

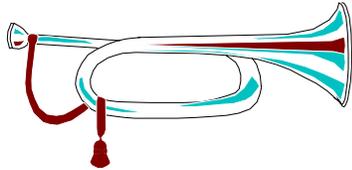


AMC CO\$T BU\$TER\$ BUGLE



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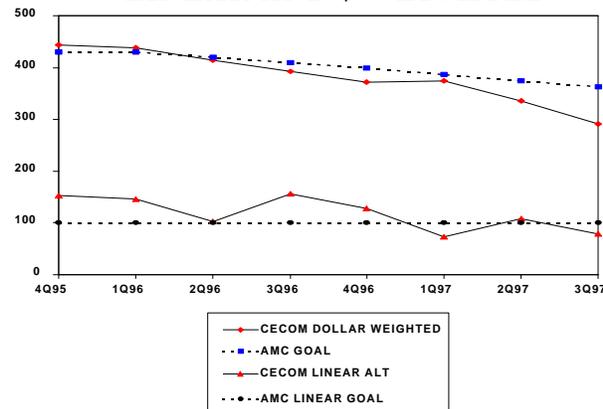


CECOM INITIATIVES PRODUCING RESULTS

The Command, Control, Communications, Computers, Intelligence, Electronic Warfare, Sensors and Information Management Team (Team C4IEWS&IM) headquartered at Fort Monmouth, takes the responsibility of helping to meet the AMC POM Savings Promise seriously. Team C4IEWS&IM accepted the POM promise challenge by aggressively pursuing new initiatives in acquisition and logistics reform. CECOM efforts in the areas of Administrative Lead Time/Production Lead Time (ALT/PLT) Reduction, Operating & Support Cost Reductions, Integrated Sustainment Maintenance, and Batteries offer the greatest potential for savings.

Lead Time Reduction. As shown by the chart, CECOM is making great strides in ALT/PLT Reduction. The 3Q FY97 dollar weighted Lead Time of 291 days is well below the AMC FY97 goal. Our 3Q FY97 linear performance of 79 days is also below the AMC goal of 100. CECOM has, and continues to implement, many varied ALT/PLT reduction efforts, but the initiatives making the most dramatic impact to the Savings Promise in ALT/PLT reduction employ Flexible Long Term Contracting (FLTC) and Ordering Officers. FLTC seeks to reduce ALT, and potentially PLT, by pre-positioning multiple items on multiple year, Indefinite Delivery/Indefinite Quantity (ID/IQ) or range quantity contracts. Ordering Officers are item managers empowered to write delivery orders against pre-priced ID/IQ contracts, permitting Acquisition Center personnel to devote more time to other tasks. The combined initiatives have already been applied to about 2700 CECOM managed items, dropping their average ALT from approximately nine months to a week. To help implement the initiative, CECOM developed the Multiple Year Packaged Buy (MYPB) System as a tool to generate secondary item spares packages automatically. This system packages items with similar manufacturing technologies based on historical acquisition data, but still allows an option to restrict packaging to a particular weapon system or manufacturer. The MYPB System is compliant with applicable Federal Acquisition Regulations including usage of Federal Prison Industries and Small Business purchases. Automated packaging with the MYPB System dramatically reduces labor intensive packaging and therefore ALT. To achieve inventory savings, a change to the Commodity Command Standard System (CCSS) has been approved that accommodates the initiative's reduced cost to procure and eliminates the reorder cycle time constraint. Analyses of applying these initiatives to 1630 CECOM items shows potential impact

**ALT/PLT GOALS:
LINEAR AND \$ WEIGHTED**



of approximately \$10M savings in safety level and \$30M savings in average on-hand reorder cycle quantities.

Operating and Support Cost Reduction (OSCR). OSCR initiatives are part of a broad spectrum of value concept initiatives to reduce costs through improvements in spares and repair parts. These improvements modernize older equipment still needed by the warfighter or provide a better product to the user at a lower cost. For Team C4IEWS&IM, employment of the Function Analysis System Technique (FAST) in specialized value concept workshops is generating many savings initiatives. FAST is a systems engineering process structured to develop and evaluate better product solutions. These value concept workshops form multi-functional Integrated Product Teams with representation from the warfighter, the analytic community, contractors, and the three AMC core competencies. For additional information, see the TEAM C4IEWS&IM home page at www.monmouth.army.mil.

