

Odd Couple

Results-focused military and profit-minded industry collaborate on depot maintenance

JAMES OTT/DAYTON, OHIO

Partnerships between the military and industry are growing in number and broadening in scope, bringing the services and defense contractors more closely together than any previous relationship.

Some collaborative programs are posting solid records of achievement, recognized by the Defense Dept. and cited by the University of Tennessee's Center for Executive Education as exemplary case studies for providing mission-capable systems and aircraft. In some instances where company workforces are integrated with the military at maintenance depots, officers find themselves in the role of subcontractors to private companies.

The government and the private sector have worked together since the founding of the Republic—not always very well, and under suspicion since President Eisenhower stated his concerns at the “unwarranted influence” of the military-industrial complex. Such partnerships, however, are responsible for major public works projects including the building of America's railroads, the interstate highway system and the air traffic control system, such as it is.

In the 20th century, when the military's weapon systems grew more complex, and maintenance, repair and overhaul demand fluctuated dramatically, the government fell into a survival mode by creating its own chain of depots for maintenance. With the end of the Cold War and military downsizing, that independent strategy was revised by Base Realignment and Closure (BRAC) legislation. Shuttering of military posts reduced the number of maintenance depots for all services to 19 from 38.

In the same period Congress opened the door for public-private partnerships

(PPPs). While congressional mandates placed restrictions to protect depots' basic capability for independent performance, Congress also allowed for establishment of Centers of Industrial and Technical Excellence (CITEs) at depots where partnerships have flourished.

Collaboration takes many forms. The Air Force, for example, is seeking a public-private partnership to build a synthetic fuel plant on property it intends to lease at Malmstrom AFB, Mont. (*AW&ST* June 16, p. 14). At last count, 348 public-private partnership

had 104 strictly for depot maintenance.

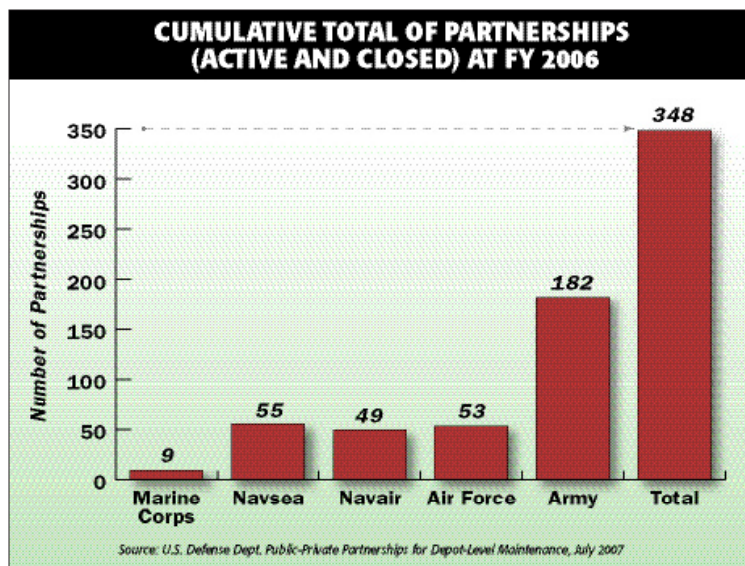
Partnerships have been on the rise due to a 2003 mandate from the Defense Dept. requiring each service to make agreements with private contractors for depot maintenance. As applied to weapons systems, they are called performance-based logistics (PBL) agreements. Similar agreements can be forged for services, for acquisitions, and even for performance-based outcomes.

Two primary types of partnerships—work-sharing/teaming and direct sales—differ in how funds flow to a depot. In a work-sharing partnership, the military depot and a contractor agree on a specified workload. Both the depot and the contractor are paid separately by the government customer. In direct sales, the payment for repairs is made to the contractor which in turn pays the depot for work performed by military personnel.

Under Title 10 U.S. Code 2563, depots may act as subcontractors to private companies. The law allows the Defense Dept. to provide incentives for contractors while holding them accountable for outcomes even if only a portion of the work is performed by depot military personnel. For example, Navy Capt. Tim Matthews, commander of the Fleet Readiness Center Southeast, formerly the Jacksonville, Fla., depot, has acted as a subcontractor to GE Aviation since 2004 under a PBL for GE 404 engines that power F/A-18 Navy aircraft. The Navy builds engines and modules and GE supplies 37 head of family components.

“I talk as a provider of touch labor facilities and as a subcontractor to GE. That's an interesting relationship for a military man to be in,” says Matthews.

The Navy-GE fixed-price contract for the 404 made the defense secretary's list of top performing PBLs in 2005. The Fleet Readiness Center achieved top depot status the following year. Since the new business model was created, the center has introduced a screening process, a triage that determines the extent of work needed prior to an engine's shift to a repair line. Once the engine is on the line, mechanics have in-hand the diagnosis of problems and the parts to do the repair work.



The military and private companies collaborated on a total of 348 PPPs—existing and closed—for depot-level maintenance, according to the last official count.

agreements were in force, covering maintenance, facility leasing and similar activities for the Army, Navy, Air Force and Marine Corps. Approximately 1,000 contractors were operating under these agreements.

An unofficial figure, compiled by a defense contractor, places the total number of existing agreements in June that deal strictly with depot-level maintenance and support at over 200. These range from total life-cycle management programs to agreements that cover only components or subsystems. In a recent count, the Army reported 141 active partnership agreements at five depots; the Air Force 64. In Fiscal 2006 the Navy

In terms of results, in the first two years of the program, the GE-Navy 404 partnership exceeded performance expectations. Component availability increased to 99% from 50%, backorders dropped to zero, and repair turnaround time fell to 47 days from 120 days. Moreover, the Navy recorded a 13.8% drop in total cost of ownership, or approximately \$79 million. These gains were recorded in a white paper on best partnership practices co-authored by Kate Vitasek, an instructor in the University of Tennessee's PBL educational programs.

