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Chinese Influence in Federal DoD Contracting Spend - Strategic Peril for United States?

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The struggle now going on for the world will never be decided by bombs or rockets, by armies or military might. The real crisis we face today is a spiritual one; at root, it is a test of moral will and faith. – Ronald Reagan



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The purpose of this ARP Symposium presentation is to highlight major shifts in Chinese policy directed at infiltrating US defense industries through Federal contracting and supply chain assimilation and infiltration, and the necessity to enact legislation and regulations to prevent it. It represents a shorter version of a working paper in the NPS APR working paper series under the same title. In the past decade, the amount of U.S. DoD contracted spend with Chinese national firms has skyrocketed. This represents a major strategic challenge and potential hazard for U.S. national security. First, when discussing national security, it's essential to understand the current elements of the National Security Strategy (NSS) and National Military Strategy (NMS).

This presentation is an except of the ARP working paper and symposium proceeding paper under technical edit as of 15 May 2020.

The final work, containing much more detail and full citations will be available soon.



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China now holds a high position in the Defense News Top 100 contractor profile.

Examining the top 20 of the top 100 shows the new preeminence of China and its emergence as a strong participant in the receipt of U.S. defense spend.

Seven of the top twenty DoD spend recipient firms are Chinese.

Total amount of spend with Chinese firms from the 2018 data in the 2019 extraction yields \$92,040 defense revenue in *millions* of dollars - in other words over \$92 billion.



Base comparative year, 2009, of top 20 DoD contractors – no Chinese firms.

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| 2009 Top 100 Click headers to sort | | | | | | | | |
|------------------------------------|----------------------|---|---------------------|-------------------------|-------------------------|-----------------------|---------------------------|-------------|
| Rank | Company | Leadership | Last Year's Rank | 2008 Defense Revenue | 2007 Defense Revenue | Total Revenue 2008 | % Revenue from Defense | Country |
| 1 | Lockheed Martin | Robert Stevens, Chairman, President and CEO | 1 | 39550 | 38513.0 | 42731 | 92.5 | U.S. |
| 2 | BAE Systems | lan King, CEO | 3 | 32667 | 29800.0 | 34351 | 95.1 | U.K. |
| 3 | Boeing | W. James McNerney, Chairman, President and CEO | 2 | 31082 | 31175.0 | 60909 | 51 | U.S. |
| 4 | Northrop Grumman | Ro-ld Sugar, Chairman and CEO | 4 | 26579 | 24497.0 | 33887 | 78.4 | U.S. |
| 5 | General Dy-mics | Jay Johnson, President and CEO | 5 | 22854 | 21519.0 | 29300 | 78 | U.S. |
| 6 | Raytheon | William Swanson, Chairman and CEO | 6 | 21551.8 | 19809.9 | 23174 | 93 | U.S. |
| 7 | EADS | Louis Gallois, CEO | 7 | 16206.6 | 12241.3 | 63639.4 | 25.5 | Netherlands |
| 8 | L-3 Communications | Michael Strianese, Chairman, President and CEO | 8 | 12159 | 11239.0 | 14901 | 81.6 | U.S. |
| 9 | Finmeccanica | PierFrancesco Guarguaglini, President and CEO | 9 | 10219 | 9861.0 | 22119 | 46.2 | Italy |
| 10 | United Technologies | Louis R. Chênevert, President and CEO | 10 | 9975.8 | 8761.4 | 58681 | 17 | U.S. |
| 11 | Thales | Luc Vigneron, Chairman and CEO | 11 | 8020 | 7200.0 | 18650 | 43 | France |
| 12 | SAIC | Ken Dahlberg, Chairman and CEO | 12 | 7661 | 6503.0 | 10070 | 76 | U.S. |
| 13 | ІТТ | Steven Loranger, Chairman, President and CEO | 17 | 6282 | 4176.0 | 11694.8 | 53.7 | U.S. |
| 14 | KBR | William Utt, Chairman, President and CEO | 13 | 5997.1 | 5967.0 | 11581 | 51.8 | U.S. |
| 15 | Honeywell | David Cote, Chairman and CEO | 14 | 5313 | 5017.0 | 36556 | 14.5 | U.S. |
| 16 | Almaz-Antei | Vladislav Menshikov, Director | 24 | 4335.2 | 2782.1 | 4616.8 | 93.9 | Russia |
| 17 | Rolls-Royce | (Sir) John Rose, CEO | 16 | 4237.6 | 4402.8 | 16950.6 | 25.2 | U.K. |
| 18 | GE Aviation | David Joyce, President and CEO | 15 | 4000 | 4500.0 | 19200 | 20.8 | U.S. |
| 19 | -vistar | Daniel Ustian, Chairman, President and CEO | 89 | 4000 | 429.0 | 14724 | 27.2 | U.S. |
| 20 | MBDA Missile Systems | Antoine Bouvier, CEO | - | 3995 | 4124.0 | 3995 | 100 | France |

