Aviation fire support in the decisive action training environment

By Capt. Karl Kunkleman

Multi-domain battle asks a lot of its force. In addition to the required skill-set each Soldier is initially trained in, this new style of fighting requires leaders to absorb and retain knowledge that makes them not only subject matter experts in their trade but also a skilled ambassador to additional specialties. Here lies a unique experience and learning opportunity that arises when you stretch your boundaries of experience and expertise, giving you the ability to broaden your horizons in a job that few of your peers will ever experience and understand. One of these jobs is an aviation fire support officer (FSO).

The FSO is an enabler to the combat aviation brigade (CAB). He is the unit’s expert in not only Fires but ground-based maneuver. He must understand both what the ground force is doing and how aviation is supporting it. He must have the skill set to implement and decipher aviation routing, identify the enemy’s Integrated Air Defense System (IADS), and enable freedom of maneuver for friendly aircraft on the battlefield. The FSO must be able to communicate, synchronize and incorporate fire support as well as cyber and electronic magnetic activities (CEMA) assets to provide the most essential Fires mission for the aviation brigade, suppression of enemy air defense (SEAD). A simple mission to execute but one of the most difficult missions to synchronize.

As an aviation FSO, there are three specific mission sets that you will synchronize with fire support: air assaults, deliberate attacks and hasty attacks. Each mis-
Air Assaults

The National Training Center continually tests your lift capabilities by tasking a battalion or several separate company air assaults throughout the multiple battle periods. Be ready to conduct flights that accommodate multiple different aircraft types in one mission under all potential flight conditions and plan to continually support these requests from division and brigade. Having a flexible Fires plan is critical and requesting assets as early as 48 hours in advance will set you up for success. Build a relationship with the ground force to help understand how to employ aviation assets into their plan. Coordination with the ground FSO’s to overlap SEAD plans is critical. A maneuver FSO that does not have their own SEAD plan for an air assault could halt or delay take off for those supporting aircraft. Understanding of this go/no go criteria must be a face-to-face or voice over IP conversation with the maneuver commander and FSO. Air assaults in the decisive action training environment (DATE) often have very tight windows for execution. Ensure that you enforce execution timelines. This was a very painful learning experience that aviators did not want to accept. Hold aviators accountable for missing their timelines and ensure they know that the allocated assets will not wait for them. When division and higher assets are required to wait for you, they are unable to support other units in a rapidly changing battlefield. Adjusting planned times does not provide last minute availability. You must be proactive and establish good commander’s guidance. If you receive a “destroy everything” request, be creative. An example SEAD plan could include utilizing electronic attacks for a quiet infill and multiple strikes from rockets or fixed wing while aircraft are at the drop off location and their egress from that area. The supporting electronic attack can double as a secondary safety measure on egress. This became the standard operating procedure during our DATE rotation allowing for a quick and quiet infill and a devastating route out of the area of operation. Deliberate Attack

Deliberate attacks, also known in the DATE as a deep attack, are special because they are typically a division-directed mission enabling the attack aviation assets to fly past the coordinated firing line (and sometimes beyond the fire support coordination line) in order to conduct disrupting attacks in the enemy’s rear echelon. The main goal of this type of attack is to cause as much damage and confusion as quickly as possible before being targeted by the enemy air defense and IADS systems. It is essential in this type of mission to overlay multiple assets and mass Fires to support movement of friendly aircraft and to disrupt the enemy capabilities in their battle space. The FSO is key because he is able to support this mission in multiple ways. Asking for additional support for these missions is important. As a division mission, the aviation FSO has more authority when requesting and implementing assets to include rockets, electronic warfare, artillery and close air support (CAS). It is absolutely critical to accomplish this attack with the highest survivability to friendly aircraft in order to meet the division commander’s intent.

Be sure to utilize SEAD that is cued by electronic warfare (EW) or signal collection with overlaying electronic attack to disrupt and deny IADS systems on the objective. Build targets to mass rockets in templated enemy locations identified in your targeting work group with the S2, S3 and information collection (IC) manager. The targeting working
group is essential at the battalion level when nominating targets for deep attacks. Building the analysis and IC Fires plan demonstrates to division you're shaping the environment in support of the division's mission. Manage your SEAD based on threat rings of the enemy ADA systems and Worldwide Equipment Guide (WEG) for displacement criteria. Do not forget your ingress and egress SEAD to ensure survivability of friendly aircraft. Do not rely on Hellfire rockets from Apaches as your main source of firepower in a deep fight. The Apaches have a limited supply of ammo and will not be able to resupply at a jump forward arming and refueling point (FARP) during this type of mission. These missions are quick and rely on the combat multiplier, the element of surprise. Coordination with brigade is essential even though they are not in direct support of the mission. Make sure the brigade Fires cell knows the mission and your SEAD plan, so they can add injects at the most critical points of conflict. Aerial call-for-fire relayed from your deep attack teams via satellite communication (SATCOM) or joint capabilities release/joint battle command platform (JBCP) that are coordinated with the brigade and division high payoff target list (HPTL) will be executed with proper pre-coordination. This coordination allows you to save ammunition for time sensitive targets with the Apaches. 

