Winning the Deep Fight

Planning, Preparing, and Executing Aviation Attacks Out of Friendly Contact

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In order for the U.S. Army to be successful and win in large-scale combat operations (LSCO), divisions must win the deep fight, and Army aviation plays a critical role in achieving success in the division deep area. However, current Warfighter exercise (WFX) observations show that division and combat aviation brigade (CAB) headquarters struggle with the planning of Army aviation attacks out of friendly contact (deliberate attacks).[1] Division headquarters often lack a clear standard planning construct within their tactical standard operating procedures (TACSOP), that includes inputs and outputs, a planning timeline, an operational planning team, and clearly defined duties and responsibilities for deliberate attacks. Likewise, CABs bear significant responsibility for this problem. CABs generally fail to prioritize key staff relationships, fail to appropriately resource the division air operations and planning officer (G-3 Aviation), eschew their own targeting cycle, and fail to generate the proper outputs from the intelligence preparation of the battlefield (IPB) process. Only by better understanding the duties and responsibilities of both headquarters and working together to develop a planning construct can the division and the CAB achieve success in the deep area and win in LSCO.

Context

Field Manual (FM) 3-0, *Operations*, states, "The purpose of operations in the deep area is to set the condition for success in the close area or to set the conditions for future operations."[2] Army Techniques Publication (ATP) 3-94.2, *Deep Operations*, reiterates this, stating, "Deep operations are combined arms operations directed against uncommitted enemy forces or capabilities before they can engage friendly forces in the close fight."[3] Division commanders have multiple capabilities at their disposal in order to achieve shaping or decisive effects in the deep fight, but this article focuses on just one method and offers recommendations for improvement: Army aviation attacks against enemy forces out of friendly contact (deliberate attacks) by divisions and CABs.

Deliberate attacks by Army aviation forces are critical to achieving success in the deep fight. FM 3-04, *Army Aviation*, states, "Army Aviation attack and reconnaissance units, maneuvering independently against an enemy force not in close contact with friendly ground maneuver forces, conducts hasty or deliberate attacks to divert, disrupt, delay, or destroy enemy capabilities before they can be brought to bear on friendly forces."[4] The employment of Army aviation throughout the depth of the division area of operation and the

A formation of AH-64 Apache attack helicopters from the 1st Attack Reconnaissance Battalion, 3rd Aviation Regiment, 12th Combat Aviation Brigade, conducts a battalion training flight 19 May 2020 over Ansbach, Germany. (Photo by Sgt Justin Ashaw, U.S. Army)

Capt. Greg Stoner (*right*), commander, Bravo Company, 2nd Assault Helicopter Battalion, 82nd Combat Aviation Brigade, 82nd Airborne Division, briefs his flight plan to Maj. Robert Tyler (*third from left*), assigned to the 450th Tactical Helicopter Squadron, 1st Wing Kingston, 29 October 2015 during an air brief mission at Fort Bragg, North Carolina. Canadian CH-147F and U.S. Army Black Hawks partnered to conduct a joint orientation flight for an air assault mission in support of Combined Joint Operational Access Exercise 16-01. (Photo by Capt. Adan Cazarez, U.S. Army)

ability to mass at a point in time and space provide an extremely lethal capability to achieve decisive effects in the deep area. Despite this capability, recent observations from corps and division WFXs show a continuous struggle to effectively plan and execute these high-risk, high-payoff missions.

A Division-Level Problem

It is critical to understand the role that both the division and CAB headquarters play in this challenging issue. The first and most critical step to ensure the success of aviation deliberate attacks is the acknowledgment that divisions are responsible for their planning and synchronization, with significant CAB input. ATP 3-94.2 states, "Deep operations require top-down planning with bottom-up refinement. While the division and corps headquarters are responsible for the overall planning of the operation, subordinate and supporting organizations actively participate in the planning effort."[5]

Despite this, current observations indicate a lack of detailed planning at division headquarters and a shifting of responsibility from the division to the CAB level for most or all planning, which far exceeds the scope and responsibility of the CAB staff. This clearly reveals a lack of understanding of the critical responsibility for a division staff in planning and synchronizing these operations. When division headquarters fail to take ownership of the planning, what follows is a lack of intelligence collection, well-defined triggers, target fidelity, fire support coordination, and understanding of other required conditions for deliberate attacks to be successful.