Lockheed Martin's High Mobility Artillery Rocket System (Himars) is another program singled out in the white paper. The company has full support responsibilities for the fire control system and the launcher module. Lockheed Martin Himars field service representatives are serving in Iraq and Afghanistan. "You almost can't increase availability," says Col. David Rice, project manager for Precision Firing Rocket and Missile Systems in the Program Executive Office for Missiles & Space at Huntsville, Ala. It is hitting 99.98%, he said. He credits the presence of company support representatives "on [the] ground with units" for improving that metric.

A 2007 Defense Dept. report listed annual expenditures of over \$25 billion for depot maintenance at government facilities carried out by private contractors, with military personnel doing the wrench-turning.

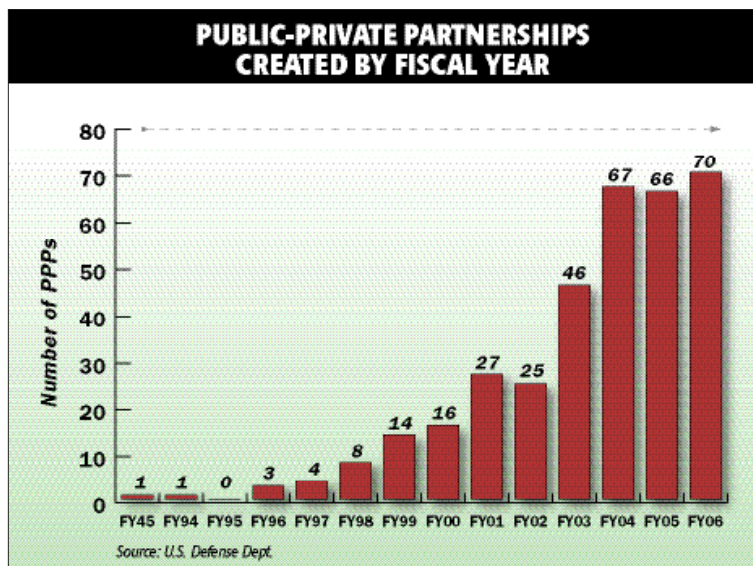
Companies and the military split the \$25 billion about 50-50 for depot maintenance and repair. That division has been standard for several years, says Michael Winchell, University of Oklahoma professor, contracts specialist and former NASA member of the Senior Executive Service. In prior years, the split was heavily in favor of depots.

Congress has placed limitations on where federal funds can be directed under 10 U.S.C. 2466, which provides that no more than 50% of fiscal year funding for maintenance may be contracted to non-government personnel. The Secretary of Defense can waive the requirement. Partnerships approved at

the Centers for Industrial and Technical Excellence are not hindered by this regulation and have spawned transfer of weapons technology and best business practices from participating companies to many of the government facilities.

"Amounts spent for the performance of depot-level maintenance and repair by contractor personnel at a Center for Industrial and Technical Excellence under a public-private partnership are not counted for the purposes of the 50-50 rule," Winchell says.

A certain level of core capabilities for depots is maintained by each service to meet surge requirements. The Air Force, for example, set core capabilities for Fiscal 2007 at 19.9-million depot maintenance labor-hours. An Air Force official stated: "This methodology allows the Air Force to assess capacity gaps where further investment is required, or conversely, allows reduction of unnecessary capacity."



Partnerships for depot maintenance increased after 2003 when the Defense Dept. required all armed services to enter into performance-based logistics programs.

Maintaining core capabilities is a safeguard against too much reliance on individual contractors, says Col. James L. Wertz of the Air Force, chief of the business integration office for Materiel Command at Wright Patterson AFB, Dayton, Ohio. Working closely with defense companies and their representatives has also increased depot capabilities. In terms of maintaining their products, "contractors know more and are better at it," he says. On the wall of his office Wertz has drawn a road map that stresses the need for participants to conduct a business case analysis, affirming assumptions and risks, benefits and costs in developing a partnership.

"Public-private partnerships enable good PBLs," says Vitasek, managing partner with Supply Chain Visions, a specialist in supply-chain management performance and use of metrics. Both military and private companies have incentives to make strong commitments. Otherwise, she says, companies that fail to meet agreed-upon performance standards "have to eat their own dog food." She says partnerships are "win-win" for both parties.

The profit motive separates defense companies from the performance-minded military, a duality that creates something of an odd couple working side-by-side. Vitasek says a solid partnership can "align the jobs" of the military and industry to make the system work better. Partnerships are shifting the focus from "buying parts to outcomes," she says. Her white paper was a first step in identifying benefits and how best to establish working relationships.

The Government Accountability Office has criticized PPPs. In a 2005 report, the GAO called for the Defense Dept. to update procedures so that it could conduct proper monitoring, especially of cost and reliability information. A report issued in May identified a key weakness. "The use of funding rather than workload [to determine the 50-50 split of work] provides a misleading representation of the public-private mix, since funding for military depots includes the price of parts which are often produced from the private sector."

The GAO concluded that the process to determine core capabilities for depots may be flawed and should be more comprehensive.

Wertz believes the services are taking PBLs to a new level, "to make new agreements intelligent, beneficial, have adequate risk and make sure that they are cost effective. We're going through an evolution right now. We are developing better partnerships that meet both of our goals."

It may be that Eisenhower would turn over in his grave if he heard about these close-knit partnerships. Then again, he might rest peacefully, given the string of successes. ☛