Issues and Unexplored Opportunities Within the Navy Working Capital Fund

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The balancing act between maintaining warfighting capabilities while doing more with less has become an increasingly difficult one. With every effort being made to focus defense funding directly on the war effort, and with the increased need for domestic spending in the wake of Hurricane Katrina, there is no doubt that decision makers face a huge challenge in how to spend taxpayer dollars.

In DoD, we need to ensure, however, that the shorter-term cost cutting does not compromise our longer-term responsibilities. Nowhere is this conflict more apparent than with the Navy Working Capital Fund entities. The recent focus on limiting growth within NWCF entities creates a danger that critical national capabilities will be lost.

Rather than limiting the potential of the entities, why not take fuller advantage of this financial model by leveraging opportunities for creating additional revenue streams without losing focus on the core purpose for these entities (namely, their ability to supply products and services without competing with the commercial sector).

In order to manage the government-run supplier base more efficiently, NAVSEA's Naval Warfare Centers and certain shipyards use a businesslike working capital fund model. The model focuses on controlling product costs, affording the customer the ability to see the true product cost as well as the performance record of the supplier organization. When compared to the mission-funded alternative, the NWCF forces the government supplier base to become much more accountable for the efficient delivery of its products and services. The NWCF provides total cost visibility to both the supplier and the customer. In addition, it allows both the supplier and the customer to understand the "real" total cost of providing the products and services, and it charges that total cost for the work to be accomplished.

Perhaps more important, however, the NWCF is not mission funding. In other words, there is no annual budget line for the supplier to depend upon when the demand

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for the products and services is not there. Where mission-funded organizations have strong incentives for spending all the money allotted to them in order to eliminate the appearance of over funding (and, thus, the risk of future budget cuts), entities within the NWCF must control their costs to ensure that their customers are not lured away by other, lower-cost options elsewhere.

It is generally recognized that the model deviates from normal business models in that it promotes a unique breakeven bottom line, whereas commercial entities strive to maximize profits. In its simplest form the NWCF can be broken into a single equation:

REVENUE (SALES) - COST = 0 .

The NWCF provides some advantages over the mission-funded model by enabling both the suppliers and the customers to better understand their business. Further, it has motivated a continuous cost consciousness, saving the Navy money on an annual basis.

In recent years, the strict emphasis on cost, combined with strict end-strength limitations, has led to a reduction of in-house technical expertise and, some believe, if maintained over the longer term, will lead to the possible elimination of NWCF entities.

Dual-emphasis Approach

I suggest that a dual emphasis be placed on the NWCF model, one that leverages the benefits of the current system and places a greater emphasis on revenue generation for maintaining or even growing existing capabilities (as driven by demand). Failure to understand the underlying long-term value of an in-house technical capability—the result of limitations brought on by a strict focus on the short-term bottom line—can lead to a lack of critical long-term warfighting capabilities. To quote James Colvard, the former deputy director, of the U.S. Office of Personnel Management, and former technical director of the Naval Surface Warfare Centers, "Military preparedness is a continuous function, not intermittent."

Cost Emphasis of the Working Capital Model

Under the NWCF, revenues are created by the need for products and services. These revenues are heavily tied to traditional customers, mostly Navy, Army, and Air Force procurement and acquisition offices (PEOs in the Navy's case). Within the individual warfare center divisions, these customers account for upwards of 80 percent of revenues. Over the past decade, defense budget cuts and outsourcing have had a direct impact on the PEOs and ultimately upon the amount of revenues received by the NWCF entities. In order to maintain what revenues they can, the NWCF entities have placed a strong emphasis upon total cost control. WCF activity cost—the primary metric for cost measurement—has increased only slightly more (2.9 percent) than the annual inflation rate (2.67 percent) since 2000.

Under the current warfare center cost model, cost is broken down into the following subcomponents: 49 percent direct labor; 25 percent direct material/travel/equipment; 25 percent overhead (including general and administrative (G&A) labor, production support labor, and overhead, analysis, business services, facilities ops/maintenance; and 1 percent investment/recoupment factor for nonzero net operating result.

