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# Neglect With the Old, In With the New: How Neglect of Existing Weapon Systems Is Causing a Readiness Issue within the Department of War, And How Acquisition Approaches Can be Improved to Solve It

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# Neglect With the Old, In With the New: How Neglect of Existing Weapon Systems Is Causing a Readiness Issue within the Department of War, And How Acquisition Approaches Can be Improved to Solve It

**Moshe Schwartz—**is President of Etherton & Associates and holds positions as Senior Fellow for Acquisition Policy at NDIA and Director at the Procurement Round Table. He previously served as the Executive Director of the 809 Panel on acquisition reform.

**Arzoo Dawoodani—**is a second-year student and research assistant at the George Washington University Law School and interning at Etherton & Associates.

**Anthony Di Stasio—**is a former Senior Executive with the Pentagon where he served as the Director for the MCEIP organization. He was responsible for the running of the DPA Title III and IBAS investment portfolios. He has 20 years of experience with Acquisitions and investments across multiple disciplines including weapons, mineral, micro-electronics, shipbuilding, space and workforce development. Most recently he served as the acting Deputy Assistant Secretary of Defense for Industrial Base Resilience before departing Government service in November 2025.

## Abstract

This research identifies the challenges driving poor weapon system operational readiness within the Department of War (DoW) and proposes ways to improve associated readiness rates. Weapon system operational readiness has been on a steady decline over the last two decades. This decline in readiness rates has been highlighted by both the General Accountability Office, the DoW Inspector General, and DoW officials at various levels.

## Introduction

The Department of War (DoW; DoD)[1] has a readiness problem. As a retired master sergeant recently quipped, “Maintenance has been in a bad way for 20 years” (Campbell, 2025).

Consider these findings from the Government Accountability Office (GAO):

- From 2011 through 2021, “sustainment challenges worsened” for 10 Navy ship classes, leading to a decrease in the number of ship availability hours for operations or training” (GAO, 2023).
- From 2022 to 2024, Air Force aircraft mission-capable rates declined 4% (Tirpak, 2025).
- In 2024, the Department did not meet “its mission capable rate goals for 42 of the 45 DoD aircraft that support military-related missions” (GAO, 2025, p.17).

The DoD Inspector General agrees. In its report on the seven “top DoD management and performance challenges” for FY26, “Maintaining and Improving Material Readiness” for weapon systems ranked third (U.S. Department of Defense Office of Inspector General [DoD OIG], 2025, p.2). According to the IG, sustainment challenges that impact mission-ready weapon systems affect all the services, spanning aircraft, ships, and vehicles (DoD OIG, 2025, p.3).

[1] Congress, the Inspector General, GAO, and other entities use the term Department of Defense. This paper will use the acronym DoD when referring to agencies that use it (such as the DoD IG), when quoting statute, and when quoting a report that uses the acronym DoD.

For its part, the Department recognizes the problem. In his Questions for the Record, Air Force Chief of Staff Kenneth Wilsbach wrote “our ability to generate forces has declined significantly in the past five years” (Senate Armed Services Committee [SASC], 2025, p.10).

## What is Driving Poor Readiness Rates

According to the GAO, Navy officials identified lack of spare parts, lack of trained maintenance personnel, and increases in deferred maintenance as the primary drivers of the readiness challenge. These long-running problems were found to prevent maintenance during deployment, increase the cost of repairs, and reduce ship service life and operational readiness (GAO, 2025b). In other reports, the GAO found that maintenance challenges directly impacting Navy readiness include aging equipment, cancelled/deferred maintenance (due to not fully funding maintenance accounts), reliability of ship systems, and inefficient shipyard layout (an infrastructure issue; GAO, 2023b, 2024a, 2024b; SASC, 2025).

The DoD IG identified three focus areas to sustain “mission-ready capabilities and ensure rapid responsiveness in any contested environment”

- Maintenance,
- Storage and Upkeep, and
- Logistics Networks (DoD OIG, 2025; SASC, 2025).

