

**The Secretary of Defense Performance-Based Logistics Awards Program
for
Excellence in Performance-Based Logistics
Section 2
Summary of Criteria Accomplishments**

Warfighter-Based Capabilities and Outcomes

Mission Success: The Navy/GE T700 PBL Team, incorporating Navy program managers, logisticians, contract specialists, and their General Electric Aviation (GEA) counterparts, awarded an engine component PBL contract in September 2004. The T700 PBL covers the total Navy requirement for T700 compressor and turbine components by acquiring repair or replacement, as needed, of these Critical Safety Items. Two T700 engines power the Navy's H-60 Sea Hawk and USMC AH-1 Cobra helicopters. The T700 PBL is a commercial, five year requirements type contract valued at \$184.9M. The contract was awarded competitively to GEA after best value proposal evaluation.

The three-year base period of PBL coverage was awarded on September 13, 2004. The base period of performance, fixed priced at \$110.6M, provided increased engine component availability at reduced cost. The first three years of PBL performance delivered an average 99% first pass material availability through June 2007 vice 64% provided previously by legacy sustainment, zero backordered parts, and a 3.4% price reduction to the Navy as compared to the cost of the legacy supply chain.

The T700 PBL Team next acquired an additional two years of T700 PBL coverage via a \$55.6M priced modification on March 27, 2007. The PBL extension, which netted the Navy an additional \$18.7M price reduction, is the culmination of three years of careful PBL program management, supply chain streamlining, maintainer process improvements, and intensive contract management, all

of which delivered a reduced price while further expanding the scope and flexibility of warfighter coverage. The post-award T700 PBL contract management effort culminated in a fixed price, PBL contract modification which is the subject of this SECDEF PBL excellence nomination.

During the T700 PBL three-year base period of performance, engine component availability rose from 64% to over 99%, while the cost of component maintenance dropped by \$1.8M compared to conventional repair coverage. The PBL extended coverage modification further reduces Navy costs by \$18.7M, for a total \$20.5M in PBL cost avoidance/savings.

Material Availability: The first three years of PBL performance through June 2007 delivered a 35% increase in ready-for-issue components, providing Navy and Marine Corps operators and maintainers the ability to meet mission requirements with fewer spare engines and a smaller logistical pipeline, garnering additional savings in materiel, infrastructure and cash. The T700 PBL Team combined skill sets of lean supply chain management and creative contracting to deliver state-of-the art warfighter support while reducing expenditures.

Ownership Cost Management: Upon awarding the T700 PBL, the Navy/GEA Team kicked off the contract management phase by:

1. Developing production/performance monitoring processes to track and assess Contractor performance,
2. Monitoring and fine tuning, as necessary, the interaction between the Navy's supply chain and commercial supplier's PBL input, performance, and output,
3. Reviewing PBL contract transactions for demand variations, and
4. Determining the value of financial incentives or disincentives earned.

The Team's efforts in coordinating Navy organic and GEA commercial support infrastructures produced the exceptional performance cited above. In addition, it alerted the Team to a weakness in its initial calculation of PBL throughput, or pace of demand for T700 engine components.

The Team's tracking data showed that while engine flight hours were increasing, demand for repair/replacement of engine components was not following the same trend. Within the complex T700 supply chain, many factors and activities were impacting rates of component removal and were driving down the demand for repaired or replacement components. After analyzing a broad range of operational and maintenance variables, the T700 Team concluded that several factors were contributing to component demand reductions. These factors included: modified Navy Sea Hawk and USMC Cobra flight crew and planeside maintenance personnel behavior, GEA's investment in an expanded pool of new T700 engine components, and GEA incorporation of a higher volume of replacement piece parts during component repair. The baseline PBL metrics tracking and monetary incentives had, in fact, delivered components with improved durability thus reducing and delaying recurring demand for repair/replacement. However, because the Navy had also contributed to reductions in the actual demand profile, a course of action was required that would fairly share the savings generated by the improvements in both Navy and PBL Contractor performance.

Sustainment of Warfighter Capabilities

Public Private Partnering: The Navy/GE T700 Team next developed and agreed to PBL demand variation language allowing the Contractor to continue to share in a portion of the savings created by delivery of more durable T700 engine components while reducing the cost of T700 PBL coverage to the Navy. The result was a contract modification that included a revised demand forecast and

flexible yet specific demand variation coverage. The bilateral modification reduced the PBL price by \$18.7M applying the savings to the final two years of contract performance.

The success of the Public Institution/Private Industry T700 PBL Team hinged upon an ability to accomplish logistics data collection, demand data analysis, throughput tracking, contract terms development, and negotiation and execution of a PBL modification. The T700 Team's effort reduced the cost of T700 Engine PBL support by an additional 10%, while setting a standard of excellence in collaborative data analysis and problem solving.

Systems Engineering Approach: It was precisely the T700 PBL Team's understanding of systems engineering principles that allowed the Team to accurately analyze the rates of component removals and determine the root cause of component demand reductions. The Team determined that there was no single factor driving the downward component demand trend, but rather a complex integration of process and material improvements, undertaken by both the Navy and GEA, that resulted in improved reliability of the T700 engine. The emphasis on a systems engineering approach to the PBL demand profile facilitated the successful negotiation of a sharing methodology resulting in a contract price reduction.