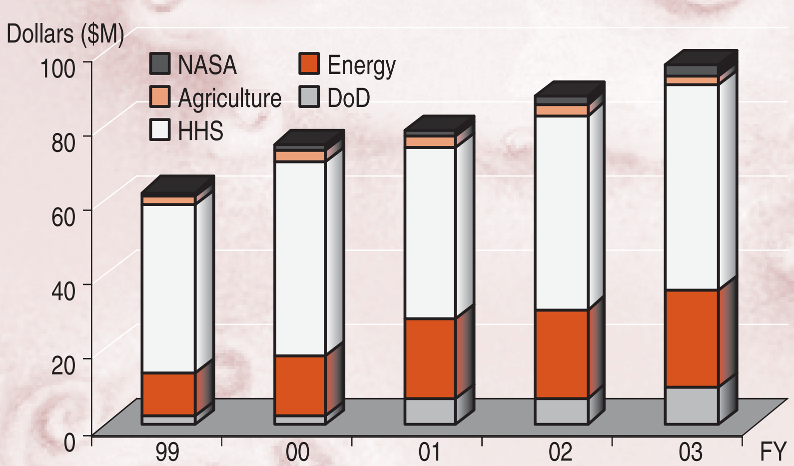
It quickly becomes apparent that the primary component of cost is labor (either direct or G&A). As a result, in order to control costs, the emphasis has been placed on reducing manpower as the traditional revenue base has stagnated or dropped off in some cases. Estimates for fiscal years 2006 and 2007 show an expected continued reduction in manpower throughout the warfare centers.

Downward Spiral

This downward spiraling trend has continued for some time. In 1996, the number of personnel employed across all of the NWC-funded entities totaled 119,500 persons; by 2004 that number had been cut to 80,200, a reduction of 33 percent.

Across the Warfare Center portion, it takes, on average, four to six years for a degreed, entry-level technical person to get to journeyman status within his or her field. The average civilian age across the Warfare Center is currently 44 years old with two-thirds of the workforce over 40 years old. These facts, combined with a mandatory policy that limits the number of new hires produces a net

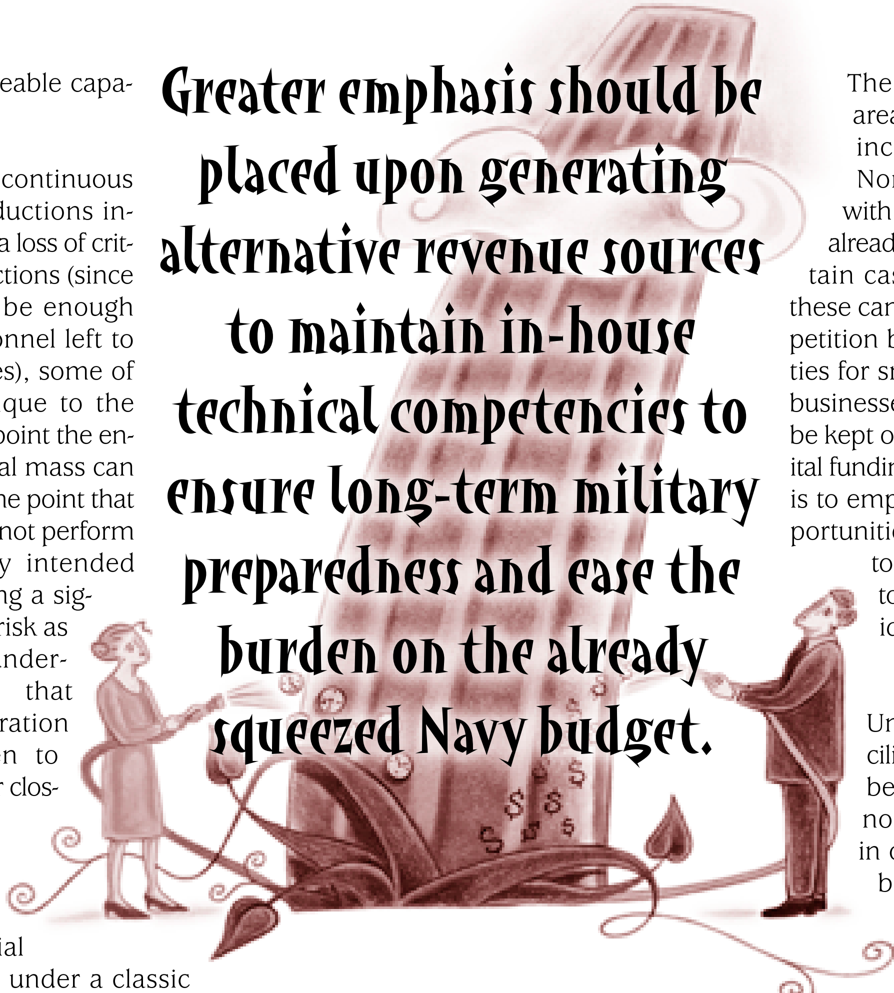
Annual Income from Invention Licenses by Department