Aging equipment and inadequate maintenance were also identified by the DoD IG as DoD-wide challenges (DoD OIG, 2025; Mitchell Institute, 2026, 21:10). In some instances, the sustainment strategy has been identified as a barrier to better readiness rates (Bergman, 2026).[2]

> *Delayed depot-level maintenance and modernization are the most significant limiters of current Fleet readiness*
>
> CNO Fighting Instructions, 2025, p. 16

The DoW recognizes these challenges to readiness. For example, in its *Fighting Instructions: 2025*, the Chief Naval Officer identified multiple sources of readiness challenges, including delayed/deferred maintenance, drydock space, maintenance plans that are not optimized, insufficient work package planning, and workforce needs (U.S. Navy, 2026, p. 16).

Such challenges lead to increased maintenance demands, cannibalizations of parts (removing working parts from one platform and using them elsewhere due to parts shortages), or maintenance delays. As Table 1 indicates, cannibalizations and maintenance delays (days beyond the scheduled end date for depot maintenance) have each increased, while steaming hours has decreased (GAO, 2023a).

[2] “The V-22 Osprey faces readiness challenges due to its complex design, high maintenance manhour requirements, inefficient supply system, and current sustainment strategy. These factors have led to persistently low mission-capable rates and a 30% increase in operating and maintenance costs per flight hour over the past four years” (Bergman, 2026).

**Table 1. Changes in Sustainment Metrics per Ship Across Selected Navy Ship Classes, Fiscal Years 2011 through 2021**

| Ship class | Maintenance cannibalizations[a] | Days of maintenance delay |
|---|---|---|
| ***Ticonderoga***-class cruiser (CG-47) | +3 ▲ | +7 ▲ |
| ***Nimitz***-class aircraft carrier (CVN-68) | +4 ▲ | +7 ▲ |
| ***Arleigh Burke***-class destroyer (DDG-51) | +7 ▲ | +20 ▲ |
| ***Freedom***-class littoral combat ship (LCS-1) | +15 ▲ | 0 ● |
| ***Independence***-class littoral combat ship (LCS-2) | +3 ▲ | +19 ▲ |
| ***America***-class amphibious assault ship (LHA-6)[b] | -1 ▼ | 0 ● |
| ***Wasp***-class amphibious assault ship (LHD-1) | +9 ▲ | +10 ▲ |
| ***San Antonio***-class amphibious transport dock (LPD-17) | +3 ▲ | +33 ▲ |
| ***Whidbey Island***-class dock landing ship (LSD-41) | +6 ▲ | +19 ▲ |
| ***Harpers Ferry***-class dock landing ship (LSD-49) | +7 ▲ | -16 ▼ |
| **Fleetwide** | **+6** ▲ | **+14** ▲ |

● No change (neutral) ▲ Increase (negative) ▼ Decrease (positive)

Source: U.S. Government Accountability Office, "Weapon System Sustainment: Navy Ship Usage Has Decreased as Challenges and Costs Have Increased." GAO-23-106440 Report to Congressional Committees (January 2023). https://www.gao.gov/assets/gao-23-106440.pdf

According to the Navy's deep dive into the V-22 program, missed readiness targets are due to four main factors:

1) not sharing and implementing known maintenance best practices;
2) poor supply systems and maintenance programs that don't prioritize program readiness outcomes;
3) reliability issues, outdated publications, and not complying with published standards; and
4) inventory management challenges, including delayed deliveries (NAVAIRSYSCOM, 2025, p. 12).

Interestingly, in the reports, audits, instructions, opening statements, and questions for the record discussed above, intellectual property or technical data rights are not raised as a significant readiness or maintenance challenge.

## Drilling Down into Readiness Drivers

### Workforce

If the DoW had all the spare parts are on hand, maintenance facilities that were fully modernized, perfect visibility into maintenance requirements, supply chains that worked perfectly, and all the IP, the Department would still face readiness challenges. Without sufficient numbers of skilled personnel to conduct maintenance, sustainment does not get done.

> *Without sufficient numbers of skilled personnel, sustainment does not get done.*

DoW personnel, including maintainers, are overworked and understaffed (Campbell, 2025; GAO, 2024c; Mitchell Institute, 2026, 23:00). The Navy has stated that it lacks sufficient trained maintenance personnel to maintain combat surface ship (GAO, 2025b, p.9). Half of the Air Force bomber units have personnel shortages for key roles, including maintenance (SASC, 2025, p. 41). This issue was highlighted by John Venable, CEO and Resident fellow of the Mitchell Institute for Aerospace Studies, when he stated, "I don't see us being able to fix the

airplanes unless we have the number of crews that can actually be qualified and be available to fix them" (Mitchell Institute, 2026b, 23:42).

