

Addressing COVID-19 Challenges to the U.S. Aerospace and Defense Industry Is Mandatory for Economic Recovery, Continued National Defense, and Future Growth

INTRODUCTION

The aerospace and defense (A&D) industry is critical to our nation's well-being, providing major contributions to our economic prosperity, national defense and homeland security, education, and quality of life. The COVID-19 pandemic and resultant near shutdown of the national economy has created a crisis for the A&D sector. As the United States and much of the world are reeling from these actions, China and others are seeking to exploit perceived weaknesses, from using propaganda to misinform regarding their intentions to buying depressed assets, seeking to dominate key market areas, and threatening military actions. The U.S. position economically and militarily must be one of strength, beginning with a rapid recovery from the pandemic. The purpose of this information paper is to 1) identify the most harmful effects that will require both immediate and longer-term measures to enable the A&D industry to return to full operations and 2) show how a healthy A&D industry will play a critical role in safely leading the nation back to a healthy and prosperous future.

AEROSPACE AND DEFENSE INDUSTRY'S CRITICAL CONTRIBUTIONS TO THE UNITED STATES

In 2019 the A&D sector¹:

- › Supported more than 2.19 million jobs
- › Generated \$909 billion in economic output, of which \$399 billion is attributed to the industry's supply chain
- › Created \$396 billion in value-added goods and services, representing 1.8 percent of the total U.S. Gross Domestic Product
- › Provided average wages and benefits of \$102,900, 46 percent higher than the comparable national average
- › Exported \$126.5 billion in goods, with a positive trade balance of \$79 billion
- › Developed and produced the advanced technical capabilities needed for our nation's defense, air transportation, and the exploration and exploitation of space

POTENTIAL COVID-19 THREATS TO THE A&D INDUSTRY

An ongoing COVID-19 pandemic could severely weaken the U.S. A&D sector and consequently impact the nation through:

1. Enormous revenue losses
2. Large-scale unemployment of a significant portion of the industry's skilled workers
3. Erosion of military capabilities relative to adversaries
4. Breakdown of essential supply chains that cannot be easily reestablished

According to Airlines for America, commercial airline passenger volume is 68% less than September 2019² – affecting jobs and posing a long-term existential threat to airlines, manufacturers, the supply chain, airports, and the travel industry. Supply lines across the spectrum of A&D industry products and services, consisting of many small and mid-size companies, are at high risk of disappearing due to the economic shutdown. Commercial and civil space activities have been slowed just when low Earth orbit and lunar exploration efforts were expanding. Many NASA programs are built on private–public partnerships that are in danger of collapse without a strong private sector.

¹ Aerospace Industries Association, Industry Profile, <https://www.aia-aerospace.org/research-center/industry-profile/>

² Airlines for America, Impact of COVID-19: Data Updates, <https://www.airlines.org/dataset/impact-of-covid19-data-updates/#>



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Finally, the DoD has maintained readiness, but weapon system development programs have been impacted and national security risks are increasing as the pandemic continues.

The national budget deficit has multiplied as a result of the stimulus packages that seek to save the economy. Downward budgetary pressure on federal agencies on which the A&D industry depends, such as the DoD and NASA, could occur in the out years. This will adversely affect the industry and academia, the latter due to possible long-term reductions in basic research tied to dependence on funding from the same agencies as industry.

In previous times of financial uncertainty and crisis, the federal government has made the difficult choice to limit or cut funding for the A&D sector. Therefore, as our decision makers navigate this current crisis it is imperative to not leverage the defense budget to aid the economic recovery. A 2009 study³ suggests that increased defense spending can in turn result in economic stimulus. As we work to recover from the economic impacts of COVID-19 and as multilateral, international threats continue to increase, reducing security and all of the associated jobs (primary and secondary) produced by the DoD enterprise would be ill-advised.

LEADING AMERICA FORWARD

Since World War II, the A&D industry has been central to the health and economic growth of our nation. It is interrelated with many other elements of the national and global economies. The United States remains the only global power that can mobilize against the multilateral threats, but only if it continues to invest in the science and technology needed to counter future threats. The A&D industry is also an enabler of many other U.S. economic sectors and therefore must be utilized as a leader in returning the country to a prosperous, safe, and exciting future for all Americans. This may include:

- › Ensuring the health of the A&D supply chain, which also supports other key industries.
- › Transitioning the global space economy to a sustained and expanding enterprise. NASA, the new Space Force, and U.S. industries would lead this new enterprise, including access to and return from space, and in-space operations around Earth, in cislunar space, to the moon, and ultimately to Mars.
- › Addressing the ongoing shift of national security threats from force projection toward management of digital disruptions and cyber-attacks. These evolving threats affect public and private systems in all domains. Domestic A&D organizations will necessarily be at the heart of the DoD's reliance on U.S.-developed technologies to address this urgent need.
- › Investing in foundational experimental and computational capabilities for research that will drive the United States to preeminence in global science and technology will be required to counter increasing threats from adversaries and to strengthen national product sourcing and manufacturing.
- › Stabilizing and growing alliances and exchanges with current and new international trade partners, while building on the U.S. A&D industry's in-place capabilities and already large positive trade balance.
- › Maintaining predictable and sustainable budgets to assure timeliness and efficiency in realizing the above objectives.

The American Institute of Aeronautics and Astronautics believes that addressing the pandemic-derived issues is crucial to the continued health of our industry, as well as the continued competitiveness, security, and growth of our nation.

³ Georgetown University Law Center, "The Case for Aerospace and Defense Spending as Economic Stimulus," 2009, <https://scholarship.law.georgetown.edu/cgi/viewcontent.cgi?article=1002&context=flpr>



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