

January 26, 2023

The Honorable Lina Khan
Chair
Federal Trade Commission
600 Pennsylvania Avenue, NW
Washington, DC 20580

The Honorable Rebecca Kelly Slaughter
Commissioner
Federal Trade Commission
600 Pennsylvania Avenue, NW
Washington, DC 20580

The Honorable Alvaro Bedoya
Commissioner
Federal Trade Commission
600 Pennsylvania Avenue, NW
Washington, DC 20580

Dear Chair Khan, Commissioner Slaughter, and Commissioner Bedoya:

I am, once again, writing regarding the monopolistic behavior of firms in the defense industry. I applaud the actions that the Federal Trade Commission (FTC) took last year to oppose Lockheed Martin's proposed acquisition of Aerojet Rocketdyne (Aerojet);¹ however, Aerojet is once more seeking to participate in an acquisition that will benefit its investors at the expense of the national security of the United States. On December 18th, 2022, L3Harris Technologies (L3Harris), the sixth-largest U.S.-based defense contractor,² announced that it would acquire Aerojet³ – the last remaining independent U.S. supplier of missile propulsion systems.⁴

This marks the latest action in what has been a decades-long industry consolidation. In 1990, the Department of Defense could turn to 13 contractors for tactical missiles, eight to make fixed-wing aircraft, and another eight to build ships.⁵ Today, there are only three missile

¹ CNN, "Lockheed Martin terminates \$4.4 bln deal to acquire Aerojet Rocketdyne," Reuters, February 13, 2022, <https://www.cnn.com/2022/02/13/business/lockheed-martin-aerojet-rocketdyne/index.html#:~:text=U.S.%20arms%20maker%20Lockheed%20Martin,the%20deal%20over%20antitrust%20concerns>.

² Defense News, "Top 100 Defense Companies for 2022," <https://people.defensenews.com/top-100/>.

³ Wall Street Journal, "Defense Contractor L3Harris Plans to Buy Aerojet Rocketdyne for \$4.7 Billion," Doug Cameron, December 18, 2022, <https://www.wsj.com/articles/defense-contractor-l3harris-plans-to-buy-aerojet-rocketdyne-for-4-7-billion-11671412218>.

⁴ Federal Trade Commission, "FTC Sues to Block Lockheed Martin Corporation's \$4.4 Billion Vertical Acquisition of Aerojet Rocketdyne Holdings Inc.," press release, January 25, 2022, <https://www.ftc.gov/news-events/news/press-releases/2022/01/ftc-sues-block-lockheed-martin-corporations-44-billion-vertical-acquisition-aerojet-rocketdyne>.

⁵ U.S. Department of Defense, Office of the Under Secretary of Defense for Acquisition and Sustainment, "State of Competition within the Defense Industrial Base," February 2022, p. 5,

and three aircraft makers, and only two surface ship builders.⁶ Similarly, there were eight satellite manufacturers in 1990; today there are only four.⁷ Tanks and other tracked vehicles are now made by a single company.⁸ Waves of merger activity and consolidation have transformed our nation’s defense industry from a competitive market with over 50 firms to an oligopoly of five massive rivals,⁹ “[a]nd nearly 20,000 small businesses have been pushed out of the defense market in the last decade alone.”¹⁰ After decades of horizontal consolidation, the remaining giants in this sector have shifted to vertical consolidation, buying up key suppliers and input manufacturers in order to integrate operations up and down their supply chains.¹¹ This deal between Aerojet and L3Harris would reduce competition in the shrinking defense industry to a new low,¹² and I encourage the FTC to oppose this dangerous transaction.

Since 1997, “L3Harris has ridden a wave of mergers and acquisitions to become the sixth largest weapons contractor in the United States and the 13th in the world.”¹³ L3Harris is merely a Wall Street entity – one of those L’s stood for Lehman Brothers – spun off from Lockheed Martin that uses its financial power to insert itself as a middleman between the government and industry by buying up companies.¹⁴ Originally known as L-3 Communications, “[t]heir first move was to acquire a few divisions of Lockheed Martin, which had only recently formed as the result of a merger between Lockheed Corporation and Martin Marietta. L-3 Communications then went on something of a shopping spree, buying as many as 30 companies between 1997 and 2017.”¹⁵ In 2018, it merged with Harris Corporation, a prominent surveillance and electronic-warfare company.¹⁶ With the

<https://media.defense.gov/2022/Feb/15/2002939087/-1/-1/1/STATE-OF-COMPETITION-WITHIN-THE-DEFENSE-INDUSTRIAL-BASE.PDF>.