Likewise, CABs must perform bottom-up refinement to assist division staffs with understanding their planning responsibilities and to provide aviation

expertise. CABs also struggle with generating a list of requests for information for the division staff, requests for collection, detailed airspace planning, and sustainment planning that is critical for refining the plan. However, there is much CABs can do in order to help bridge this gap, such as forging strong relationships with key division staff elements, placing the right officer into the G-3 Aviation position, improved IPB, and conducting their own targeting cycle.

Planning process. To better describe the planning of these operations, division and CAB staffs must develop a standard planning construct for deliberate attacks and incorporate it into the division TACSOP. Corps and division WFX show there is little understanding of the detailed planning required for such operations, which creates considerable friction between staffs when planning and executing deliberate attacks. When considering all that is written about the air assault planning process (another critical combined arms operation), these gaps become plainly evident. The air assault planning process consists of a clearly defined timeline (ninety-six hours), required meetings (e.g., initial planning conference, air mission coordination meeting, air mission brief), well-defined inputs and outputs, and clearly understood duties and responsibilities at echelon. ATP 3-94.2 and ATP 3-04-1, *Tactical Employment of Army Aviation*, are large steps forward for deliberate attacks, but there is still a long way to go to improve planning for deliberate attacks. By developing a process and incorporating it into the TACSOP, divisions can help reduce friction and create shared understanding between the division and CAB staffs.

One recommendation that is nested in existing doctrine and best practices is the development of a deep operations planning team (DOPT). ATP 3-94.2 describes the DOPT as a "temporary grouping of trained and familiar planners that convene to develop a synchronized plan for a specific deep operation."[6] It clearly outlines the members of the DOPT—which consists of key members of the division staff, the CAB, and division artillery (DIVARTY) liaison officers (LNO)—and it places the responsibility of the planning and synchronization of deep operations squarely on the division staff, not the CAB. The CAB provides critical inputs and support when planning these operations; however, such operations clearly require resources that are well beyond the CAB level and scope to ensure successful synchronization. The G-35 Future Operations cell should take responsibility for the execution of this planning effort since it will usually fall within the future operations time horizon of forty-eight to ninety-six hours.

Since targets are usually identified for the CAB as part of the division targeting working group (TWG), the planning timeline must begin here, ideally at H-96 hours (see figure 1, page 57). At the division targeting decision board (TDB), the commanding general can approve the target and give guidance to stand up the DOPT to further plan the operation. The DOPT should meet no less than every twenty-four hours as it continues to refine the plan and produces the required

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outputs. The DOPT, led by the G-35, will convene the staff, discuss the commander's guidance, verify the remaining planning timeline, and issue written warning orders and fragmentary orders as required. The DOPT will likely plan several missions at once but will eventually conduct a deliberate handover briefing to the G-33 (Current Operations), which is approved by the division G-3. This handover must be a deliberate process and should be done in conjunction with or close to a mission rehearsal. At approximately H-24, the G-33 will assume responsibility for the plan and will execute the backbrief to the deputy commanding general-maneuver (DCG-M), a rehearsal, the required conditions checks to the DCG-M or commanding general, and the final go/no-go brief prior to execution.

Outputs. In conjunction with the above timeline, the outputs of this planning process must be clearly defined. The DOPT must produce an initial warning order, an intelligence collection synchronization matrix, an event template, priority intelligence requirements, airspace and fire support control measures, a suppression of enemy air defenses plan, a synchronization matrix, a conditions checklist, a go/no-go briefing, and a backbrief. The framework for the synchronization matrix, execution checklist (EXCHECK), go/no-go briefing, backbriefs, and rehearsals should all be written into the TACSOP for ease of planning.