2009 Top 20 DoD Contractors. Extracted from Defense News on 16 October 2019. Data sorted by revenue in prior year.



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Notice that a clear majority of the top 20 firms in 2009 sorted by total defense revenue are for U.S. and NATO country firms. The Notable exception is Almaz-Antei ranked sixteenth from Russia, a company that specializes in anti-aircraft weapons and military technical support for intelligence and communications. (Defense News, 2019)

Specifically sorting the Defense News data from 2009 by country, the results show no Chinese firms in receipt of DoD dollars. Again, there is no reported direct DoD contract dollars awarded to Chinese firms in the 2008 year (as reported in the 2009 snapshot).



Recent, 2019 comparative year of top 20 DoD contractors – many Chinese firms.

2019

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Top 100 for 2019

2019 Top 100 Click headers to sort

| Rank | Last Year's Rank | Company | Leadership | Country | 2018 Defense Revenue (in millions) | 2017 Defense Revenue (in millions) | % Defense Revenue Change | 2018 Total Revenue (in millions) | Revenue From Defense |
|------|------------------------|---|--|--------------------|--|--|--------------------------------|--|----------------------------|
| 1 | 1 | Lockheed Martin ¹ | Marillyn Hewson, Chairman, President and CEO | U.S. | \$50,536.00 | \$47,985.00 | 5% | \$53,762.00 | 94% |
| 2 | 5 | Boeing ² | Dennis Muilenburg, Chairman, President and CEO | U.S. | \$34,050.00 | \$20,561.00 | 66% | \$101,127.00 | 34% |
| 3 | 4 | Northrop Grumman | Kathy J. Warden, CEO and President * | U.S. | \$25,300.00 | \$21,700.00 | 17% | \$30,095.00 | 84% |
| 4 | 2 | Raytheon Company | Thomas Kennedy, Chairman and CEO | U.S. | \$25,163.94 | \$23,573.64 | 7% | \$27,058.00 | 93% |
| 5 | NEW | Aviation Industry Corporation of China | Tan Ruisong, Chairman of the Board, and Luo Ronghuai, President | China | \$24,902.01 | \$22,898.73 | 9% | \$66,405.36 | 38% |
| 6 | 6 | General Dynamics | Phebe Novakovic, Chairman and CEO | U.S. | \$24,055.00 | \$19,587.00 | 23% | \$36,200.00 | 66% |
| 7 | 3 | BAE Systems ³ | Charles Woodburn,CEO | U.K. | \$22,477.48 | \$22,380.04 | 0% | \$24,569.06 | 91% |
| 8 | NEW | China North Industries Group Corporation Limited | Jiao Kaihe, Chairman, and Liu Dashan, President | China | \$14,777.77 | \$14,206.36 | 4% | \$68,100.30 | 22% |
| 9 | 7 | Airbus ⁴ | Guillaume Faury, CEO * | Netherlands/France | \$13,063.82 | \$11,185.91 | 17% | \$75,220.59 | 17% |
| 10 | NEW | China Aerospace Science and Industry Corporation | Gao Hongwei, Chairman of the Board, and Liu Shiquan, General Manager | China | \$12,130.93 | \$11,206.28 | 8% | \$37,909.17 | 32% |
| 11 | NEW | China South Industries Group Corporation | Xu Ping, CEO, and Gong Yande, Director and General Manager | China | \$11,963.37 | \$14,121.77 | -15% | \$38,591.53 | 31% |
| 12 | NEW | China Electronics Technology Group | Xiong Qunli, Chairman | China | \$10,275.58 | \$9,518.91 | 8% | \$33,354.01 | 31% |
| 13 | 10 | Leonardo | Alessandro Profumo, CEO | Italy | \$9,828.51 | \$8,856.48 | 11% | \$14,453.69 | 68% |
| 14 | NEW | China Shipbuilding Industry Corporation | Hu Wenming, Chairman of the Board, and Wu Yongjie, President | China | \$9,795.47 | \$9,337.91 | 5% | \$48,977.36 | 20% |
| 15 | 8 | Almaz-Antey | Yan Novikov, CEO | Russia | \$9,660.14 | \$9,125.02 | 6% | \$9,896.67 | 98% |
| 16 | 9 | Thales ¹ | Patrice Caine, Chairman and CEO | France | \$9,575.57 | \$8,926.13 | 7% | \$18,775.63 | 51% |
| 17 | 11 | United Technologies 1, 5 | Gregory Hayes, Chairman and CEO | U.S. | \$9,310.00 | \$7,826.00 | 19% | \$66,500.00 | 14% |
| 18 | 12 | L3 Technologies ⁶ | Bill Brown, Chairman, President and CEO | U.S. | \$8,249.00 | \$7,749.00 | 6% | \$10,200.00 | 81% |
| 19 | NEW | China Aerospace Science and Technology Corporation | Wu Yansheng, Chairman of the Board, and Yuan Jie, Executive Director and President | China | \$8,138.47 | \$7,514.73 | 8% | \$38,030.23 | 21% |
| 20 | 13 | Huntington Ingalls Industries ¹ | Mike Petters, President and CEO | U.S. | \$7,767.00 | \$7,030.00 | 10% | \$8,176.00 | 95% |



