

ATMOSPHERICS

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DEFENSE INDUSTRIAL BASE



Bottom Line Up Front:

- The Defense Industrial Base (DIB) encompasses all commercial, nonprofit, and public organizations that provide materials, products, and services to the Department of Defense. It includes over 60,000 companies and employs around 1.1 million people.
- Consolidation has been a major trend, with the number of major defense prime contractors shrinking from 51 in the 1990s to just 5 today. This raises concerns about reduced competition and supply chain resilience.
- Small businesses play a critical role, making up over 70% of DIB companies. But small business participation in defense contracting has declined over 40% in the past decade.
- Reliance on foreign sources for critical materials and technologies creates vulnerabilities in defense supply chains, potentially hindering the ability to surge production if needed. Steps like increased investments, acquisition reforms, supplier diversification, and boosting small business participation could strengthen DIB capacity, resilience, security, and innovation.

TECHNOLOGY



AI Generated Image

" In a world of evolving threats, the Defense Industrial Base stands not just as a foundation, but as our collective endeavor encoded in hardware and software. With technology, we persistently refine our security measures, ensuring a dynamic progression beyond yesterday's solutions, turning adversities into lessons, and fostering a state of preparedness that evolves with the challenges that loom. "
- ChatGPT 2023

Emerging technologies offer a pathway to rejuvenate the defense industry and enhance readiness. One of the solutions lies in establishing **digital supplier networks** to foster better communication and collaboration among defense contractors, suppliers, and government entities. Through a centralized digital platform, stakeholders can share critical information, manage contracts, and respond to changes in demand swiftly, ensuring a robust defense-industrial base.

Artificial Intelligence (AI) is poised to play a pivotal role in predictive maintenance, anomaly detection, and demand forecasting. By analyzing patterns and trends, AI can help in making informed decisions, optimizing inventory levels, and reducing downtime, thereby enhancing operational efficacy. Additionally, **Virtual Reality (VR) and Augmented Reality (AR)** technologies can revolutionize training and skill development within the defense sector, expediting the learning curve and ensuring a well-prepared workforce.

Enhanced connectivity through **advanced telecommunication networks** like 5G can ensure real-time communication and data sharing, which are crucial for coordinated defense operations. The low latency and high bandwidth of these advanced networks can significantly improve operational efficacy. Furthermore, **automation and robotics** can alleviate workforce shortage issues, enhance precision and efficiency, paving the way for a more agile and capable defense industry.

Cybersecurity is imperative to safeguard sensitive information as defense systems become increasingly connected. With the foundation of a strong cybersecurity framework, the defense industry can significantly reduce the risk of cyber threats, ensuring system integrity. Through embracing these technological advancements, the defense industry can rejuvenate its operations, ensuring preparedness for the challenges of modern warfare and geopolitics. By adopting a tech-forward approach, not only can the defense sector overcome current hurdles, but also reinstate a state of readiness and resilience that's crucial for navigating the geopolitical landscapes of tomorrow.

SENTIMENT

2023 Top 10

2023



| This Year's Rank | Last Year's Rank | Company | Leadership | Country | 2022 Defense Revenue (in millions) | 2021 Defense Revenue (in millions) | Defense Revenue Change | 2022 Total Revenue (in millions) | Revenue From Defense |
|------------------|------------------|--|---|---------|------------------------------------|------------------------------------|------------------------|----------------------------------|----------------------|
| 1 | 1 | Lockheed Martin | James D. Taiclet, Chairman, President and CEO | U.S. | \$63,334.00 | \$64,458.00 | -2% | \$65,984.00 | 96% |
| 2 | 2 | RTX ¹ | Gregory J. Hayes, Chairman and CEO | U.S. | \$39,600.00 | \$41,852.20 | -5% | \$67,100.00 | 59% |
| 3 | 4 | Northrop Grumman | Kathy J. Warden, Chair, CEO and President | U.S. | \$32,435.00 | \$31,429.00 | 3% | \$36,602.00 | 89% |
| 4 | 6 | Aviation Industry Corporation of China | Hao Zhaoping, Director and General Manager * | China | \$30,971.31 | \$30,155.22 | 3% | \$82,600.10 | 37% |
| 5 | 3 | Boeing | David Calhoun, President and CEO | U.S. | \$30,843.00 | \$35,093.00 | -12% | \$66,608.00 | 46% |
| 6 | 5 | General Dynamics | Phebe Novakovic, Chairman and CEO | U.S. | \$30,400.00 | \$30,800.00 | -1% | \$39,400.00 | 77% |
| 7 | 7 | BAE Systems ² | Charles Woodburn, Group CEO | U.K. | \$25,238.85 | \$25,775.20 | -2% | \$26,290.47 | 96% |
| 8 | 9 | China North Industries Group Corporation Limited | Liu Shiquan, Chairman, and Liu Dashan, President | China | \$17,963.66 | \$17,711.93 | 1% | \$82,778.69 | 22% |
| 9 | 10 | L3Harris Technologies | Christopher E. Kubasik, Chair and CEO | U.S. | \$13,927.00 | \$14,924.00 | -7% | \$17,062.00 | 82% |
| 10 | 13 | China South Industries Group Corporation | Xu Xianping, Chairman of the Group and Secretary of the Party Committee, and Chen Guoying, Director and General Manager | China | \$13,483.91 | \$13,744.95 | -2% | \$43,472.95 | 31% |

People have strong emotional responses towards topics like the Defense Industrial Base (DIB) for many different reasons, but the most prominent reasons and the associated context are:

Economic Implications: For individuals directly linked to the defense industry - from employees of defense contractors and local communities heavily reliant on defense contracts, to individuals living in heavily defense-dependent communities - DIB contracts or policies can be an important source of employment and income.

National Security Considerations: Some individuals feel emotionally invested in discussions of DIB due to its implications for national security. Many have personal or familial ties within the military or have strong feelings of patriotism towards defending and safeguarding our nation.

Historical Context: Depending on one's background and experience, historical events related to defense contracting and the DIB (such as scandals or notable successes) can evoke strong emotions and opinions.

Ethical and Moral Considerations: Individuals harbor ethical or moral reservations regarding the defense industry, including concerns related to its use of military force, weapons production and environmental impacts. Such objections can spark strong sentiment among citizens.

Community Impacts: Communities heavily reliant on defense contracts have an investment in its success and growth, which means changes to this industry can have far-reaching implications on their social fabric, infrastructure needs and overall well-being.

Perceived Public Interest: The public view the DIB as being of paramount public interest, as efficient, transparent, and effective defense procurement processes are critical to national wellbeing.

INFORMATION:

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