

Fielding of the “Shadow” Tactical Unmanned Aircraft System (TUAS) to the ARNG

What is it?

The SHADOW TUAS is a low to medium altitude, short endurance unmanned aircraft system. The individual SHADOW air vehicle (AV) (4 per system) carries a variety of mission equipment packages including electro-optical, infrared and laser designation (EO/IR/LD). These payloads enable the SHADOW AV to conduct immediately-responsive intelligence, surveillance, and reconnaissance (ISR), reconnaissance, surveillance and target acquisition (RSTA), target designation, battle damage assessment (BDA), communications relay, and persistent surveillance under control of operators in the SHADOW ground control station (GCS) and the SHADOW portable ground control station (PGCS).

What has the Army done?

The Army has now fielded this low-density / high-value critical system to almost all of its 73 Brigade Combat Teams (BCTs) and 7 Special Forces Groups (SFGs), with the final units to be completed in early FY12. As of 19 November 2010, the ARNG has completed the fielding of 22 of its 30 TUAS units (28 BCTs and 2 SFGs), with the remaining 8 units to be completed by end of FY11. Use of the “Shadow” TUAS in combat operations has grown at an accelerated pace with the TUAS units operating at 5 to 6 times the originally projected flying hour rate. The ARNG has 3 to 5 TUAS platoons mobilizing in each deployment cycle for the foreseeable future.

What continuing efforts does the Army have planned?

The Army is currently finalizing plans to extend the fielding of the “Shadow” TUAS to other types of brigades in the structure, including the new Full-Spectrum Combat Aviation Brigades (FSCABs), Battlefield Surveillance Brigades (BfSBs), and Fires Brigades (FiBs). Under both the current plan and the pending revised plan the Army faces significant challenges in obtaining the necessary equipment. Using the Army’s present BOIP and APO, the ARNG will be short 11 of the required 46 TUAS needed by FY14 to equip its full force (28 BCTs, 2 SFGs, 7 FiBs, 7 BfSBs (4 TUAS go to the USAR), and 2 TDA training sets. Changes to the Army’s post-FY12 BOIP are currently awaiting VCSA review and approval; however, an unfunded procurement shortfall is still projected. The shortfall of 11 TUAS sets has a projected cost of \$264 million (11 x \$24 million each).

Why is this important to the Army?

Demand for these critical combat enablers will continue to increase, with the requirement in Afghanistan for “Shadow” TUAS now exceeding the requirements in Iraq. In addition the Theater CINC has recently identified requirements for even more ISR and UAS assets to support US operations in CENTCOM.