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Top DoD Contractors - 2019. A over a decade later, in 2020, utilizing the most recently available data from the October 2019 database, the statistics are strikingly different. China now holds a high position in the Defense News contractor profile. Examining the top 20 of the top 100 shows the new preeminence of China and its emergence as a strong participant in the receipt of U.S. defense spend. Seven of the top twenty DoD spend recipient firms are Chinese. Totaling the amount of spend with Chinese firms from the 2018 data in the 2019 extraction yields \$92,040 defense revenue in *millions* of dollars - in other words over \$92 billion. The change in one decade, from zero dollars to over 92 billion is significant in terms of sheer value, but also in the strategic inroad that it represents in the United States reliance on China on prime contract support.



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The data collected by Defense News only show the consolidated values of prime contracts, not sub-contracts. The Federal Procurement Data System-Next Generation (FPDS-NG) only reports prime contract data, not subcontract data. So, a large firm acting as an integrator, which often occurs, won't reflect the amounts that a prime has placed on their own contracts, at any level or tier. No subcontract data is reflected in the tables. Of particular note is that on average, complex systems contracts may have up to 50-70% of the prime dollars further awarded to suppliers and subcontractors – for tangible goods, manufacturing, and services. So, the likelihood that the \$92 billion dollars represented is an understatement of the actual amount of US dollars being spend with Chinese firms.



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2019 Chinese Companies doing Contracted Business with DoD from the Top 100 List.

