



Lessons Learned from Operation Allied Force in Kosovo

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The airmen and soldiers who executed Operation Allied Force, the air campaign to liberate Kosovo, achieved their mission. Serbian forces are out of the province, displaced Kosovar Albanians have returned to their homes and peacekeeping forces have deployed and begun the process of stabilizing the area.

This article discusses lessons learned by the US Army Europe's (USAREUR's) Battlefield Coordination Element (BCE) during Operation Allied Force—lessons useful to fire supporters working in a joint environment. (The BCE is an echelons-above-corps organization recently redesignated as a battlefield coordination detachment or BCD.) The USAR-EUR BCE at the Headquarters of the US Air Force Europe (USAFE) on Ramstein Air Force Base, Germany, was involved in planning for what would become Operation Allied Force since its genesis in 1998.

On 23 May 1998, the 32d Air Operations Group (AOG) at Ramstein was tasked to develop an air campaign to compel the Federal Republic of Yugoslavia to desist its repression of Kosovar Albanians in Kosovo. The initial absence of a ground component left the BCE as the ground force representative in the air campaign plan-

ning process. On 24 March 1999, Operation Allied Force began. The BCE was already deployed with the combined air operations center (CAOC) at Dal Molin AFB, Italy, in support of Task Force (TF) Able Sentry in Macedonia.

On 9 April, the deployment order to Albania came for TF Hawk, a V Corps contingency force consisting of attack aviation, a multiple-launch rocket system (MLRS) battalion—1st Battalion, 27th Field Artillery—and maneuver forces. This shifted the BCE's focus to TF Hawk with the mission of supporting the Army force (ARFOR) under

Joint Task Force Noble Anvil, the US JTF under the broader NATO effort.

The BCE sections were integrated throughout the combined forces air component commander's (CFACC's) staff. BCE functions included air tasking order (ATO) development; target development for the guidance, apportionment and targeting (GAT) and master air attack plan (MAAP) processes; airspace management and deconfliction; air defense coordination; intelligence collection and development; and ground liaison team (GLT) support for fighter squadrons deployed in England, Germany and Italy.

The BCE coordinated the airspace and air support requirements for TF Hawk in Albania while the CAOC's Flex Targeting Cell simultaneously targeted Serbian fielded forces in Kosovo. In the latter part of May, TF Hawk shifted its focus from deep attack training to targeting Serbian forces in Kosovo.

The V Corps Deep Operations Coordination Cell (DOCC) began submitting target nominations derived from Q-37 Firefinder radar reports and information gleaned from other sources. These targets greatly increased the effectiveness of Kosovo engagement zone operations. NATO air forces were bet-



ter able to focus their efforts, resulting in the highest levels of destruction of Serbian fielded forces in Kosovo achieved during the war. The air campaign of Operation Allied Force ended on 9 June.

Intelligence Lessons

“The BCE intelligence section serves the BCE and the JOAC [joint air operations center] as a one-stop COMARFOR [commander ARFOR] land warfare intelligence liaison. The BCE’s intelligence function is that of liaison and coordination, not that of an ACE [analysis and control element]. The BCE intelligence functions include, but are not limited to, the following: relaying real-time significant intelligence received from collection platforms and sensors to the JAOC; coordinating emerging target information with the ARFOR TOC [tactical operations center] and validating them for diverts; obtaining the most current enemy ground force situations from the ARFOR G2 operations sections and interpreting that enemy ground force situation; and getting the priority intelligence requirements (PIRs), collection plan, targeting data, 24 to 96 hour enemy situation projection, and nominations for reconnaissance and intelligence EW [electronic warfare] support from the ARFOR G2 Plans sections.” (*FM 100-13 Battlefield Coordination Detachment (BCD)*, 5 September 1996, Pages 2-4 and 2-5.)

Allied Force was unique in many ways, foremost of which was the CFACC’s executing the ground war from the air—in essence, a movement-to-contact from 15,000 feet above ground level. To execute this task in an area the size of Kosovo required detailed ground intelligence preparation of the battlefield (IPB); continuous timely intelligence on enemy ground forces from the land component commander (LCC); effective intelligence automation systems; and a coordinated intelligence, surveillance and reconnaissance (ISR) collection strategy. These requirements were not met consistently.

