RECORD VERSION

STATEMENT BY

LTG AUNDRE F. PIGGEE
DEPUTY CHIEF OF STAFF, G-4
UNITED STATES ARMY

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Introduction

Chairman Wilson, Ranking Member Bordallo, and distinguished members of the Subcommittee, thank you for the opportunity to testify on the preparedness of the Army's Organic Industrial Base (OIB), its critical role in providing and sustaining readiness for the Warfighter, and our ongoing initiatives in support of its revitalization.

On behalf of Secretary Esper and General Milley, I would like to express our gratitude for your strong support. As the Secretary outlined in his recent testimony before the House Armed Services Committee, we face a strategic security environment more complex and volatile than any we have experienced in recent memory. To maintain our effectiveness, we must continue to focus on Readiness, Modernization, and Reform.

A key component of Readiness is the Army's OIB. This $14 billion enterprise consists of 23 ammunition plants, depots, and manufacturing arsenals that manufacture and reset the Army's best equipment, generating readiness and operational capability throughout Army formations. When the force needs equipment or parts manufactured, repaired, upgraded, or modernized, the OIB's industrial artisans deliver.

The OIB builds and maintains readiness by executing two key functions. The first is depot maintenance, which is the overhaul and rebuild of major systems such as the Abrams, Bradley, and Stryker, as well as communications equipment, weapons, and other materiel. The second function is the execution of the Army's role as the DoD Executive Agent for Conventional Ammunition. This includes manufacturing critical conventional munitions including propellants, energetics, and small arms ammunition. Our ammo plants maintain preferred munitions and load, assemble, pack, store, distribute, and demilitarize munitions.

The OIB has demonstrated its value time and time again during the past 17 years of conflict. In order to remain highly capable and responsive, the OIB must be optimized to maintain unit readiness across the force and have the ability to surge in support of contingencies. The OIB successfully surged in order to provide

warfighting equipment required for contingency operations in Afghanistan and Iraq. Although it remains a key readiness enabler for the Army, the OIB is in a period of transition. As we redeployed forces and drew down the Army over the past decade, inability to balance our workload with our capacity and workforce contributed to rate increases and inefficient operations.

OIB Workload and Readiness

The OIB has been sustaining continuous operations since 2003. During this time, the OIB produced over 21 billion rounds of ammunition and reset over 3.9 million pieces of equipment valued at approximately $32 billion. Notably, $5.7 billion of this work was in support of other Services. The OIB's efforts increased Equipment-On-Hand readiness rates of units across the Army and contributed to the execution of other key readiness initiatives, like the expansion and reconfiguration of Army Prepositioned Stocks (APS). Equipment that went through the OIB is now at a higher state of readiness in our APS sets, which significantly reduces the amount of time it takes to issue the equipment to deploying units. The OIB also worked to build and equip the Army's 15th Armor Brigade Combat Team (ABCT) at Fort Stewart, Georgia.

Although the OIB has reliably generated readiness, it has largely been reactive to emerging requirements; this reactive model does not allow us to preserve the organic capability required to maintain the core competencies and surge capacity we need to generate combat power. To become more proactive, we are embracing opportunities for change. We are implementing new tools and processes to help us better forecast workload and align it to the Sustainable Readiness Model. We are assessing how we manage our capabilities and capacity, and we are developing a long-term plan for infrastructure and equipment improvement in our facilities. We are constantly looking for synergies with industry through public-private partnerships, and will continue to streamline depot maintenance through automation and continuous process improvement initiatives.

Unique Capabilities in the OIB

The OIB possesses unique industrial competencies that are not easily replicated in the commercial sector. These capabilities provide for the Army's immediate needs, provide a base from which to expand in times of conflict and increased operational tempo, and rapidly produce or repair weapons systems or components that are essential for operational readiness. One example is Watervliet Arsenal in New York. Watervliet is the nation's only manufacturer of large caliber cannon barrels, breach blocks and breach rings. In 2014, we found a fleet-wide problem with corrosion in the gun tubes on one of our major weapons systems. Because Watervliet was postured to surge, we were able to correct the problem and return to acceptable readiness levels much faster than we would have relying on industry alone.

In addition to depot maintenance capabilities, we rely heavily on the organic and commercial segments of the ammunition industrial base. The Army has identified 103 critical capabilities for ammunition production and management; 25 of these reside solely in the OIB. For example, Holston Army Ammunition Plant in Tennessee is the only manufacturer of High Melting Explosive and Research Development Explosive in the United States; Holston also recently began production of IMX - Insensitive Munitions Explosive, the first in a family of "insensitive munitions," which are far more stable than conventional TNT. Additionally, McAlester Army Ammunition Plant in Oklahoma produces bombs for all the services and is the principal source of supply for both wartime and training requirements across the Department of Defense.

Personnel

The highly skilled artisans of our workforce are the backbone of our OIB. Altogether our government and contractor operated facilities employ about 28,000 people who are committed to producing weapons systems and equipment at the highest possible levels of readiness. This workforce is comprised of dedicated tradesmen with

critical skills, including skilled mechanics and machinists, electricians, welders and engineers.

Many of these experts have dedicated years of service in their facilities, and are now retirement eligible. On average it takes 10 years to train an apprentice into a journeyman, and there is fierce competition for that talent from industry employers. The OIB needs the flexibility to quickly hire and retain the right talent. We have been able to use the recently granted Direct and Expedited Hiring Authorities to hire almost 500 new employees – the increased efficiency we've gained is essential to our workforce succession plan.

