## **INDUSTRY UPDATE**

# Aerospace & Defense Market Monitor





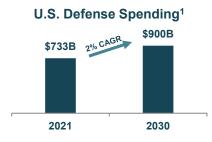


SUMMER 2021 | DEFENSE INDUSTRY SPOTLIGHT

#### **DEFENSE MARKET INSIGHTS**

#### **Growing Defense Budget Provides Industry Tailwinds**

- The defense market has proven resilient and weathered the disruptions caused by the COVID-19 pandemic, largely driven by the U.S. government's continued execution and funding of military programs.
- The White House announced that its Fiscal Year 2022 budget will seek \$753B for national defense, a 1.7% increase over the FY 2021 enacted budget, that includes \$715B for the Defense Department. With an expected defense spend of \$733B in 2021, U.S. defense spending is forecasted to grow at a CAGR of 2% from 2021 2030 and reach \$900B.
- Global defense markets are expected to trend in line with the U.S. as most countries have not significantly reduced defense budgets and remain committed to sustaining military capabilities.



• Key spending areas include (1) planned procurement of advanced military equipment to replace aging equipment currently in service; (2) increasing investments in the development of advanced technologies like additive manufacturing; and (3) Al integration for C4ISR applications and improved lethality of weapon stations.

#### **Defense M&A Remains Strong Driven by Investments in Technology**

- M&A in the defense industry has remained relatively active through 2020 and has been notably more active since
  last November's presidential election. Through Q1 2021, the total value of deals announced for defense
  transactions in excess of \$100M exceeded 2020's total figure of \$13.3B, led by Veritas Capital's \$3B acquisition of
  Cubic.
- Access to new and advanced technologies continues to be a driving force for defense M&A activity. Transactions in the Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance ("C4ISR") are expected to increase as firms seek further access into the enabling technology markets in military air, land, sea and space platforms following the Department of Defense's first enterprise data strategy. The strategy declares seven goals around digital modernization aimed at transforming the Pentagon into a data-centric organization.
- Government services, space technologies, and cybersecurity have also attracted strong investment interest from both financial and strategic investors. As a recent example, in May, Noblis acquired McKean Defense and its affiliates Mikros Systems and Cabrillo Technologies, further expanding Noblis' scale and capabilities of their Defense Mission offering.
- Access to proprietary technology and intellectual property is expected to continue to drive M&A activity across these segments.

# Corporate Divestitures Offer Investors Attractive Acquisition Assets and Sellers with Liquidity

- Following the consolidation experienced in the defense industry in recent years, 2021 has seen several major strategic players divest business divisions in order to reshape their portfolios and focus on their respective core business strategies. These divested assets have created attractive assets for both private equity platform investments and strategics' portfolio expansion.
- Effective May 7, 2021, Triumph Group announced the sale of its composites business and three aerostructure fabrication facilities to Arlington Capital Partners. Arlington Capital will form a new company, Qarbon Aersopace, and fabricate structural and engine components and assemblies for both commercial aircraft and military uses.
- L3Harris Technologies has signed definitive agreements to sell its Combat Propulsion Systems business to RENK AG and its Military Training business to CAE for a combined \$1.45B. Additionally, Northrop Grumman divested its IT Services Business to Peraton, an affiliate of Veritas Capital for \$3.4B.
- Divestitures will provide industry strategics with incremental cash on the balance sheet to focus on R&D initiatives, balance sheet restructuring, and pursue new M&A opportunities that are more aligned with their core business focus.





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#### SUMMER 2021 | DEFENSE INDUSTRY SPOTLIGHT

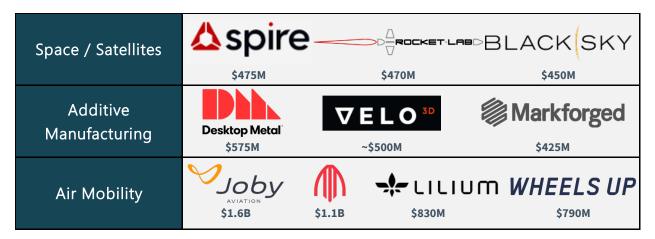
#### **DEFENSE MARKET INSIGHTS (cont.)**

# Increasing use of Advanced Manufacturing Technologies Across the Defense Supply Chain

- The defense industry is well positioned to benefit from advancements in additive manufacturing and advanced materials as participants continue to seek light-weight, stronger materials. Further, the rapid production capabilities can significantly improve product lead times and reduce supply chain costs.
- In January, the U.S. Department of Defense released an additive manufacturing strategy which seeks to pave the way for the use of additive manufacturing within the Nation's defense program, highlighting the importance of incorporating these technologies into practice. Advanced manufacturing is already being deployed on several initiatives and used in the production of spare parts throughout the U.S. military.<sup>2</sup>
- Tier 1 defense suppliers are increasing their focus on advanced manufacturing to develop the technology and expertise to better and more competitively serve the needs of their defense customer base. Lockheed Martin and Northrop Grumman, among others, have been focusing on developing these technologies in-house.
- Additive manufacturing and advanced materials has also been an active space for start-ups and early-stage companies seeking to disrupt the manufacturing supply chain with new technology. These emerging market entrants may serve as attractive acquisition candidates for Tier 1's looking to gain a competitive advantage.

