

Combat ID Workshop Panel Session Notes
May 14, 2008

Panelists:

Staff Sgt. Jonathan Hoehn
Major Bill Meredith
First Sgt. Andrew Delcourt
Major Kurt Selko

Question:

What sort of in-theater experience do you have with combat ID (using Blue Force Tracker, with close air support, etc.)?

Staff Sgt. Hoehn:

Staff Sgt. Hoehn deployed to Iraq during the initial invasion and again during the first presidential elections. The main difference between the two deployments was that during his second deployment, combat ID involving enemy armor and vehicles was absent. He feels that it would be a good idea to integrate Blue Force Tracker (BFT) into the operating shelters.

First Sgt. Delcourt:

First Sgt. Delcourt has not been deployed in theater.

Major Meredith:

Major Meredith deployed to Iraq from late 2004 to 2005 for a total of 14 months. He felt that there was good unmanned aerial system (UAS) and rotary wing integration. Fixed wing aircraft were not used very often due to where operations were taking place. The most effective approach was a layering system where a soldier on the ground would identify a potential target or point of interest, then a UAS would take a second look, and if needed or possible a rotary wing aircraft can place a third set of eyes on a target. Major Meredith had very few "close calls" involving fratricide. Their unit was very careful about combat ID. Most of their problems involved the Iraqi army shooting at them due to lack of fire control discipline.

Major Selko:

BFT can show a real-time feed in the aircraft, which is useful for finding one another in the air and locating assets on the ground. It is also useful for monitoring missions. They did a lot of training both with US and international forces. At first most of the errors are with passing information along, but over time improvement is apparent. In his unit he is not the person who fires weapons, so it is important to pass target information along.

Question:

How well prepared were you to deal with combat ID?

Major Selko:

Training helps you know what to do. You find out how allies and comrades are marked and how the enemy is marked. In theater you know where friendly forces are when they are first deployed, but when they are being picked up it can be harder to identify forces.

Major Meredith:

BFT and radio communication is useful, especially on mounted systems like armor and mechanized infantry. Combat ID was a big point of emphasis even before the Iraq war started, so his unit was very comfortable with it when dealing with other mechanized forces. There was little training for dealing with dismounted soldiers on the ground. The number of radios is limited and it can be harder to keep track of ground soldiers moving

through urban areas. They had to be dual-moded and use both automated methods as well as radio communication.

Visual ID was also difficult because the FLIR sights do not pick up a soldier who is using IR or night vision so a new way to signal location was needed. One solution that was reached was jamming two 9-v batteries together to generate heat and mark Humvees or soldiers. In short, it combat ID was not a very hard problem with mounted forces, but dismounted forces were more difficult.

First Sgt. Delcourt:

The fundamental techniques for combat ID haven't changed much, they just get tailored to the scenario at hand. Essentially people are looking for the size and shape to help ID targets. Training tries to prepare soldiers by setting up scenarios and simulations to demonstrate what certain types of activity may look like from the air. Combat ID is more difficult when using IR, especially at night. They try to make training as difficult as possible. Things have changed quickly between the start of the Iraq war and now.

Staff Sgt. Hoehn:

UAS is a huge asset for real-time coordination, but layering is still very important because of the IR limitations that Sgt. Delcourt mentioned.

Question:

One panelist mentioned integrating BFT with the shelters. What was meant by that?

Staff Sgt. Hoehn:

It would be nice to show the shelters on screen (where the UAS operators are). It would be helpful so the operators could orient themselves and know where other friendly forces are. It would be a good feature to have, but it would also be important to include the ability for operators to limit what is shown in order to avoid screen clutter.

First Sgt. Delcourt:

The operator's screen is very full, so it is important to show the information that is needed and nothing more. The screens can't get in the way of actually flying the aircraft. Re-tasking is a very common occurrence, so knowing where everything is located is a good asset to have.

Major Meredith:

You can look at assets on a platform level or on an echelon level. There is a lot of information on a small screen, and the icons don't scale when the operator zooms in and out. The problem with BFT is that the location of units can become unclear if an echelon view is being used because a single icon shows the location of several assets.

Latency can also be an issue with satellite based systems because a tank can move a considerable distance before the system refreshes/updates. To compensate for this problem, a platoon would do a circular line of sight to ensure that friendly forces were clear before calling in fire.

Question:

What were the strengths and weaknesses of your combat ID training? Does our military do a good job with the exercises they do?

Major Selko:

Major Selko had very little training. His main job was to have BFT up to date. His instruction was mainly "put this box on and make sure the light is on". There were efforts at joint training, but each service within the US military and each coalition partner has been fairly unilateral in terms of target ID procedures.

Major Meredith:

His unit was very familiar and comfortable with using BFT. The problem arose when interacting with units without BFT or units without experience with it. Sometimes units would surprise one another and be at locations unexpectedly. BFT is good because it can increase the range of communication, but the message may be lost. The interface is also “cumbersome” which can reduce effectiveness.

Supplemental question:

Were there any issues during training?

