In May 2010, Secretary of the Navy Ray Mabus set out the five governing principles of Navy and Marine Corps acquisitions:

First, we have to clearly identify the requirements. Second, we have to raise the bar on performance. Third, we have to rebuild the acquisition workforce. Fourth, we have to support the industrial base. And finally, we have to make every single dollar count.

These imperatives match the goals of the more detailed Better Buying Power (BBP) 1.0 and 2.0 initiatives introduced by the Under Secretary of Defense for Acquisition, Technology and Logistics, which provide a gauge for the Department of the Navy (DoN) acquisition community against which to measure its programs. With members of the DoN Acquisition Workforce (AWF) focused on carrying out the Secretary of the Navy’s Acquisition Excellence imperatives and BBP initiatives, a number of approaches have been found to seek the best possible value for every defense dollar spent.

A Study in Should Cost
Should-cost management figures prominently in both the original and updated BBP 2.0, and the Naval Air Systems Command’s Multi-Mission Helicopter Programs (PMA-299) has been particularly successful in introducing should-cost principles across its two Multiyear Procurements (MYPs) for the airframes and mission systems for the MH-60 Romeo and MH-60 Sierra, both Acquisition Category (ACAT) I programs.

**Vandroff** is a 1989 graduate of the United States Naval Academy and a Navy engineering duty officer. He has held a variety of key acquisition positions within Navy shipbuilding programs and is currently the Major Program Manager for DDG 51 Class shipbuilding. **Kimble** is deputy program manager of the Navy’s H-60 Helicopter Program, headquartered at Patuxent River, Md. The H-60 Program Office, PMA-299, provides full-spectrum, worldwide support for the Navy’s SH-60B, SH-60F, HH-60H, MH-60S and MH-60R helicopters and user communities.
**1. REPORT DATE**  
OCT 2013

**2. REPORT TYPE**

**3. DATES COVERED**  
00-00-2013 to 00-00-2013

**4. TITLE AND SUBTITLE**  
Navy Raises the Bar

**5a. CONTRACT NUMBER**

**5b. GRANT NUMBER**

**5c. PROGRAM ELEMENT NUMBER**

**5d. PROJECT NUMBER**

**5e. TASK NUMBER**

**5f. WORK UNIT NUMBER**

**6. AUTHOR(S)**

**7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)**  
Defense Acquisition University, Defense AT&L, 9820 Belvoir Road, Fort Belvoir, VA, 22060-5565

**8. PERFORMING ORGANIZATION REPORT NUMBER**

**9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)**

**10. SPONSOR/MONITOR’S ACRONYM(S)**

**11. SPONSOR/MONITOR’S REPORT NUMBER(S)**

**12. DISTRIBUTION/AVAILABILITY STATEMENT**  
Approved for public release; distribution unlimited

**13. SUPPLEMENTARY NOTES**

**14. ABSTRACT**

**15. SUBJECT TERMS**

**16. SECURITY CLASSIFICATION OF:**

<table>
<thead>
<tr>
<th>a. REPORT</th>
<th>b. ABSTRACT</th>
<th>c. THIS PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>unclassified</td>
<td>unclassified</td>
<td>unclassified</td>
</tr>
</tbody>
</table>

**17. LIMITATION OF ABSTRACT**  
Same as Report (SAR)

**18. NUMBER OF PAGES**  
3

**19a. NAME OF RESPONSIBLE PERSON**

---

*Standard Form 298 (Rev. 8-98)*  
Prepared by ANS I Bal Z39-18
The team entered these MYPs with BBP strategies in mind to use the two MYPs to build off one another with lessons learned on certification, internal reviews, and review processes of the Office of the Secretary of Defense (OSD), as well as sharing different initiatives between the teams. With more than 50 percent of the effort for each MYP being material, the team knew going in that addressing subcontractor cost would be a key element in finding savings.

This started prior to releasing the request for proposal (RFP) to the prime. The program office (PO) worked with each prime contractor to develop and deliver the message to subcontractors, relative to the importance of the MYPs.