Employing intelligence, surveillance and reconnaissance (ISR) will allow you to shape the engagement area for the deep attack prior to friendly aircraft coming on station. You will easily be allocated immediate division fire assets if you are utilizing ISR feed provided by the S2 synced with the HPTL. Focus on submitting immediate fire missions for targets on the HPTL. Remember that one rocket may not always destroy the enemy. Be creative with your engagement requests. We utilized triangle formations with time separation around towns that had possible enemy ADA on their perimeter. This allowed multiple strikes from the same Multiple Launch Rocket System (MLRS) launcher in our sector. If ISR are not available, your aircraft have the ability to be the observers. Ballistically, friendly aircraft are safe from friendly artillery if aircraft have 1km standoff from the target, 1km standoff from friendly positional artillery area (PAA) and are below 500 feet mean sea level (MSL). From experience, aircraft in a deep fight will not crest 150 feet MSL in order to stay hidden by terrain in their attack. De-confliction of Fires and aircraft is most easily conducted by lateral separation and will be the most efficient during a deep attack. Ensure in your SOP that, if friendly aircraft identify targets to be engaged by fire support as sets, they understand their lateral de-confliction requirements.

**Hasty Attack**

Hasty attacks are enabled by effective flight routing. Ensure that the ground commander understands the mission requirements and that you, as the FSO, can easily translate that for the aviators. Encourage and enforce battalion FSO’s to communicate in real time with supporting aircraft for situation updates, front line of troops and mortar locations. Pushing the aircrafts down to the battalion FSOs can assist in generating larger battle damage assessment and will be much easier to coordinate with the grounds maneuver scheme while on site. Typically, when conducting hasty attacks, the aircraft are constrained by restrictive corridors, this limits their superior capacity to see and impact the battlefield and make last second adjustments to win the fight. As stated earlier, the aircrafts are your best, most responsive forward observers. Let the aircraft work for you and the maneuver FSO. Permissive coordination measure importance cannot be overstated. Through our experience, heavily mandated restriction resulted in numerous missed opportunities where aircraft bypassed enemy armor that they could have easily killed.

When building your SEAD plan, or any Fires plan that supports aviation, having an official knee board product or condensed aviation plan that is distributed to pilots to sync efforts is key. This is critical when you have multiple missions going on simultane-

Figure 2. An example of a knee board product. (Courtesy illustration).
Knee board products will keep you organized and allow others to execute your plan if you are wounded in action or killed in action. The knee board product should include the mission, a generalized common operating picture, battalion and brigade Fires nets, fire support coordination measures, electronic warfare timelines and sectors in support of the mission, target list worksheet, PAA locations, friendly call signs and any other additional information that could benefit the pilots.

The unique attributes of an FSO in an aviation community are related to their experience and individual training background. Each FSO typically has three to five years of experience in a ground maneuver force prior to joining the aviation unit. Because of this experience, the FSO becomes a liaison. He provides knowledge in maneuver tactics, techniques and procedures making him the subject matter expert on how the Army fights on the ground. The FSO knows the best way to incorporate attack aviation into the scheme of maneuver plan and translate maneuver tactics to aviators. Since aviation has no internal fire support assets and
are considered a maneuver force, aviation units that leverage their FSO to cross-coordinate throughout the force set themselves up for success.

A common misnomer in the fire support community is that forward observers (FO) are the best observers on the battlefield. FO teams are able to visualize the battle space, move under concealment into observation points and implement Fires that can affect and shape a battle. While this is true, the reality is that the best, most reliant, most responsive and deadliest observers on the battlefield are aviation assets. Aviation has the ability to observe and cover the battlefield at a high rate of speed with the most advanced sensors available. Aviation has the capability to conduct targeting and information, reconnaissance and surveillance (ISR) with assets such as Grey Eagle and Shadow. Attack aviation uses a technique called manned unmanned targeting (MUM-T) to identify targets and shape the deep fight for the maneuver force. These assets are your best friend as a fire support-