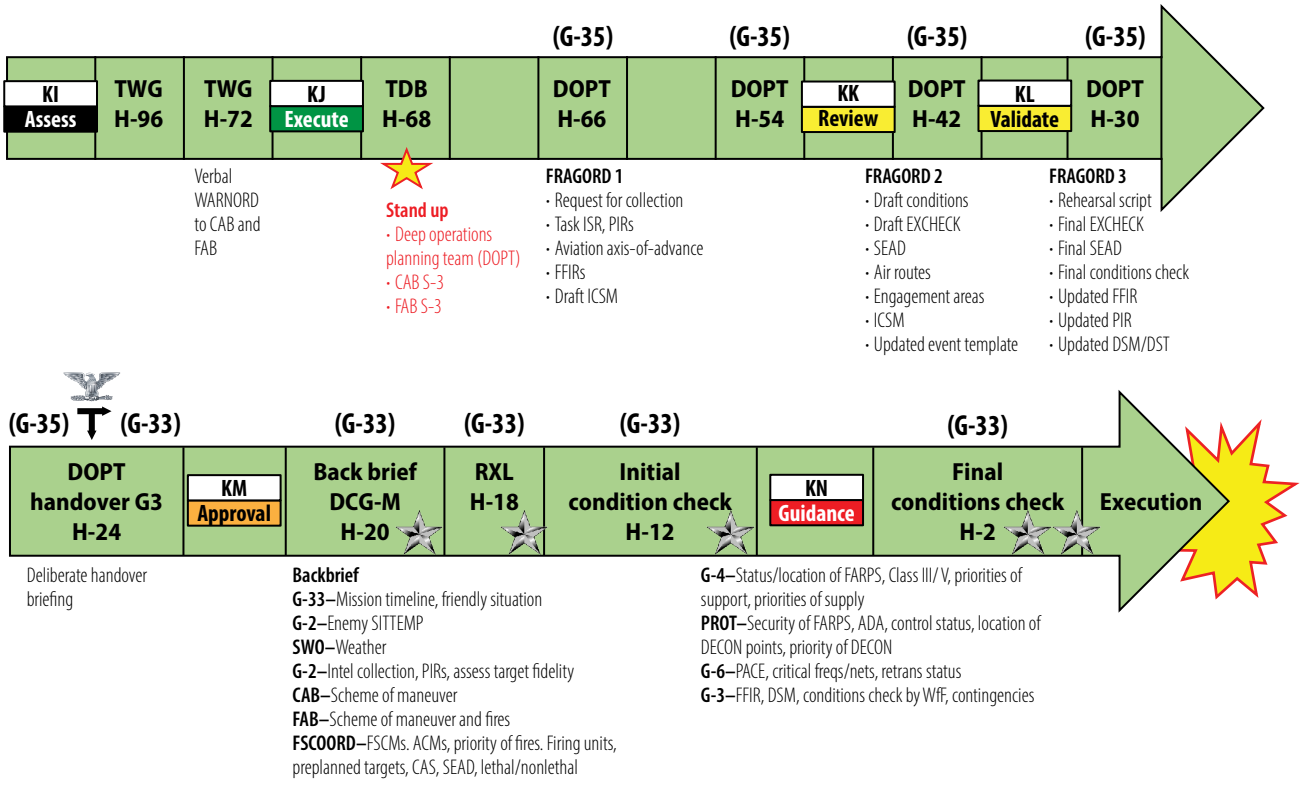
Of all these documents, the EXCHECK bears special mention. The EXCHECK is very commonly used in the detailed synchronization of an air assault, and it can play a very similar role for deliberate attacks. It is a forcing function for the detailed planning and synchronization of the timing necessary to execute complex division-level operations. The G-35 assumes responsibility for building the EXCHECK as part of the DOPT and solicits significant input from the rest of the division staff, the CAB, and the DIVARTY. The EXCHECK should be the driving document behind the rehearsal for and the execution of the operation. Production of the EXCHECK cannot be delegated to a subordinate unit. Center for Army Lessons Learned Handbook No. 18-11, *Deep Operations: Lessons and Best Practices*, provides examples of some of these products and outputs.[7]

> "Staff effectiveness depends in part on relationships of the staff with commanders and other staff. Collaboration and dialogue aids in developing shared understanding and visualization among staffs at different echelons."

