TTPs that decrease the time manned platforms need to engage the enemy. In the instance of a deliberate attack conducted in the deep area, unmanned platforms conduct reconnaissance to confirm infiltration route and attack by fire position intelligence estimates as well as enemy location, composition, and disposition prior to any manned platform even taking off. AH-64D/E aircrews are capable of digitally linking with UAS platforms to gain real time intelligence, allowing the aircrews to engage the enemy at their maximum standoff range while minimizing exposure time to enemy air defense assets.

As a reconnaissance platform against an integrated air defense threat, AH-64D/E aircrews are capable of much lower level flight than the vast majority of unmanned and manned ISR platforms, thus limiting their exposure to enemy radar-guided systems. While BCT ground forces have become accustomed to the freedom of maneuver of ISR platforms during recent conflicts, a near-peer fight would likely result in a severe restriction of these platforms to perform their mission and ground commanders would need an alternate solution that the AH-64 could provide.

Similarly, ground forces have come to expect lift aviation to have near perfect freedom of movement, as a BCT conducts a deep fight against a near-peer force the best way for lift and assault aviation to remain effective will be being well integrated with the BCT planners. In addition to planning-intensive missions like air assaults lift aviation is often used at short notice to deal with the unforeseen, for instance, emergency resupply operations or MEDEVAC. This rapid flexibility can be one of the most powerful tools at the Commander's disposal even in the deep fight, as an example bringing extra ammunition to a 155mm battery best positioned on the enemy avenue of approach could become critical. This ability to react quickly however, is only possible when ground and aviation planners have the same shared understanding of all aspects of the operation. If the BCT has not accounted for enemy ADA or set forth appropriate airspace control measures then a critical operation may become more hazardous or complex then is acceptable to the commander. With good integration though, Army Aviation is frequently one of the BCT commander's best tools to achieve quickly and precisely a specific goal or task.

Information Collection

(formally known as **ISR**)



"Information collection is an activity that synchronizes and integrates the planning and employment of sensors and assets as well as the processing, exploitation, and dissemination systems in direct support of current and future operations."

FM 3-55: Information Collection, May 2013

Role of ISR in the Deep Fight

Information Collection (IC) provides timely, accurate, and actionable intelligence in order to answer the Brigade Commander's Priority Intelligence Requirements (PIR) and provide direct support to Targeting. It is the ability to coordinate the "eyes and ears" of the organization to identify, observe, and track enemy forces throughout the area of operations. From an intelligence perspective, the primary focus of IC is to confirm or deny a most likely enemy course of action. While this is doctrinally sound, it is crucial that the IC Manager does not plan in a vacuum nor does he/she lose focus of the targeting process. The ultimate goal of the ABCT to defeat our nation's enemies through the application of lethal force. This article will detail how IC supports that goal.

Military Decision Making Process (MDMP) dictates that the initial Collection Plan will be drafted during Mission Analysis (MA). Much of this information is based on the Annex B and Annex L received from the higher headquarters (HQ). The primary sub step of MA, Intelligence Preparation of the Battlefield (IPB) will identify key terrain, obstacles, mobility corridors, avenues of approach and the enemy forces in the form of Order of Battle. This process will provide an initial High Payoff Target List (HPTL) which directly impacts the Targeting process. IPB facilitates the development of PIR and named areas of interest (NAIs). Coupled with collection priorities provided by the S3, the unit has sufficient information to begin planning for targeting at this point in the MDMP process.

The IC Manager, Targeting Officer and Fires Support Officer (FSO) work together to develop the Information Collection Matrix (ICM) and the Target Selection Standards. The ICM will identify what intelligence requirements can be satisfied with organic assets and what request must be made to the next higher HQ. These products help to focus IC and Targeting processes, driving the development of the Target Support Matrix (TSM). D3A (Decide, Detect, Deliver, Asses) is applied by the FSO with input from the IC Manager. The TSM cannot be completed without the input of the IC Manager as he is the subject matter expert (SME) in regards to availability, capability and proper implementation of collection assets. Course of Action (COA) development, MDMP step three, is the first point in development of Intelligence Handoff Lines, potential recovery plans, the Event Template and the Event Matrix. This will refine the timing necessary to focus both collection and fires within a specific NAI. During steps four and five of MDMP, these products should be refined as there will be updates and changes that occur during each step. It is important that the IC Manager, Targeting Officer, and the FSO convene after each step to ensure all updates are applied to each product. Annex L production should start during step five, COA Comparison. These products cannot be completed prior to COA approval. Once all products are completed, they should be disseminated with the Annex L to the S3 for publication.



How to Employ ISR in the Deep Fight

Collection assets are allocated to satisfy intelligence requirements by the IC Manager and the S3, AS 3, or BTL CPT. The ICM and TSM will drive this process. It is important not to leave assets "in reserve" for follow on missions. All organic assets must be used utilized against the unit's intelligence requirements. Any unsatisfied requirements require request for collection (RFC) to the next higher HQ for IC support. The most important aspect is to ensure that the correct capability is leveraged against the corresponding problem set. Production of these RFCs should be nested within the ICM and TSM. During operation, it is the IC Manager responsibility to supervise the employment of assets, to ensure the collector understand what and how to meet the intelligence requirements. Communications with assets vary from secret voice over internet protocol (SVOIP) to chat via Joint Battle Command Platform (JBCP). It is important to develop a PACE plan for each asset that may support the unit. Every 24hrs, an Intelligence Synchronization Matrix (ISM) is produced that depicts what assets are scheduled for collection for the next 72hrs. This requires input from the BNs, Shadow PLT, and higher HQ.

Anecdotes

The BDE IC Manager has an underutilized asset within the Calvary Regiment in the form of the "Chief of Recon." This is a nominated position and not on the MTOE. This person is assigned by the BN Commander as the resident expert in reconnaissance and has the responsibility to plan reconnaissance for the unit.