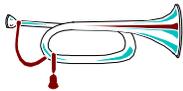
Since the savings promise was made, the CECOM Supply Management Army - OSCR program has seven approved initiatives with estimated 10-year net savings of \$115M. Additional savings not covered in the promise are being generated from other approved improvements to products using the DLA Savings through Value Enhancement Program, the Value Engineering Program and the Army Ideas for Excellence Program.

Integrated Sustainment Maintenance (ISM). A CECOM initiative with a significant potential impact to ISM is the implementation of the Electronic Single Support Strategy (ESSS). During Operation Desert Shield/Desert Storm, there was a proliferation of contractor support across the battlefield. Today, there is an increasing reliance on the use of contractors to support electronic systems which causes confusion from the creation of multiple, unique support strategies. As a result, CECOM recommended the ESSS concept, which was approved by AMC and DA decision-makers. The ESSS makes available a single maintenance point and help desk to the field for C4IEWS&IM equipment. This strategy is functional in wartime as well as peacetime. The ESSS creates Electronic Sustainment Support Centers (ESSCs) which complement the Regional ISM concept. The ESSCs provide a level of maintenance above Direct or General Support plus some field software management. The ESSCs become the field management organization for contractor support requirements and the induction point for a circuit card assembly repair and return program. ESSCs overseas also manage some wholesale stocks stored forward.

A cost-benefit analysis of the ESSS concept verified its potential for exceptional savings. Significant maintenance consolidation savings come from using a single support facility in lieu of going to multiple contractors. Also, ESSC use of the Tobyhanna Depot Forward Repair Activity to accomplish repairs in lieu of going to the original equipment manufacturer sometimes yields savings. The ESSC employs a repair and return concept to the field which simplifies the maintenance process and lowers cost. This concept reduces repair cycle and shipping times, which correspondingly improves operational readiness and may also save money by reducing inventory. ESSCs have been implemented at Fort Hood, Fort Bragg, Europe and the Far East.

Batteries. The use of rechargeable batteries in lieu of lithium batteries for training purposes is expected to achieve the \$33 million Battery portion of the AMC Savings Promise with just this initiative alone. Based on a validated analysis approved by the Army Audit Agency, AMC has funded about \$9M to jump-start the use of rechargeable batteries and their chargers for more than 50 battalions. All the equipment has been purchased and fielding is underway. Analysis showed that using rechargeable batteries in lieu of lithium batteries for training could reduce battery costs by 50% to 75% over the three-year expected life for rechargeable batteries. Battery value concept workshops are continuing to develop better chargers and better primary and rechargeable power sources to generate further battery cost reductions.

******SUCCESS STORIES******

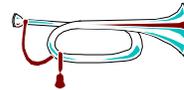


**LEAD TIME
TRACKING SYSTEM**

The Lead Time Tracking System allows for the tracking of an acquisition from the identification of a requirement through contract completion. Each segment of the process has associated standards against which to measure the acquisition. This allows accountability to the individual level, facilitates the reward of positive performance, identifies abnormalities in the acquisition process and flags any out-of-standard actions. Early identification of process abnormalities enables management to take proactive, “real-time” corrective actions and thereby reduces ALT. Phase One, which covers Army Working Capital Fund (AWCF) ALT tracking and performance, has been implemented and fielded to the CECOM Logistics and Readiness Center and Acquisition Center. Phase Two covers the tracking of AWCF PLT and is scheduled for completion in December 1997. Phase Three will expand

ALT and PLT tracking to all fund types and is scheduled for implementation in the third quarter of FY98.

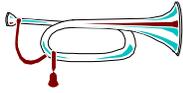
POC: Gary Webber
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**NIGHT VISION
GOGGLE
MAINTENANCE**

Based on a Fort Carson suggestion, a field study was conducted at eight installations to determine the viability of Direct Support (DS) units replacing the high failure on/off/standby switch. The study showed that 25% of the goggles at the test installations required switch replacement and concluded that the task should be made a permanent part of the AN/PVS-7B maintenance concept. Adoption of the suggestion netted a \$10K award to the originator and is expected to yield a \$7M savings over ten years to Army units.

