**Wolfhound Information Paper**

The height of kinetic Operations in Afghanistan necessitated wider employment of man-packable electronic warfare capabilities. Due to mission requirements, the capabilities had to be not only effective and reliable, but usable by Soldiers of multiple branches and specialties. To meet these requirements, the Intelligence and Information Warfare Directorate (I2WD) fielded a quick- reaction capability called Wolfhound in 2009. Wolfhound includes three networked, man-portable nodes that are capable of detecting, identifying, and direction-finding conventional voice communications. The manpack configuration is the primary mode of operation; however, the system may also be configured for mounted and fixed/stationary operations. I2WD began development of this type of technology in 2006, starting with a device called Handheld Integrated Direction-Finding (DF) and Integrated Communications Equipment (HIDICE). By 2009, Wolfhound had become one of the most sought-after capabilities in OEF, primarily for its effectiveness and its user-friendly design.

On 13 August 2010, the Assistant Secretary of the Army-Acquisition, Logistics, and Technology (ASA ALT) directed Program Executive Office, Intelligence and Electronic Warfare and Sensors (PEO IEW&S) to assume management of Wolfhound. PEO IEW&S subsequently assigned management responsibilities to PM Prophet. PEO IEW&S directed PM Prophet to develop a transition plan with I2WD. In September 2010, the Office of the Secretary of Defense (OSD) directed urgent procurement of additional Wolfhounds (385 systems) in support of operational needs in OEF. PM Prophet was faced with two critical tasks: to maintain a steady production rate (55 systems per months) and to build a more responsive sustainment infrastructure in theater. An urgent, sole-source Letter Contract was awarded in November 2010 to Booz Allen Hamilton (BAH), the incumbent contractor, for the production of 385 systems along with support for this systems in-theater. While BAH was the prime, it is important to note that success in the production effort depended on 17 different sub-vendors who each supplied the necessary components needed to produce the system. These components range from simple parts such as rubber whip antennas to major items like wireless routers and RF receivers. Praemittias Group Incorporated (PGI) was a key subcontractor on the contract. PGI produced the Wolfhound systems at their Lorton, VA Facility, integrating 70 different components for each production unit.

By November 2011, Wolfhound had become a success story. All delivery requirements in support of Joint Operational Requirements Statement (JUONS) CC-0271, which outlined Wolfhound requirements in terms of quantities and capabilities, were met. Also by this time, the sustainment infrastructure was established. The sustainment infrastructure consists of eight logistics hubs spread out across Afghanistan, all of which are operating at full capability. As of 1 April 2012, there are 658 systems in Afghanistan. Though ultimately successful, the transition of Wolfhound from a research and development (R&D) project to a PM-managed effort had some challenges. The following is a brief synopsis of those challenges as well as lessons learned.