Source: 2004 Summary Report on Federal Laboratory Technology Transfer, Office of the Secretary, U.S. Department of Commerce.

loss of irreplaceable capability.

It is clear that continuous manpower reductions inevitably lead to a loss of critical facility functions (since there will not be enough qualified personnel left to run the facilities), some of which are unique to the DoD. At some point the enterprise's critical mass can be reduced to the point that the entities cannot perform their originally intended missions, posing a significant safety risk as a result of undermanning. At that point, consideration must be given to consolidation or closing down.



> **Greater emphasis should be placed upon generating alternative revenue sources to maintain in-house technical competencies to ensure long-term military preparedness and ease the burden on the already squeezed Navy budget.**

Contrast this effect to that of a commercial entity running under a classic corporate turnaround scenario. The business sees the same loss of revenue and may take the same approach: Cut costs in order to reduce losses or salvage profit. The cost cutting is intended as a short-term strategy until the organization gets to the final step: reclaiming revenues either through a pickup in the business cycle or, when the revenues will not return (for example because of obsolescence), through reorganizing and focusing on alternative revenue streams. Either way, there is recognition that the business cannot remain viable over the long term if it remains in a cost-cutting mode.

In Pursuit of Alternative Revenue Streams

One solution might be for NWCF entities to look at alternative, noncompetitive revenue streams with the intention of reducing operating costs, enhancing commercialization of dual-use technologies, and increasing private-sector access to defense-unique capabilities. These forms of revenue, since they would not be related to mission-funded customers, would serve to preserve the Navy's in-house capabilities without playing into the trade-offs between the costs of a Navy civilian technical workforce and direct warfighter support.

Further, one could advocate for the formal authorization to allow that processes be put in place or that existing processes be reviewed and changed as necessary to allow for the more efficient acquisition of these revenue streams.

The following are some areas offering potential for increased WCF revenues. None competes directly with commercial capabilities already in place; in fact, in certain cases, initiatives such as these can serve to increase competition by providing opportunities for small and medium-sized businesses that would otherwise be kept out of the market by capital funding constraints. My intent is to emphasize a few of the opportunities already existing and to challenge others to add to these revenue creation ideas.

Leasing

Under-capacity or idle facilities and resources could be leased to one or more nongovernmental parties in order to maintain capabilities, reduce infrastructure cost, and possibly increase revenues. Title 10, U.S.C. 2667 provides the ability for outleasing nonexcess property, facilities, and equipment located at WCF activities: *Consideration received for outleased property may be in the form of cash or may be taken as in-kind consideration: i.e., maintenance, protection, alteration, repair, improvement, restoration, new construction, facilities, facilities operation support services, or such other services relating to the activities on the leased property at any facilities under the control of the Secretary of the Navy. The ability to receive in-kind consideration in such a variety of forms provides a most effective way for installation commanders to leverage their property assets, reduce their cost of ownership, lower the price of installation-provided products and services and establish mutually beneficial commercial links with the business community.*

As traditional revenue streams get smaller, the ability to fully utilize facilities and equipment becomes more challenging. Additionally, long periods of idleness tend to create larger maintenance costs to ensure the facilities and equipment perform as expected in their limited-use capacity. Use of Leasing agreements can help reduce downtime or, in facilities that are not used at all, revitalize useable assets fully. Leasing of existing facilities already has interest from some within the business community. Those businesses that would like to compete within the defense sector but are unable to efficiently do so because of lack of capital for expensive fixed assets could now be provided an opportunity. Taken to its fullest extent this could increase the competitiveness of the commercial defense sector. In areas where only one or a few companies contend for the lion's share of business, the addition of new companies into the mix may serve to drive down unit costs and improve quality.

