



The Human Touch: Geospatial Engineering Meets Local Afghans

By Major Christopher J. Scott

Alpha Company, 4th Special Troops Battalion, 4th Brigade Combat Team, 4th Infantry Division, was responsible for four districts along Afghanistan's border with Pakistan in southern Nangarhar Province. The company inherited the mission of connecting the local population to the government, separating them from antigovernment forces, and improving economic opportunities in the 4,000-square-kilometer area. The company partnered with four district governors, five district police forces, an Afghan border patrol company, and two Afghan National Army infantry companies. It was a challenging opportunity for an engineer company with two platoons, an attached platoon of military police Soldiers, and a pair of howitzers.

After 60 days in theater, it was obvious that there was still a large fundamental gap in knowledge of the cultural geography in the company area of operations. Geospatial intelligence provided a comprehensive representation of the physical terrain, but we did not know local naming conventions to describe small villages inside the district boundaries. The local population used the names of small villages, rather than political district boundaries, to describe locations, thereby hampering the effectiveness of local reporting. Also, our contact with local leadership ended with the appointed district governor. With tribal leadership such a driving force in Afghan society, we knew that communicating with the elders was essential to understanding the disconnected populace. We needed access, and we needed it in concert with the district governors.

Solution

Operation Jantacular was developed as a 45-day survey program to meet over breakfast with the elders of each village to produce a geodetic product

representing the human terrain in our area of operations. *Jantacular* is a British term for breakfast, which was appropriate for our intent. The aim was to meet with the leaders of one village daily. This would allow us to get the data to complete the survey, which would help us understand the fundamental challenges and let us spend more of our deployment time tackling them. Entering the data into the geospatial intelligence database would ensure that the information lived beyond our deployment.

Preparation

It was decided that three to four village elders would be the right size group, large enough to feel comfortable among Americans, but small enough to discourage sidebar conversations. Our civil-military Jantacular Team was composed of an American civilian law enforcement professional, a district support team (composed of representatives from the U.S. State Department and U.S. Agency for International Development), the company intelligence team leader, platoon leaders (if available), and the company commander. At least one interpreter attended to facilitate the mission. It quickly became apparent that choosing the right interpreter and maintaining consistency were important for success. "James" was our best interpreter, able to anticipate issues with less direction from us.

The primary district governor in the Khogyani tribal region provided us with initial information, describing the names and general location of the 44 villages in our four districts. He pointed them out on our tactical operations center wall map, which we roughly outlined. He set up meetings with village elders, as did his counterparts in the other districts. Their cooperation was essential and greatly appreciated.



An engineer Soldier provides security during a meeting with tribal leaders.

Large printouts of each village, without any added graphics or layers, formed the centerpiece for our discussions. The village elders understood the imagery much better when it was oriented on a horizontal surface, rather than hanging on the wall. Once, after an especially grueling 2-hour session, all of our work had to be redone when the elders discovered that we had not oriented the mountains on our imagery toward the real Tora Bora Mountains and all the features had been identified at the wrong end of the map.

We contracted to have a traditional breakfast of flatbread, sweet cream, water, and tea to serve our guests when visiting elders came to the gate of our forward operating base. This flexibility was important since the visitors often arrive an hour early or 2 hours late.

By hosting the meeting at our base (and occasionally providing travel reimbursement), we could conduct Jantacular Team meetings whenever the locals were available. Meetings did not affect our patrol schedule or require manpower outside of the team.

Execution

The company intelligence support team and an interpreter escorted the elders from the front gate to the meeting room, where we made introductions, engaged in small talk, and exchanged cell phone numbers. Refreshments were served as we began talking about their village. The best meetings began with questions about local history, giving the leaders a chance to brag about their village. For mapping, we tried to distinguish the boundaries of the village first; and then we helped the elders find their own *qalats* (walled living compounds), on the map. Anyone who has spent hours exploring Google Earth™ knows how much fun this can be. Once they found their own homes, the elders were usually well oriented to the imagery and could identify the locations of hospitals, schools, mosques, powerful families, and terrain features such as hills and streams.

Output

Once an initial map survey was complete, the data was transcribed into the Tactical Ground Reporting System. This turned grid coordinates into a village name, which allowed the operations center to assist in battle tracking and to coordinate with the Afghan National Police. It also facilitated “tip line” operations by translating a village name into grid coordinates for U.S. patrols. Communication with local nationals improved when we could use their local village

names to narrow down the location of a story rather than using vague descriptions such as “2 miles from the old, burned-out Russian tank” as landmarks. Additionally, we created a PowerPoint® map of our operating environment, which was useful for describing various village metrics in reports to higher headquarters.

Once the maps had been transcribed internally, we shipped them off to the brigade geospatial intelligence cell for data entry. The geospatial intelligence cell then provided us with a new tactical operations center map, complete with village boundaries, locations of hospitals and mosques, and local names of major terrain features. They also provided high-resolution imagery of each village, which was compiled in binders for patrol leaders to take on missions. This document was very helpful in gathering information from local nationals and using the air-to-ground integration of intelligence, surveillance, and reconnaissance information during cordon-and-search missions.

Conclusion

Operation Jantacular provided information that the company used to drive most of its follow-on missions, and the data it produced facilitated a successful battlefield hand-off at the end of the deployment. Without the initial survey, we would have continued business as usual and left the follow-on unit with the same knowledge gaps that had been passed down for nearly a decade. 

Major Scott was the commander of Alpha Company during its deployment in Nangarhar Province, Afghanistan. He currently serves in the Pittsburgh District, Lakes and Rivers Division of the U.S. Army Corps of Engineers. He is a graduate of the Engineer Officer Basic Course, the Engineer Captains Career Course, and the Topographic Officer Management Course. He holds a bachelor's degree in historic preservation from the University of Mary Washington in Fredericksburg, Virginia.