THE BASTOGNE FUSION PROCESS

A COMMANDER-CENTRIC APPROACH TO PLANNING AND DECISION MAKING

LTC SCOTT SENTELL LTC PHILLIP KINIERY

"Commanders are the most important participants in the operations process. While staffs perform essential functions that amplify the effectiveness of operations, commanders drive the operations process through understanding, visualizing, describing, directing, leading, and assessing operations."

- ADRP 5-0, The Operations Process, May 2012

n the spring of 2012, as the 1st Brigade Combat Team (Bastogne), 101st Airborne Division (Air Assault) prepared to conduct collective training prior to a deployment to Afghanistan, it was determined that the brigade staff needed to enhance the planning process to help gain a deeper understanding of the environment in a way that supported the brigade commander's personality and way of thinking. The brigade commander was concerned that traditional methods and processes did not account for the complexity of the Afghan environment. How would the staff decide when and where to apply resources and effort? In an attempt to contribute to the brigade commander's understanding the environment, the brigade staff developed a commander-centric approach we called the Bastogne Fusion Process (BFP). The brigade applied this process while deployed to Afghanistan from November 2012 until August 2013 as a security force assistance brigade.

Although the Army operations process provides a template for planning and problem solving with the Army design methodology and the military decision-making process (MDMP), the staff should tailor these processes with the commander's personality in mind to maximize mission command and his ability to balance the art of command with the science of control. The correct inputs and outputs, synchronized within a process, should align with how a commander internalizes understanding and how his visualization of the environment reinforces their decisionmaking methodology. The process should also deepen the shared understanding of the operational environment across



Figure 1 — The Bastogne Fusion Process

higher and subordinate commands to ensure that the unit's effort and resources are not applied against poorly defined problems.

The overarching goal of the BFP is to provide feasible solutions to complex, ill-structured problems, tailored to the commander's thought process. Throughout the development and execution of this process, the brigade staff determined that there are several characteristics that the Bastogne Fusion Process exhibits:

♣ Adapts to fit the commander's thought process and his decision-making horizons

♣ Allocates time; 75 percent is dedicated to preparation and 25 percent is dedicated to planning and execution

Accommodates short and long-term problem sets

♣ Ensures that actions are tied directly to a deep understanding of the environment (through iterative process)

Focuses on uncovering opportunities

♣ Avoids offering simple answers to complex problems; simple approaches are easy to understand, but often ineffective in execution

♣ Is resilient to friction and turbulence as friendly actions create new circumstances (intended and unintended) in the environment

✤ Utilizes comprehensive inputs from subordinate commanders and staffs to frame the problem set

✤ Changes conceptual thinking into executable orders; finds the critical transition point between conceptual and detailed planning

✤ Includes inputs that are designed to be intuitive, easy to use, and clearly understood down to the platoon

The BFP does not seek to replace design or the MDMP. Instead, it ensures that mission analysis is thorough and clarifies the problem set. Throughout numerous iterations of this process during the brigade's Mission Command Training Program — Brigade Warfighter Exercise, Joint Readiness Training Center (JRTC) rotation, and deployment to Afghanistan, the staff continued to refine the BFP to improve the understanding of the environment and describe it in a manner that resonated with the both the staff and the commander. This process also had to transform a conceptual plan into detailed executable orders for subordinate units and ensure that the action is being assessed appropriately in order to restart or continue the process with sufficient data points. Ultimately, the purpose of this paper is to show how the brigade staff accounted for the commander's personality in tailoring a planning and problem-solving process. In Afghanistan, where complexity and friction thrive at the crossroads of human and physical terrain, the staff validated the BFP and found it to be a sound approach to commander-centric planning and problem solving built on a deep and accurate shared understanding of the operational environment.

