

**The Secretary of Defense Performance-Based Logistics Awards Program
For
Excellence in Performance-Based Logistics
In
Life Cycle Product Support**

**Section 2
Summary of Criteria Accomplishments**

Improvements in Warfighter-Based Capabilities and Outcomes

Mission Success: NAVICP provides worldwide logistics support for aviation tires to 3,600 Navy, Marine Corps and Foreign Military Service customers. This support covers 23 separate tire sizes in support of 16 different types of aircraft including fixed and rotary wing platforms. Management of such an extensive and diverse tire inventory presented significant challenges and cost burdens to the Navy logistics community. Prior to the PBL contract award, all aviation tire management functions were performed in-house. Military and civilian personnel managed a wholesale inventory of 60,000 tires stored in numerous, geographically dispersed government warehouses incurring the carrying costs associated with warehousing and managing the large inventory of tires. Frequent individual contracts were awarded for each tire type to various tire manufacturers, a labor-intensive process for both government and industry personnel. Variations in customer demand and manufacturer's delivery times resulted in frequent stock-outs, aged customer unfilled requirements and negative impacts on readiness. Under this PBL, backorders have been reduced from approximately 3,500 to zero, 289,362 tires have been delivered, and logistics response time improved from 60 days to under 2 days in the continental United States (CONUS) and under 4 days outside the continental United States (OCONUS), including deliveries to the Iraqi Theater of Operations in 4 days. These dramatic results are the direct result of this innovative contract which leverages the manufacturer's core competencies, capitalizes on commercial best practices and aligns the supply chain to meet the mission requirements of the aviation tire community.

Material Availability: The Navy Tire PBL Team was chartered for the purpose of developing an innovative solution that would streamline the aviation tire management process while providing the highest level of combat readiness at a cost equal to or lower than traditional support. The government and industry Team found solutions to numerous internal and external process shortcomings such as delayed procurement actions, manufacturing capacity, and raw material constraints; shortcomings which resulted in delayed shipments and high levels of unfilled customer requisitions. On contract award, the transition to PBL support was achieved seamlessly with no impact to the fleet customer, even through a period of dramatically increased operating tempo during Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF). Since contract award, Navy aircraft tire readiness is at its highest level ever, with 100% of the requisitions filled and over 289,000 tires delivered world wide. The contract delivery metric requires that 100% of the requisitions are filled and that 95% of all requisitions are filled on time (2-days CONUS and 4-days OCONUS). Michelin has consistently exceeded the on-time delivery metric of 95% with an on-time delivery of 98.5%. Backorders have been reduced to zero from a pre-PBL high of 3,500. In addition, as a result of this contract, the Navy no longer owns or maintains wholesale tires, since the government-owned wholesale inventory has been successfully transferred to the contractor's warehouses and was completely drawn down during the five-year base period of the contract. Navy retail customer inventory levels have also been significantly reduced as the consistently short delivery timeframes allow the customer to maintain a lower local inventory level.

Material Reliability: Aviation tire reliability, safety, and maintainability are a focus of the program and are an on-going focus of the Team. Engineering investigations have been dramatically reduced over the life of this PBL through the Team's ongoing efforts to improve aviation tire reliability, safety, and maintainability. The government/industry Tire PBL Team

makes customer visits to Naval Air Stations and Marine Corps Air Stations to identify and resolve any warfighter issues affecting any aspect of the aviation tire supply chain. This direct dialogue with the actual tire user has created an exchange of information resulting in further process improvements to the supply chain that otherwise would not have been possible.