Remote operations can alleviate workforce concerns by allowing for maintenance and installation of equipment of government personnel qualified by contractors, assisted remotely by contractors. Such an approach could expedite maintenance in the field, without having to bring contractors in from distant locations or shipping equipment back to contractor facilities. Using specific contractor–qualified personnel could also keep warranties in place. Remote-assisted operations could also reduce the Department's own workforce manpower requirements by leveraging a similar approach to maintenance and installation.

**Underfunded Maintenance and Infrastructure Accounts**

Another challenge is not fully funding maintenance, spare parts, or related infrastructure accounts, which leads to maintenance backlogs, deferred maintenance, lack of parts, and insufficient preventative maintenance.

**Underfunded Infrastructure**

An aging maintenance infrastructure, legacy equipment, and outdated processes lead to insufficient capability to keep up with maintenance requirements (Mohan, 2026). The organic industrial base performs a substantial amount of remanufacturing and maintenance; the average organic industrial base factory is 80 years old (Temin, 2024). Stephanie Hoaglin, Director of the Army's Organic Base Modernization Task Force stated that the Army has an $18 billion, 15-year plan to upgrade infrastructure, improve equipment and process, and "bring all those things to the 21st century" (Temin, 2024). This means that if all goes according to plan, the Army organic industrial base will achieve 21st century status some 40 years after the century started.

The organic industrial base can significantly increase readiness with facility upgrades and improved use of technology. While some upgrades, like the Army's full 15-year plan, require substantial funding, in the short term, certain less-expensive upgrades could prioritized to appreciably increase maintenance capacity.

The Navy has similar challenges, reporting that without improvements to shipyard infrastructure, it will be unable to support almost a third of the planned maintenance periods for aircraft carriers and submarines through 2040. According to the GAO, dry docks and maintenance facilities are poor, and equipment is "generally past its useful life" (GAO, 2023b, p.1). Shipyard infrastructure in the domestic commercial does not have the capacity to support national security needs. Fewer than 1% of commercial ships are built domestically. The United States has only 66 shipyards (including 8 shipbuilding yards and 22 repairs yards with drydocking; The White House, 2026).

The Trump administration promulgated Executive Order 13807 Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure to expedite the permitting process for infrastructure investment) and Executive Order 14269 Restoring America's Maritime Dominance (to revitalize shipbuilding), but these efforts require significant resources and commitment to succeed.

**Deferred/Underfunded Maintenance**

Maintenance accounts that are not fully funded lead to deferred maintenance and insufficient preventative maintenance. In 2023, the Navy's surface ship maintenance backlog was $1.8 billion (GAO, 2023c, p. 19). Included in the underfunded accounts are those dedicated to buying spare parts. For example, the Air Force unfunded spare parts requirement was recently estimated to be $8.9 billion (SASC, 2025, p.43). In a fireside chat at the Mitchell Institute, Lt. Gen. David A. Harris, Deputy Chief of Staff, Air Force Futures stated that if he had

extra dollars, “the first dollar I would spend would be on spare parts . . . your deployed spares packages” (Mitchell Institute, 2026a, 21:20).

**Spare Parts**

Even when the trained personnel are available, the existing infrastructure supports maintenance needs, and funding is available to buy spare parts, too often the spare parts are not on the shelf. As Lt. Gen. Kenyon Bell, Air Force Deputy Chief of Staff for logistics, recently stated

> *When maintainers are available, they are trained, they are ready, and then they reach back and there is not anything on the shelf in order to replace a broken asset, that is a problem. (Mitchell Institute, 2026b, 22:28)*

AF Chief of Staff Wilsbach also identified acquiring sufficient spare parts for weapon systems as a challenge, adding that having a “healthier inventory of parts” could improve weapon system availability (SASC, 2025, p. 10, 42).

Three drivers of spare parts shortages that keep coming up in our research are

- insufficient communication with industry/the organic industrial base,
- poor data management/IT systems, and
- outdated acquisition processes.