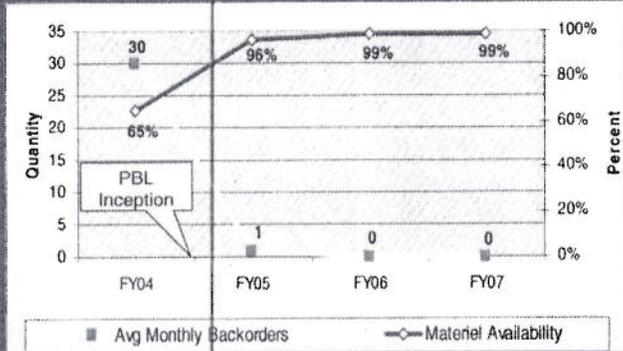
Footprint Reduction: The logistics footprint reduction directly related to this PBL support solution is significant. While the T700 program has continued to increase both in quantity of engines operating and hours flown, the retail stocking levels of spare engines and components has remained constant. The PBL delivers wholesale material availability of 99% and average requisition response times of 2 days, allowing a lean planeside spare parts supply posture, while increased operational

availability and reliability reduces the logistics footprint. These improvements reduced the warfighter's operating cost per flight hour from \$103 to \$70.

Obsolescence Management: GEA is responsible for managing obsolescence of all engine components, subassemblies, and raw materials covered by this PBL. The contract requires delivery of full supply support while eliminating any and all factors negatively impacting required performance metrics. The T700 PBL Obsolescence Management Plan includes methods for locating alternative sources, integration with Navy technical requirements, and adaptive engineering response plans should GEA lose or anticipate losing a supplier/subcontractor during performance of this PBL.

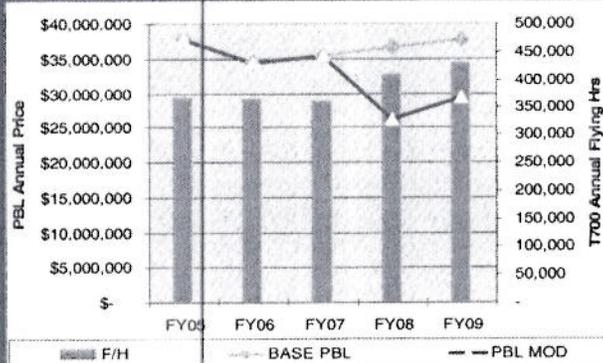
Reliability, Maintainability and Supportability Improvements: By combining the technical prowess and world-wide support network of a private industrial partner with the Navy's lean, outcome focused, weapons support team, the Navy/GE T700 PBL Team produced breakthrough results. Through technology insertion, leveraging commercial repair best practices, and rapidly incorporating Government funded reliability improvements, the Team improved engine Time-on-Wing by 54% while concurrently reducing supply support costs to the warfighter by 38%. The Team delivers an improved product, reduced customer wait time, and over 99% materiel availability -- all at a price significantly less than legacy support, to Navy and Marine Corps aircraft operators.

T700 Component PBL Warfighter Materiel Availability



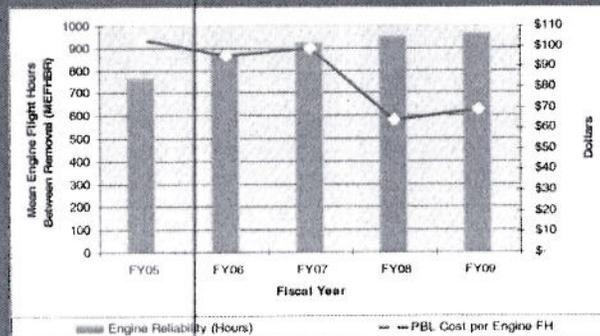
Source Data:
ICP T700 Team PBL Availability Report
ICP T700 Team Backorder Comparison Report

T700 Component PBL Warfighter Ownership Cost Management



Source Data:
BAR Ver (various) and OPNAV Ver (various)
PBL Contract N00383-04-D-014M & Mod P00002

T700 Component PBL Warfighter Reliability



Source Data:
T700 Monthly Cockpit Charts
BAR Ver (various) and OPNAV Ver (various)
PBL Contract N00383-04-D-014M & Mod P00002

**The Secretary of Defense Performance-Based Logistics Awards Program
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Section 4
Achievements**

The Navy/GE T700 Aircraft Engine Performance Based Logistics Team is recognized for their exceptional warfighter focus and process innovation demonstrated while managing the T700 PBL. The T700 supply chain supports two of Naval Aviation's front line rotary wing aircraft, the H60 Seahawk and AH-1 Cobra. The Team's efforts resulted in a contract modification extending the T700 PBL for two additional years of coverage while reducing the price of the \$184.9M contract by \$18.7M. The initial three years of T700 PBL performance provided a 99% requisition fill rate, up from a 64% legacy rate. The Navy/GE T700 PBL Team's superior ability to accomplish logistics data analysis, contract throughput tracking, contract terms and conditions development, and their determination to seek further efficiencies even after the targeted system efficiencies and cost avoidance had been achieved is exemplary and embodies the principles of excellence recognized by this award. The Team's perseverance and expertise reduced the cost of T700 Engine PBL support by an additional 10%, while setting a standard of excellence in Government/Industry collaboration on performance type contracts. The Team crafted an innovative supply support solution that delivers measurable readiness improvements and cost savings to the Fleet. The T700 engine currently stands at its highest level of combat readiness and customer satisfaction since its introduction to the Fleet.