| 5 | NEW | Aviation Industry Corporation of China | Tan Ruisong, Chairman of the Board, and Luo Ronghuai, President | China | \$24,902.01 | \$22,898.73 | 9% | \$66,405.36 | 38% |
|----|-----|---|--|-------|-------------|-------------|------|-------------|-----|
| 8 | NEW | China North Industries Group Corporation Limited | Jiao Kaihe, Chairman, and Liu Dashan, President | China | \$14,777.77 | \$14,206.36 | 4% | \$68,100.30 | 22% |
| 10 | NEW | China Aerospace Science and Industry Corporation | Gao Hongwei, Chairman of the Board, and Liu Shiquan, General Manager | China | \$12,130.93 | \$11,206.28 | 8% | \$37,909.17 | 32% |
| 11 | NEW | China South Industries Group Corporation | Xu Ping, CEO, and Gong Yande, Director and General Manager | China | \$11,963.37 | \$14,121.77 | -15% | \$38,591.53 | 31% |
| 12 | NEW | China Electronics Technology Group | Xiong Qunli, Chairman | China | \$10,275.58 | \$9,518.91 | 8% | \$33,354.01 | 31% |
| 14 | NEW | China Shipbuilding Industry Corporation | Hu Wenming, Chairman of the Board, and Wu Yongjie, President | China | \$9,795.47 | \$9,337.91 | 5% | \$48,977.36 | 20% |
| 19 | NEW | China Aerospace Science and Technology Corporation | Wu Yansheng, Chairman of the Board, and Yuan Jie, Executive Director and President | China | \$8,138.47 | \$7,514.73 | 8% | \$38,030.23 | 21% |
| 22 | NEW | China State Shipbuilding Corporation | Lei Fan Pei, Chairman, and Yang Jin Cheng, General Manager | China | \$4,954.07 | \$4,842.69 | 2% | \$30,962.94 | 16% |

2019 Top Chinese Contractors. Extracted from Defense News on 16 October 2019. Data sorted by country in prior year.



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Why the Incursion? "China Made 2025" and "Belt and Road" Doctrines explained.

"China Made 2025" doctrine by the Chinese government. The trend of increasing engagement of Chinese firms within U.S. DoD contracting, can be explained, in part, by the recent Chinese industrialization doctrine titled "China Made 2025". According to the Council on Foreign Relations, and many other sources, the Chinese government launched the "Made in China 2025" initiative in 2015. (Council on Foreign Relations (CFR), 2019). The Chinese state-led initiative is an industrial policy that has, as its aim, domination in global high-tech manufacturing. The program uses Chinese government subsidies, a large-scale mobilization of state-owned enterprises (notably that's most of all Chinese international businesses), and incorporation of the strategy throughout its enterprises and endeavors.



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Belt and Road - Chinese Initiative Aimed at Global Enterprise, Market Control and Dominance

The communist Chinese government's Belt and Road initiative is another central government policy aimed at restoring the silk road from a century ago. This initiative is designed to create the policies, infrastructure and means to have an Asian, Middle East, and southern European economic trade and transportation alliance under the control, albeit dominance, of the Chinese.

One of the secondary effects of the Belt and Road initiative is that the Chinese are executing huge amounts of capital leverage with the nations that are participating. The policy calls for large Chinese investments in infrastructure, including roads, shipyards, ports, mining and mineral extraction, fuel and oil production and distribution, etc. This investment is more often-than-not based on "loans" to the participating nations. These loans are significant, particularly to poorer nations that have agreed to allow the Chinese to invest in the sovereign countries. The relationship creates an insurmountable debt load on the participant nations, often with high demands being imposed by the Chinese to strong-arm participants struggling to pay on the debt.



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Chinese Investments in U.S. Companies and Influence via U.S. Corporate Boards of Directors – Mergers and Acquisitions - CFIUS Reviews

Concurrent with the China First 2025 and Belt and Road initiatives, the Chinese communist government has encouraged its state-owned, state-controlled, industries to either acquire major positions in U.S. firms, outright acquire them, and/or place Chinese sponsored representatives on U.S. company boards or directors.

Note that there were several hundred mergers and takeovers of U.S. firms by the Chinese. The CFIUS indicates that in the reporting years from 2012-2017, over 800 acquisition transactions of U.S. firms were reviewed for security issues. Some of these seem relatively benign, such as a Chinese company making a bid to purchase a chip manufacturer that makes chips for automotive firms. Although seemingly harmless, the underlying premise is that the Chinese would acquire the intellectual property, control production, and potentially, in the longer-term, transfer production and control to China. This type of potential acquisition, in the long run, erodes the U.S. industrial based and loss of supply chain integrity and control for critical manufactured goods. (Li, J. and Hoff, P., 2018).



