



# EXCERPT FROM THE PROCEEDINGS

---

## OF THE SECOND ANNUAL ACQUISITION RESEARCH SYMPOSIUM

### **PUBLIC-PRIVATE PARTNERSHIP IMPROVES AIRCRAFT READINESS**

**Published: 1 May 2005**

**by**

**William Lucyshyn**

**2<sup>nd</sup> Annual Acquisition Research Symposium  
of the Naval Postgraduate School:**

**Acquisition Research:  
The Foundation for Innovation**

**May 18-19, 2005**

Approved for public release, distribution unlimited.

Prepared for: Naval Postgraduate School, Monterey, California 93943



ACQUISITION RESEARCH PROGRAM  
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY  
NAVAL POSTGRADUATE SCHOOL

The research presented at the symposium was supported by the Acquisition Chair of the Graduate School of Business & Public Policy at the Naval Postgraduate School.

**To request Defense Acquisition Research or to become a research sponsor, please contact:**

NPS Acquisition Research Program  
Attn: James B. Greene, RADM, USN, (Ret)  
Acquisition Chair  
Graduate School of Business and Public Policy  
Naval Postgraduate School  
555 Dyer Road, Room 332  
Monterey, CA 93943-5103  
Tel: (831) 656-2092  
Fax: (831) 656-2253  
E-mail: [jbgreene@nps.edu](mailto:jbgreene@nps.edu)

Copies of the Acquisition Sponsored Research Reports may be printed from our website [www.acquisitionresearch.org](http://www.acquisitionresearch.org)

Conference Website:  
[www.researchsymposium.org](http://www.researchsymposium.org)



ACQUISITION RESEARCH PROGRAM  
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY  
NAVAL POSTGRADUATE SCHOOL

## Proceedings of the Annual Acquisition Research Program

The following article is taken as an excerpt from the proceedings of the annual Acquisition Research Program. This annual event showcases the research projects funded through the Acquisition Research Program at the Graduate School of Business and Public Policy at the Naval Postgraduate School. Featuring keynote speakers, plenary panels, multiple panel sessions, a student research poster show and social events, the Annual Acquisition Research Symposium offers a candid environment where high-ranking Department of Defense (DoD) officials, industry officials, accomplished faculty and military students are encouraged to collaborate on finding applicable solutions to the challenges facing acquisition policies and processes within the DoD today. By jointly and publicly questioning the norms of industry and academia, the resulting research benefits from myriad perspectives and collaborations which can identify better solutions and practices in acquisition, contract, financial, logistics and program management.

For further information regarding the Acquisition Research Program, electronic copies of additional research, or to learn more about becoming a sponsor, please visit our program website at:

[www.acquistionresearch.org](http://www.acquistionresearch.org)

For further information on or to register for the next Acquisition Research Symposium during the third week of May, please visit our conference website at:

[www.researchsymposium.org](http://www.researchsymposium.org)



THIS PAGE INTENTIONALLY LEFT BLANK



## Public-Private Partnership Improves Aircraft Readiness

---

**Presenter: William Lucyshyn**, is the Director of Research and a Senior Research Scholar at the Center for Public Policy and Private Enterprise in the School of Public Affairs at the University of Maryland. Previously, Mr. Lucyshyn served as a program manager and the principal technical advisor to the Director, Defense Advanced Research Projects Agency (DARPA), on the identification, selection, research, development, and prototype production of advanced technology projects. Prior to this appointment, Mr. Lucyshyn completed a 25-year career in the US Air Force serving in various operations, staff, and acquisition positions. Mr. Lucyshyn received his Bachelor Degree in Engineering Science from the City University of New York and his Master's Degree in Nuclear Engineering from the Air Force Institute of Technology.

---

### Abstract

The mission of the Cherry Point Naval Air Depot is to provide maintenance, engineering and logistics support for a wide variety of Navy and Marine aircraft. One of the depot's primary tasks is the maintenance, overhaul, and testing of aircraft engines. Depot engineers and logistics personnel are also responsible for a wide range of logistics management, research, and engineering issues.

In the mid-1990s, the Navy became concerned with increasing costs of managing and distributing reparable Auxiliary Power Units (APUs), as well as with the units' decreasing reliability. After considering several concepts, the Navy began to explore an innovative approach: using a public-private partnership. In the spring of 2001, the Navy signed a contract with Honeywell Corporation (and subcontractor Caterpillar Logistics) to manage its APU inventory of more than 1,000 units, with repair work to be handled by its depot at Cherry Point, North Carolina. Caterpillar Logistics, a sub-contractor to Honeywell and a third partner in the venture, was selected to handle delivery of parts and storage of completed APUs until they were needed.

The contract was signed in June 2000, and the resultant partnership has made dramatic improvements in reliability and reduction in the Mean Number of Flight Hours between Unscheduled Removal (MFHBUR). Since the government did not maintain a good cost baseline, the program savings are more difficult to quantify.



THIS PAGE INTENTIONALLY LEFT BLANK



## 2003 - 2006 Sponsored Acquisition Research Topics

### **Acquisition Management**

- Software Requirements for OA
- Managing Services Supply Chain
- Acquiring Combat Capability via Public-Private Partnerships (PPPs)
- Knowledge Value Added (KVA) + Real Options (RO) Applied to Shipyard Planning Processes
- Portfolio Optimization via KVA + RO
- MOSA Contracting Implications
- Strategy for Defense Acquisition Research
- Spiral Development
- BCA: Contractor vs. Organic Growth

### **Contract Management**

- USAF IT Commodity Council
- Contractors in 21st Century Combat Zone
- Joint Contingency Contracting
- Navy Contract Writing Guide
- Commodity Sourcing Strategies
- Past Performance in Source Selection
- USMC Contingency Contracting
- Transforming DoD Contract Closeout
- Model for Optimizing Contingency Contracting Planning and Execution

### **Financial Management**

- PPPs and Government Financing
- Energy Saving Contracts/DoD Mobile Assets
- Capital Budgeting for DoD
- Financing DoD Budget via PPPs
- ROI of Information Warfare Systems
- Acquisitions via leasing: MPS case
- Special Termination Liability in MDAPs

### **Logistics Management**

- R-TOC Aegis Microwave Power Tubes



- Privatization-NOSL/NAWCI
- Army LOG MOD
- PBL (4)
- Contractors Supporting Military Operations
- RFID (4)
- Strategic Sourcing
- ASDS Product Support Analysis
- Analysis of LAV Depot Maintenance
- Diffusion/Variability on Vendor Performance Evaluation
- Optimizing CIWS Life Cycle Support (LCS)

### **Program Management**

- Building Collaborative Capacity
- Knowledge, Responsibilities and Decision Rights in MDAPs
- KVA Applied to Aegis and SSDS
- Business Process Reengineering (BPR) for LCS Mission Module Acquisition
- Terminating Your Own Program
- Collaborative IT Tools Leveraging Competence

A complete listing and electronic copies of published research within the Acquisition Research Program are available on our website: [www.acquisitionresearch.org](http://www.acquisitionresearch.org)







ACQUISITION RESEARCH PROGRAM  
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY  
NAVAL POSTGRADUATE SCHOOL  
555 DYER ROAD, INGERSOLL HALL  
MONTEREY, CALIFORNIA 93943

[www.acquisitionresearch.org](http://www.acquisitionresearch.org)