Up to this point in my career, I had never heard the term "Chief of Recon" and had no idea what this position entailed. During the Combined Arms Rehearsal, I was approached by the 1-1 CAV Chief of Recon, a CPT. During a very candid conversation he informed me that the Annex L that was previously produced did not sufficiently outline for him or his unit what task was required of him. From my point of view, the Annex L spoke to each subordinate unit's task and purpose and should have been enough to draft an initial plan for reconnaissance. He questioned me about focus, tempo, engagement, displacement, and disengagement criteria. Very quickly I understood that we were not speaking the same language. After he explained how he planned his missions, I could then see that detailing these points for him will facilitate better collection form his unit. It was advantageous for me to discuss the CAV's capabilities and how best to leverage them. Production of the Annex L was drastically improved with the Chief's input. By Capt. Daniel Savini & TSgt Paul Klar 7th ASOS, 2/1 ABCT, Joint Terminal Attack Controllers

Tactical Air Control Party



"The TACP has two primary missions: advise ground commanders on the capabilities and limitations of air operations and provide the primary TAC of CAS. TACPs coordinate ACMs and deconflict the aircraft with other fire support. TACPs may employ JTACs at any echelon, but will most often place them in a forward position (i.e., the company/team level)."

JPUB 3-09.3: Close Air Support, November 2014

Role of the TACP in the Deep Fight

Close air support (CAS) is a critical element of joint fire support that requires detailed planning, coordination, and training of ground and supporting air forces for safe and effective execution.

The supported commander establishes the target priority, effects, and timing of CAS fires within the boundaries of the land or maritime areas of operations, joint special operations areas, or amphibious objective areas. CAS is a key capability for each of these components to employ fires that destroy, suppress, or neutralize enemy forces and in turn permit movement, maneuver, and control of territory, populations, and key waters.

CAS is planned and executed to support ground tactical units. CAS execution is tightly integrated at the tactical level with the fire and maneuver of supported ground forces. The air apportionment and allocation process for CAS occurs at the operational level. CAS planning focuses on providing timely and accurate fires in support of friendly forces in close proximity to the enemy.

A commander generally assigns the preponderance of available CAS in support of close combat operations to the unit designated as the main effort. CAS aircraft and fire support assets can mass with surface forces to support the commander's objectives. The speed, range, and firepower of CAS also make it a valuable asset for exploiting friendly success, disrupting rapid adversary maneuver, and attacking a retreating enemy. These effects may also be achieved in support of the deep fight.

Commanders may employ CAS to support operations deep within the operational area, which may include SOF or conventional forces with a deep operation mission. Shaping operations involving CAS may require additional coordination to deconflict with other missions such as air interdiction (refer to the joint air tasking order [ATO]).

CAS provides commanders with flexible and responsive fire support. Using CAS, commanders can take full advantage of battlefield opportunities by massing firepower to maintain the momentum of an offensive action or reduce operational and tactical risks. The mobility and speed of aircraft provide commanders with a means to strike the enemy swiftly and unexpectedly.



How to Employ the TACP for the Deep Fight

CAS planners anticipate the enemy's ability to affect the mission, and the potential impact enemy actions may have on flight tactics. Timely mission planning to employ CAS in the deep fight is critical due to air support request requirements and timedriven scheduling. The specific theater or joint operations area supporting JAOC will establish cut-off times to receive preplanned air support requests for inclusion in the Air Tasking Order (ATO). CAS requirements that do not meet the established cut-off times are treated as immediate air support requests and processed by the Air Support Operations Center (ASOC).

Although CAS may be used primarily in support of close combat operations, Commanders may decide to employ CAS in the deep fight for several reasons, specifically in major combat operations. In the beginning phases of major combat operations a greater number of aircraft will likely be apportioned for air interdiction against strategic targets to be prosecuted at echelons above the Brigade. As a result, there may be a limited number of aircraft apportioned to the CAS role, allowing the Commander to decide to provide air support to the deep fight where there may be higher priority targets instead of directly to maneuver battalions if the tactical situation warrants that flexibility. The recent counter-insurgency fight in Afghanistan and Iraq has developed expectations of full CAS coverage to respond to any troops-in-contact situation, which will not be realistic in a force-on-force fight. CAS will be a limited resource in a fight against a peer or near-peer enemy, and the Commander will be forced to decide the priority for air support.

When aircraft are sent to shape operations with the potential for friendlies relatively distant from the enemy, terminal attack control will likely be conducted from the Brigade because of the highest level of situational awareness. In order to increase effectiveness at this level, aircraft need an accurate threat and FSCM picture, the assets to provide effective SEAD/DEAD, and ISR or observers to find and PID targets. An additional factor to consider for CAS operations in a Brigade TOC is seat placement of the JTAC and ALO. The TACP needs to be placed close to the ISR seat for direct airspace deconfliction with ISR assets and target identification, the A2C2 for rotary wing and host nation aircraft deconfliction, the Battle Captain for friendly and operational situational awareness, and the Commander for strike approval.

Surface to air threats have a major impact on the ability to employ CAS. CAS planners will follow the "Avoid, Suppress, Kill" mentality in terms of utilizing CAS to meet the Commander's intent. Prosecution of strategic level threats will most likely be targeted above the Brigade, however the possibility remains that tactical threats are still present on the battlefield within the Brigade's area of responsibility. Employing CAS in the deep fight against these threats is extremely relevant in order to secure freedom of maneuver for all supporting aircraft to include CAS, ISR, Army Attack Aviation, and MEDEVAC, and therefore be able to fully support the ground maneuver units. The appropriate SEAD/DEAD assets should be requested to support these strikes to include EW and organic indirect fire support.