Duties and responsibilities. In order to ensure efficiency in the planning process, it is critical for planning duties and responsibilities to be defined at echelon. The division staff will provide task and purpose, conduct initial IPB, and provide initial destruction criteria to achieve success. The division staff also provides and synchronizes resources for the CAB that are effectively beyond the CAB's scope such as intelligence collection for target fidelity, lethal and nonlethal suppression of enemy air defenses (SEAD), priority of fires, and command and control. The CAB focus should be on conducting detailed aviation planning, including engagement area development, airspace control measures, the aviation scheme of maneuver, and more refined IPB. Figure 2 (on page 58) is one way for clearly designating responsibilities between the division and CAB staffs. Critical to this process is the exchange of LNOs between headquarters.

The Combat Aviation Brigade

CAB staffs naturally possess the majority of aviation expertise within the division. However, observations from WFXs show challenges with staff relationships between the CAB and the division pose a significant obstacle to shared understanding and communication in planning deliberate attacks. FM 6-0, *Commander and Staff Organization and Operations*, states, "Staff effectiveness depends in part on relationships of the staff with commanders and other staff. Collaboration and dialogue aids in developing shared understanding and visualization among staffs at different echelons."[8]



(Figure from "Targeting," Mission Command Training Seminar for Division Staffs)

Figure 1. Division Staff Planning Model for Deliberate Attacks Out of Friendly Contact in the Deep Area

CAB commanders and staffs must place a premium on relationships in order to further develop, shape, and increase efficiencies in these planning processes and increase understanding of aviation operations on the division staff. Recent WFXs indicate that the following staff and adjacent unit relationships must be strengthened in order to improve close coordination.

CAB fire support officer and DIVARTY relationship. The CAB fire support officer (FSO) is the intermediary between the CAB staff and the division fire support enterprise. One of the crucial roles for the FSO during planning and execution of deliberate attacks is the coordination of the SEAD plan. This often requires working with DIVARTY and division staff elements to synchronize both lethal and nonlethal SEAD assets. The FSO must ensure that all elements understand the entirety of the SEAD plan and what actions trigger its execution. The FSO can also enable more successful operations by coordinating for the development of a quick-fire net/strike net to enable engagement of targets identified by aircrews, unmanned aircraft systems, or other fire support assets.[9] The FSO and the targeting officer also play a role in coordinating with DIVARTY and the division joint air-ground integration center to deconflict airspace and fire support control measures.

CAB S-2 and G-2 relationship. The CAB intelligence officer (S-2) must develop close working relationships with the division G-2 section. It is essential to establish shared understanding of the operational environment and inform the CAB commander's decision-making process based on the threat. The CAB S-2 must find time in the battle rhythm to attend the G-2 analyst control element synchronization meeting. The S-2 should routinely speak with the division G-2 and deputy G-2 to maintain situational awareness, and more importantly, an understanding of the target list

Division

- Leads division-level operation teams (OPT) with combat aviation brigade (CAB) and division artillery (DIVARTY) participation
- Synchronizes all warfighting functions to support the attack and set conditions
- Provides command and control
- Synchronizes, resources lethal and non-lethal suppression of enemy air defenses (SEAD)
- Selects ground for the attack
- Provides intelligence collection to achieve target fidelity
- Approves airspace coordinating measures and fire support coordination measures
- Coordinates transitions across boundaries if required
- Establishes destruction criteria
- Receives go/no-go and conditions checks
- Establishes required conditions for the attack
- Leads rehearsals and backbriefs
- Finalizes execution checklist (EXCHECK)

Combat aviation brigade

- Participates in division OPTs
- Participates in go/no-go and conditions checks
- Recommends required conditions for the attack
- Publishes written orders
- Provides risk assessment to division
- Conducts intelligence preparation of the battlefield (IPB)
- Selects initial engagement areas
- Updates situational template, event template, priority intelligence requirements
- Requests collection from division to achieve target fidelity
- Aviation concept of the operation
- Determines combat power and task organization
- Provides commander's intent, clear task/purpose
- Updates friendly force information requirement, builds decision-support matrix and decision-support template
- Updates synchronization matrix
- Contributes to EXCHECK
- Develops initial axes of advance or air routes
- Provides initial battle positions
- Recommends destruction criteria to division (if not provided)
- Coordinates lethal and non-lethal SEAD, close air support, priority of fires
- Coordinates, provides protection for forward army and refueling points (FARP)
- Determines Class V requirements ("missile math")
- Plans and synchronizes FARP support
- Leads/participates in rehearsals, backbriefs

