Running head: FBCB2 AND THE MECHANIZED INFANTRY

FBCB2 and the Mechanized Infantry

SGM Charles Stafford

United States Sergeants Major Academy

Class 58

Mr. Mike Artis

November 27, 2007

Outline

Thesis: By employing the FBCB2, the Mechanized Infantry has the ability to maintain continuous information flow and situational understanding for successful operations on today's modern battlefield.

1) Development
   a) Fog of War
   b) Fratricide

2) Mission Development
   a) System
   b) Capabilities

3) Results
   a) OIF 1
   b) Operations "Red Dawn"

4) Shortcomings / Issues
   a) Joint operations
   b) Bandwidth

Abstract

The Force XXI Battle Command Brigade and Below is one of the newest weapons in the Army's arsenal. This weapon gives decision-makers at all levels the ability to visualize in real time the disposition of their assets versus that of an enemy at greater distances regardless of weather and terrain. This real-time picture gives the American Soldier an unprecedented situational awareness and information superiority allowing him to make better, safer, quicker decisions. The FBCB2 gives the mechanized infantry a tremendous tactical advantage and is essential for successful operations on today's modern battlefield.

FBCB2 and the Mechanized Infantry

On the multi-dimensional battlefield of today, the Army's mechanized infantry must be able to maintain situational awareness and information superiority. In the past, commanders did not know the current disposition of their forces beyond what they could see or what the latest situation update reported. This often delayed the decision making process and at times led to fratricide. I surmise that General Lee would have been more aggressive had he known where all his forces were and how the union deployed itself in front of him. I also know that the vast majority of U.S. Soldiers would not shoot if they believed their targets were friendly. The Army has added a combat multiplier to its arsenal that addresses those issues. That multiplier is the Force XXI Battle Command Brigade and Below (FBCB2). By employing the FBCB2, the Mechanized Infantry has the ability to maintain continuous information flow and situational understanding for successful operations on today's modern battlefield.

The FBCB2 is a software, hardware, and database capability, which is operates fluidly over the network at Brigade and lower. This capability extends the battle space from the traditional line of sight data to an extended range with passive broadcasts and automatic postings to a map display, continuously updating a common operating picture of the battlefield. The system provides situation awareness by gathering and collating, and broadcasting the battlefield common operating picture in real time at each user's display (FBCB2, GlobalSecurity.org). Commanders can also transmit and receive orders, reports, and data in real time, thereby actively exercising control of his command. The FBCB2 consist of a rugged shock resistant notebook with a touch screen and a keyboard mounted on tactical vehicles. On a colored liquid screen, it provides the user with a digitized map or Google-like imagery with integrated overlays depicting vehicles, known enemy locations, or obstacles such as minefields. The user can zoom in or out

much like using MapQuest or Google Earth with "…on-screen buttons, pop-up windows for composing and sending messages as well" (Rising, 2003). Additionally, the system passively provides positional data on friendly forces by assigning each entity blue icon, hence the moniker – blue force tracker. The system is comprised of a Global Positioning System, PLGR or DAGR, a SINCGAR and/or EPLR radio and interfaces with the Army's tactical internet. Because the nature of the tactical internet is similar to the worldwide web model, every FBCB2 equipped user communicates not only to everyone, but also each user, from the commander to the shooter, has access to the same operating picture (FBCB2, FAS Military Analysis Network).

The system got battle tested during Operation Iraqi Freedom. LTC John Charlton, Commander, 1-15th Regiment, 3d BCT, 3d Infantry Division, crossed the line of departure without full confidence in the system. He had more than a dozen map sheets, a cumbersome map board, and a map case with him in his Bradley. As the battalion moved along, he switched map sheets in his tiny space sometimes going from scale to scale or reading with the aid of a little pen light. When they got to the town of As Samawa, their mission was to engage Saddam Fedayeen forces in the town, but he only had 1:100,000 paper maps. One of his young vehicle commanders transferred his operational graphics from acetate to his digital system. The whole battalion instantly had the same picture and was able to move seamlessly from scale to scale. The LTC's conversion was not complete "until the infamous sandstorm of March 23, 2003. On a reconnaissance in force to find and destroy Fedayeen forces, the battalion was moving when the sandstorm hit reducing visibility to zero" (Charlton, 2004). They continued their mission using their system much like pilots do instrument flying, knowing exactly where each other was by looking at the blue icons. "I never used another paper map product for the rest of the war and fought every fight thereafter using FBCB2" (Charlton, 2004). Operation Red Dawn also

highlighted the system. The 4th Infantry Division obtained highly actionable intelligence on a high value target. Planners drew up the operation and made real time changes to the mission while in progress. In the end, they captured Saddam Hussein (Van Marsh, 2004). Lastly, the FBCB2 is a force multiplier concerning logistics. When a component or vehicle goes down, the mechanics are virtually, instantaneously aware and can aggressively assess and fix the problem area. This ability puts the asset back in the fight faster (MSG Jon Lacks, personal communication, October 18, 2007).