⁶ *Id.*

⁷ *Id.*

⁸ *Id.*

⁹ Commission on the Future of the United States Aerospace Industry, “Final Report,” November 2002, p. 134, <https://history.nasa.gov/AeroCommissionFinalReport.pdf>.

¹⁰ Responsible Statecraft, “Incredibly shrinking defense industry is a boon for the fat cats,” Connor Echols, December 19, 2022, <https://responsiblestatecraft.org/2022/12/19/incredibly-shrinking-defense-industry-is-a-boon-for-the-fat-cats/>; U.S. Government Accountability Office, “Small Business Contracting: Actions Needed to Implement and Monitor DOD’s Small Business Strategy,,” October 2021, <https://www.gao.gov/assets/720/717090.pdf>.

¹¹ Antitrust Alert, “Aerospace and Defense Series: DOJ and FTC Vertical Merger Guidelines Will Impact Government Contractors,” Anthony S. Ferrera and Jon B. Dubrow, February 24, 2020, <https://www.antitrustalert.com/2020/02/aerospace-and-defense-series-doj-and-ftc-vertical-merger-guidelines-will-impact-government-contractors/>.

¹² Responsible Statecraft, “Incredibly shrinking defense industry is a boon for the fat cats,” Connor Echols, December 19, 2022, <https://responsiblestatecraft.org/2022/12/19/incredibly-shrinking-defense-industry-is-a-boon-for-the-fat-cats/>.

¹³ *Id.*

¹⁴ Funding Universe, “L-3 Communications Holdings, Inc. History,” <http://www.fundinguniverse.com/company-histories/l-3-communications-holdings-inc-history/>.

¹⁵ Responsible Statecraft, “Incredibly shrinking defense industry is a boon for the fat cats,” Connor Echols, December 19, 2022, <https://responsiblestatecraft.org/2022/12/19/incredibly-shrinking-defense-industry-is-a-boon-for-the-fat-cats/>.

¹⁶ *Id.*

consummation of that deal, L3Harris and its Wall Street backers had effectively bought its spot as one of the biggest defense contractors in the world.¹⁷

Simultaneously, Aerojet and Pratt & Whitney Rocketdyne, “both of which made rocket propulsion systems,” merged in 2013 to create Aerojet Rocketdyne.¹⁸ Aerojet Rocketdyne is “now one of only two U.S.-based firms that produce rocket motors at large scales” – and the only independent company since Northrop Grumman, the world’s fourth-largest weapons maker, bought Orbital ATK in 2018 – leaving scant competition for a critical component of many advanced weapons.¹⁹ (One immediate harmful effect of that similar transaction was that Boeing stopped bidding for a Pentagon program to replace America’s ground-based nuclear missiles, citing competition concerns.²⁰) Moreover, prior to announcing the Aerojet deal, in October L3Harris announced that it planned to purchase Viasat’s military communications unit for \$2 billion.²¹

L3Harris has bought its way to the top of the defense industrial base, and this trend could ultimately threaten U.S. national security. Lockheed Martin, Raytheon, and Boeing are all dependent on products that only Aerojet is able to produce, and their operations would be hamstrung by its acquisition.²² In simple terms, if L3Harris were to own Aerojet, L3Harris would be in a position to leverage its control over solid rocket motors and other Aerojet products to force other companies and the United States to purchase its other products, regardless of the impact this would have on price or quality.

This lack of competition in solid rocket motors represents a national-security threat. The Pentagon’s recent report on competition in the defense industrial base found that:

[C]ompetition is also an indicator of the necessary industrial capability and capacity to deliver the systems, key technologies, materials, services, and products the Department requires to support its mission. Insufficient competition may leave gaps in filling these needs, remove pressures to innovate to outpace other firms, result in higher costs to taxpayers as leading firms leverage their market position to charge more, and raise barriers for new entrants. Moreover, having only a single source or a small number of sources

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.*; Northrop Grumman, “Northrop Grumman Completes Orbital ATK Acquisition, Blake Larson Elected to Lead New Innovation Systems Sector,” press release, June 6, 2018, <https://news.northropgrumman.com/news/releases/northrop-grumman-completes-orbital-atk-acquisition-blake-larson-elected-to-lead-new-innovation-systems-sector>.