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Chinese Firms Opening Production in the U.S. – Reverse Offshoring – Green Fielding

Closely related to mergers and acquisition of U.S. firms, is a new phenomenon, Chinese opening their own production facilities in the U.S., has emerged, which is called "green fielding" by many experts. Particularly in the past five years, the trend is increasing rapidly, coincident with the China First 2025 initiative which the Chinese implemented in 2015. "We've seen this trend since about 2009, but there's been an uptick especially in the past two years," says Cassie Gao, a Research Analyst focusing on China's international trade and investment flows at the Rhodium Group – speaking in 2017. "In terms of dollar value, the top industries we see are automotive and other transportation equipment, chemicals, metals and basic materials." (Hu, K. 2017).



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As green fielding by China in the U.S. is really a recent phenomenon, South Korea and Germany have green fielded production in the U.S. decades earlier. To wit, BMW in South Carolina, and Hyundai in Alabama as example. Japanese firms, such as Toyota, Honda, and Subaru green fielded U.S. production in the 1990s. So why the concern over China doing the same green fielding practice that other southeast Asian countries have done? The answer lies in the intent of the Chinese as it relates to the China First 2025 and the Belt and Road initiatives. These are specifically designed to wrest control of production, technical innovation, and supply chains of western countries in Europe and the United States. And, this by a power recognized as adversarial to the U.S. economically and militarily.



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Chinese Control of Vital Supply Chains

The ability of the Chinese to exact control over U.S. industries and supply chains, as indicated, is manifest in three primary ways, according to the GAO. Note that there are manifold methods in which the Chinese can exercise influence and control, however, the GAO report focused on the three most visible and prominent. These three, according to GAO, are; first, establishing a legally binding relationship with a U.S. firm; second, expanding a U.S. based affiliate where a legal relationship exists, and; third, outright acquisition of a firm or its affiliate. The GAO determined that making any sound statistical analysis of the outsourcing phenomenon is challenging, as there is no agreed upon consensus of what exactly constitutes outsourcing or a commonly agreed definition, neither by industry, nor the government. (GAO, 2019).



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Federal Law directly addresses some key issues related to DoD contracting with Communist China. 48 CFR § 252.225-7007 - Prohibition on Acquisition of Certain Items from Communist Chinese Military Companies, is the most direct for contracting officers. Note that there are other provisions related to technology transfer which are not directly to purpose of this paper, but should be consider in this context nonetheless. This legal provision flows down into subordinate implementing and governing citations, including, but not limited to:

Title 48 - Federal Acquisition Regulations System
Chapter 2 - DEFENSE ACQUISITION REGULATIONS SYSTEM, DEPARTMENT OF DEFENSE
Subchapter H - CLAUSES AND FORMS
Part 252 - SOLICITATION PROVISIONS AND CONTRACT CLAUSES
Subpart 252.2 - Text of Provisions and Clauses
Section 252.225-7007 - Prohibition on Acquisition of United States Munitions
List Items from Communist Chinese Military Companies (Prohibition on Acquisition, 2015).



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Findings, Recommendations and Conclusion

This paper highlights the major issues and challenges DoD faces in protecting its military systems from Chinese influence and outright compromise which can damage U.S. national security. The Chinese, through its long-term strategy China First 2025 and the Belt and Road initiatives, plan to take control of major portions of U.S. intellectual, technological, and production capability. And, this isn't just in theory, it's been happening, and is happening currently. The Chinese have a long-term vision, more so than most U.S. policy makers and business planners are accustomed. The long-term Chinese vision, although already showing strong inroads, and dangerously pro-active measures to acquire and supplant U.S. supply chains, through U.S. contracting out, outsourcing, green-fielding, and corporate and political influence and takeover is a Sun Tzu strategy – long term and persistent.



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Findings and Recommendations

The following findings and recommendations are provided. Note that these provide a framework or guide as to what is needed.

