KHILIGAI, AFGHANISTAN – As I walked ducking my head low, the rotating blades of the helicopter spun overhead, sending the drizzling rain in swirls through the air. There was snow on the ground, and steam in the air, but I was already overheating, straining under the load of three overstuffed duffel bags and wearing 50 lbs. of body armor. I couldn’t help thinking for the third time this trip, that at age 57, I might be getting too old for this. I had spent the last week bouncing my way across Afghanistan, with stops in Kandahar, Bagram, and Mazar-e-Sharif with little sleep, living much as a homeless person without the shopping cart. At least I had finally reached my “home” for the next three months, Combat Outpost Khiligai, home to the 933rd Forward Surgical Team (FST).

When I had learned that I would be mobilized as an Army Reservist in support of Operation Enduring Freedom, I had contacted the unit commander looking for information on where I would be located. The 933rd FST, based out of Kentucky, had just arrived in the past November for a 9-month tour. At the time, she informed me that the unit was split between two remote locations, and that I would be joining the team in Khiligai as their anesthesia provider. To my dismay, I could not find Khiligai on any map, or through searching Google. Khiligai was a major Russian tank base during its occupation in the late ’90s, and sits along one of the main northern highways leading to Tajikistan and Uzbekistan, mid-way between Kunduz and Kabul. The outpost is small by most standards, with fewer than 200 full-time residents, home to a Cavalry unit, American and German Special Forces, a Hungarian Provincial Reconstruction Team, the 933rd FST, and an aviation Medevac unit, all adjacent to an Afghan National Army base.

Mobile surgical units
FST’s are designed to be 20-person, mobile surgical units able to follow the battle, providing Level II care for 30 critically injured soldiers for a period of 72 hours before relief or resupply. During recent actions in Iraq and Afghanistan, FST’s have been used as stationary surgical hospitals, often split into two

'I have not run into any other Rhode Islanders, but did meet a Special Forces soldier wearing a Providence College Friars shirt the other day.'

looking for information on where I would be located. The 933rd FST, based out of Kentucky, had just arrived in theater this past November for a 9-month tour. At the time, she informed me that
separate 10-person teams, typically including 1–2 surgeons, an anesthesia provider, 2–3 nurses, surgical techs, and medics. In recent years, there has been considerable variability in the organization of the teams, often encompassing various medical specialties and extended capabilities. Current Army doctrine requires the positioning of surgical teams throughout the combat theater such that any severely wounded soldier can receive surgical care within one hour of wounding.

The FST at Combat Outpost Khiligai is primarily an emergency trauma set-up, delivering care for life-threatening accidental and combat injuries, with little elective surgery due to environmental conditions. We do only what must be done to stop the bleeding, and then move patients on to a higher-level facility. During my first three weeks here, we have only dealt with a few minor laceration repairs, and a number of minor medical problems, which included patients with kidney stones and musculoskeletal injuries. Triage occurs at the Battalion Aide Station (BAS) run by 3 medics, who manage most of the minor complaints. With only two physicians on the post, a general surgeon and myself, we are regularly consulted for anyone requiring medication or higher-level evaluation.

**Equipment, logistics**

The FST is equipped with a small digital radiograph unit, limited bedside testing equipment to analyze hemoglobin, electrolytes and blood gasses. Our anesthesia equipment is high quality, including a new compact anesthesia machine, high-flow blood warmers, forced hot air patient warmers, pulse oximetry, and end-tidal carbon dioxide monitoring. Keeping the trauma patient warm and the ability to rapidly deliver blood products are essential in preventing the lethal triad of acidosis, hypothermia, and coagulopathy.

Operating in austere environments, tasks such as blood banking, blood typing, generator maintenance, electrical safety, and medical supply logistics become the responsibility of the 10 members of the FST. Monitoring the blood supply, typing of donors and patients often falls to the nursing and anesthesia staff. Supplies of plasma and packed red blood supplies are maintained in small refrigeration/freeze units in the operating room tents. Given the small supply of blood products, the U.S. military has developed protocols to obtain fresh whole blood from local donors for the management of massive transfusion situations that may occur with one individual, or a mass casualty event. Typically, the FST will stock approximately 15 units of O+/– blood and a similar quantity of type AB, and fresh frozen plasma. Resupply can be rapid, but weather conditions often delay air resupply, making local blood drives potentially necessary. The availability of fresh warm whole blood is regarded as being advantageous in improving hemostasis in the combat trauma setting.

**Daily routine**

Much of our time at the FST is spent checking supplies, monitoring and testing equipment, and a constant rearrangement...
of the unit’s layout. As operational activities escalate or de-escalate, the physical location and arrangement is constantly being relocated and revised. The Taliban fighting season is much like the baseball season. There is little activity in the winter months, but as the weather warms, we are getting ready for the “Fighting Season,” which begins near the end of March, peaking in August. Recent changes at the outpost have us relocating, which means I am getting a lot of practice packing and setting up tents, participating in minor construction projects, setting up satellite dishes, and other physical tasks that medical school never prepared me for. My typical days start with an email or “Skype” home, breakfast, a team meeting, an educational effort twice a week with the camp medics and medical staff, followed by a range of responsibilities. Lunch often includes leftovers from dinner, corn dogs, and frozen pizzas, and then more work in the afternoon, followed by PT. Patients are managed on an as-needed basis. Evenings are mostly free to watch DVDs; Internet access is very limited. Military units operate on a 24-hour/7-days-a-week basis, but there is down time, and most Sundays are essential work only days. I have not run into any other Rhode Islanders, but did meet a Special Forces soldier wearing a Providence College Friars shirt the other day. We exchanged a few fond memories of Rhode Island. We’re both looking forward to a fine meal up on the Hill when we return!