The FBCB2 system, however, does have a few shortcomings. First, much like LTC Charlton, leaders have to change the doctrine and the way they think (Scully, 2004). A young specialist at the National Training Center said in 2001, "A hammer isn't a tool, until you learn how to use it. It's the same with this" (Garamone, n.d.). Young Soldiers growing up in the Nintendo age are naturally able to multitask and process multiple data streams simultaneously. The faster leaders are able to process, the faster they can act. Second, not all friendly forces are equipped with FBCB2. This fault is diminishing however, as the Army continues to proliferate the system through the force and integrate similar systems for our allies. Third, bandwidth can be a showstopper. The system relies on its satellite backbone, yet there is not enough bandwidth to accommodate the entire Army. New color division multiplex technologies as well as launching more satellites will surely remedy this. Finally, Soldiers remain identified with a vehicle. Dismounted Soldiers must remain in proximity to their vehicle otherwise; they become unidentified entities on the battlefield, the enemy. Army engineers and contractors are working to create portable versions for Soldiers.

Overall, though, the FBCB2 provides Soldiers and leaders the right data, at a precise location, at the moment in which leaders can act upon it. The system leverages the wireless

tactical internet and GPS technology to bring Soldiers needed information. With a clear picture

of the battlefield, decision makers can act faster and communicate their decisions faster than the

enemy can react. The FBCB2 gives the mechanized infantry a tremendous tactical advantage

and is essential for successful operations on today's modern battlefield.

References

Charlton, John. (2004). *Digital battle command: baptism by fire*. Retrieved October 21, 2007,

from Findarticles.com:

http://findarticles.com/p/articles/mi_m0IBS/is_1_30/ai_n6123710

DeRosa, John. (2006). *Operation Baton Rouge: perspectives from an Iraqi Security Forces*

Advisor. Retrieved on October 21, 2007, from HighBeam Encyclopedia:

http://www.encyclopedia.com/doc/1G1-156365100.html

FBCB2 System Capabilities. (n.d.). Retrieved October 21, 2007, from Close Combat tactical

trainer: http://www.peostri.army.mil/PM-CATT/CCTT/CITT/io/ie/io_10a.htm

Force XXI Battle Command, Brigade-and-Below. (n.d.). Retrieved October 21, 2007, from

GlobalSecurity.org: http://www.globalsecurity.org/military/systems/ground/fbcb2.htm

Force XXI Battle Command, Brigade-and-Below. (n.d.). Retrieved October 21, 2007, from FAS

Military Analysis Network: http://www.fas.org/man/dod-101/sys/land/fbcb2.htm

Garamone, Jim. (n.d.). *Digital World Meets Combat During Desert Exercise*. American Forces

Information Services. Retrieved October 21, 2007, from internet:

http://www.fas.org/man/dod-101/sys/land/docs/man-la-fbcb2-010418.htm

Lacks, Jon. (personal communication, October 18, 2007)

McCarter, Mickey. (2004). *Bigger Role for Blue Force Tracking*. Retrieved October 21, 2007,

from Military Information Technology Online Archives:

http://www.military-information-technology.com/article.cfm?DocID=504

Rising, David. (2003). *Battlefield Internet gets first war use*. Retrieved October 21, 2007,

from MSNBC.com: http://www.msnbc.msn.com/id/3078666/

References

Scully, Megan. (2004). *Iraq War Proves Power of Net-Centric Vision*. Retrieved October 21,

2007, from the Defense News:

http://www.oft.osd.mil/library/library_files/article_307_Defense%20News.doc

Schiesel, Seth. (2003). *On the Ground in Iraq, the best Compass Is in the Sky*. Retrieved October

21, 2007, from The New York Times:

http://query.nytimes.com/gst/fullpage.html?res=9B0CE7DC163AF934A25757C0A9659C8

B63

Van Marsh, Alphonso. (2004). *How the Army used tech to nab Saddam*. Retrieved October 21,

2007 from CNN.com:

http://www.cnn.com/2004/TECH/ptech/01/06/sprj.nirq.troop.tech/index.html