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PRODUCTION LEAD TIME REDUCTION

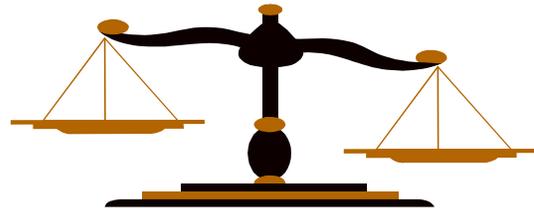
CECOM is reducing PLTs through major Weapon System (WS) IPTs, which canvas industry for potential improvements to the manufacturing process. This initiative is unique because CECOM concentrated on the WS portfolio review of both ALT and PLT versus individual high dollar driver items. These reviews address not only lead time issues, but improved short or long term acquisition strategies as well. WS reviews have yielded a 3.5-month lead time reduction on system items. CECOM is continuing this effort until all of the procurable items have been reviewed.

Flexible Computer Integrated Manufacturing (FCIM) is another lead time reduction initiative which leverages the depot manufacturing capability to reverse engineer and fabricate obsolete and other difficult to procure items. About 200 different items with diminishing sources of supply have been manufactured by the depot using FCIM. The PLT of FCIM items has decreased by more than five months and the ALT has decreased by three months.

Delivery cycle time for shipment from the contractor to post accountable records has a standard 15-day time frame hard coded in CCSS. Actual experience is near 9 days. A CECOM proposed change in the CCSS delivery cycle time requirement will adjust PLTs to every item in CCSS AMC wide.

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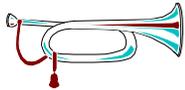
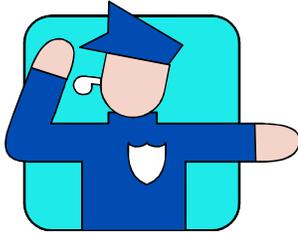


LITIGATION EFFICIENCY OPTION

CECOM contracts may now contain a clause that allows use of an Alternative Dispute Resolution (ADR) process in lieu of litigating disputes before the Armed Services Board of Contract Appeals (ASBCA). CECOM performed, documented, and forwarded to AMC a validated analysis projecting the savings and cost avoidance associated with the litigation efficiency, which is potentially applicable to other AMC Major Subordinate Commands (MSCs). Utilizing ADR in lieu of ASBCA proceedings reduces Army Contract Appeals Division (CAD), Office of the Judge Advocate General involvement in the process of resolving disputes and streamlines the dispute resolution process. Since ADR procedures are less costly and burdensome to contractors, more appeals are expected. This makes the MSC cost avoidance impact small, but still promotes a reduced need for Army CAD personnel. Implementation of this litigation efficiency initiative at other AMC MSCs may similarly increase overall Army savings/cost avoidance. A disk containing the spreadsheet model for computing the potential cost avoidance/savings is available upon request.

POC: Anita Esses-Fernandez

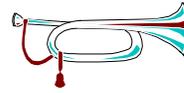
DSN: 992-4381



AUTOMATED SECURITY SYSTEM REDUCES GUARDS

A new Westinghouse Card Access Security System has been installed in the Albert J. Myer Center located at Fort Monmouth. The Myer Center had many manned entrances and the automated security system greatly reduces the requirement for security guards. Access cards, usable at four Myer Center entrances and a nearby building, are programmed and given to all employees requiring entry into the building. A security guard will continue to be stationed at the main entrance to the Myer Center from 0645 to 1800, Monday through Friday to accommodate visitors and employees without access cards. All entrances have closed circuit televisions, intercoms and card readers for access. Using the intercom and TV cameras, the guard office, which monitors all entrances 24 hours per day, can also control badge entry for those without access cards. Installation of this new security system almost halved the Myer Center guard requirement.

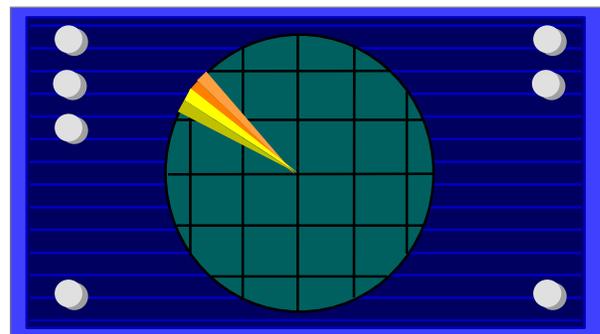
POC: John Brack
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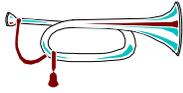