Finding 1: The FAR and DFARS do not have enough provision through statutory or other mandate to effectively address the premise of this paper, that the DoD has been directly spending on prime contracts with Chinese national entities. And, as noted in this work, the data does not include spend by the primary DoD contractor on their subcontracts, at any level, which is likely to be significant. As indicated, existing legislation has not been effective at stemming the tide of Chinese influence, including the Buy American Act (BAA) and others indicated herein.

Recommendation 1: Congress must enact legislation requiring DoD contractors to source domestically or with approved allied partners. This legislation must flow-down into FAR and DFAR provisions. A strict prohibition on utilizing Chinese firms for any DoD awarded contract is recommended. Additionally, there must be sufficient oversight – monitoring and enforcement – mechanisms and practice. There must be sound enforceability. While seemingly harsh, the long-term negative effects of not prohibiting these sources is detrimental to U.S. national security.



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Finding 2: The current commercial item protocols and commercial off the shelf -COTs -provisions allowing for loosened FAR protocols for FAR Part 12, FAR Part 13, and other FAR parts under commercial item protocols, has allowed a loophole for the Chinese to infiltrate DoD through seemingly benign channels, but with detrimental effects, as indicted. Several COTs buys have resulted in damage to U.S. national security interests, and a weakening of the U.S. domestic supplier base.

Recommendation 2: Congress must enact legislation to source domestically, even for commercial and COTs items. The domestic source provision can include approved allies. As with recommendation 1 above, adequate monitoring, oversight and penalty for violation must be part of the legislation. All legislative provisions must be accompanied by an implementation plan at all levels from Congress to the Executive Branch. Funding for enforcement must be provided.



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Finding 3: The Buy American Act and the Berry Amendment. Although great in concept, the BAA and Berry Amendment to the BAA are, in essence, ineffectual. As indicated in this paper, there are too many exclusions and waivers in applicability. Plus, the self-reporting and policing policies, along with retro-active waivers, provide too many opportunities for escaping visibility and scrutiny on transactions that should be subject to the BAA and BA.

Recommendation 3: Through pro-active legislative action, eliminate the many exclusions of the BAA and BA, and provide more rigid review and enforcement of waiver policies.



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Finding 4. There are significant shortfalls and deficiencies in the legal and agency structures and protocols in several key areas noted herein. To wit:

- Tariffs and extent to which they can deal with Chinese influence,
- Section 301 deficiencies and waivers
- CFIUS reviews and the inability to effectively control Chinese incursions
- Green fielding the Chinese method to outright acquire US production
- FIRRMA
- Buy American Act and Berry Amendment
- FAR and DFAR provisions

All of the above were addressed in the body of this research. And, all have noted deficiencies, significant deficiencies precluding them from addressing in an effective and efficient manner, the Chinese influence.

Recommendation 4: Congress and the Executive Branches must thoroughly review and revise these programs to address the deficiencies noted herein.



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And take note! This is not a flash fad that the Chinese will abandon easily or without a fight. For every step the U.S. takes, and will take in the future, it's very likely going to be met with a subtle, yet effective, counter-plan. Sun Tzu strategy calls for long term vigilance – the Chinese are noted for their persistence. But, that doesn't mean the United States should not take pro-active action to stop the many talons of Chinese communist infiltration of our supply chains, productive capabilities and capacities, and intellectual property assimilation and piracy. On the contrary, the U.S. should do everything at its disposal to end the onslaught. This is a call to action!



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Final Thoughts and Conclusion

In summary, the Chinese are resolutely intent on subverting the United States' advantages in military, industrial, and intellectual domains. The China First 2020 and Belt and Road initiatives are the most prominent means that Chinese communist government has in place to achieve their end-state of global dominance. If the United States doesn't act now, and act decisively, we may lose our strategic advantages in these domains. As stated by John Milton:

With scattered arms and ensigns, till anon His swift pursuers from Heaven-gates discern The advantage, and descending tread us down Thus drooping, or with linked thunderbolts Transfix us to the bottom of this gulf. Awake, arise, or be forever fallen! (Milton, J. 1663)

The time to act is now. Congress and the Executive Branch must be pro-active and resolute in protecting our strategic interests.