Brigade Signal officer describes S6 role

By Josh Davidson

Please describe the role and responsibilities of the brigade S6 at the Network Integration Evaluation.

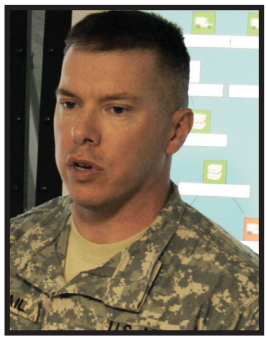
As the brigade Signal officer or S6, I'm in charge of communications throughout the brigade. That includes everything from the upper tactical internet – or the backbone communications, like the internet connection you have in your house – all the way down to the battalion level. On a day-to-day basis, it depends on where we are in the arena (of conducting mission scenarios). If it's starting up, we're initiating those communications, and at that point it's focused a lot on your voice communications. It progresses on to that backbone network operations. In a stability phase, my job is primarily focused on keeping the communications where they are and figuring out how we can improve them down to the battalion level.

How does the S6 coordinate the battle with the other functional area experts and operators inside a Tactical Operations Center?

In today's fight, almost everything we have out there is networked. One of the challenges in the S6 communications world is making sure you have situational awareness of the battle that's going on. It's very easy to stay separated and just focused on the network without realizing what its effects are on the rest of the systems that are out there. Obviously, the reason that we have the network is to be able to communicate and be able to push data across to those systems. So it's really incumbent upon us as communicators to make sure we are intimately involved with the fight – both the S3 in operations and with the other slice elements to make sure we are figuring out how to best meet their needs so they can pass their data along and can do their part in the fight.

What will be the impact of a network that can push more data to the company level?

It's critical not just to the company level, but to the Soldier level. There's always the question about too much information going up and down. But one of the things we say in the Army is "every Soldier is a sensor." So whether it's the company or the Soldier level, there's a lot of information they can gather, and there's information we know we can push down to them. Historically that's always gone down different ways, whether it's FM which is voice only or as we moved on and added a little more network bandwidth, we started to push down some static images. We're now at the point where we [can push data] rapidly. They say a picture's worth a thousand words – well, a video can be even more than that. So when video comes to us, we look at it and see what it means and push it back down to that company level. Instead of that taking potentially days or weeks because we had to mail information, we can now do that over a network so they can use that information right there on the battlefield.



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How do the improvements in Network Operations tools as part of Warfighter Information Network-Tactical Increment 2 impact your situational awareness of how the network is functioning?

In the maneuver world we have what's called a common operating picture and that's kind of what Command Post of the Future gives you--the ability to see all the different things going on at once. In the network world, we are a little behind in that area and we are trying to move forward. It's not as much of a challenge when you're in a static environment, but as you start to transition to command on the move [with Increment 2], it's very important that we have that situational awareness, that common picture of the network itself. All of the Increment 2 systems have position location information. They actually show where those systems are on the battlefield. So now I can look at a device that's showing me "red" [not operating] and find out if it's still on a Forward Operating Base or still in a secure area. That way I know it's probably (just) turned off. But if I see it moving across the battlefield and I'm having a problem talking to it, then I know there's an issue. So it gives me more situational awareness to say, This is an area I need to focus. This is where I need to look.

How much network troubleshooting is done automatically, and how much are you doing as the S6?

I'd like to say it's primarily automatic, but we're

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not quite there yet. One of the advantages of a dynamic routing network like we have here is that they do establish and create those links relatively automatically. For the Soldier and operator in the vehicle, they can establish and break those links and they'll drop as they move across the battlefield. Very little interaction is required of the operator in that vehicle. From the NetOps perspective here though, it can create some other routing changes for us that we have to do. For example, if we have a Point of Presence or a Soldier Network Extension [vehicle] as they move across the battlefield, or an aerial vehicle moves across the battlefield, you may see some of those green links establish themselves or break. That's where we have to manage it here from NetOps and say, OK, is that a good thing? Do we have to change how we're doing the routing? It kind of depends what level you're at. At the brigade level we have to do some fairly in-depth and constant management of that network. The tradeoff on that is the operator who is in the vehicle has to do very little.

Josh Davidson *is a graduate of The College of New Jersey (formerly Trenton State College), in Ewing, N.J. Prior to becoming a government civilian and strategic communications director with PEO C3T, he was an investigative, music, sports and municipal journalist with numerous publications including Gannett Newspapers. He has interviewed GEN (Ret) David Petraeus, GEN Kevin Chilton, and GEN Ann Dunwoody. He has covered numerous tests, exercises and events related to Army satellite communications systems and applications.*