**Challenges and Lessons Learned.**

1. When the transition took place in August 2010, I2WD’s contract with BAH still had four months remaining on the period of performance. During this four-month period, there was some confusion-- from the contractor’s perspective-- about who was really in charge (I2WD or PM Prophet?). PM Prophet’s follow-on production contract was awarded in November 2010, at which time PM Prophet had total control of the program.
2. In OEF, Wolfhound is employed by not only Army Soldiers, but also Marines. The common misperception is that Wolfhound is a Signals Intelligence System employed only by Soldiers and Marines with signals intelligence (SIGINT) backgrounds. The reality is that Wolfhound is considered a force protection (FP) capability. (Reference: Director, National Security Agency (DIRNSA) dated July 2011). The majority of users are Soldiers and Marines with no SIGINT background—Infantrymen and other combat arms specialties. SIGINT-trained users make up a small portion of the user-base.
3. The Army categorized Wolfhound a quick reaction capability (QRC), only to be fielded in support of overseas contingency operations; as a result, the initial guidance from DA G3 at the time PM Prophet assumed management of Wolfhound was that Wolfhound New Equipment Training (NET) would be conducted only in theater. Given that Wolfhound is the baseline man pack collection capability in OEF; several units requested pre-deploying training on Wolfhound prior to their deployments. This posed a significant challenge. On one hand, PM Prophet had to comply with DA G3 guidance; on the other, there was high demand for CONUS-based training. In January 2011, PM Prophet engaged Intelligence and Security Command (INSCOM) to discuss the possibility of establishing a partnership to solve the CONUS-based training issue. INSCOM is the proponent for Project Foundry, a program that provides pre-deployment SIGINT training for Army Military Intelligence (MI) Soldiers at various Army installations in the US. INSCOM chose to limit Project Foundry involvement with Wolfhound to support only the Army MI force. Given that the customer base was far greater than the Army MI Force, PM Prophet worked with BAH to establish mobile training teams (MTTs). These MTTs provided 3-day training events for a limited number of units prior to deployment. To date, CONUS-based MTTs have served primarily Army units. There is a plan in place to procure Wolfhound systems for each of the Army Combat Training Centers (CTCs). The United States Marine Corps (USMC) is developing a CONUS based training strategy of its own. They are independently procuring Wolfhounds for use in CONUS as training sets.
4. In July 2011, PM Prophet finalized a complete training package. The materials included lesson plans, course materials, and graphic training aids. Interactive media instruction (IMI) software was also developed. The IMI software provides realistic training using the “crawl- walk-run” methodology. The IMI provides familiarization with the system components and practical instruction regarding system employment. The training package and the IMI have been deployed to the field. The training materials can be easily implemented by Army Training and Doctrine Command (TRADOC) should TRADOC decide to institutionalize Wolfhound training.
5. To maintain a steady flow of systems to theater (55 systems per month), a streamlined delivery method had to be established. PM Prophet worked closely with TRANSCOM to do this. Each month, after production units came off of the production line, in cooperation with TRANSCOM, PM Prophet shipped the systems to theater from Charleston Air Force Base. Each shipment was assigned a unit line number (ULN) and was assigned priority of movement in accordance with CENTCOM guidance. Wolfhound shipments went to not only the major hubs in Afghanistan (Bagram and Kandahar), but also smaller satellite locations.
6. With the increasing number of systems in theater, it became necessary to strengthen depot repair capabilities, both CONUS and OCONUS. The team worked with BAH to shorten cycle times for CONUS-based repairs from weeks to days. Also, high-failure parts were shipped forward to allow for an increased repair capability in theater. Building on the Wolfhound sustainment experience with BAH, PM Prophet worked with CACI to identify key repairs that could be moved to forward locations and repair circuit cards that were previously categorized as Beyond Economically Repairable. Today, the 5 most common Wolfhound failures are repaired in Afghanistan by CACI technicians, resulting in a further reduction in cycle times, cost savings and increased operational availability. Wolfhound’s OEF team of TYAD and CACI professionals has repaired 51 systems since mid-February.
7. At the start of the effort, the Wolfhound team in Afghanistan supported the Warfighter from three major hubs: Bagram, Kandahar, and Camp Leatherkneck. It became apparent that, in order to be more responsive to the Warfighter’s needs, the footprint needed to grow. The team expanded the footprint to include 4 additional satellite locations, thus bringing the total number of support locations to 7 sites. In March 2012, Wolfhound point of presence expanded to 1 additional site and the team will flex to meet the needs on Regional Commanders (RC) as the battlefield evolves or contracts. The Wolfhound OEF team travels to all MILAIR-capable satellite sites to train US Forces operating Wolfhound systems and conduct maintenance. The combined TYAD/PGI FSR team in OEF during 2011 trained approximately 2,600 soldiers and Marines to operate 658 systems (1,974 individual nodes). Since mid-February 2012, the combined TYAD/CACI team in OEF has trained 521 soldiers and Marines on Wolfhound operations.
8. In January 2011, PM Prophet established a permanent partnership with Tobyhanna Army Depot (TYAD) in support of both CONUS and OCONUS operations. Of the 29 personnel deployed to Afghanistan in support of the Wolfhound effort, TYAD DA Civilians make up half of the workforce to include field service representatives and logistics specialists. Tobyhanna has also stood up two mobile training teams (MTTs) to support CONUS-based pre-deployment training. Overall, the partnership with Tobyhanna has proven to be invaluable and has resulted in cost savings of over $5 million.