Sustainment Strategy Effectiveness/Efficiency

Ownership Cost Management: The competitive, firm fixed price PBL contract was awarded to Michelin Aircraft Tire Company for a five-year base period with two five-year priced options at a total value of \$261.5M. The Navy business case estimates the total cost savings of \$46M. Michelin's proposal both met the BCA affordability criteria and was determined fair and reasonable by the NAVICP Contracting Officer. The strategy of using a single commercial supply chain integrator is to provide responsive and timely support to the fleet while reducing the total logistics ownership costs associated with aircraft tires. Michelin is the prime contractor for the program and manufactures and supplies the tires. Lockheed Martin is a subcontractor to Michelin, providing the supply chain services. Drivers of the significant life cycle cost benefits under the contract include dramatically reduced delivery performance and the requirement for retrograde pick-up. Because of the sustained superior performance under this contract, the Navy reduced retail tire inventories ashore by 66% with a value of \$1.7M. The vendor is required to retrieve fleet retrograde from locations worldwide and dispose of scrapped tires, a function rarely performed by a PBL vendor. Retrograde pick-up is accomplished worldwide and is tailored to meet the requirements of the Fleet customer. Retrograde pick-up time has averaged 3.4 days and eliminates the need for labor and storage space for retrograde tire management. 141,365 retrograde tires have been picked by the contractor since the start of the PBL. These reductions, coupled with the complete elimination of a wholesale inventory of over 60,000 tires have significantly reduced the Navy cost of ownership. The PBL program enabled exceptional improvements in support for less cost than would have been paid under traditional support.

Public-Private Partnering: The concept of PBL support for tires was initially met with skepticism by the Navy's tire suppliers. The NAVICP team overcame this hurdle by conducting Market Forums and ensuring the participation of tire manufacturers and recognized industry leaders in the field of Third Party Logistics. The interaction and dialogue generated during these forums led to the forging of a number of industry partnerships, matching tire manufacturers with the core competencies of logistics providers. These partnerships ultimately resulted in the creation of a highly competitive environment whereby multiple qualified offerors aggressively bid for the Navy's tire support business. The Team established a contractual framework that leveraged best commercial practices and maintained the industrial base for Navy aviation tires. By utilizing a single logistics integrator, the Navy is afforded the benefit of having a single point of accountability for all operations affecting fleet support including requirements forecasting, inventory management, retrograde management, storage, and transportation. This strategy aligns the efforts of the logistics provider and the manufacturer with fleet support demands. Under the contract, Government processes are replaced with state-of-the art commercial systems in the areas of forecasting, transportation, warehousing, and technical information flow. Real time requisition status, shipping status and product support information is provided to the customer via web-based technology, with the contractor maintaining a full service Customer Command Center that is staffed 24 hours a day, 365 days a year. Surge capability is guaranteed for up to twice the normal monthly demand.

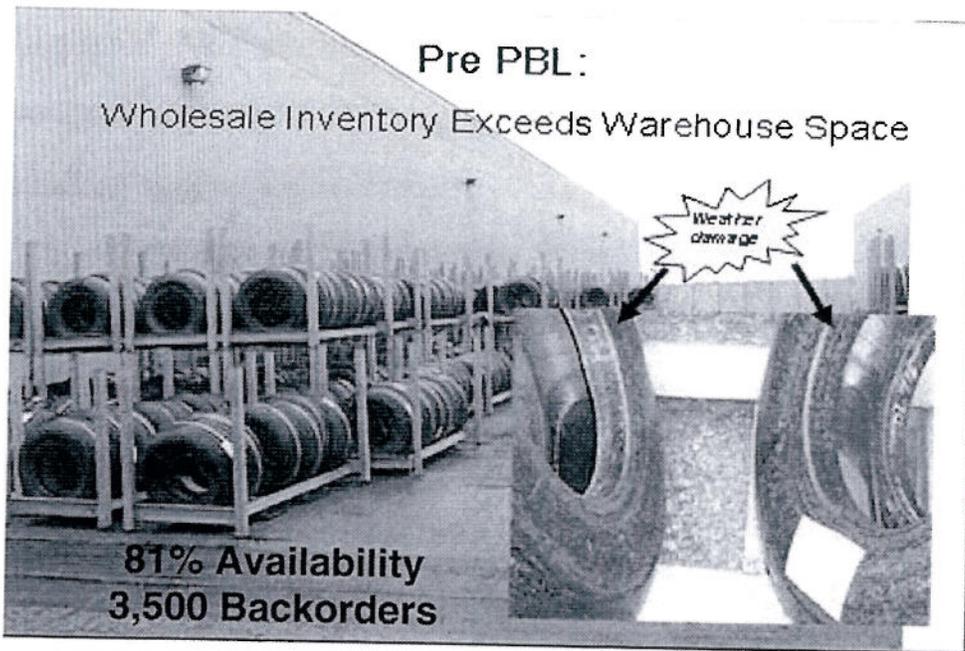
Systems Engineering Approach: The Team enhances the engineering improvement process through a collaborative effort with the manufacturer and the Fleet Support Team for engineering evaluation and approval of new tire configurations. The frequent communication and exchange of information by the PBL Team has facilitated immediate action to address safety issues including the immediate quarantine of suspect tires. The outcome of this teaming arrangement is