²⁰ Washington Post, “Boeing drops out of massive Pentagon nuclear missile program, citing unfair competition,” Aaron Gregg, July 25, 2019, <https://www.washingtonpost.com/business/2019/07/25/boeing-drops-out-massive-pentagon-nuclear-missile-program-citing-unfair-competition/>.

²¹ Responsible Statecraft, “Incredibly shrinking defense industry is a boon for the fat cats,” Connor Echols, December 19, 2022, <https://responsiblestatecraft.org/2022/12/19/incredibly-shrinking-defense-industry-is-a-boon-for-the-fat-cats/>.

²² Forbes, “How Aerojet Rocketdyne Manages To Play An Outsized Role In The U.S. Defense Supply Chain,” Loren Thompson, May 1, 2020, <https://www.forbes.com/sites/lorenthompson/2020/05/01/how-aerojet-rocketdyne-manages-to-play-an-outsized-role-in-the-us-defense-supply-chain/?sh=61ce7e6611d1>.

for a defense need can pose mission risk and, particularly in cases where the existing dominant supplier or suppliers are influenced by an adversary nation, pose significant national security risks.²³

The FTC should take seriously the threats that further consolidation would pose to competition in the defense sector and to our national security by opposing this deal in the same way that it opposed Lockheed Martin's acquisition of Aerojet.²⁴ Currently, when the military solicits proposals for missile defense systems from defense firms like Northrup Grumman, Raytheon, Boeing, and Lockheed Martin, it can force these contractors to compete off each other on pricing, timing, and other contractual terms. The FTC opposed the Lockheed Martin-Aerojet acquisition because if it had gone through, the military's ability to spur competition would have been inhibited because the newly integrated entity would have had the ability and incentive to raise costs for its rivals, hurting competition and potentially threatening national security.²⁶

Allowing L3Harris to acquire Aerojet would present similar threats to competition and national security: "As an independent supplier, Aerojet has the incentive to allocate its research and development funds based on the potential return the funds would generate regardless of which prime contractor it is supporting, said the FTC. 'The combined firm would be incentivized to allocate Aerojet investment dollars for the combined firm's benefit alone, which would stifle innovation.'"²⁷

Some have questioned Aerojet's ability to "thrive over the long run" and argue that L3Harris needs to buy Aerojet for Aerojet to be competitive with Northrup Grumman following its acquisition of Orbital ATK.²⁸ However, this may reflect management issues at Aerojet rather than legitimate competition concerns. For at least the past year, instead of being focused on investing in research and development and producing high-quality products that are critical to protect our service members and national security, Aerojet has been consumed by infighting regarding deals with potential buyers.³¹ This has resulted in Aerojet being

²³ U.S. Department of Defense, Office of the Under Secretary of Defense for Acquisition and Sustainment, "State of Competition within the Defense Industrial Base," February 2022, p. 1, <https://media.defense.gov/2022/Feb/15/2002939087/-1/-1/1/STATE-OF-COMPETITION-WITHIN-THE-DEFENSE-INDUSTRIAL-BASE.PDF>.

²⁴ Federal Trade Commission, "FTC Sues to Block Lockheed Martin Corporation's \$4.4 Billion Vertical Acquisition of Aerojet Rocketdyne Holdings Inc.," press release, January 25, 2022, <https://www.ftc.gov/news-events/news/press-releases/2022/01/ftc-sues-block-lockheed-martin-corporations-44-billion-vertical-acquisition-aerojet-rocketdyne>.

²⁶ *Id.*

²⁷ SpaceNews, "Federal Trade Commission blocks Lockheed Martin's acquisition of Aerojet Rocketdyne," Sandra Erwin, January 25, 2022, <https://spacenews.com/federal-trade-commission-likely-to-block-lockheed-martins-acquisition-of-aerojet-rocketdyne/>.