**Communication**

The DoW has a communication problem. Demand signal challenges and the breakdown of communication between the Pentagon and industry was the subject of a paper coauthored by Moshe Schwartz, *What We’ve Got Here Is Failure to Communicate: How Better Communication Can Improve DoD Acquisition Outcomes* (Schwartz et al., 2025). Secretary of War Hegseth echoed a similar theme (perhaps he read our paper?), when commenting on defense acquisition he stated:

> *We have to fix our own house first—provide clarity, simplify the system, allow more people to access it, give that steady demand signal* (emphasis added). (Zeljko, 2026)

The Air Force is working to improve communication and more effectively sending a spare parts demand signal to the industrial base. According to Lt. Gen. Bell, “We are making sure that the both the organic industrial base and the defense industrial base understand the demand signal for each of the components and the parts that are needed . . . so that maintainers have what they need” (Mitchell Institute, 2026b, 22:43).

**Effective IT Systems and Data Management**

Poor data management and outdated IT systems have a surprising impact on readiness. One challenge is the sheer number of duplicative, outdated systems that often do not talk to each other. According to Army undersecretary Mike Obadal, the Army has 42 different systems for training and readiness, which means that “commanders don’t have a cohesive picture of readiness, and to get close requires hundreds of man hours to compile data” (Miller, 2026). The Army also has some 75 different logistics systems, adding to the weapon system readiness challenge (Miller, 2026). Not all of these systems are effectively interoperable.

In one example, the Army relies on the Defense Logistics Agency (DLA) for 90% of its maintenance parts—mostly low-dollar, high-volume expendables (Williams, 2025). Yet until

recently, the Army and DLA operated with incompatible systems, resulting in supply chain disruptions and hindering readiness. DLA was unable to assess what supplies the Army was consuming and unable to order the necessary parts before they were needed, a significant challenge when some parts have a two-year delivery time (Williams, 2025).

> The current demand planning accuracy rate *"doesn't help the readiness of our systems"*
>
> Maj. Gen. David Sanford

Another challenge is the accuracy and effectiveness of IT systems, in part due to their age. The DLA has challenges with its demand planning accuracy, which is reportedly at approximately 60% (Obis, 2026). DLA director of logistics operations, Maj. Gen. David Sanford, acknowledged that the current demand planning accuracy rate "doesn't help the readiness of our systems" (Obis, 2026).

In another example, DoD IG's analysis of spare parts on Navy ships found that the spare parts "inventory accuracy was between 83% and 95%, which is below the minimum inventory accuracy of 98% needed to ensure the ships' readiness" (DoD OIG, 2025b, p.3). The inventory discrepancies in the Navy's RSupply software application (intended to provide real-time, online tools for inventory management) were attributed to personnel not knowing where the parts were, not updating inventory records after issuing spare parts, and not removing excess line items from the ships. As a result, the IG found that "the Navy did not have assurance that the 10 ships we reviewed in the Indo-Pacific region had all of the required spare parts . . . to maintain operational readiness" (DoD OIG, 2025b, p.3).

These issues are exemplified in the most recent Inspector General's Audit of the Army's Management of Repairs. This audit found that the Army did not "adequately maintain BFV's [Bradley Fighting Machines], turned in non-mission capable BFV's, and improperly reported the condition of the BFVs turned in as fully mission capable" (DoD OIG, 2026, p.6). This ineffective management was also the result of the unit's lack of personnel and capabilities to repair the BFV's. This is a lack of communication, lack of spare parts, and ineffective IT systems at play.

### Outdated Acquisition Processes

The Department could increase the availability of spare parts by improving acquisitions, including increasing reliance on commercial parts and using multiyear procurement processes.

### Buy Commercial

Too often, the Department acquires parts and components that are bespoke and customized when commercial products could meet requirements. Reevaluating specific requirements could lead to identifying parts that have unnecessary requirements, are over-designed, or obsolete and replaceable with alternatives. Special Operations Command has been successful in looking for commercial solutions to incorporate into the design process, thereby avoiding customized parts or components.

### Use Multiyear Procurements

Sometimes, the Department has used a just-in-time approach of ordering parts, placing orders only when there are specifically identifiable maintenance needs. This approach engenders unnecessary delays, as maintainers await the arrival of parts or components.

Multiyear procurements can ensure regular delivery of parts in predetermined quantities, ensuring that the parts are always available.

Multiyear procurements offer other benefits, including driving down cost through larger quantity buys, giving industry a stronger demand signal that could incentivize contractors to invest in infrastructure, and create a more stable production rate.