Defining the Inputs

The information that goes into any process — the inputs — must be carefully considered. One consideration used to determine the relevant inputs was to ensure we were not creating redundant reporting requirements for subordinate commands and staffs. The brigade commander's battle rhythm was used to identify those venues and existing reporting requirements as well as higher's battle rhythm to avoid overloading a subordinate staff officer with redundant reports. (It is no secret that a brigade staff can quickly overwhelm a battalion/squadron staff with reporting requirements that do not serve as valid inputs to a relevant process.) Once the standard reporting requirements were outlined, the staff identified efficiencies within those reports that would contribute to the brigade commander's visualization of the environment. The battle rhythm consisted of commander update briefs (CUBs), battle update briefs (BUBs), warfighting function (WfF) working groups (WGs), staff updates, and commander assessment briefs (CABs) — all designed to serve as inputs to the BFP.

Finding the correct inputs was a continuously evolving process that assessed whether or not the information requested actually benefited the BFP. Getting rid of a report or staff estimate which did not make sense was occasionally a significant emotional event for staff officers whom had adopted the processes from the previous staff or from a previous job. Inputs and venues must be synchronized and sustainable. They should contribute and be formatted to the brigade commander's visualization in order to gain efficiency in staff work. Additionally, understanding the impact a commander has on the operational environment while conducting deliberate/dynamic engagements and battlefield circulation is critical for the staff. Assembling the brigade staff with the commander following battlefield circulation is a technique the staff developed in Afghanistan. This meeting ensured staff situational awareness and prevented the development of divergent views of the operational environment. Initially, this meeting involved all brigade staff officers. However, with increasing requirements, only key or select staff officers were required for future meetings. In this case, the commander used his weekly staff update to provide insights to the remainder of the staff.

Framing the Problem

One of the primary characteristics that made the BFP successful is the integrated staff approach which fostered an environment where all participants were encouraged to challenge the status quo and question assumptions. The critical phase in the BFP — framing the problem — was the forum for such collaboration. Initially, this series of meetings with the entire brigade staff was frustrating and often did not produce the outputs desired. When trying to define a complex problem set, it proved to be difficult to identify a start point. As a result of trial and error, the staff determined that identifying the right contributors, proper framework, and an open mindset go a long way in making this key step successful.

In practice, the Design WG (see Figure 2) is a room populated by white boards with representatives from each staff section and interagency representatives. The rank of the participants was not considered a prerequisite for contributing. Instead, new and unconventional approaches are welcome in a generally doctrine-laced environment of post-Captains Career Course (CCC) and Intermediate Level Education (ILE) graduates. For example, it was noted that enlisted intelligence analysts had a deep understanding of a specific topic, ethnic group, or geographic location. Their perspectives were essential to developing a complete picture of the operational environment. In many cases, the non-combat arms officer, chaplains, and lawyers gave some of the best insights because they were able to widen the aperture and look at the operating environment through a different lens.

Meetings were also framed around a range of variables depending on the operating environment. For example, the operational variables - political, military, economic, social, information. infrastructure. physical environment and time (PMESII-PT) - worked to effectively describe an Afghan province or district. SWOT (strengths, weaknesses, opportunities, and threats) analysis was also used when attempting to describe a specific

Design Working Group		
Purpose: Understand the Operating EnvironmentFrequency: First day of cycleDuration: As neededLocation: Brigade conference roomChair: XOLead: S3Attendees: S1, S2, S3, S4, S5, S6, FSO, TGTofficer, S7, S9, SJA, MISO, PAO, MEDO, EW,PMO, BAE, ENG, ALO, CHAP, CA, Safety, S3Plans, EOD, ANSF/SFAAT representative, DoS	Proposed AgendaRoll call(S3)Intel update(S2)Operations update(S3)Commander's intent(S3)WfF updates(various)Framing discussion(ALL)	
Inputs: Current OE Assessment (S2) SIGACTs from previous cycle (S3) OPSUM from previous cycle (S3) CAB/CUB/BUB and CDR feedback (staff) Current staff estimates (WfF) Current campaign plan (S3) Current HNSF assessment (SFAAT CDR) Current PMESS-II assessment (S3) IIA assessment (S7) Media activity (PAO) Atmospherics (S9)	 Outputs: ♣ Refined IRs to battalions ♣ Proposed problem set ♣ Any recommended changes to commander's intent ♦ WARNO 1 	