Battalion/squadron

- Conducts and refines IPB with CAB S-2
- Aviation scheme of maneuver
- Refines axes of advance into air routes
- Employment methods (max destruction, phased, continuous)
- Refines engagement areas
- Refines battle positions and attack-by-fire positions
- Selects firing positions
- Direct fire planning
- Fire distribution planning
- Method of fire control
- Firing techniques
- Disengagement criteria
- Contributes to EXCHECK
- Troop leading procedures
- Provides liaison officers to CAB
- Builds aircrew products and kneeboard packets
- Participates in rehearsals and backbriefs as required
- Task organizes FARPs as required

(Figure from "Aviation Support to Division Operations," Mission Command Training Seminar for Combat Aviation Brigades)

Figure 2. Planning Duties and Responsibilities for Deliberate Attacks Out of Friendly Contact in the Deep Area

and collection focus for the division. As one of only two subordinate elements routinely focused on collection in the division deep area, the CAB S-2 must attend division collection management meetings/working groups to remain nested with priority of collection and focus for the division. This will allow the CAB S-2 to identify gaps in collection coverage for the CAB and submit requests for collection to division to answer priority intelligence requirements that support the execution of deliberate attacks. The CAB S-2 should attend the division target decision board meeting when possible, as the G-2 will brief the most current enemy situation during this meeting to the division commander as well as the intelligence collection synchronization matrix. There will also be decisions and discussions about division collection efforts (by phase) and who (unit) has priority

of collection. The division will establish collection as far out as seventy-two to ninety-six hours to provide predictability for the brigades for collection assets. Key for the CAB S-2 is to develop the CAB intelligence collection matrix to help assess what level of collection is required at division's level to best support the deep fight.

can be effective, but the G-3 Aviation does not have the authority to synchronize operations or drive the staff for planning critical events. Only the G-3 can do this, and therefore a strong relationship from the CAB S-3 to division G-3 will go a long way with helping to eliminate this friction.

> Combat aviation brigades must better shape and influence the planning and execution of deliberate attacks by conducting their own targeting cycle.

CAB LNO and division relationship. The importance of LNOs to a division headquarters is well documented yet rarely put into practice. Leaders often comment that "if it doesn't hurt to give up that LNO, then it's not the right person." FM 6-0 recommends a brigade provide a major as an LNO to the division headquarters.[10] Although this is rarely possible, the selection of an LNO is of paramount importance for forging effective relationships. CABs must consider their LNO to division as a force multiplier that can greatly enhance the reach and influence of the CAB, if appropriately resourced. The CAB should also consider senior aviation warrant officers for this position. Whoever is selected, the commander must effectively define the duties, responsibilities, and expectations for that individual. Commanders must take great heed in determining who does fill this critical position as "LNOs must have the commander's full confidence and experience for the mission."[11]

CAB S-3 and division G-3 relationship. Much like a competent and trusted brigade aviation officer on a brigade combat team (BCT) staff facilitates a relationship between the CAB and a BCT, so can the G-3 Aviation for the division. However, this relationship was never intended to replace the need for an excellent working relationship between the CAB S-3 and the division G-3. The CAB provides a vital capability to any division. The CAB must be treated with the same level of importance as any of the other subordinate brigades. It is often the case that division G-3s, in an effort to prioritize limited time in a busy battle rhythm, understandably rely on the G-3 Aviation to perform critical coordination with the CAB. This technique