The Department in recent months has been pursuing multiyear procurements to improve acquisition and readiness issues.

**Use all the Tools in the Toolkit**

The Department has various tools at its disposal to incentivize industry and outside capital. Some administrations have focused on direct investment and grants, to varying degrees. Some have focused on fixed-price contracts, others on cost-contracts. This administration is leaning heavily on loan guarantees, equity investments, and insisting on industry investment in facilities. Focusing on value to the government instead of profit margin of the supplier is another valuable tool that is not leveraged enough, particularly when industry has invested significant resources to develop new solutions.

Too often, the Department took a single approach and applied to almost all situations—as if a silver bullet exists. There is no silver bullet, no single approach to incentivize industry. The DoW must leverage all the tools available to it, customized to the particular situation instead of pursuing one-size-fits-all approach.

**Aging Weapon Systems**

Aging equipment is yet another challenge. Older equipment needs more maintenance, increasing cost, adding downtime, and reducing readiness. The average aircraft in the Air Force is approximately 30 years old, compared to an average age of 17 years in 1994 (SASC, 2025). Age of systems also contributes to spare parts shortages. Some of the weapon systems are so old that the companies that made certain parts are no longer in business and left no technical data packages behind. This is why earlier this year, the Department announced a $1.8 million investment to develop reverse engineering capabilities to develop tech data packages for these parts (DoW, 2026). While this investment is a positive step, more needs to be done.

**Are Intellectual Property and Data Rights Major Drivers of Poor Readiness Rates**

Some have argued that the DoD's limited data rights to the intellectual property needed for sustainment is the primary barrier to improved readiness. The data tell a different story.

While inadequate data rights can sometimes be a factor, an analysis of GAO reports, DoD IG audits, independent analyses, and DoW statements cited in this paper indicate that intellectual property is not the driver of the readiness crisis.[1] Intellectual Property (IP) is not even raised as an issue in most of these sources.

The DoD has the legal authority and updated policy guidance (including the creation of the IP cadre) necessary to effectively negotiate for, manage, and use data rights and IP. The DoW's problems are rooted in how it manages IP. As the Joint Explanatory Statement for the FY2026 National Defense Authorization Act Stated

> *The Department's challenges related to technical data are not rooted in an insufficiency in the law, but rather insufficiencies in the Department's planning and resourcing decisions made early in the acquisition phase related to the sustainment of the systems it procures, and in some cases the Department's insufficient inspection, acceptance, and management of technical data that have been negotiated**

The DoW also lacks a systematic method to track IP rights across the services and even between programs, leading to wasteful and duplicative licensing of the same technology by different programs (U.S. House of Representatives, Committee on Armed Services [HASC], 2025, p. 159).

## A Path to Improving Readiness

Many of the issues affecting readiness are systemic. They are also fixable. The DoW and Congress have already taken steps within the last two years to tackle some of these issues in a serious way. We modestly add a few recommendations below as the Department continues down the path to improving readiness.

### Plan Sustainment Early

Too often, the Department does not plan for sustainment early in the acquisition process. Better and earlier planning will help

- design systems for faster or more cost-effective sustainment,
- identify early-on the Department's IP needs. Such early identification will allow for better contracts (see Intellectual Property section below) and let industry know what IP might be required by the Government, allowing industry to build that into their business case.

*1. Fully implement of section 1803 of the FY26 NDAA*

The issue of insufficient early planning for sustainment and bringing the maintainers in early in the design/acquisition process was partially addressed in section 1803 of the FY26 NDAA (Life Cycle Management and Product Support) which elevated the product support

manager to be coequal with the program manager and requires the product support manager to plan for IP requirements and management. The provision also requires

- product support managers meet certain certification and training requirements,
- sustainment reviews to focus on why systems are not meeting operational requirements and readiness objectives,
- sustainment plans to include strategies for public-private capabilities, plans for IP management, and using best-value approaches in life cycle planning, and
- the Office of Cost Assessment and Program Evaluation to maintain a database on O&S estimates and actual costs for major weapon systems

Effective implementation of section 1803 could significantly improve readiness. That is why we strongly encourage the Department and Congress to do so.

## Leverage IT to Improve Sustainment and Maintenance Management

From upgrading legacy systems to predictive analytics, the DoW and Congress could take steps to leverage technology to improve readiness.