²⁸ Forbes, "Five Reasons An L3Harris Merger With Aerojet Will Not Face The Obstacles Lockheed Martin's Bid Did," Loren Thompson, January 13, 2023, <https://www.forbes.com/sites/lorenthompson/2023/01/13/five-reasons-an-l3harris-merger-with-aerojet-will-not-face-the-obstacles-lockheed-martins-bid-did/?sh=3ccd91b116b3>.

³¹ *Id.*

“distracted” and “struggling to deliver quality rocket motors,” causing it to “become ‘the weak link’ in Raytheon Technologies’ supply chain.”³²

Nevertheless, if it is correct that allowing Northrop Grumman to acquire Orbital ATK has harmed competition and innovation in the solid rocket motor market and has signaled to other companies like Aerojet that their focus should be on mergers and acquisitions rather than innovation, the remedy is not to approve yet another acquisition that would reduce competition. The FTC should instead move to make the industry more competitive again by unwinding Northrop Grumman’s 2018 acquisition of solid rocket motor producer Orbital ATK that left Aerojet as the sole independent supplier.

The FTC must act quickly and aggressively to address the L3Harris-Aerojet acquisition, and it has ample evidence to successfully oppose this merger. L3Harris’s acquisition spree spanning two decades and over 30 target companies is evidence of anticompetitive intent, and its acquisition of the last remaining independent U.S. supplier of missile propulsion systems must be viewed in that context.³³ Empirical evidence and enforcement history have shown that the “acquisition or exclusion of unproven innovators is properly regarded as a core concern of antitrust law. Evidence of anticompetitive intent—particularly evidence of a larger anticompetitive design that spans multiple acts—can help to resolve the difficult question of distinguishing salutary from anticompetitive acquisitions. Enforcement agencies must be ready to intervene ex post when a pattern of anticompetitive conduct becomes clearer.”³⁴

L3Harris’s acquisition of Aerojet defines anticompetitive enhanced market power and would adversely affect customers, including reduced product quality, reduced product variety, reduced service, and diminished innovation.³⁵ In this case, the “customer” is the American people and the Department of Defense. We depend and rely on the highest performance and quality from the defense industrial base in order to protect our service members abroad and Americans at home. Any acquisition that would increase costs or threaten the quality, variety, service, or innovation must be stopped. L3Harris’s acquisition of Aerojet would negatively affect competition within the defense industrial base and threaten our national security.

Additionally, in light of the arguments that Northrop Grumman’s acquisition of Orbital ATK reduced competition such that the L3Harris-Aerojet deal is necessary to restore

³² Defense One, “Aerojet Rocketdyne Struggling to Deliver Rocket Motors, Raytheon CEO Says,” Marcus Weisgerber, December 7, 2022, <https://www.defenseone.com/business/2022/12/aerojet-rocketdyne-struggling-deliver-rocket-motors-raytheon-ceo-says/380562/>.

³³ Responsible Statecraft, “Incredibly shrinking defense industry is a boon for the fat cats,” Connor Echols, December 19, 2022, <https://responsiblestatecraft.org/2022/12/19/incredibly-shrinking-defense-industry-is-a-boon-for-the-fat-cats/>.


³⁴ University of Pennsylvania Law Review, NYU Law and Economics Research Paper, Columbia Law and Economics Working Paper, “Nascent Competitors,” C. Scott Hemphill and Tim Wu, June 11, 2020, <https://ssrn.com/abstract=3624058>.

³⁵ U.S. Department of Justice and the Federal Trade Commission, “Horizontal Merger Guidelines,” August 19, 2010, p. 2, <https://www.ftc.gov/legal-library/browse/horizontal-merger-guidelines-united-states-department-justice-federal-trade-commission>.

competition,³⁶ I request a briefing with relevant FTC staff to discuss the findings of any investigation related to that deal, the legal actions that the FTC may be considering, and the impact these findings may have on the FTC's usage of remedies going forward.

Thank you for your attention to this matter.

Sincerely,



Elizabeth Warren
United States Senator

³⁶ Forbes, "Five Reasons An L3Harris Merger With Aerojet Will Not Face The Obstacles Lockheed Martin's Bid Did," Loren Thompson, January 13, 2023, <https://www.forbes.com/sites/lorenthompson/2023/01/13/five-reasons-an-l3harris-merger-with-aerojet-will-not-face-the-obstacles-lockheed-martins-bid-did/?sh=3ccd91b116b3>.