

# PM-AGSE

## Aviation Maintenance's Bridge to the Future

By Bernard Gajkowski and Don Hamblin

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**A**s the first Army aviators pulled pitch in twenty-first century state-of-the-art aircraft during Operations Enduring Freedom and Iraqi Freedom, the aviation maintenance Soldiers providing those mission ready aircraft were doing so with tools and equipment that, in some cases, dated back as far as the Vietnam era.

**SPECIAL FOCUS:  
Product Support**

While Army aircraft were continually available to fly the record numbers of hours, and units maintained record readiness rates, those superhuman accomplishments by our maintenance Soldiers were not going unnoticed.

### Tools for a 21st Century Army

In-theater visits to deployed units by COL Michelle Yarborough, the project manager for Aviation Systems (PM-AS), and DAC Bernard Gajkowski, product manager for Aviation Ground Support Equipment (PM-AGSE), validated the issues raised by the after-action reports and comments from returning maintenance officers from OEF and OIF at aircraft platform user conferences.

Final validation came from the first

ever Aviation and Missile Command Lifecycle Management Command's Aviation Maintenance Tool Kit conference, co-hosted by AMCOM's CSM Gregory Lunn and the PM-AGSE.

The challenges raised were clear, the Soldiers maintaining twenty-first century aircraft not only required but deserved twenty-first century tools and support equipment.

### Bridging to the Future

The acquisition process is known for being time consuming and labor intensive. In its defense, it needs to be that way to assure acquisition managers do not place an inappropriate or unsupportable product in the hands of our Soldiers.

That said, proactive and forward thinking acquisition managers can still directly support tactical missions with modern equipment while molding the material solutions for the future.

The AGSE strategy has become one of bridging to the future by developing support for commercial off-the-shelf (COTS) items units have already purchased, then providing deployed tactical units with COTS

**The aircraft wash system provides Soldiers with the ability to wash multiple aircraft simultaneously. Here troops training with an AWS clean an AH-64D Apache.**

ARMY PHOTO BY SFC SIMON TRINIDAD

items that appear to meet a majority of needs, and finalizing the total Army solution based upon this experience.

### Talk is Cheap

Validation of this strategy is already in place across the sands and mountains of Southwest Asia. Various "Tool Stores" established by PM-AGSE are now in operation in both Iraq and Afghanistan.

Hand tools under warranty which have failed or are broken can be immediately exchanged for replacement items at central locations in either country. Stocking these critical enablers forward has shortened the maintenance Soldiers wait time by weeks and even months.

Tactical aircraft and turbine engine washing has always presented problems. These problems have been attacked in two different ways.

The first solution was to authorize the Turbine Engine Wash System

## PM ASGA *Continued*

(TEWS) as a substitute for the antiquated Universal Wash System in the A-92 aviation unit maintenance shop set.

PM-AGSE could then begin to establish a standard support structure for an item many units had already purchased, and augment unit property with limited numbers of "loaner" TEWS as stay-behind equipment (SBE).

Full aircraft washing has been made possible with forward positioning of scores of large trailer mounted aircraft wash systems (AWS) as SBE. AWS are capable of facilitating the washing of a number of aircraft without replenishing onboard water supplies.

Repositioning aircraft has long been a challenge to aircraft maintenance Soldiers, so commercial rough-terrain tractors and tow bars have been added to the SBE fleet.

While slight modifications to the commercial products have been necessary, the development and support structure lag times have been greatly reduced. But more importantly, "fifteen Soldiers on a rope" is no longer an expedient option for moving aircraft around the tactical maintenance area.

Nitrogen availability in forward maintenance areas is not the cumbersome task it had once become. The nitrogen back pack (NBK) system, similar to a number of systems locally purchased by units, has also been added to available SBE.

A more mobile capability than nitrogen service carts or generic aircraft nitrogen generators (GANG), the NBK has put manageable nitrogen servicing capability in the Soldier's hands.

In tactical environments the hydraulic, pneumatic, electrical and other capabilities of the aviation ground power unit (AGPU) are critical to efficient maintenance operations.

To this end the PM-AGSE has provided a number of operational readiness float AGPUs to the AMCOM Theater Aviation Single Manager so as to support continued aircraft maintenance while deployed AGPU are being serviced.

As age and multiple deployments catch up with these systems, a service life extension program (SLEP) is being established to extend their useful life until a more



Troops receive new equipment fielding training on the "Hydroblaster" aircraft wash system (AWS) as part of their deployment.



The turbine engine wash system or TEWS is a substitute for the antiquated Universal Wash System in the aviation unit maintenance formations.

modern replacement can be developed and fielded. The SLEP AGPU will be completely overhauled, modernized and issued to future deploying units.

### No "Drive-by" Fieldings

Dumping non-standard equipment into the hands of deployed Soldiers has proven to be the ultimate disservice, so each of these "bridging" systems have been provided with an initial repair parts and services package, along with maintenance and operator manuals.

As further proof of the PM-AGSE commitment to support what is fielded, new equipment training is being offered for each of these systems as part of the PRESET pre-deployment assistance program, and regularly at forward locations in theater.

### Commitment to the Real World

In the midst of these highly visible activities, PM-AGSE has not lost sight of the commitment to support the rest of today's tools and support equipment. Based on real-time availability data from forward deployed AMCOM logistics assistance representatives, the entire AMCOM LCMC AGSE team monitors all the critical items of support equipment so as to proactively provide expedited

support at the first signs of problems.

### What's Next

Providing COTS items to fill immediate needs is not the final answer to Army aviation's maintenance support future. The PM-AGSE is committed to using lessons learned from tactical experience with these bridging systems so as to assure the final material solutions are truly field proven and forged in the hands of the ultimate tester. That ultimate tester is today's forward deployed Army aviation maintenance Soldier!



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