Likewise, the Aviation Branch and CAB commanders must take careful consideration when recommending aviation officers for the G-3 Aviation position. Although the position is specified for a lieutenant colonel, observations show this position is very often filled by aviation majors of varying experience levels. The preferences and priorities of the CAB and the division commander will play the biggest role in determining who fills this critical position. However, it is routine that aviation brigade- and battalion-level key developmental positions and brigade aviation officer positions take precedence over G-3 Aviation assignments. When this happens, it is not uncommon for a newly arrived Command and General Staff College graduate to be assigned to the G-3 Aviation position while waiting to begin their S-3 or executive officer time in the CAB. Many of these officers have never worked above the battalion level, much less at the brigade or division level. With the division as the unit of action under LSCO, it is paramount to ensure the assignment of the right officer to this very critical position. Having the wrong officer in this critical position induces considerable friction and only increases the burden on the CAB staff. Although there are competing requirements, CAB commanders must keep this in mind when making recommendations to the division commander for G-3 Aviation positions and consider assuming more risk elsewhere in the field grade slate. The G-3 Aviation must be a trusted and capable officer who can succeed on a division staff and be value added for the combat aviation brigade and division in LSCO.

CAB internal processes. Furthermore, CABs can improve deliberate attacks by improving their own

Purpose: Synchronize targeting priorities, collection assets, and planning efforts IOT anticipate emerging requirements, make recommendations to the commander, and ensure continued execution of both lethal and nonlethal targets.
Frequency: Daily
Duration: One hour
Location: Briefing tent

Proponent: CAB
Chair: BDE XO/S-3
Lead: BDE FSO/TARGO
Attendees: S-2 rep, S-3, plans, sustainment, protection, AMSO, IIA, SWO, AMD, CA, SJA, CBRNE, Bn Reps, PAO, S-6

Inputs: 24–96 hrs
- Enemy situation (by ATO cycles) (DECIDE)–S-2
- Targets tasked to support (DECIDE)–FSO, S-3
- Information collection plan (DETECT)–S-2
- Attack guidance matrix–FSO/TARGO
- Draft ACMs/airspace plan–ADAM/AMSO
- Current and draft FSCMs–FSO/TARGO
- Sustainment running estimate (as needed)–S-4/MEDO
- Maneuver plan–S-3

Outputs:
- TTLODAC for each new proposed TGT
- Developed COAs by time period
- Target assessments and refinement recommendations
- IC refinements
- Updated HPTL, proposed collection plan, proposed target list work sheet (TLWS), updated FSCMs/ACMs

Feeds: BDE CUB; BDE targeting board, DIV targeting working group

Agenda:
- Enemy situation for ATO cycle–S-2
- Maneuver plan for ATO cycle–S-3
- Weather and impacts on operations (SWO)
- FSTs for ATO (FSO/TARGO)
  (Run four turns, assess past 24 ATO, review/refine next 24 ATO, validate next 48 ATO, develop concept sketch for next 72 ATO, CDR's guidance and initial nominations for next 96 ATO)
- Build TTLODAC
  - Target number (targeting)
  - Target location (targeting plots on map)
  - Trigger (NAI/TAI target is in and time it is being observed–sensor to shooter)
  - Observer (IC asset that is doing the observing S-2/radar)
  - Delivery system (assign primary and alternate shooter based on FSTs/FATs/AGM)
  - Attack guidance (weaponeering from ATK ops/master gunner)
  - Communication: PACE
- Develop ACMs/FSCMs based on preplanned targets
- Develop sustainment plans
- Review changes to TLWS
- Go over due-outs and set deadlines for tasks

(Figure from "Targeting," Mission Command Training Seminar for Combat Aviation Brigades)

Figure 3. "A Way" for a Combat Aviation Brigade to Conduct a Targeting Working Group

internal processes. In particular, CABs must better shape and influence the planning and execution of deliberate attacks by conducting their own targeting cycle. Current observations from WFXs indicate that CABs are not conducting a thorough or complete targeting cycle that is effectively nested with the division targeting cycle. CABs often conduct a nondoctrinal version that leaves the CAB commander and staff ill equipped to provide inputs during the division targeting cycle and engage with division personnel on targeting. A recommended way to alleviate this is for the CAB to conduct a TWG that takes place *prior* to the division TWG. The S-2, S-3, planner, aviation mission survivability officer, and FSO should all participate in the division TWG. This will allow better coordination and communication between the division staff and CAB staff, including more rapid responses to requests for information that will drive more detailed planning and synchronization. If time

precludes the conduct of a CAB TDB, then the CAB can save time by finding an alternate method to brief the CAB commander on the results of the CAB TWG and division TWG prior to the division TDB. This will allow the CAB commander to address any concerns and have an informed discussion about risk with the division commander. Figure 3 (on page 60) depicts a recommended quad chart for a CAB-level TWG.

