
MANNING, EQUIPPING, TRAINING AND DEPLOYING THE BRIGADE AVIATION ELEMENT

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“The Brigade Aviation Element — organized, equipped, and manned to meet air ground integration and A2C2 needs of the transformed Brigade Combat Team.”

The Brigade Aviation Element (BAE) concept evolved as part of Army Transformation and was identified as a solution for integration after the Aviation Task Force reviewed lessons learned from Operations Iraqi Freedom and Enduring Freedom, and countless combat training center (CTC) rotations. Across the board, aviation and ground maneuver continued to lack the synchronization desired by all. Historically, Army aviation provided liaison officers for short durations only; these LNOs were outstanding pilots, but lacked the proper equipment, air-ground integration and Army Airspace Command and Control (A2C2) training, and often the right number of people necessary to perform the required planning.

The BAE was developed to meet the modular needs of the Brigade Combat Team (BCT) and the Multi-Functional Aviation Brigade (MFAB). The contemporary operational environment (COE) demands well aimed fires, synchronized ground maneuver and integrated aviation operations. The BCT and the MFAB have been redesigned to meet these needs and the Brigade Aviation Element has been established as an organic staff element within the BCT to ensure mission success.

The Army’s senior leadership sought to harness the air-ground

integration synergy that existed with special operations forces; where the air and ground relationship is tightly interwoven, resulting in well planned and executed operations. Design analysis also looked at other staff organizations with proven track records. The fire support element found in the infantry brigade had similar capabilities; in turn the BAE was designed to have many of the same attributes that made the Fire Support Element successful.

These attributes include:

- A robust, mature, mission focused staff capable of 24-hour operations.
- A large enough organization to simultaneously conduct current operations and prepare future plans.
- A permanent presence, home station, RSOI (reception, staging, onward movement and integration), combat operations, stability and reconstruction operations, redeployment and regeneration.
- Provide embedded branch specific subject matter expertise capable of coordinating and deconflicting laterally, to higher, and joint.
- Provide Army Battle Command System (ABCS) connectivity and communications to facilitate the common operational picture; and communicate with supporting units.

Mission of the BAE

The BAE provides an imbedded 24-hour operational capability to plan and coordinate aviation operations, UAVS (unmanned



aerial vehicle systems) operations and A2C2 throughout the BCT's area of responsibility. It helps set the conditions for the BCT's success through the combined arms integration of aviation into the commander's scheme of maneuver.

Organization of BAE

The BAE organization consists of a six-man team, with a major as the officer in charge. A captain serves as the plans officer and second in charge, with a trained Chief Warrant Officer 3 tactical operations officer. A 15P (Aviation Operations) sergeant first class serves as the operations NCO, and a 15P staff sergeant is the assistant operations NCO. A 15P operations specialist rounds out the team. These Soldiers represent army aviation as subject matter experts to the brigade combat team.

BAE Staff METL

The BAE staff mission essential task list includes:

- Plan and integrate aviation operations with the ground scheme of maneuver.
- Integrate A2C2 in the BCT area of responsibility.
- Plan and request airspace coordination measures.
- Coordinate and synchronize aviation operations with the MFAB and the higher headquarters.
- Coordinate and de-conflict UAVS operations.

In order to accomplish these essential tasks, the BAE must understand and be able to initiate planning that will be further refined by either the aviation brigade or an aviation battalion task force. Key to success is the BAE's ability to conduct conceptual planning 96 to 72 hours out, while the aviation brigade or aviation battalion task force (TF) is conducting current operations. It cannot be overstated, the planning conducted by the BAE must be supportable by the aviation task force. This is accomplished by the BAE developing as close of a relationship with the aviation TF as it has with the organic commanders and staffs found in the BCT. The BAE and the aviation organizations it interacts with is a partnership built on collaboration and teamwork.