Intelligence Support Structure. In a traditional combined task force (CTF) operation, the air component and land component headquarters work hand-in-hand. The LCC has the intelligence support structure needed to develop the enemy ground order of battle, identify enemy vulnerabilities and offer possible courses of action. The ground commander pushes the intelligence to the

CFACC through the BCE intelligence section, providing clarity of the enemy ground situation. The LCC drives the focus for collecting, tracking, targeting and attacking enemy ground forces.

The air component headquarters, in this case the CAOC, traditionally runs the air campaign. Its intelligence support structure focuses on developing fixed targets for air assets to service. The Allied Force CAOC did not have the ground intelligence structure to perform detailed IPB and relied on the analyzed intelligence relayed through the BCE from the LCC’s organic intelligence element.

TF Hawk had the only intelligence organization in Operation Allied Force with the expertise, experience and manpower to provide adequate resolution of the ground picture and a detailed IPB—the V Corps G2 ACE. This organization could have enabled a much more rapid sensor-to-shooter response and allowed daily operations to be planned based on detailed predictive analysis rather than as one would execute a hipshoot. The analysis could have identified targeted areas of interest (TAIs), high-value targets (HVTs) and high-payoff targets (HPTs) up to 96 hours in advance.

The CAOC Ground Analysis Cell tried to fill the void as the TF Hawk ACE/G2 focused solely on developing targets for Apache helicopter engagement areas in Kosovo. After realizing that the Apaches would not be employed in Allied Force, TF Hawk began to nominate targets to the CAOC through the BCE.

For a CAOC ground analysis, targeting and fusion cell to support an air campaign against ground forces, it must be fully supported by the land component ACE’s shared intelligence products through the BCE.

Security Classification. This was another major hindrance to the use of TF Hawk intelligence products. The CAOC’s Ground Analysis Cell operated by NATO rules. TF Hawk classified its information (friendly and enemy) as “US Only, Originator Control.” This meant the TF controlled who could access specific pieces of information within US-Only channels.

The CAOC Ground Analysis Cell could not use any intelligence summary sent by the TF Hawk ACE, depriving the CFACC of a common enemy ground picture that joint doctrine requires. It also deprived the Ground Analysis Cell of an extremely detailed picture of the enemy, thus degrading its targeting capabilities.

Intelligence must support the operational commander. Allied Force was a NATO operation. A common classification on enemy information between the CFACC and LCC is essential for mission success.

All-Source Analysis System (ASAS). During Operation Allied Force, the ASAS remote workstation (RWS) added little to the critical functions of the BCE Intelligence Section and the CAOC Ground Analysis Cell, despite its capabilities. The ASAS-RWS depends on the LCC G2’s ASAS suite to push database information in different formats. The



An ammo handler prepares to load a CBU-87 bomb on to an A-10 before the use of cluster bombs were restricted in Operation Allied Force.

ASAS suite gets its information from various external links and assets through the all-source and single-source elements and also can be updated manually by operators.

In this operation, the TF Hawk ACE did not deploy with its complete doctrinal ASAS suite. It took only three ASAS-RWS machines and used them only as servers and database “pulls” from the 66th Military Intelligence (MI) Group. The data transfer from the 66th worked well, but TF Hawk never transmitted its own updated database to any supported or subordinate unit over ASAS. Subsequently, the BCE and others never got a “red” update from the LCC over the ASAS—the doctrinal Army intelligence system. Dissemination of TF Hawk intelligence products only came over the US secure Internet protocol net (SIPRNET) or the joint deployable intelligence support system (JDISS).

ASAS is a tremendous asset, but it must be used by all Army intelligence elements if it is to be effective in intelligence dissemination and target development.