the reduction in non-mission capable aircraft due to a lack of tires, thereby assuring optimal weapons system availability.

Footprint Reduction: The Tire PBL has significantly reengineered the tire supply chain. Through the provider's assumption of all aspects of requirements forecasting and inventory management the Navy has been able to eliminate its wholesale inventory of over 60,000 tires, freeing up an estimated 280,000 cubic feet of storage space in the Defense Logistics Agency's distribution depots, while the improved delivery times of 2.4 days and 3.5 days for CONUS and OCONUS deliveries respectively have enabled the Navy to reduce retail tire allowance levels at shore facilities by 66 percent, from 4,769 to 1,626 tires, with an associated savings of \$1.7M. Michelin's sustained superior performance has eliminated the need for massive stockpiles of tires at operating bases. When the Fleet customer orders a tire, it is delivered when it's needed. Average time to deliver to the customer in the most recent performance period is 32.1 hours CONUS and 59.5 hours OCONUS... unprecedented support.

Obsolescence Management: Under this contract, all tire inventories are managed by the contractor who carries the full risk of obsolescence, eliminating the need for obsolescence management by the Navy. Risk to the provider is minimized by communication between government and industry team members and regular program reviews.

Innovative Contracting Support Approach: The PBL is clearly focused on the desired outcomes of DoD Acquisition Reform guidance. The BCA ensures affordability and the firm-fixed price per tire contract controls cost growth. The PBL was competed on a best value basis and the follow-on PBL will be competed again as the Navy tire industrial base remains robust. The current contract ends in January 2016. PBL support is fully integrated with the Navy Supply System and maximizes use of and maintains existing Navy infrastructure and expertise. Current performance improvements will be captured in the follow-on PBL as demand and cost parameters are re-baselined.



Since PBL Award:

AIRCRAFT TIRE PBL PERFORMANCE

Program to Date – 2000 thru 2010

- ◆ Performance 98.5%
- ◆ Delivered 289,365 tires
- ◆ Processed 94,883 requisitions

No Backorders Since 2000!

Navy Wholesale Inventory Eliminated

LOCKHEED MARTIN MICHELIN

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

The Navy Tire Performance-Based Logistics (PBL) Team is recognized for their innovative reinvention of the logistics supply chain for the management of Navy Aviation Tires. The Team's 15-year term, \$261.5M contract created a single point of accountability for Navy/Marine supply chain management responsible for requirements forecasting, inventory management, retrograde management, storage, and transportation. This strategy synchronizes production with fleet support demands and the logistics provider creating a cost effective, streamlined supply chain for aviation tires. Since the contract has been in place, there has never been a backorder and Navy aircraft tire readiness is at its highest level ever with 100% of all requisitions filled and over 289,000 tires delivered worldwide. To date, PBL performance has consistently exceeded the on-time delivery metric of 95% with the most recent reporting period showing on-time performance rates of 98.5%. The Navy no longer maintains a wholesale tire inventory, freeing up an estimated 280,000 cubic feet of storage space in Defense Logistics Agency's distribution depots. Cost savings associated with the reinvented supply chain for Navy aviation tires are \$46M during the term of the contract. The transition to PBL support was achieved seamlessly, remaining transparent to the fleet even through a period of dramatically increased operating tempo during Operations Enduring Freedom and Iraqi Freedom. The Tire PBL contract now serves as an industrial model for commercial and DoD PBLs.