AN/TPN-18A SEAL IMPROVEMENT

The AN/TPN-18A Radar Set Units deployed in Germany have been experiencing failures in the Azimuth Drive Gear Case. The failures were traced to the gear case seals, which have been observed to deteriorate over time. Deteriorated seals allow oil to seep into the \$125K azimuth drive motor causing it to fail. When deployed to Bosnia, the users were unable to readily obtain replacement seals through the supply system. Local purchase authority was granted and Feodar Burgmann, a German company, proposed a redesigned seal assembly. The users believe this new assembly to be more reliable than the current seal assembly. There are presently 18 AN/TPN-18As fielded: 8 in Germany, 5 in Korea, 1 in Hawaii, and 4 in CONUS. Seven systems are now using the redesigned seal assembly, running over 250 hours, with no problems.

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AN/PPS-5B SYSTEM REDESIGN

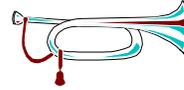
The AN/PPS-5B Man Transportable Radar is an excellent example of Modernization Through Spares, where older equipment still being used can be modernized. The AN/PPS-5B is a man-portable, ground to ground surveillance radar set for use by units such as infantry and tank battalions. The current system uses 1960s technology and is facing obsolescence of parts, modules, technical manuals, and test equipment. The system is outdated, unreliable, heavy, and entirely analog in design. CECOM IPTs working with Tobyhanna Army Depot and the PM implemented a performance specification approach. New and more reliable, higher performing technology was inserted into the AN/PPS-5B by replacing many spare parts. SMA-OSCR funds were used to perform an engineering analysis to develop a prototype, test the prototype and develop a performance specification. This will permit contracting for an upgrade package for the 306 fielded systems, putting an improved, easier to maintain and better product back into the hands of the warfighter. Positive feedback was received from the users after a recent demonstration of the prototype conducted at Fort Huachuca. A production contract is expected to be awarded during the first quarter of FY98. Net FY98-03 POM savings are projected to be \$15.7M.

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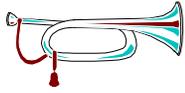
AN/VVS-2 VALVE IMPROVEMENT



The AN/VVS-2 Night Vision Viewer is an image intensification night vision device. It is widely used on the Abrams, Bradley, Paladin, M113 APC, M88 Tracked Recovery Vehicle, the M728, and Marine Corps vehicles. The viewers use optics, which are exposed to rapidly varying temperatures and moisture levels during missions. To avoid fogging of the optics from internal condensation, the housing, which holds the optics, is charged with nitrogen gas to maintain a positive overpressure inside the viewer housing. Each viewer has two valves to introduce the nitrogen into the housing. These valves are approximately the size of a pencil eraser. The existing valve design is made of stainless steel, and is screwed into the aluminum exterior of the viewer, using metal to metal contact. With this design, sufficient leakage exists to make it necessary to purge each viewer with a fresh charge of nitrogen gas every six months. This process is both time consuming and expensive. Replacement of the existing valve design with a new one which employs a rubber o-ring between a new needle (purge) valve and the viewer housing will significantly improve the seal to block the leakage of nitrogen, and make the purging process necessary only once a year.

POC: Mark Stephan

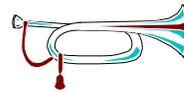
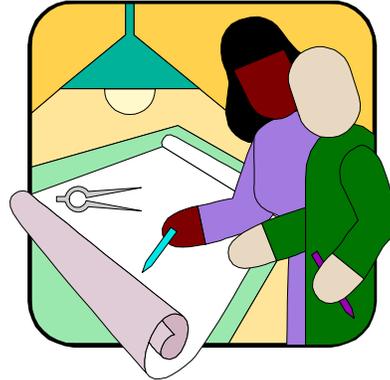
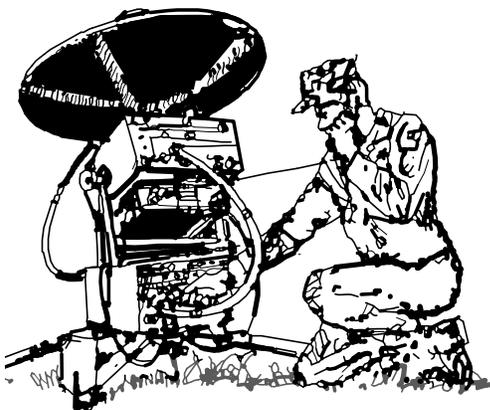
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**AN/PRD-12 DISPLAY
UNIT REDESIGN**