Based on the wide breadth of knowledge required to plan these operations, the BAE is comprised of officers, NCOs and Soldiers who are experienced, intelligent, and fast learning professionals, ready for the challenge.

BAE Training

As the BAE transformed from concept to reality, the U.S. Army Aviation Center (USAAVNC) saw the need for specialized training and doctrine to support the fielding of this new addition to the BCT staff.

First, several references were produced to provide a basis for the BAE's operations including: Training Circular 1-400, *Brigade Aviation Element Handbook*; a BAE reference library; and an Army Knowledge Online Knowledge Collaboration Center. To aid in the rapid fielding of a BAE to the 3rd Infantry Division, the Army Aviation Center at Fort Rucker developed a mobile training team (MTT) program, with other A2C2 and aviation planners to help train their BAE. Today, the MTT addresses critical training tasks to aid BAEs in learning and performing their duties, it provides immediate assistance to fielded BAEs, and is the interim training solution until a BAE resident course can be established at Fort Rucker. The MTT has supported the 101st Airborne Division (Air Assault), the 10th Mountain and the 4th Infantry Divisions, as well as delivering its instruction to the CTCs.

Currently the USAAVNC, in conjunction with the Computer Sciences Corporation, is developing a resident course at Fort Rucker to address all of the training needs of the BAE. This course is intended to provide detailed instruction in air-ground integration, A2C2, joint airspace, targeting; the full spectrum of aviation missions to include: attack, assault, general support, medical evacuation (MEDEVAC), and UAVS operations; Tactical Airspace Integration System (TAIS); and Aviation Mission Planning System (AMPS) instruction. The BAE course development is on track and is expected to be available by next April 2006.

The BAE and the Aviation LNO

The aviation brigade and its subordinate

battalions continue to have their own embedded liaison cells. These LNO organizations have not gone away and are still vital in the successful execution of aviation missions. The BAE does not replace this capability. The aviation commander will always have the responsibility to provide liaison to the BCT; but now that there is a BAE, this liaison can be better focused and more productive. Once an aviation task force establishes a relationship with a BCT, the aviation unit must develop a mutually supporting liaison plan for aviation planning and execution.

With this said, both the BCT and the aviation task force must have the same expectations of aviation planning conducted at the BCT, so that planning can be beneficial, meeting the timely needs of the ground commander, while retaining planning flexibility for the aviation TF commander. The BAE was not designed to develop stovepipe plans, but is in place to facilitate collaborative planning between the BCT and the supporting aviation task force.

Equipment

In order to take full advantage of the BAE's potential, critical equipment was required. The Army Battle Command System that best allows the BAE to effect A2C2 operations is the Theater Integrated Airspace System or TAIS. Prior to transformation, TAIS only existed in air traffic service battalions and companies, as well as some division headquarters and in the Stryker BCT Air Defense Air Management Cells.

The TAIS allows the BAE to:

- Synchronize, visualize, and deconflict airspace;
- Request, process and display airspace coordination measures from the airspace control order;
- Link to joint airspace management processes at the Battlefield Coordination Detachment;
- Interface with other Army and Joint Battle Command Systems; and
- Display air tracks, if appropriate feeds are available.

The BAE and BCT's ADAM cell, share tactical communications equipment to include SINCGARS, Air and Missile Defense Workstation (AMDWS), Air

Defense Systems Integrator (ADSI) workstation, and the TAIS workstation. This set of systems was conveniently packaged in the TSQ 282 ADAM vehicle. Due to the rapid fielding of the BAE, this equipment solution was necessary to allow the BAE to operate upon fielding.

In the future, additional systems are being considered for issue, to include the VRC-100 ALE HF radio, additional SINCGARS radios, TACSAT 117F, GRC-240 UHF/VHF radio, and an Iridium satellite telephone.

In time, the BAE's capabilities will increase as equipment becomes available. Aviation mission planning tools are also necessary for the BAE to plan and deconflict both manned and unmanned aviation operations.