2. *Implement predictive analytics capabilities to identify what maintenance can be conducted and parts ordered before systems break down*

The GAO has highlighted the need for the DoD to further implement predictive maintenance, which could increase operational availability of weapon systems (GAO, 2022). Such an approach can include embedding artificial intelligence within weapons systems to flag maintenance problems (U.S. Navy, 2026, p. 14). While the Department has begun to pilot these predictive maintenance programs within weapon systems, the GAO has found that there is no action for acting on forecasts being provided (GAO, 2022, p.2; Thompson, n.d.).

The Department recently introduced a new metric called materiel resilience to capture how systems are performing under stress and how quickly it can return to baseline (Miles et al., 2026, p. 37). While this could give clear insight into sustainment issues early on and support proposed predictive analytics efforts, this data would need to be implemented across all platforms and monitored regularly to ensure a proactive approach to system sustainment.

3. *Establish a MITIER (Modernizing IT Infrastructure to Expedite Readiness) tiger team to accelerate modernizing the IT infrastructure to manage spare parts and maintenance sequencing*

Be it spare parts management on surface ships, spare parts forecasting at the DLA, or the Army's multitude of logistics and readiness systems, the IT infrastructure responsible for managing spare parts and maintenance is in desperate need of an upgrade. Yes, we are talking about business systems, but these are business systems that **directly correlate to mission capable readiness rates of weapon systems**. Modernizing IT systems to ensure data reliability, interoperability, and forecasting will help ensure that the Department has the right spare parts, delivered to the right locations, at the right time. This is not a just-in-time approach but a must-be-in-time concept to ensure parts are where they need to be **before they are needed.**

We recommend the Department, through the office of the Chief Data and AI Officer, in coordination with the DLA and the military services, establish a tiger team specifically charged with modernizing those systems responsible for managing the spare parts (including setting a demand signal to industry) and maximizing the efficiency of maintenance sequencing.

4. *Leverage technology to improve sustainment during operations*

The Department is leveraging technology to streamline and improve

- operational planning and deployment,
- forecasting for intelligence and predictive analytics for maintenance, and
- logistics.

To date, these efforts appear to be pursued individually. The Department could integrate these tasks into an integrated capability that enables operational planning informed by

- AI-enabled predictive analytics estimating sustainment requirements from battle damage and operational tempo *based on actual data and planned actions,* and
- current logistics capabilities and global stock/maintenance facility availability.

Integrating these tasks into a single capability could also speed up the process for activating logistics and sustainment needs based on real-time operational planning and deployments data.

## Improve IP Management Within the Department

Even if IP and Data Rights are not significant drivers of poor weapon system readiness, the Department has IP challenges that should be addressed. Secretary Hegseth recently said about acquisition, “We have to fix our own house first—provide clarity, simplify the system, allow more people to access it.” These three principles—clarity, simplifying the system, and more shared access—are a framework for improving IP in the Department.

5. *Include detailed, specific IP asset schedules in contracts similar to those used in commercial agreements.*

The DoW does not always include detailed and specific IP asset schedules into contracts. As a result, industry and government do not have a true meeting of the minds. This causes unnecessary confusion and disagreements later on.

6. *Implement Section 805 of the FY2026 NDAA*

The Department lacks a centralized record keeping system for IP licenses. Section 805 of the FY26 NDAA requires the Department to implement a system to track covered data and contractor compliance with requirements for technical data. Implementing this system will help the Department better understand and manage its IP and give the DoW the visibility it needs to ensure that contractors are held accountable for complying with IP agreements.

Section 805 also required the Senior Acquisition Executives to review contracts to identify where they didn’t receive, can’t find, or didn’t order needed IP, and enter into active negotiations to get those insufficiencies in legacy systems resolved. If implemented correctly, this will also help the Department manage IP and ensure that it contracts for the IP it needs.

7. *Protect Against At-Risk Subcontractors in the Supply Chain*

Prime contractors, and by extension the DoW, rely on numerous sole-source manufacturers that own the IP for critical parts or services necessary to support weapon systems acquisition and sustainment.

Some of these manufacturers are not financially healthy and at risk of being acquired by adverse capital, going out of business, or being acquired by a company that will simply increase the cost to DoW. Sometimes, the company may be healthy, but the particular product line is not profitable, prompting the subcontractor to phase out or divest/sell the product line. In these scenarios, the continued supply is prohibitively expensive and often not an attractive business proposition for industry.