Similar to targeting challenges, CABs are not producing the required intelligence products in order to successfully refine planning in support of deliberate attacks. CAB S-2s should be working very closely with the division G-2 in order to best understand the enemy threat and maneuver in the deep area and achieve maximum effects. Mission command training seminars and WFXs indicate that CABs often struggle with completing the required initial outputs of IPB (e.g., possible enemy courses of action, situation template, event template, named areas of interest overlay, intelligence collection synchronization matrix), and once operations begin, a lack of available time only makes it more difficult to complete these products, much less refine them. This largely occurs because CABs, like many units, delegate IPB to the S-2 section, while the remainder of the staff charges into the rest of mission analysis. This lack of a whole-of-staff approach in IPB leads to a lack of collective understanding of the enemy and terrain, and it slows down planning in subsequent operations. As part of a division, the CAB S-2 should have just as much knowledge of the terrain and enemy in the deep area as the division G-2, with special focus on avenues of approach, mobility corridors, canalizing and key terrain, tentative engagement areas, and tentative aerial battle positions. CAB S-2s and the aviation mission survivability officer, through their detailed analysis, knowledge, and close working relationship with the G-2, should be proactively recommending targets to the G-2. They should be bombarding the G-2 with continuously refined priority intelligence requirements and requests for collection to validate the terrain and enemy courses of action where they seek to destroy the enemy and win the deep fight.

Conclusion

For aviation deliberate attacks to be successful, the division must take responsibility for the synchronization, detailed planning, and execution of deep operations. Establishing a deep operations planning team to conduct the detailed planning, create the required outputs and products, and synchronize the plan within the context of the division scheme of maneuver will help significantly. This will also help with other CAB challenges such as developing the CAB's targeting cycle that is nested with division and focusing the staff on IPB. In addition to this, ensuring the right officer is in the G-3 Aviation position and forming relationships with key division staff will play a significant role in improving these critical operations in LSCO. ■

Notes

1. The observations referenced by the authors in this document are from the authors and other observers, controllers/trainers at the Mission Command Training Center. Many are discussed in greater detail in the "Mission Command Training Program (MCTP) Key Observations" series, published annually by the Center for Army Lessons Learned.

2. Field Manual (FM) 3-0, *Operations* (Washington, DC: U.S. Government Publishing Office [GPO], 6 October 2017), para. 1-150.

3. Army Techniques Publication (ATP) 3-94.2, *Deep Operations* (Washington, DC: U.S. GPO, September 2016), 1-4.

4. FM 3-04, *Army Aviation* (Washington, DC: U.S. GPO, April 2020), 3-8.

5. ATP 3-94.2, *Deep Operations*, 3-8.

6. Ibid.

7. Center for Army Lessons Learned (CALL) Handbook 18-11, *Deep Operations: Lessons and Best Practices* (Fort Leavenworth, KS: CALL, March 2018).

8. FM 6-0, *Commander and Staff Organization and Operations* (Washington, DC: U.S. GPO, 5 May 2014), 2-3.

9. ATP 3-09.42, *Fire Support for the Brigade Combat Team* (Washington, DC: U.S. GPO, March 2016), para 2-41. "Quick-fire nets allow the observers to communicate with specific field artillery or mortar fire units. These kinds of communication arrangements enhance responsiveness. Communication planning should also include communications nets for the clearing of targets for air assets."

10. FM 6-0, *Commander and Staff Organization and Operations*, table 13-1, "Senior Liaison Officer Rank by Echelon."

11. Ibid., para. 13-3.