For example, when the PO was invited to attend a supplier conference held by the airframe prime contractor, the PO gave an overview of MYPs and why they were a benefit to all parties involved. The PO, along with the contractor, held executive-level meetings with the top ranking officials from several of the major subcontractors to emphasize their roles and answer any questions or concerns they had regarding MYPs.

This was just the beginning of the focus on subcontractors by both MYP teams, with attention on both the tier one suppliers, and the second and third tier suppliers. Detailed analysis of these suppliers’ proposals resulted in significant savings for the program. In addition, the team did independent fee evaluations for many of the major subcontractors, rather than negotiating an overall profit for the contract. This prevented profit discussions at lower levels to be solely at the discretion of the prime.

This same level of scrutiny was applied at the prime contractor level. Whether it was the material cost from subcontractors, or the labor hours at the prime, the use of current actuals, as well as a thorough understanding of current production status and any issues and inefficiencies on the production floor allowed the team to challenge the proposed values and drive from a will-cost position to a should-cost position.

The team also performed a detailed risk assessment for use in profit analysis at both prime and subcontractor levels. A critical element in this part of the negotiations was understanding the business base of the prime contractor, to include any commercial sales. By understanding this clearly, the government team was able to drive cost down from a quantity of buy perspective by adjusting learning curves and ensuring rates were reflective of the projected business base.

The key to this entire approach and to the Secretary of Defense Certification for the MYPs, was relationship development, which was supported by selecting a PO lead who had responsibility for both MYPs in order to ensure proper coordination and sharing of lessons learned.

The next step was to keep the team small but talented. Having expertise in manufacturing, quality, and assembly, along with program management and engineering, allowed the team to highlight areas for improvement that benefited both parties. The Defense Contract Management Agency (DCMA) and Defense Contract Audit Agency (DCAA) were incredibly valuable assets to the team, both from a perspective of developing negotiating positions for material and labor, as well as providing the Navy/Army team with forward pricing rate recommendation (FPRR) “ranges” to allow for successful negotiations. The team engaged with these offices from the outset and continued to have regularly scheduled meetings throughout the process. This allowed for real time coordination of labor positions, understanding of status relative to assist audits, status of commercial item claims, as well as current FPRR status.

**Speed to the Fleet**

While the end result of the MYP team’s efforts was $650 million in budget returned to the Naval enterprise, the enduring benefit is in the product that will be delivered to the warfighter years earlier than it would have been if funded as part of the “normal” budget cycle. Specific to PMA-299, the retained funds have enabled the acceleration of programs to provide suppression capability against the Fast Attack Craft/Fast Inshore Attack Craft (FAC/FIAC) threat. In Fiscal Year 2013 (FY2013), instead of starting programs, the PO was providing fleet operators with early operational capability of two weapons systems for the MH-60S and a third was in testing.

Persistent surveillance for savings opportunities continues to produce results. Since May 2011, PMA-299 has realized additional should cost benefits. While efforts were under way to contract for a new Aluminum Main Rotor Gearbox, at an estimated cost of $27 million and a break-even in 2024, the program team was looking for a more affordable means to achieve the same result. What the team came up with was a $0.127 million investment that would achieve $130 million in savings by 2030. Utilization of a Fleet Response Center instead of the prime contractor for installation of an engineering change proposal resulted in another $3.6 million in savings.
Simplification in a mission kit as a result of a requirements change saved another $3.6 million and reduced aircraft mission weight that will be used for additional fuel to give the operators more time on station.

**Promote Effective Competition**

Real competition is the single most powerful tool available to the Department to drive productivity, which accounts for the BBP focus area on continuing to promote competition. A leading example in the Navy is the DDG 51 Acquisition Team, which developed, won approval for, and executed a highly innovative acquisition approach for the three DDG 51 Class Guided Missile Destroyers authorized and appropriated in FY2011 and 2012. The DDG 51 team also applied this approach for an additional nine (with an option for a 10th) ships as part of an MYP for FY2013 through 2017.

This acquisition approach, known as profit related to offer (PRO), injects competition into the acquisition of DDG 51 Class ships while maintaining sufficient workload at two different shipbuilders to allow for future competition in DDG 51 acquisition.