Major Meredith:

Training was intense but he can't remember any instances of fratricide. There were a couple of close calls due to system latency, but there were no injuries. The speed of events and the proximity of operations mean that near misses can be literally forgotten about. There is a lot going on, so the feeling is that if no one got hurt, it's not a major event. The near-miss reviews that are carried out at the national training center don't necessarily carry over after training. During the reviews, sometimes commanders have a tendency to want to focus on the issues that are perceived as more serious or that they are more able to improve on.

Question:

If a future enemy can mimic or jam Blue Force Tracker, how would that alter fratricide rates?

Major Meredith:

Major Meredith was told by a Norwegian soldier that he was training with that NATO forces get nervous around US forces because their BFT does not interact with our BFT, so NATO forces can't see us and we can't see them.

The “old school” commanders focus on analog technology such as radios for combat ID and see BFT as a way to augment that ability. The newer generation relies much more on BFT and isn't very familiar with the analog way of doing combat ID. The short answer is that yes, there would be problems if BFT were to be mimicked or jammed by an enemy.

First Sgt. Delcourt (addressing the strengths and weaknesses of their combat ID training):

The Army is doing a good job with training, especially now. There used to be a big gap, but it is closing rapidly.

First Sgt. Delcourt (addressing what would happen if an enemy jammed BFT):

Soldiers are trained to use images and screen shots rather than the BFT systems in order to help reduce the reliance on automation.

Staff Sgt. Hoehn (addressing the strengths and weaknesses of combat ID training):

One of the first skills trained is symbology. Another skill that is introduced early on uses integrated video scenarios with mock-ups to help trainees know the types of things that a UAS can assist with. Proper techniques are also emphasized.

Question:

Could you discuss some situations where you had no clear expectations for combat ID going in?

Staff Sgt. Hoehn:

With set missions you have a good idea of what to expect, but if you get re-tasked it becomes more difficult and you have less information.

First Sgt. Delcourt:

There may be a plan to start out, but the plan may change several times with new situations. It is rare to complete a mission without altering the plan. You can start with a general idea, but it's hard to know too much

because situations are very flexible. The only expectation that can be counted on is that you are going to be re-tasked during the course of your mission.

Audience comment:

Fatigue can be an issue because of the focus required, the amount of things the operator is looking at, boredom may set in, and the length of a mission is also a factor.

First Sgt. Delcourt (responding to the comment):

Coordination helps with those types of things.

Major Meredith (to First Sgt. Delcourt):

Snipers trade off being the shooter and the spotter to avoid some of those issues. Does the Army do anything like that?

First Sgt. Delcourt (responding to Major Meredith):

Not really, they just coordinate with one another.

Major Meredith (addressing situations with no clear expectations for combat ID):

Information is always coming in but the type of information is very diverse. The source and quality of the information is variable due to several reasons such as cultural differences with map use. Your expectations can vary depending on where your information is coming from.

Major Selko:

Handing off is very nice. You can get a gunship to illuminate a target, etc. This ability can make up for times when information is vague. As the war in Iraq has gone on, complacency has led to information becoming vaguer as far as how soldiers are marked. At first, each soldier was clearly marked (by a chemical light on the right shoulder, for instance), but now only the commander may be marked and it is assumed that the other people around him are also friendly.

Question:

Do you have any experiences of the enemy trying to use a laser to blind your systems?

Staff Sgt. Hoehn:

They have tried everything, but they are rarely successful. They have tried laser pointers but they are usually not very accurate.

Question:

Would a heads-up on the quality of your information help (a reliability report)?

Major Meredith:

They would mainly like to just be able to better filter the information that is shown.

Question:

What human factors changes would you like to see? Are there any issues with techniques or procedures?

Major Selko:

The size of the device is nice for the Air Force, but the Army and Navy need line of sight mounting. Communication is another benefit. BFT is simple to set up. It only has five buttons and a toggle switch. Command and control would benefit from new icons and things like that. Right now the user gives their requirements and those requirements get displayed, but someone else has to enter them. A speed improvement would be nice.

Major Meredith:

He would like to see changes to the interface. The touch screens that are used in wheeled vehicles are easy to use and are also larger. The built-in systems in the Bradleys and tanks are smaller and harder to use. It's more difficult to physically manipulate the system using those interfaces.

The software and menu system are fairly easy with primary tasks, but once you get into the system it's too layered. The interfaces should focus on their function as situation awareness tools because that's their primary use. They never get used for planning.

First Sgt. Delcourt:

The platforms have limitations. FLIR is very hard to use to distinguish targets, especially at night. A larger joystick that offered more functionality would also be nice. It is also difficult to make inputs and navigate through the menus.

Staff Sgt. Hoehn:

Issue a remote video terminal to every tactical unit as quickly as possible in order to let them see what operators are seeing and give early warnings.

Audience comment (from Claude Ezzell):

It would be nice to project imagery between the different platforms also (from Predators to Shadows, etc.).

Major Selko:

At first the Air Force didn't want to show their video to anyone else. Cooperation also depends on whether a party wants to share their information.