To enable the BAE to accomplish these tasks, the Aviation Mission Planning System (AMPS) is being given to BAEs to facilitate their ability to digitally communicate. The planning products from the aviation TFs, as well as subordinate UAV units, will be processed and passed to higher A2C2 authorities via the AMPS for approval and synchronization.

All of these equipment issues are part of the normal growing pains of rapidly fielded organizations. As doctrine and tactics, techniques and procedures mature, the BAE's equipment needs will be better defined and met to allow the BCT to fully exploit the BAE's capability.

Summary

In the Army today, fully qualified BAEs are present in the transformed brigade combat teams of the 3rd Infantry Division, the 101st Airborne, the 10th Mountain and the 4th Infantry Divisions, and in the 48th BCT of the Georgia Army National Guard. When the Army completes transformation, a BAE will reside in every interim BCT and heavy BCT of the active and reserve components. Currently, the 3rd ID BAEs are the first BAEs deployed for OIF. These teams represent the first of many to bring aviation expertise to the BCTs in Iraq and Afghanistan. They have played a critical role in the development and success of the BAE concept and will help to further refine its future.

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EOD SUPPORT IN OIF 04-06: WHEN GS IS MORE THAN DS

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Just south of Baghdad along Main Supply Route (MSR) Tampa:

Sergeant Jones, an Explosive Ordnance Disposal (EOD) team member, guides the Talon 4B Man Transportable Robot System (MTRS) back to the EOD incident control point near Checkpoint 13 along MSR Tampa. The robot hurries along carrying the handset of a long range cordless telephone gingerly in its gripper. Moments ago the telephone was the initiator for an improvised explosive device

(IED) linked via a blasting cap to a 155 mm South African HE (high explosive) projectile housing 23 pounds of Comp B High Explosive. Minutes later the Talon is back downrange placing a countercharge on the barely visible 155mm projectile buried along the shoulder of the road. As soon as the airspace is clear, Sergeant First Class Holman, the EOD team leader, initiates the modern demolition initiator (MDI), and the thunderous crack lets everyone know that the operation is almost over. After ensuring there were no kick-outs and that the area is clear of any other hazards, the TL declares the area "safe;" the team packs up their equipment and reopens the MSR as the inner and outer security cordons collapse around them. Minutes later, the EOD team and their dedicated security element race back towards Forward Operating Base (FOB) St. Michael when the 717th EOD Company command post calls and directs them to another suspected IED...



This cell phone was used as an initiator for an improvised explosive device in Iraq. EOD Soldiers were able to safely destroy the IED.

Army EOD companies, Air Force Expeditionary Civil Engineer Squadron (ECES)/EOD flights and Navy EOD detachments and their subordinate teams are performing emergency response missions like the one above across most of the Iraqi Theater of Operations (ITO) under the command and control of the 184th Ordnance Battalion (EOD). The 184th is a separate battalion in general support (GS) to the Multi-National Corps-Iraq (MNC-I) that commands, controls, and task organizes subordinate joint service EOD forces in support of the MNC-I commander's priorities. The battalion's EOD teams are trained and equipped to render safe disposal of IEDs, U.S. and foreign conventional and unconventional (chemical, biological, radiological and nuclear) unexploded ordnance (UXO), designated captured enemy ammunition (CEA), and conduct post blast investigations to gather technical intelligence to target bomb makers.

The Army is currently the only service that has the EOD command and control as well as liaison and support structure integrated into maneuver

formations from the BCT and select task force (TF) level all the way up to the corps. To provide the most responsive support to the BCTs engaged in dynamic counterinsurgency operations against the anti-Iraqi forces, the battalion employs its companies (as well as flights and detachments) in general support to each of the multi-national divisions or forces (MND/MNF). From here, companies support BCTs on an area basis so that each BCT commander has only one point of contact for EOD planning and response missions. At first, most maneuver commanders and operations officers balk at the idea of GS. There is no doubt that EOD is a critical enabler on today's battlefield and the "I want my slice" mentality prevails among most supported units. In reality though, most maneuver elements quickly see that the support relationship the EOD companies and teams have with the BCTs and TFs looks a lot like direct support (DS).