Public-Private Partnerships Under Revised U.S. Code 10 USC 2474

At present, there are provisions under Title 10, U.S.C. 2474 for the designation of depot-level facilities as Centers of Industrial and Technical Excellence in their recognized core competencies. The intent of the code is to maintain a "warm industrial base" for critical wartime functions while at the same time using best business practices to maintain a leadership role within the depots' core competency areas. Under the code, depots are encouraged to enter into public-private partnership arrangements, allowing employees of non-DoD entities to perform work related to a depot's core competency at the depot. Further, the code allows for the use by non-DoD entities of any facilities or equipment of the depot that are not fully utilized for a military department's own production or maintenance requirements. Finally, the code opens up the possibility of non-DoD entities' using DoD personnel to perform core competency functions at the activity (ref. Section b.1.A). A case can be made that justifies the criticality of the WCF activities' (specifically the Naval Warfare Centers') core capabilities to the wartime functioning of the Navy. When combined with the reduced end-strength scenario I highlight, I think this option could provide an additional critical piece for maintaining current capabilities within the NWCF entities. The benefits of such a revision to the code would be to:

- Allow the WCF Warfare Center activities the ability to more fully utilize under-capacity buildings and equipment
- Reduce the cost of government operations and maintenance of Warfare Center facilities
- Leverage commercial investment in an activity's facilities and equipment
- Retain the full amount of financial considerations obtained under the public-private partnership agreement at the activity involved in the partnering
- Build government-corporate relationships.

Commercial Licensing of NWCF-developed Technologies Under Patent Protection

In 2003 alone, there were over 2,800 new inventions within the patent process covered under invention disclosures, filed patent applications, or as newly issued patents. This annual number remained relatively stable from 1999-2003. Currently there are hundreds of Navy-patented concepts with potential applications for the commercial sectors that are not actively marketed or reviewed for commercial potential. The graphic on page 39 shows an increasing trend in commercial licensing of patents across government departments. In 2000, the DoD was realizing only $2.2 million of distributed annual income from invention licenses. By 2003, however, the DoD's revenue had increased to $9.96 million.

Considering that the total number of patents within the approval cycle is 600 annually, I believe this number is far smaller than it could be if more focus were given to the expansion of this opportunity. One attraction to such an initiative is that it can be a win-win-win situation among the government, the inventor, and the commercial entity. Based upon the financial success of the technology being licensed, all three parties stand to gain. Two other benefits accrue from licensing DoD patents: so doing can result in the creation of new products useful to the DoD and can develop new working relationships that would not otherwise have been forged. At the present time, there is no central patent licensing and marketing approach within the NWCFs to leverage this opportunity.

Alternate Revenue Generation is Key

There is no conclusive evidence to show that the strict emphasis upon cost within the WCF model will inevitably bring about the elimination of the WCF institutions altogether. There is ample evidence of a significant decrease in the institutions' manpower. Since 2002, the Warfare Centers have controlled their unit cost increases to slightly above the annual inflation rate. There has been a 2.5 percent decrease in manpower for the Centers over that same time period. Since approximately 75 percent of costs within the Centers is related to labor, it can be inferred that the cost stability is due, in large part, to a reduction in workforce. This is confirmed by the numbers. Since 1990, the end strength of the combined NWCF activities has decreased by 33 percent.

There are no metrics to chart technical competence, so that is neither proved nor disproved; however, since it takes a few years to get to a technical journeyman status within the NWCF structure, it's safe to assume that as the cost pressures continue to mount and workload continues to decrease, over time there will be a diluted experience base and a less qualified workforce within the NWCF entities as compared to 15 years ago.

If history shows us one thing, it is the importance of maintaining strong in-house warfighting capabilities. It is my belief that a greater emphasis should be placed upon generating alternative revenue sources to maintain in-house technical competencies, which will ensure long-term military preparedness and ease the burden on the already squeezed Navy budget.

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