The PRO approach allocates a minimum number of ships to each shipbuilder and requires the shipbuilders to bid a target cost and compete for the resulting fee based on the cost differential between the competing bids. The low-cost offeror receives the winner’s fee margin. The higher-cost offeror receives a lower fee, which is calculated by reducing the winner’s fee by a percentage of the difference in the cost between the two bids. This predetermined percentage is included in the request for proposal (RFP) as the “PRO slope.” PRO encourages both shipbuilders to provide aggressive yet realistic cost bids in an environment where it would be contrary to the Navy’s interest to simply compete for quantity.

To give a simple example, assume a competition for two identical end items between Company A and Company B using Fixed Price Incentive Firm (FPIF) contracts. The acquiring Department of Defense (DoD) agency releases a limited competition RFP using PRO, with a winner’s fee set at 14 percent and a PRO slope of 65 percent. Company A bids a cost of 100 units and Company B bids a cost of 105 units. Company A is the winner, and is awarded a contract for one end item at a target price of 114 units with share-line and ceiling as per the RFP. Company B is the loser. Because of the allocation under PRO, Company B still receives a contract for one end item. The Target Price of B’s end item is set by the PRO formula of B’s bid cost (105 Units) plus A’s profit (14 Units) minus the difference in A and B’s cost multiplied by PRO slope (65 percent of 5), for a target price of 115.75 units. While both A and B receive contracts, the low-cost offeror gets the higher profit percentage and the price to government for an offeror whose costs are 5 percent higher is only 1.5 percent more than the low-cost offeror.

Because the initial acquisition strategy for FY2011 was for a negotiated allocation between the two shipyards, the PRO approach had to be vetted formally and reviewed through both the Navy and the Office of the Secretary of Defense (OSD) staff prior to award. Despite this, the Navy was able to proceed to award of the FY2011 ships less than 6 months after Assistant Secretary of the Navy (Research, Development & Acquisition) (ASN(RDA)) approved the PRO acquisition strategy.

The DDG 51 team was able to inject competitive forces into a unique industrial environment, where the Navy has an interest in maintaining two viable shipbuilders for major surface combatants. Despite allocating ships to both shipbuilders, the DDG 51 Acquisition Team allowed the Navy to reap the advantages of competitive forces in the acquisition of these ships.

The immediate significance of the DDG 51 Acquisition Team’s accomplishment is the savings they achieved. The DDG 51 Acquisition Team accomplished the award of more than $8.3 billion in shipbuilding contracts across FY2011 through FY2017.

The FY2011 and FY2012 DDG 51s were awarded at a total target price to government that was $298 million lower than the appropriated amount. Based on the Navy’s estimate of the cost of an annualized, noncompetitive procurement, the Navy saved more than $1.4 billion across the FY2013–FY2017 MYP. While OSD’s Cost Assessment and Program Evaluation (CAPE) estimate of MYP savings was lower than the Navy’s due to a more optimistic assessment of the outcome of annualized procurement, the FY2013–FY2017 shipbuilding MYP contracts using PRO were still $968 million below the CAPE’s estimate for those contracts.

Major secondary benefits of the DDG 51 Acquisition Team are the Terms and Conditions (T&C) achieved in the award. Previous DDG 51 contracts that were not competitive awards required T&C which were negotiated bilaterally between the Navy and the shipbuilder. The competitive T&C are far more favorable to the Navy in several instances. For example, the Navy achieved its desired delivery dates for all PRO ships. In addition, PRO ships will require no future target adjustment based future shipyard workload, while previous noncompetitive awarded ships from other ship classes allow for a negotiated adjustment to target price if the shipbuilder’s workload declines.

A major long-term benefit of the DDG 51 Acquisition Team’s accomplishment is the maintenance of two viable surface combatant shipbuilders. This will benefit the Navy’s ability to procure large surface combatants in a cost-effective manner for many years to come. Had the Navy conducted a simple competition for quantity, it is likely that the losing shipyard would have exited surface combatant construction.

The DDG 51 Shipbuilding Program Office was honored for this innovative competition approach as a winner of the 2012 Packard Award for Acquisition Excellence.

*The authors can be contacted at mark.vandroff@navy.mil and robert.kimble@navy.mil.*

19

Defense AT&L: September–October 2013