The AN/PRD-12 is a lightweight, man transportable, ground based communications intercept, processing, and direction-finding system used by the U.S. Army Light Divisions and U.S. Special Operations Command. The liquid crystal display unit is obsolete and experiencing a high failure rate due to condensation and freezing. The AN/PRD-12 display unit redesign effort has been funded and completed. The replacement item is more reliable, lighter in weight, easier to maintain, waterproofed, and meets all environmental performance specifications. The projected unit cost for the replacement item is \$10K, which saves \$13K over the existing item. The procurement of replacement units, initial organizational and depot level spares, updated logistics technical documentation and the conduct of materiel fielding is projected to yield net FY98-FY03 POM savings of \$7.3M.

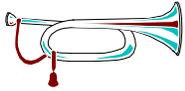
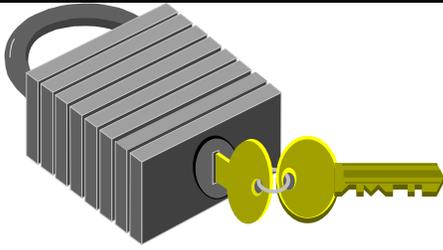
POC: Roy George
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**REVERSE
ENGINEERING SAVES**

Over the past few years, the CECOM-managed CN-998 Gyroscope, used throughout the DOD rotary-winged aircraft fleet, including the UH-60 production line, has suffered serious overhaul delays because of parts shortages. One component, the shock mount, was only available from one source with inordinately long lead times. Additionally, the total replacement of these shock mounts, four per gyroscope, represents a significant portion of the CN-998's overhaul cost, since their replacement rate is near 100 percent. A review of the problem with overhaul personnel revealed that only a portion of the mount required replacement. As a result, the shock mount was reverse engineered and only small components of the mount actually required replacement. A source for the needed parts was developed which reduced PLT from about nine months for the whole shock mount to only three weeks for the parts. Associated shock mount replacement costs were reduced from \$336 to \$2.48 per unit, reducing annual overhaul costs by \$100K.

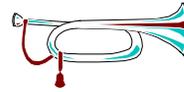
POC: Dwight Deatherage
DSN: 992-1626



MISSI “ONE STOP SHOP” SAVES \$

The CECOM Communications Security Logistics Activity (CCSLA) is the “One Stop Shop” for all Multilevel Information Systems Security Initiative (MISSI) products. The CCSLA is responsible for the centralized management of the products to include user requirements, Integrated Logistics Support (ILS), procurement and fielding of all Army MISSI products for C4I systems, and Defense Messaging System (DMS), as well as Non-DMS business systems. Through central management, CCSLA has been able to obtain substantial volume discounts for Army customers. For example, the FORTEZZA Card, which would cost individual activities \$295 each if purchased directly from vendors, is now available from CCSLA at a cost of \$69.50 each. Since all DMS users will need a FORTEZZA card, this item alone will result in significant savings Army wide. Another example is the Turnkey Certification Authority Workstation System, which would have cost Army users approximately \$20,000. The CCSLA cost is \$13,881.

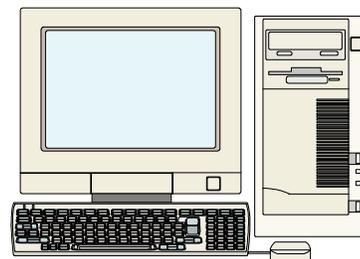
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EIP SUGGESTION SAVINGS

Engineering Installation Packages (EIPs) are acquired for each site to support the fielding of new automatic data processing (ADP) equipment. Each EIP contains information on the site configuration items, tasks needed to prepare the site for delivery of the equipment, items needed to install the equipment and estimated labor hours required for the installation. The Government repeatedly paid for that redundant boilerplate information. An adopted suggestion under the CECOM Army Ideas for Excellence Program led to the purchase of a single, generic EIP covering all installation sites and much smaller EIPs for the 269 installation sites. Each installation site EIP references the generic EIP to make a complete site package. The new, smaller version decreases the acquisition costs for each EIP from \$18,606 to \$2000 and reduces the time spent by the Government reviewing and processing each EIP delivered by the contractor. The savings were reinvested in the program to acquire ADP with improved performance and capacity.

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**Look for the AMC Cost Busters on the World Wide Web at
www.amc.army.mil/amc/rm/costbust.html.**