Warfighting Function (WFF) Points of Interest

The battalion FSO needs to conduct a targeting working group with the S2, S3 and lead flight planner daily to ensure that targets and information from brigade and division are properly translated. This will allow you, as the FSO, to match upcoming mission targets with your non-organic assets. Requesting additional collection assets to support your missions will be greatly enhanced with S2 input. Anticipate where you will be working and start painting the picture for the team as you move forward. This will also increase and enable assets for battle damage assessment gathering. The Intelligence WFF is the most important component to the FSO in the decisive action training environment. The FSO and S2 need to be co-located at all times of the fight to enable success on the battlefield. It is essential that these two entities
are in sync and requesting assets together. Utilizing the S2 for ISR assets in support of your Fires plan ensures that the battalion commander is updated on the situations so they can assist in building your go/no go criteria for each mission. Key to remember is that you have the fastest observers on the field. Post-mission, secure a thorough target debrief from the pilots. This will allow you to easily direct or redirect assets where they are needed and give recommendations to the aviation battalion commander. Remember, the FSO is the expert on ground maneuver in the aviation world. Support your commander by providing guidance on where the enemy is fighting, how they are fighting, how the enemy artillery will play an effect and where YOU think the enemy artillery is positioned.

The Fires WFF can be summarized in six words Advanced Field Artillery Tactical Data System. As the smallest WFF in the aviation community you are only as good as your ability to communicate and maintain AFATDS capabilities with your adjacent units and higher headquarters. The AFATDS is your lifeline. Conducting digital sustainment training with your headquarters prior to your CTC rotation will set you up for success. Get your AFATDS up and running with everyone. The FSO team that maintains the best contact will have the most assets allocated and targets executed. Continually request information from the Fires community via AFATDS - at a minimum twice daily and at least 12 hours prior to the execution of any mission. Continually share your geometries with the brigade and supporting battalion FSO’s to ensure that all parties have a common operating picture of flight routes and target locations.

Utilize SEAD ideally cued by EW or other signal collection assets. Request everything you need to accomplish the mission. Asking the simple question, “What assets are not currently being requested or templated for use from time A to time B?” can allow you to improve your plan significantly. Ensure that the BCT understands the shadow CFF capability and MUM-T (manned, unmanned team) so that your pilots can conduct hasty CFF missions for brigade and division targets on-the-fly. Don’t rely on Hellfire rockets and 30 mm rounds. Use artillery when possible to increase effects on the battlefield. In addition, utilize Fires as a break contact method during hasty and deliberate attack missions to increase aircraft survivability.

Aviation FSO’s rarely add to their units’ defense diagrams. Requesting critical friendly zones (CFZ) over the tactical operations center and supporting company command posts is extremely beneficial. As an aviation unit you are centrally located. Requesting a division supported CFZ over your location is critical to minimize enemy indirect fire. Submit a request for radar coverage to division for CFZ support. You will initially be given a four-hour window for coverage. Conduct pattern analysis to identify when the enemy indirect fire (IDF) typically strikes your location.

Defensive targets should also be included in your defense diagram. Identify target reference points surrounding your tactical assembly area. Utilize a Blackhawk and conduct air recon of these locations and put targets on them in support of your defense. Identify avenues of approach and establish additional targets at these locations. If your unit is overrun, having these target sets ready to execute will be critical to your survivability.

In the required training gates for fire support validation, as soon as you receive IDF, make sure you conduct crater analysis in case the CFZ radar does not acquire the enemy IDF. By showing the observer/controller teams that you have conducted crater analysis to standard by doctrine they will give you the point of origin. This location can then support one of your deep attack missions later in the exercise. For example, the Prima multiple launch rocket systems typically fire one launcher at a time from the same location. Pattern analysis will ensure you remove this enemy from the battlefield.

As an aviation FSO your PACE plan is vital and will be either your greatest achievement or biggest downfall. P: AFATDS, A: Traverse, C: SATCOM, E: BFT/JBCP is one of the combinations that worked during my rotation and ensured that I could always communicate. Bring, at a minimum, one additional Fires Soldier to run the AFATDS and manage your COP/overlays. Depending on the unit you support and the jamming environment you may need
more. A minimum requirement should consist of one I3F Soldier. Kneeboard product or analog for a better term will be your friend in this contested environment.

In summary, I believe that it is essential for an aviation unit to have a dedicated FSO at the battalion and brigade levels. The necessity stems from the ability of the FSO to collectively integrate all aspects of fire support through the war fighting functions to include maneuver, aviation and Fires in a cohesive single productive unit focused on mission success.

The de-confliction requirement and necessity to “sell” Fires to all branches and echelons cannot be over emphasized. A technically and tactically proficient FSO creates an environment and atmosphere of success in a DATE rotation. The position of an aviation FSO is typically viewed as a broadening assignment for an artillery officer. The role teaches a unique capability and understanding only seen in some of the most senior and experienced FSOs. I strongly encourage those of the Fires community to seek this role and expand your appreciation of Fires role by supporting an aviation unit in a decisive action training environment.

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