Unmanned Aerial Vehicles (UAVs). The success of Allied Force highlights the effective employment of ISR assets, particularly UAVs. However, significant controversy over tasking and employing the Hunter UAV degraded its effectiveness. Before TF Hawk assumed tasking authority and operational control (OPCON) of Hunter, the National Collection Management Cell (NCMC) and Collection Coordination and Intelligence Requirements Management (CCIRM) integrated all UAVs and drones (US and NATO) into an orchestrated collection effort. They used the planned imaging day (PID) and current imaging day (CID) processes, involving US theater, national and NATO target deconfliction. The process ensured efficient, non-redundant coverage and maximum support available for theater collection.

Once TF Hawk assumed OPCON, Hunter began operating outside of the PID/CID cycles and the rotations of other NATO and US-Only surveillance systems, often creating gaps in coverage. Had Hunter remained in the rotation under national rather than local control, continuous coverage of key target areas could have been maintained.

Hunter’s schedule also was not consistent with the combat sortie schedules. This lack of sensor-shooter synchronization created circumstances

when targets could not be struck in a timely manner because no strike aircraft packages were available.

Common mission requirements and limiting geography in this theater required centralized, integrated control of the ISR force. In future operations, tasking authority for all US UAVs should be retained at the operational level. Hunter still should be allocated to the tactical commander for day-to-day operations; however, higher echelons should maintain tasking authority.

Operations Lessons

“The BCD Operations section focuses on current operations (0 to 24 hours out). The operations section monitors execution of the current ATO in regard to sorties planned against ARFOR nominated targets and coordinates with the ARFOR TOC, DOCC, TMD [theater missile defense] cell, and JAOC on canceled, diverted, or re-rolled missions planned against ARFOR targets. The operations section coordinates with the JAOC combat operations division on ARFOR immediate requests for AI [air interdiction], EW, PSYOP [psychological operations], and reconnaissance flights. The operations section gets the current friendly ground force situations from the ARFOR G3 and interprets that situation for the JAOC combat operations division. The operations section coordinates ATACMS [Army tactical missile system] missions and the required airspace with the JAOC, including both ARFOR and JFACC initiated missions. The operations section coordinates ARFOR aviation and deep attack operations and airspace with the JAOC.” (FM 100-13, Pages 2-2 and 2-3.)

The BCE Operations Section learned a great deal about airspace deconfliction and battle tracking in Operation Allied

Force. In essence, the BCE kept both the Air Force and the Army apprised of each other’s actions. Failure to do so dramatically increases not only the confusion in combat but also the likelihood of fratricide.

ATACMS Airspace. The deconfliction of ATACMS airspace is crucial for air operations. An ATACMS flight can take down a friendly aircraft. Less obvious, nearby aircraft can easily read the ATACMS’ launch signature as an air defense attack. This leads to a friendly pilot taking evasive action that typically consists of jettisoning critically needed munitions and external fuel tanks and beginning dramatic evasive maneuvers. The pilot may be unable to attack his assigned targets and inadvertently could injure friendly soldiers or civilians. The occurrence of such actions due to a coordination failure is inexcusable.

The lesson learned is that all pertinent ATACMS information must be included in the ATO and airspace control order (ACO), once again balancing predictability against flexibility.

Firefinder Radars. The Q-36 and Q-37 provided a crucial coordination challenge because friendly aircraft can identify them as potential enemy targets. Aircraft such as the EA6B and the F16CJ are armed with the high-speed anti-radiation missile (HARM), a missile designed to detect emitters and suppress enemy air defenses (SEAD). Thorough coordination and knowledge of radar locations and the bandwidth on which these emitters operate stops pilots from launching on friendly radar sites.

GLTs must provide Air Force planners the information they need to reduce the likelihood of acquiring a friendly Q-37. The planners then can factor the radars into their plan—change the direction of attack or limit the flight range of the HARM.



Post-mission check by ground crew—81st Expeditionary Squadron in Operation Allied Force.

Plans Lessons

“The BCE plans section focuses on operations 24 to 96 hours out. The plans section integrates and synchronizes air operations planning with the COMARFOR’s intent and scheme of maneuver. The plans section ensures the COMARFOR’s guidance and priorities are used to enhance air support to the ARFOR. The plans section airspace personnel coordinate ARFOR airspace use requirements with the JAOC airspace management sections, integrate ARFOR airspace user activities with the JAOC airspace plans, integrate joint airspace requirements with appropriate A²C² [Army airspace coordination cell] elements, and represent the COMARFOR’s interests in the development and approval of airspace control restrictions published in the ACO.” (FM 100-13, Pages 2-5 and 2-6.)

