GSG Surveys Saudi Arabia

The Geodetic Survey Group, which became part of the DMAAC Geodesy and Geophysics Dept. July 1, performs geodetic surveys for U.S. forces throughout the world. This article by the GSG public affairs representative describes one of those surveys.

By 2nd Lt. Ron Senger

A Geodetic Survey Group (GSG) team based at F.E. Warren AFB, Wyo., completed two separate surveys in Saudi Arabia during Operation Desert Shield.

During the first week in December, the team, consisting of TSgt. Ray Allen, SSgt. Tony Mireles, Sgt. Pete Patera, and A1C Eric Grzebinski prepared for a rapid deployment. (Army Sgt. 1st Class Russ Taylor, who was pulled from a survey mission in Egypt, joined the team in Saudi Arabia.) Survey equipment was checked and packed. Transportation, points of contact, chemical gear training, M-16 rifle training, shots, and mobility gear were procured. After all was said and done (to include the help of many of the fine people of the 90th Strategic Missile Wing at FE Warren AFB), the GSG survey team was on its way.

Arriving in country, the team's first task was to identify the points to be done in each of the two surveys. One project was in the Operation Desert Shield area while the other, spread all over the rest of Saudi Arabia, was in support of a Mapping, Charting, and Geodesy (MC&G) agreement between the U.S. and the Saudi Arabian Military Survey Department.

The lifeblood of the surveys were the four Global Positioning System receiver sets used to collect precise satellite positioning data for each survey site occupation. In all, some 28 occupations of stations throughout Saudi Arabia were required.

The second task was to coordinate transportation, access, guides, and logistics with the local authorities. The coordination proved to be as difficult as the actual survey. Phase I, the Operation Desert Shield area, lasted from 13 December to 22 December and involved seven locations which were done with relative ease, although the mission required nighttime observations and daytime travel. Three nights in the field, one day in town, and then back out was the norm. But the real "fun" began on 28 December when the team began Phase II, the MC&G agreement points.

Pete Patera
Ray Allen Photo by TSgt. ~~Ray Allen~~

An antenna, placed on a tripod by Sgt. ~~Pete Patera~~, is used to collect latitude, longitude and elevation data from the Global Positioning System.

According to Sergeant Allen, a typical day in the field began with breakfast, camp teardown, and departure for a new survey site by 0800 hours. After driving up to 600 kilometers to the new station, the GPS receivers and other equipment weighing 250 pounds often had to be packed 1,000 meters up mountains. Camp and equipment setup was usually completed by about 2100 hours. The surveyors would then monitor satellite tracking until about 0700 hours, have a quick breakfast, break camp, etc..... They completed the job in record time!

Despite challenges such as the language barrier and frequent stops for prayer, all of the surveyors enjoyed their experiences, especially the local cuisine. They often dined on shish kebab, chicken, rice, and unleavened bread—forget the silverware. On one occasion the Saudi Frontier Forces roasted a ram for all to feast on.

In 40 days the team traveled thousands of kilometers, spent 25 nights in the desert, towed a broken-down truck 500 kilometers through the sand, and had dinner with a local prince. Although the trip was exciting, the surveyors were happy to return (in late January) to their families and friends in Cheyenne, knowing that the missed holidays were a relatively small price to pay in support of the Allied Coalition for Kuwaiti Freedom!

On the Move

David E. Rogers has received a temporary promotion to GM-15 physical scientist as chief of the Engineering Development Division, Systems Development Group, at DMASC.

Richard L. Baker has received a noncompetitive reassignment to a GM-15 telecommunications manager position. He will serve as chief of the Engineering and Integration Division of DMATSC.