

Prospectus for an Industry/Government workshop on the DIB (Defense Industrial Base) readiness to support platforms required to successfully conduct contested logistics in response to an example conflict scenario

Revision C - 6/11/24

»The.history.of.failure.in.war.can.almost.always.be.summed.up.in.two.words;Too.late;Too.late.in.comprehending.the.deadly.purpose.of.a.potential.enemy;Too.late.in.realizing.the.mortal.danger;
--General Douglas MacArthur

»You.will.not.find.it.difficult.to.prove.that.battles?campaigns?and.even.wars.have.been.won.or.lost.primarily.because.of.logistics;
--Dwight D. Eisenhower

»My.logisticians.are.a.humorless.lot•.they.know.if.my.campaign.fails?they.are.the.first.ones.I.will.slay;
-- Alexander the Great

Our goal, our mission is not to be “Too late!” The history of warfare is replete with failures where strategist and warfighters failed to anticipate the nature of war and adapt to the future. As we step forward into a future where technology accelerates at an astonishing rate, and it is imperative we anticipate and integrate promising technologies and concepts while ensuring existing platforms are supported by the DIB for Production and Sustainment. With the encouragement and in coordination with the Office of the Assistant Secretary of Defense for Industrial Base Policy and in collaboration with the National Defense Industrial Association (NDIA), a workshop under the leadership of Maj. Gen. (ret) Tim Zadalis, USAF is being planned for August 27th, 2024 to address DIB readiness to support an example wargame scenario involving US forces in the Indo-Pacific.

A focused contested logistics wargame scenario will be used as an example to define specific constraints for the DIB manufacturing sector in the support of platforms that may be involved in this example scenario, specifically Air Force F-35, C-130, C-5, and C-17 aircraft. The NDIA recently published their Vital Signs (provide link) document which elucidates general concerns across the DIB; this workshop will focus on the platforms identified above to extract critical systems, components, materials, and manufacturing processes and capacities that are essential to supporting production, sustainment, and surge requirements.

The Challenge

As the geo-political world shifts and near-peer adversaries, with robust militaries, emerge, we must not allow ourselves to fall into the trap of fighting the last war. At the top of the list of highly capable adversaries is China. Should a conflict emerge in the Indo-Pacific, the United States, and our allies, will face a host of challenges as we operate on exterior lines. Extreme distances will expand operations and strain logistical supply capabilities. In addition, highly capable adversary weapon systems will threaten combat operations and traditional basing infrastructure. Bottomline, now is the time to understand industrial concerns that may impact key weapons system and transport availability and capability.

The 2024 NDIA Vital Signs document makes the assertion that “during the past 35 years the US has lost its understanding of the direct connection between a strong defense industrial base and

effective national deterrence.” There are many examples including the dominance of Chinese rare earth materials and processes that have replaced ferro magnetic materials in many weapons systems due to their magnetic efficiency and weight savings. In another example the most sophisticated chips are now made in Asia which was made painfully evident during the COVID crisis where foreign chip manufacturing directly impacted car production in the US. The recent Chips and Science act is aimed specifically at our domestic capabilities for chip production which has significantly deteriorated in technology and capacity in the past 20 years. Another example is our dependence on Japanese titanium sponge for most of our aerospace grade titanium requirements. Per the Vital Signs report “the defense industrial readiness policy is straightforward: to ensure our warfighters have the platforms, services, and technologies they need so they can never engage in a fair fight against any competitor.” Reduced Defense spending, continuing congressional resolutions, cost pressures, fixed price contracting, and the lack of incentives for domestic DIB investment has driven increased dependence on complex international supply chains to supply sophisticated weapons systems and limited their ability to fund excess or surge capacity requirements. Perhaps more concerning for the long term, decades ago, the DIB was responsible for the development of advanced technologies that were eventually incorporated into commercial products. Today, commercial technology development is better funded than defense R&D and is available to a wide range of international consumers reducing US technological advantages.

“The competitive military advantage we enjoy today is the result of capabilities developed by our services in an era of unchallenged technological dominance. That era has now passed ...Meanwhile our adversaries’ investments in modernization have outpaced our own.”

General Joseph F. Dunford, USMC (Ret) 19th chairman of the Joint Chiefs of Staff.

The Congested Logistics Workshop

The purpose of the Contested Logistics Workshop is to identify near term vehicle, component, manufacturing, and material requirements at risk to support selected platforms.

1. Prior to the workshop, we will use email and telephone discussions to identify those industrial organizations interested in collaborating to support the workshop.
2. We will invite those organizations (government, prime, and tier 1 suppliers) that agree to collaborate during the workshop and in principle to the workshop goals.
3. Each participating industrial organization will make a short presentation outlining their strategy, approach, and requirements to support near term (1-4 years) production, sustainment, and surge for the selected weapons systems.
4. These presentations will include a Pareto of key components/subsystems of LRU items for the platforms identified. Issues and perspectives on meeting the requirements for supporting the component/subsystems should be identified.
5. The presentations are intended to address top-level parts and systems requirements from prime and Tier 1/2 suppliers for identified platforms but should also identify where issues with lower-tier suppliers should be addressed.
6. This workshop is intended to be held at a CUI level but will be US only.

At a minimum, each participating industry presentation should address the following general questions:

- a. What are the critical requirements (components, materials, manufacturing capabilities) to support each of the target platforms and critical components.
- b. Does the domestic Defense Industrial Base have the technical capability to support the current and surge demand?
What are the lead times for material requirements?
- c. What are the supplier repair and rework tooling requirements and timing?
- d. Does industry have the capacity to surge for future demand? Is the workforce sufficient?
- e. Does industry have the willingness to collaborate across organizational boundaries in a unified approach?

The results of the workshop will be accumulated into a report with baseline recommendations which, after review and approval from the customer community, will be used to guide follow on discussions and actions toward realizing a more resilient Defense Industrial Base.