TF Hawk was responsible for developing potential engagement areas within Kosovo for deep attack missions by Apaches and ATACMS, yet the CFACC controlled all airspace within the area of responsibility (AOR). These two facts necessitated coordination between TF Hawk and the CAOC to avoid a blue-on-blue engagement and provide TF Hawk all the support needed to conduct combat missions.

ATO Flexibility. The initial challenge was placing Army aviation assets on the ATO within the CAOC’s 72-hour ATO cycle. Typically, Army aviation deep attacks require maximum flexibility to attack their target sets, which runs counter to the standard 72-hour ATO cycle input: routes or axis and the number and type of aircraft.

TF Hawk resolved this challenge by identifying a projected F-Hour—cross-forward line of own troops (FLOT)—time for its mission 72 hours in advance, allowing Air Force planners to move their Kosovo engagement zone support packages to provide coverage for the TF Hawk mission. The support packages included tankers, an airborne command and control center (ABCCC), air-to-air fighter support, lethal and non-lethal SEAD, etc. This arrangement allowed both TF Hawk and CAOC to maintain flexibility while operating predictably enough to synchronize assets.

Whenever TF Hawk moved its F-Hour outside of the Kosovo engagement zone window, the CAOC had significant problems. Changes to F-Hour occurred

less than 24 hours from execution on several occasions, making Air Force support of TF Hawk’s mission readiness exercises (MREs) extremely difficult. In essence, a change to an MRE was frequently felt at every level—fuel tankers, ammunition handlers, SEAD sorties, crew rest, etc. In every case, the MREs occurred in Albania at the same time the CAOC was conducting combat missions over Kosovo and Serbia. On some occasions, the Air Force had to cancel combat sorties to support training exercises.

Dual ATOs. While deep attack missions went on the “US Only ATO” for operational security reasons, all TF Hawk aircraft had to be reflected on the NATO ATO to prevent fratricide. Initially, putting TF Hawk aircraft on two separate ATOs and coordinating with two separate ATO production teams created problems. These were resolved by placing all TF Hawk aircraft on ground alert status every day on the NATO ATO, which kept the allies informed of all TF Hawk “squawk” codes and prevented allied aircraft from incorrectly identifying TF Hawk aircraft as hostile.

To ensure complete understanding of procedures for ATO inclusion and airspace management, BCE personnel and planners at the CAOC developed standing operating procedures (SOP) for TF Hawk mission execution. This SOP was staffed at TF Hawk and the CAOC and adopted.

Conclusion. The most striking and erroneous observation of Operation Allied Force is the role of air power as a single decisive arm in warfare. Proponents of air power are, understandably, very proud of the performance of US and NATO Air Forces during this operation. Some have indicated that, based on this operation, new doctrine may emerge that will reshape joint warfighting.

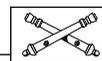
We must be cautious about extrapolating too much from the success of the exclusive use of air power in Kosovo. The United States and NATO had no vital interests at stake in Kosovo. Therefore, there was little willingness to expend the political capital required to employ ground forces or to accept the toll in blood and treasure that would certainly result from a ground campaign. It is premature to rewrite doctrine (read restructure the defense budget) based on this experience.

Our enemies will threaten our vital national interests in the future in a scenario that will offer a dramatically dif-

ferent calculus to our leaders. Internalizing the notion that air power alone can defeat a competent ground force is too broad a conclusion to draw from one operation.

USAREUR and USAFE must train together at the operational and tactical levels of war more often. We must explore innovative ways of integrating exercises such as the Army’s Warfighter or the Air Force’s Union Flash. At the tactical level, Air Force assets must train with Army maneuver and fire units to achieve synchronization and efficiency on the battlefield.

The “ramp-up” cost of gaining mutual understanding during Operation Allied Force was too high. A more lethal and capable enemy won’t allow NATO forces the time to ramp up. And then we’ll pay the price in blood and treasure.



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