Figure 2 — The Design Working Group (Framing the Problem)

element such as the Afghan National Army or a Taliban subcommander in the area of operation (AO). The method used to capture this critical discussion is not paramount. Instead, the staff should use the framework that will resonate the most with how your commander thinks and how he sees the environment. As conversations began to answer or describe the chosen variables, it became easier to identify the problem set and recognize those opportunities that clearly involve multiple variables. Through this process, the staff modified the endstate initially drafted by the brigade commander.

It is important that the staff not approach this process strictly within their WfF, but more like students asked to read a novel and then give their opinions and raw ideas; an informal discussion where new ideas were accepted instead of a canned briefing format. This approach enabled each staff member to draw from his background, education, and experiences rather than focusing narrowly within the WfF. The staff also understood that challenging assumptions and thoughts was highly encouraged because it forced members to come to the meeting prepared to defend their positions. These meetings were not one the commander would normally attend. On occasion the commander would sit in the back of the room to gain insight on discussions and thought processes but mostly he allowed the staff to continue to muddle through this phase and formally present the proposed problem set for approval.

Subordinate units played an important role in this phase as well. During the early stages of the framing phase, the brigade staff developed information requirements (IRs) based on gaps in knowledge of the environment. The staff would categorize these IRs along the same variables used to frame the problem (i.e., PMESII-PT or SWOT). Those IRs were immediately distributed to the battalions and the brigade staff relied heavily on their feedback to help achieve a better understanding of the environment. Bringing in this bottomup refinement early in the BFP was essential as it helped to validate thought processes and built credibility into the staff's recommendations to the commander.

Fusion

The next phase of the BFP is the process of "fusing" all of the data garnered from the previous framing phase. The inputs into this fusion phase included subordinate feedback to the IRs, a proposed problem set, recommended changes to the commander's endstate, proposed lines of effort, and draft opportunities. Within each line of effort, multiple opportunities were identified. These opportunities provided operational orientation for the brigade's efforts. It is through those opportunities for success that the brigade staff would apply the traditional MDMP resulting in a detailed order given to the subordinate units for action.

In the fusion phase, the staff refined the identified opportunities based on the staff's understanding gained during the framing phase. In preparation for the commander's review, the staff defined each opportunity in a written description of the current state of the environment that requires this action and the action being proposed. Also defined is the risk associated with this opportunity if not executed or executed ineffectively as well as identifying who owns "the fight" at each level. This helped to prioritize resources and establish unity of effort. It is important to note that a full course of action brief was not the target, but a one slide description that explains the opportunity (see Figure 3). In order to prevent wasted effort, the staff would not conduct any additional planning until the opportunity was approved and prioritized during the commander's decision brief.

The output of this phase was a written brigade narrative — not a PowerPoint presentation — that would be given

to the brigade commander for review prior to seeking a decision from him. The combined brigade narrative included a narrative from each of the battalion commanders and one from the brigade staff. In order to prevent the brigade staff from regurgitating what the battalion commanders were saying in their narrative, a proposed problem set, defined lines of effort and the opportunities that met the criteria of cross-cutting multiple lines of effort were presented in the narrative. The embedded battalion commanders' narrative was the forum for subordinate commanders to articulate to the brigade the current state of their operating environment and any emerging opportunities and exploitable networks (friendly, enemy, or mutually supporting). It was through this narrative format that the brigade commander could best internalize the information and would also act as the read ahead prior to our commander's decision brief in the following phase.