9. Having a continuous leadership presence in theater—a Theater Lead-- has been a critical element in the success of the Wolfhound effort. The Theater Lead is a GS-14 DA Civilian out of Tobyhanna who serves as the in-country representative for PM Prophet. His job includes serving as the “face” of the program in theater, interfacing with key stakeholders, and prioritizing resources in theater appropriately to provide the best possible support to the Warfighter. In the early stages of the transition, the Theater Lead was critical in the establishment of the logistics support sites that make up the Wolfhound sustainment footprint in theater.
10. In addition to the critical role the Wolfhound Theater Lead plays, another key enabler is the close working relationship between the Program Theater Lead and the PEO IEW&S forward liaison officer. The PEO LNO ensures the theater lead has presence in planning meetings at the right level and assists with resolution of issues, but has been instrumental in ensuring the key program personnel have insight into near term support requirements and Surge Recovery and Retrograde planning and operations.
11. A key challenge PM Prophet overcame was gaining accountability of systems that had been fielded prior to the transition. PM Prophet worked closely with deployed field service representatives (FSRs) and logistics personnel within the 401st Army Field Support Brigade (AFSB) to identify where each system was located and to ensure that each system was properly accounted for in the Property Book Unit Supply Enhanced (PBUSE) system.
12. The program transitioned from production to sustainment in August 2011. CACI was awarded the follow-on sustainment contract in September 2011. Transitioning the sustainment effort to a new contractor was a challenge, for BAH had been the incumbent since Wolfhound’s inception (4 years). The departure of BAH also meant that the program would lose the support of PGI, the most experienced subject-matter experts in theater. In addition, the depot support operation would have to transition from PGI’s Lorton, VA facility to CACI’s Aberdeen Proving Ground, MD facility. The Regional Commands in OEF were very concerned. To help ensure a seamless transition, in coordination with Army Contracting Command, PM Prophet extended BAH’s period of performance in theater for 60 days. TYAD DA Civilians made up half of the deployed workforce, which helped to smooth out the transition. They provided continuity while CACI replaced PGI in theater. Also, almost a year prior, PM Prophet had the foresight to require the incumbent contractor to develop previously non-existent technical documentation (Level III engineering drawings, performance specifications, and other documents). Additionally, preparation for competitive award of the sustainment contract included specific scope for CONUS MTTs, training updates, adequate quantities of FSRs, provisions for component-level depot repairs and software engineering support in the performance work statement (PWS). The foresight associated with including those specific items in the PWS for the new contractor facilitated the current team’s ability to be successful in sustainment endeavors. Ultimately, the transition from BAH to CACI was successful and has been lauded by leadership in OEF.
13. PM Prophet has established 3 Mobile Training Teams (MTT) for execution of CONUS Pre-deployment training in response to feedback from post-deployment After Action Reports. As noted in section C, the primary focus of Wolfhound training is in Afghanistan by the FSRs. The CONUS-based training is a familiarization course intended as a train-the-trainer event for NCOs and experienced Wolfhound operators. This course augments, rather than replaces, the robust 3-day course provided by the FSRs in Afghanistan. The familiarization course covers 16 training hours; 4 hours of classroom instruction, 12 hours of practical exercises. Two courses will be conducted during a training week, which will train up to 24 soldiers. Each soldier in training will receive a hard-copy Quick Reference Guide, a CD copy of the IMI and a CD copy of the training and system support materials. Training will be scheduled to prioritize deploying BCTs prior to their CTC rotation. Important to note that this approach leverages the highly valuable relationship with Tobyhanna Army Depot described in section H. The USMC has procured their own systems and will conduct training in CONUS with their personnel, utilizing the same training materials.
14. In order to support the establishment of the CONUS pre-deployment training and refine the OEF-based training, all Wolfhound training and system support materials recently underwent review and revision to implement recommendations received from post-deployment AARs, and to leverage the Wolfhound operational experience from the TYAD deployed personnel and the new CACI team. PM Prophet has also updated the Wolfhound Logistics Guide, Support Flowchart and Point of Contact list in an effort to gain wider dissemination of knowledge of the support available to units with Wolfhound equipment. This data will be posted to Center for Army Lessons Learned website and distributed to CALL LNOs for widest dissemination.
15. Wolfhound has been subject to the Capabilities Development for Rapid Transition (CDRT) process twice. On both occasions, Wolfhound was adjudicated as a “Sustain” capability, meaning it will be supported for current contingency operations but not be made its own program of record.
16. PM Prophet is currently preparing to execute funding provided to fulfill the capabilities requested in JUONS CC-0501 and ONS 12-14963; 81 systems for OEF and 71 systems for CONUS training, respectively. The new systems will be the current version available and fit seamlessly within the existing sustainment infrastructure.