One option is to create a mechanism for a non-government holding entity to

- acquire financially distressed manufacturers producing essential parts, components, or systems, and
- acquire the IP, tech data, and other information necessary to manufacture parts, components, or systems that are being phased out in industry and not supported by the manufacturer.

For at-risk ,sole-source manufacturers supporting multiple programs and subcontracting to multiple primes, the entity could acquire the company and provide the parts to the primes as Government Furnished Equipment (GFE).

This entity could collaborate with the Office of Strategic Capital (OSC), in partnership with OUSW(A&S) Industrial Base Policy, DIU, DCMA, DLA, PAEs, sustainment centers, depots, etc. to identify and prioritize buying a critical supplier or acquiring the IP needed to self-manufacture when necessary. In many cases, prime contractors are best positioned to identify at-risk critical suppliers. A revolving fund can be used to fund the initial investment and, when necessary, with future revenue streams used to replenish the revolving fund.

To succeed, the Department may need to pursue thoughtful intellectual property and technical data polies for legacy parts and small manufacturers. One approach could be to include a right of first refusal or a grant/purchase of certain IP rights for government purposes in the event of a sale of the company, or the phasing out of supporting an item in industry. Limiting the use of acquired IP to defense applications would protect commercial markets while securing national interests.

## Invest in the Workforce and Contractor-DoW Teamwork

As discussed above, there are insufficient numbers of maintainers and other sustainment critical personnel. Retention remains a challenge (GAO, 2026). In some cases, there is insufficient training for maintenance personnel.

8. *Invest the resources to build a sufficiently sized, trained, and experienced workforce*

Understanding the costs involved, we believe the investment in a sufficiently sized and skilled workforce is justified by an anticipated higher rate of weapon system readiness. Such a workforce cannot be turned on quickly, and investing in a sustainment workforce today will be a critical node in ensuring that in a war with a peer adversary tomorrow, the United States has the capacity to keep our Air Force climbing high, Navy anchors away, and Army rolling along.[3]

9. *Implement experimenting with remote contractor maintenance assistance to reduce costs, downtime, and improve contractor-warfighter teamwork*

In certain circumstances, remote contractor maintenance assistance to enhance maintenance and readiness. Such an approach may only be applicable in limited circumstances—but could still be a useful approach. In such an approach, contractors could "certify" certain DoW personnel to conduct maintenance *when done in coordination and with remote-participation of contractors.* This approach could reduce wait times for qualified contractor personnel to arrive onsite and work on systems, decrease travel costs, and improve training capabilities for onsite personnel.

[3] Musical reference intended.

## Appendix I: Recommendations

| *Source* | *Title* | *Recommendations* |
|---|---|---|
| *Department of Defense Office of the Inspector General* | 2026 Report | 1. Retire non-compliant financial systems, which would resolve audit discrepancies and save about $760 million annually (DoD OIG, 2026, p. 39)<br>2. Increase the number of trained maintenance personnel (DoD OIG, 2026, p.13).<br>3. Implement proactive management to increase oversight of storage and upkeep (DoD OIG, 2026, p. 18) |
| *Department of the Navy and NAVAIRSYSCOM* | V-22 Osprey Hearing | 1. Establish reliability control boards to address readiness degraders (NAVAIRSYSCOM, 2025, p. 16)<br>2. Implement a supply cell to address interoperability and consolidate parts allocation across services (NAVAIRSYSCOM, 2025, p. 15)<br>3. Implement closed loop dealing for maintainers to leverage their experience and keep them on for longer periods of time (NAVAIRSYSCOM, 2025, p. 14)<br>4. Conduct cross-service supply diagnostics to identify and tag any related issues across systems (NAVAIRSYSCOM, 2025, p. 15) |
| *Mitchell Institute* | AirPower Forum | 1. Partner with industry and integrate unique capabilities (Mitchell Institute, 2026a, 17:17)<br>2. Invest enough to maintain surge capacity for munitions and platforms for wartime (Mitchell Institute, 2026a, 39:01)<br>3. Implement the Aircraft Readiness Machine framework for interoperability (Mitchell Institute, 2026b, 16:14)<br>4. Bring maintainers in but keep them at the generalist area for a bit to improve their skill set and quality of work (Mitchell Institute, 2026b, 26:47) |