Deciding

Pinning down the commander in a combat environment for a decision is nearly impossible when he has not been given ample time to think. Creating a read ahead narrative - the combined brigade narrative - and a desk-side huddle with the deputy commander (DCO), executive officer (XO), S3, S2, and targeting officer prior to the formal decision brief was critical. This guick meeting helped the commander to focus on what decisions were being asked of him and when the decision was needed. The desk-side huddle also provided insight on where the brigade commander was leaning in regards to prioritization and approval of the opportunities which allowed the brigade staff to begin the initial steps of MDMP. It also provided insight on what opportunities were misaligned with the brigade commander's read of the environment. This normally led to analysis on additional opportunities that were not initially identified.

The brigade commander's decision brief (Figure 4) was the final step prior to moving into the MDMP with each opportunity. This brief involved all battalion commanders and brigade staff officers. This forum was not for the weak of heart; the staff would defend their product to the brigade and battalion

Brigade Opportunity (Example)		
Opportunity: Brief definition of the opportunity that outlines the current situation and illustrates how the opportunity will achieve the commander's endstate and contribute to the entire brigade operating environment.		
IRs: List of all information requirements associated to the opportunity		
Risk: 1. List of potential risks associated to the opportunity if executed or not executed 2. Risk 2 3. Risk 3 4. Risk 4		
Brigade fights: Identify brigade-level decisions and influence		
Battalion fights: Identify battalion-level decisions and influence		
SFAAT fights: Identify battalion-level decisions and influence		

Figure 3 — Opportunity Presentation Template

commanders so each fully understood the background and operational approach. Transparency between brigade and battalion staffs was essential and argumentative discourse was encouraged. The discourse that derived from this forum helped refine the brigade commander's planning guidance and approval of our operational approach. At the end of this meeting, the brigade staff would have prioritization on which opportunities to continue planning on and any adjustments to the problem set, lines of effort, or commander's endstate.

Planning and Execution

Once the commander decided on where to prioritize his efforts and apply resources, the brigade staff used the remaining 25 percent of time to conduct the more traditional MDMP steps. Mission analysis became more focused on the tangible aspects of resourcing the actions inside of the defined operational environment – facts, assumptions, tasks, and limitations - instead of trying to understand stakeholders, networks, and the human terrain. The majority of time was spent on course of action (COA) development. The benefit of the BFP up to this point is that the battalions were read in on the opportunities and in most cases developed them in conjunction with the brigade staff. This allowed for several efficiencies to include parallel planning and the brigade staff's ability to immediately request the enablers needed from the regional command headquarters. An additional benefit that inherently emerged from this process was that everyone on the brigade staff understood the intellectual underpinnings of the operation being planned and how it tied to the brigade's campaign plan. The output of this phase was an executable order (fragmentary order [FRAGO], operation order [OPORD], or concept of operation [CONOP]), directing subordinate units to take the necessary actions to achieve the commander's endstate.

Assessing the effects of the operation always created friction points among the staffs based on the read they were getting from the available data. Assessment working groups that involved every player in each current or completed operation were held (see Figure 5). The outputs of this forum

fed directly back into the BFP and the reframing process. It was in this meeting where planners discussed the relevance of the data being measured with an eye to ensuring it contributed to the planning process. This was generally a heated conversation that led to a better understanding for everyone as the environment continued to change based on our actions.

Success in the assessment phase is defined by the brigade commander's ability to articulate refined guidance to his subordinate commanders. Additionally, establishing the correct battle rhythm for the assessment phase is important to remain relevant in the current fight. However, the staff quickly determined that maintaining the same frequency of the meeting was less important than ensuring that the assessment measures were correct. As time passed, the environment changed and