According to FM 5-0, *Army Planning and Orders Production*, GS is a support relationship assigned to a "unit to support the force as a whole and not to any particular subdivision thereof." These units are positioned and receive priorities from their parent units. In contrast, DS is a support relationship requiring a force to support another specific force and authorizing it to answer directly to the supported force's request for assistance. The field manual goes on to note that a "unit assigned a DS relationship retains its command relationship with its parent organization but is positioned by and has priorities of support established by the supported unit." EOD companies and teams across the ITO maintain their command relationship to the battalion, but on a day-to-day basis are positioned and receive their taskings and priorities from the maneuver unit they support. Only in select situations does the battalion exercise its GS authority to reposition units.

A two-to-four-person EOD team, depending on the service and unit strength, is the sole EOD support at more than 20 forward operating bases (FOBs) across the ITO. Other camps and FOBs may be



Soldiers from the 184th Ordnance Battalion (EOD) unload a remote control robot during a mission in Irbel, Iraq, in May 2005.

fortunate (read busy) enough to have a HQ element and two to three EOD teams. To those TFs with just one EOD team, the command-support relationship truly looks like DS. The EOD team does not request permission from the EOD company or battalion before responding. The team lives among the TF Soldiers and is literally standing by and ready to go as soon as the TOC receives the UXO/IED 9-Line report. The EOD battalion requires the team to respond within 30 minutes (though typically they are ready in 15) and roll as soon as their dedicated security element is ready. The security element typically consists of three to four M1114s with 10-16 Soldiers that form the inner cordon at the IED site. The EOD team gets all classes of supply (minus CL V and EOD peculiar equipment), life-support, and vehicle maintenance from the TF. In return the TF S3 tasks that team directly, receives back-briefs after every mission is complete and gets the results of the EOD battalion's intelligence analysis based on all exploited IED components in that AO.

In certain cases the battalion does task organize subordinate EOD teams in direct support to maneuver units. These are usually short duration missions (though some have lasted in excess of eight weeks) with specific objectives that require extensive prior planning, rehearsals and multiple EOD teams. The most common examples include named operations, raids against suspected bomb-makers, mass grave

exploitation missions and missions in support of elections. Some examples of these operations in OIF 04-06 include 1st Cavalry Division's Operation Sacrifice Bunt, 42nd ID's Operation Attleboro, 1-25 SBCT's Operation Saber Thrust, and unnamed operations ISO CJSOTF raids in Baghdad. An additional benefit of GS relationship is that when a team goes down, either from a casualty or other reason, the battalion has the flexibility to move a replacement team from a slower sector so that BCT's do not experience any degradation in support. The 184th OD BN (EOD) rarely task organizes its elements at anything other than a GS role

to maintain the operational flexibility necessary to surge assets IAW the corps or division commander's priorities. Otherwise, the corps would have to write and staff a fragmentary order (FRAGO) before moving, even temporarily, any EOD team that was DS to another unit. In the long run, a DS support relationship would lead to less responsive EOD support.

Though sometimes unpalatable, the EOD battalion in OIF provides GS to the corps and its subordinate units because it allows the most responsive EOD support to counter the AIF's number one casualty producing weapon system. On a day-to-day basis, EOD companies and teams respond to the maneuver commander as if they were in DS. Occasionally though, the higher commander's priorities will require the move of a team or even a company to support the main effort. In these instances the GS support relationship presents both the battalion and maneuver commanders with the most efficient and effective way to get the job done. Call it DS minus or GS plus, but anyway you look at it, the joint service EOD teams of the 184th OD BN (EOD) respond at a moment's notice to render-safe the IED threat anywhere on the battlefield!

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