| | | |
|---|---|---|
| *Senate Armed Services Committee* | Advance Policy Questions for General Kenneth S. Wilsbach, USAF | 1. Shift responsibility to senior leadership to pay attention to maintenance of weapon systems<br>2. Invest in spare parts availability so that the shelf is full and there are less maintenance delays |
| *U.S. Navy* | Chief Naval Fighting Operations Instructions | 1. Imbed artificial intelligence into core functions to increase operational capability (U.S. Navy, 2026, p. 14)<br>2. Fix backlog in munitions production by implementing multi-year procurement authorities, produce with allies, optimize production priority across customers, and partner with industry (U.S. Navy, 2026, p. 15) |
| *Government Accountability Office GAO-23-10556* | Military Readiness: Actions Needed to Further Implement Predictive Maintenance on Weapon Systems | 1. All services should develop a comprehensive implementation plan for predictive maintenance. This includes action plans, milestones, outcome-related goals, and a framework to keep track of everything. (GAO, 2022) |
| *Government Accountability Office GAO-23-106440* | Weapon System Sustainment: Navy Ship Usage Has Decreased as Challenges and Costs have Increased | 1. Implement a more comprehensive and mission-specific readiness tracking. DoD should broaden its targets for when ships are available, and broaden what counts as taking a ship out of commission to include unplanned maintenance, unplanned losses, and training (GAO, 2023b). |
| *Government Accountability Office GAO-23-106673* | Military Readiness: Improvement in Some Areas, but Sustain and Other Challenges Persist | 1. DoD should prioritize establishing metrics for measuring readiness to conduct full-spectrum operations across domains (GAO, 2023c, p. 4).<br>2. DoD should update its F-35 sustainment strategy for the supply chain (GAO, 2023c, p. 15)<br>3. Navy should focus on obtaining accurate cost estimates to optimize facilities, replace aged equipment, and improve overall Shipyard infrastructure (GAO, 2023c, p. 27) |
| *Government Accountability Office GAO-25-106728* | Amphibious Warfare Fleet: Navy Needs to Complete Key Efforts | 1. Secretary of the Navy should establish a time frame for their ongoing joint plan to address ship |

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| | to Better Ensure Ships are Available for Marines | availability concerns (GAO, 2024b)<br>2. Navy amphibious ship depot maintenance policy should be updated to include that depot maintenance should not be cancelled before amphibious ships have reached the end of their expected service life (GAO, 2024b)<br>3. Chief of Naval operations should establish performance goals with tangible objectives to measure progress (GAO, 2024b) |
| *Government Accountability Office GAO-24-105917* | Military Readiness: Comprehensive Approach Needed to Address Service Member Fatigue and Manage Related Efforts | 1. Assessment of DoD's oversight structure for fatigue related efforts. Assessment should identify and delegate authority to an office to act as a focal point for and oversee DoD fatigue-related efforts (GAO, 2024c, p.39)<br>2. Senior leadership should create and maintain a comprehensive list of all fatigue-related research projects (GAO, 2024c, p.39) |
| *Government Accountability Office GAO-25-106990* | Navy Surface Ships: Maintenance Funds and Actions Needed to Address Ongoing Challenges | 1. Set availability requirements that capture all factors that could contribute to ships being needed before they're ready (GAO, 2025b, p.10).<br>2. Regularly report on assessments of risks associated with deferred maintenance on surface ships (GAO, 2025b, p.10). |
| *Government Accountability Office GAO-25-108104* | Military Readiness: Implementing GAO's Recommendations Can Help DoD Address Persistent Challenges across Air, Sea, Ground, and Space Domains | 1. Analyze data to identify high-risk training activities and ensure guidelines reflect conditions affecting the needed personnel and training (GAO, 2025a, p.9).<br>2. "Determine desired mix of government and contractor roles" (GAO, 2025a, p.24).<br>3. Create ship industrial base strategy, "prioritize strategy to not prematurely cancel maintenance when divesting ships" (GAO, 2025a, p.35).<br>4. "Complete planning elements before fielding new equipment" (GAO, 2025a, p.35). |

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Acquisition Research Program
Department of Acquisition, Finance, and Manpower
Naval Postgraduate School
555 Dyer Road, Ingersoll Hall
Monterey, CA 93943

www.acquisitionresearch.net