Commander's Decision Brief		
Purpose: To present COAs and attain planning guidance for identified emerging opportunities Frequency: Last week of Bastogne fusion cycle Duration: 60 minutes Location: Brigade conference room Chair: B6 Lead: XO Attendees: Battalion commanders, SFAT team leader, S1, S2, S3, S4, S5, S6, FSO, targeting officer, S7, S9, SJA, MISO, PAO, MEDO, EW, PMO, BAE, ENG, ALO, CHAP, Safety, S3 Plans, EOD, ADS	Proposed AgendaRoll call(XO)Mission (revisit)(S3)Commander's intent(S3)Problem set statement(S3)Line of effort review(S35)Opportunity discussion(S35)For decision(BDE CDR)For guidance(BDE CDR)	
Inputs: B6 Narrative CONOPs for approval CONOPs for guidance	Outputs:	
Figure 4 — Commander's Decision Brief		

became more complex as the actors in the system reacted to the brigade's actions. Changing a meeting time and the inputs from the staff and subordinate units are extremely disruptive, but it does ensure relevant meetings that focus on the changes that require updated assessment measures. Without adapting to the environment, meetings lose their substance and no one, especially commanders, will gain anything from the information being presented because it is no longer relevant to the environment.

The brigade staff designed the BFP to match the brigade commander's personality and benefits from an inherent ability to ensure that everyone gets all the information and data available. This was made possible because of the

physical structure of the fusion cell, also doctrinally called "plans." Only two areas existed in the brigade HQ: the joint operations center for current operations and the fusion cell for planning. Walls were literally knocked down and individual offices removed, preventing stove-pipe organization а among the staff and creating a bay office where every WfF section worked. Another technique used to ensure that information was disseminated as widely as possible was resourcing each battle space integrator (battalion), combat advisory group (company), and security force advise and assist team (SFAAT) with a video teleconference capability allowing for anyone to join any meeting to provide their direct input.

Assessment Working Group Purpose: The Assessment Working Group (AWG) analyzes **Proposed Agenda** operations over the last fusion cycle to determine whether the tasks Bastogne fusion status and desired effects outlined in priorities development were achieved (S35) (5 min) (MOPs). It further determines whether the desired effects had the Review commander's intent intended impact on the BCT's opportunities. The AWG acts as the (5 min) (S35) primary input to the Operations and Development WG where the BCT Definitions analyzes each LOE and their associated opportunities to determine their continued validity. (5 min) (S7) Combined priorities overview Frequency: Monday, 2nd and 4th week of 4-week cycle (5 min) (All) Duration: 1.5 hours Location: Brigade conference room Assessments review (40 min) (All) Chair: B6 Questions & closing comments Lead: ADS (5 min) (S35) Attendees: Brigade staff primaries, COMSDIR, FSO, ENG, ANA BDE SFAAT S3s, ABP Z1 S3, AOSC S3, AOSC S2, PRT, AOB Inputs: **Outputs:** INTSUMs/GRINTSUMs Recommended OPSUMs adjustments to current priorities 🜲 B6 vision paper Recommended new Measures of effectiveness (MOEs) priorities Measures of performance (MOPs)

Reframing and Frequency

At any point during the BFP, conditions on the ground were likely to change creating unforeseen circumstances. new opportunities. or а renewed understanding of the environment. The iterative design of the BFP allowed the staff to reframe if required. If there were no major changes in the environment, the staff would conduct the design working group on a recurring basis to determine if the key inputs -IR feedback, CUBs, BUBs, CABs — have revealed gaps in our understanding that require additional analysis.

Whether the output of the design working group is to frame an initial problem, to reframe based on changes in the environment, or to validate the existing opportunities determining the frequency of the BFP is important, but not paramount. The BFP may be conducted on a two, three, or even a four-week cycle or planning horizons with traditional "targeting meetings" occurring multiple times within each BFP cycle. Essentially, there is no defined cycle for the BFP. The environment and the brigade commander's personality will determine the necessary tempo of the process.

Conclusion

Throughout the development and implementation of the

Figure 5 — Assessment Working Group

BFP, the brigade staff found that many steps in the process were simply extensions of the way our commander viewed planning and problem solving. Challenging the status quo, questioning shallow assumptions, and adjusting the plan throughout execution were all characteristics that the staff had to adopt. In doing so, the staff gained a much deeper understanding of the environment and was able to develop more detailed solutions to complex problems. When finally presented to the commander as recommendations for decision, the gaps in understanding were narrower, confidence in the process was higher, and the desire for action was greater.