In addition to making sure we have the right skill sets, we need the right mix of permanent, term, temporary, and contracted workforce. Having the right mix allows us to appropriately structure our workforce to our workload – a critical balance that we have to get right in order to keep the rates at our facilities competitive to attract more work.

Infrastructure, Modernization, and Cost Efficiencies

The aging infrastructure of our 23 facilities is overdue for an update; over 6 percent of these facilities, valued at $2.5 billion, are in substandard condition. The Army recognizes that modernization is especially critical now. We plan to make facility investments and upgrades to modernize antiquated, unreliable, and inefficient machinery and facilities. New technologies like automation and robotics, accompanied by upgrades to facilities and infrastructure, have enhanced productivity. As productivity and efficiency increase we are seeing corresponding decreases in labor, maintenance, and utility costs.

Despite our aging infrastructure, we have made great efforts to increase energy performance. Industrial operations require tremendous water resources and energy. The OIB has successfully used Energy Savings Performance Contracts and Utility Energy Service Contracts to solicit third party investment and save over $30 million annually.

In addition to our short term investments we are taking a long term, strategic approach to major infrastructure upgrades. We are developing a strategic plan to

assess the scope and focus of our modernization efforts. We generate our requirements by considering current and emerging mission priorities, our existing recapitalization strategy to address failed or failing facilities and those with sub-standard conditions, and requirements for additional space to support future work.

Process and Performance

Alongside upgrading our infrastructure and facilities, we are modernizing our processes and performance. To ensure readiness now and into the future, we are developing a schedule-driven, depot workloading strategy that is directly linked to the Army's Sustainable Readiness Model. This approach ensures our organic capabilities are focused on meeting our highest readiness priorities and our precious resources are optimized at the enterprise-level. This approach also yields a predictable and stable workload while providing a mechanism to continually evaluate and assess risk to the operating force.

The OIB recently transitioned to business systems that use standard, industry-recognized processes. The Logistics Modernization Program (LMP) is built on commercial off-the-shelf software for Enterprise Resource Planning (ERP) and shop floor integration. These tools give us complete visibility on manufacturing and service operations, a capability we now have for the first time. These applications also help us improve the accuracy of our Bills of Materials; engage in more efficient production scheduling; enable interaction with our supply chain of over 11,000 first, second and third tier vendors; and reduce delays for parts. These capabilities coupled with the Army's tactical-level ERP are increasing the speed at which materiel reaches the warfighter, and provides the Army with true "factory to foxhole" asset visibility and auditability.

The OIB is also executing a number of supply chain initiatives to improve its effectiveness, including improving demand forecasting accuracy and imposing tougher performance standards on suppliers. The aforementioned efforts improve our ability to purchase, manufacturer, and repair critical parts required to support warfighting equipment.

The Army is actively pursuing advanced manufacturing (AM), integrating a

number of cutting edge technologies including robotics, artificial intelligence, computer learning, and additive manufacturing to improve products or processes. We have installed AM capabilities at seven OIB sites. AM could revolutionize the way in which our arsenals and depots maintain, repair, and recapitalize equipment. With AM capabilities, we will be able to quickly replicate parts that are obsolete and difficult to obtain, translating to reduced down time and higher operational readiness rates. We are collaborating with other Services and sharing best practices and lessons learned with industry, participating in forums with the private sector and original equipment manufacturers. Eventually, our expectation is to deliver this capability to the point of need on the battlefield, getting equipment quickly back into action while eliminating wait time and transportation costs.

Synergy through Public-Private Partnerships

Public-private partnerships are an important element of our strategy for a modern, viable OIB. These partnerships allow private sector companies to access OIB manufacturing capabilities and permit the government to act as a supplier to commercial industry under certain circumstances. Last year, 263 partnerships across the OIB produced $412 million in additional revenue for the government and brought with them innovative ideas and best business practices.

There are many exciting examples of these projects. Anniston Army Depot continues to partner with General Dynamics to reset Strykers, and with Honeywell to recapitalize Army M1 tank engines at 25 percent of their original cost which saves the government $45 million annually. Tooele Army Depot in Utah has a joint venture with Safety Management Services (SMS), Inc. to operate an on-site commercial laboratory that tests and grades explosives. AM General is partnering with Rock Island Arsenal's Joint Manufacturing Technology Center in Illinois, the Army National Guard to manufacture M997A3 HMMWV ambulances, and with Red River Army Depot in Texas to overhaul older HMMWV models.

Closing

In conclusion, our OIB has been effective at building and fixing the Army's equipment for today's needs and generating improved Army readiness. With your support, improvements to the OIB have resulted in cost savings and better sustainment.

Now, we must ensure our OIB is just as adept at handling tomorrow's requirements as modernization efforts produce next-generation combat vehicles, long-range precision fires, future vertical lift, and other innovations. We must modernize our facilities, incorporate emerging technologies, ensure we can hire and retain talented workforce with the right skill sets, partner in new ways with industry, and above all, have the flexibility to revitalize our industrial base as efficiently as possible.

I would like to thank each distinguished member of the Committee for holding this hearing. Your continued support will enable us to equip and sustain the best fighting force in the world.