The Bastogne Brigade's 2012-2013 deployment to Afghanistan provided a unique opportunity to validate the Bastogne Fusion Process. The brigade's security force advise and assist mission created distinctive and nontraditional problem sets where a shared AND accurate understanding of the environment was essential to properly apply limited resources in a geographically complex region. The BFP became a collaborative and iterative approach that significantly altered the way the staff viewed planning and problem solving. The ability to become comfortable with being uncomfortable was essential in providing the commander the information he desired in a format that supported his thought processes. It is not expected that units will completely adopt the BFP as their method. Instead, it is our desire that this article has emphasized the importance of finding a process that your commander is comfortable with, addresses the complexities of the modern environment, and improves the ability to create a shared understanding. In the end, it is the active dialogue between commanders - company, battalion, and brigade and the staffs that highlight the benefits of the BFP.

A

ACRONYM LIST	EW — electronic warfare
	FRAGO — fragmentary order
ABP — Afghan Border Police	FSO — fire support officer
ALO — air liaison officer	GRINTSUM — graphic intelligence summa
ANA — Afghan National Army	HNSF — host nation security force
ANSF — Afghan National Security Forces	IIA — inform and influence activities
AO — area of operation	ILE — Intermediate Level Education
AOB — advanced operating base	INTSUM — intelligence summary
AOSC — area of operations support	IR — information requirement
command	JRTC — Joint Readiness Training Center
AWG — assessment working group	KSP — kinetic strike package
B6 — Bastogne 6	LOE — line of effort
BAE — brigade aviation element	MDMP — military decision-making process
BCT — brigade combat team	MEDO — medical officer
BDA — battle damage assessment	MISO — military information support officer
BFP — Bastogne Fusion Process	MOE — measure of effectiveness
BN — battalion	MOP — measure of performance
BUB — battle update brief	OE — operational environment
CA — civil affairs	OPORD — operation order
CAB — commander assessment brief	OPSUM — operations summary
CAP — crisis action planning	PAO — public affairs officer
CCC — Captains Career Course	PMESII-PT — political, military, economic,
CDB — commander's decision brief	social, information, infrastructure, physical
CHAP — chaplain	environment and time
CHOPS — chief of operations	PMO — provost marshal
C-IDF — counter indirect fire	PRT — provisional reconstruction team
C-IED — counter-improvised explosive device	SFAAT - security forces advise and assist
CNE — catastrophic negative event	team
COA — course of action	SIGACTs — significant activities
COMSDIR — communication director	SJA — staff judge advocate
COMSTRAT — communication strategy	SWOT — strengths, weaknesses,
CONOP — concept of operations	opportunities, and threats
CUB — commander update brief	TGT — targeting
DCO — deputy commander	TST — time sensitive target
DoS — Department of State	WARNO — warning order
DSLE — dynamic soldier leader engagement	WfF — warfighting function
ENG — engineer	WG — working groups
EOD — explosive ordnance disposal	XO — executive officer

LTC Scott Sentell serves as the commander of the 6th Squadron, 8th Cavalry Regiment, 4th Brigade Combat Team, 3rd Infantry Division, Fort Stewart, Ga. Prior to assuming command of 6/8 CAV, LTC Sentell served as the executive officer to the 1st Brigade Combat Team (Bastogne), 101st Airborne Division (Air Assault) from March 2012 to May 2013.

LTC Phil Kiniery serves as the brigade executive officer observer/ controller/trainer at the Joint Readiness Training Center, Fort Polk, La. LTC Kiniery previously served as the operations officer to the 1st Brigade (Bastogne), 101st Airborne Division (Air Assault) from March 2012 to April 2013.

> A Soldier with the 1st Brigade Combat Team, 101st Airborne Division, mans an observation post in Nangarhar Province, Afghanistan, on 31 May 2013. Photo by SGT Margaret Taylo