#### Strong SPAC Interest in Innovative Technologies Surrounding the A&D Industry

- Sectors operating tangential to defense, providing innovative technologies with defense applications have drawn strong interest from Special Purpose Acquisition Companies ("SPACs") including the space, satellites, and additive manufacturing sectors. The Air Mobility sector has also attracted significant SPAC investments with a mix of both commercial and defense aerospace applications.
- Recent SPAC transactions include:



- Post-SPAC transaction, companies are well capitalized to aggressively pursue both organic and inorganic growth opportunities. Given the strong valuations at which the initial transactions occur, accelerating growth will be a key focus area.
- Follow-on acquisitions are common strategies in SPAC mandates and can be a means to quickly fuel growth for the company. As a result, this creates a new and active investor universe for both earlier stage and wellestablished companies.

Sources: Pitchbook, company press releases, company websites & Meridian research

2. 3D Printing Industry

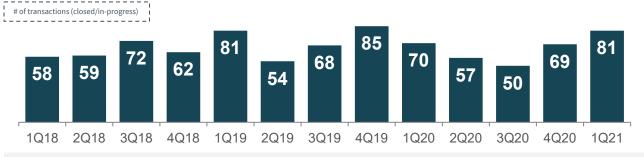




SUMMER 2021 | DEFENSE INDUSTRY SPOTLIGHT

#### **AEROSPACE & DEFENSE M&A ACTIVITY**

#### **M&A Activity and Market Trends**



#### Sector Index Performance<sup>3</sup>



### **Recent Transaction Spotlights**







**Description:** Essex Industries has acquired Stevens Manufacturing, a provider of precision machined OEM parts and sub-assemblies to aerospace and defense companies primarily supporting the rotorcraft market.

**Rationale:** The acquisition supports Essex' business strategy of continued expansion of its aerospace and defense product portfolio.





April 2021

**Description:** Enjet Aero has acquired Birken Manufacturing via its financial sponsor VantEdge Partners. Birken Manufacturing is a supplier of complex aeroengine components.

Rationale: The acquisition of Birken reinforces Enjet's commitment to expanding its breadth of manufacturing capabilities and customer reach.





May 2021

**Description:** Anduril has acquired Area-I, a developer of unmanned aircraft systems for national security.

Rationale: The acquisition expands Anduril's portfolio of unmanned aerial systems, creating new opportunities for its software defined capabilities such as mission autonomy and intelligent teaming.

3. Individual components of Aerospace and Defense Indices can be found on page 5. Indices weighted by Market Capitalization. Sources: Pitchbook, Meridian research & company press releases





### SUMMER 2021 | DEFENSE INDUSTRY SPOTLIGHT

#### PUBLICLY-TRADED AEROSPACE & DEFENSE COMPANIES

\$US in millions, except per share amounts)	Market	Market Enterprise		LTM		EV/LTM		52-Week
Company Name	Сар	Value	Revenue	EBITDA	Revenue	EBITDA	EBITDA	Change
Boeing Co.	\$149,489	\$191,361	\$56,467	(\$7,980)	3.4x	-	-	39 %
Airbus S.A.S.	\$106,240	\$104,761	\$57,950	\$2,922	1.8x	35.9x	5.0%	67 %
Safran Group SA	\$65,472	\$69,833	\$18,958	\$2,822	3.7x	24.7x	14.9%	39 %
TransDigm Group, Inc.	\$36,201	\$52,164	\$4,496	\$1,915	11.6x	27.2x	42.6%	37 %
HEICO Corporation	\$18,558	\$19,013	\$1,697	\$437	11.2x	43.5x	25.7%	29 %
Textron Inc.	\$15,472	\$17,487	\$11,753	\$1,173	1.5x	14.9x	10.0%	85 %
MTU Aero Engines AG	\$13,904	\$14,787	\$4,533	\$593	3.3x	24.9x	13.1%	37 %
Spirit AeroSystems Holdings, Inc.	\$5,426	\$7,705	\$3,228	(\$382)	2.4x	-	-	65 %
Hexcel Corporation	\$5,017	\$5,847	\$1,272	\$88	4.6x	66.4x	6.9%	34 %
Kaman Corporation	\$1,536	\$1,614	\$749	\$94	2.2x	17.2x	12.5%	26 %
Triumph Group, Inc.	\$1,297	\$2,703	\$1,870	\$109	1.4x	24.7x	5.9%	107 %
Senior plc	\$920	\$1,201	\$940	\$77	1.3x	15.5x	8.2%	92 %
Ducommun Inc	\$639	\$951	\$613	\$86	1.6x	11.1x	14.0%	43 %
	Median Mean	\$14,787 \$37.648	\$3,228 \$12.656	\$109 \$150	2.4x 3.8x	24.7x 27.8x	12.5% 14.4%	39 % 54 %

Defense								
Raytheon Technologies Corporation	\$134,282	\$160,425	\$60,478	\$7,139	2.7x	22.5x	11.8%	31 %
Lockheed Martin Corporation	\$107,030	\$116,281	\$66,005	\$10,586	1.8x	11.0x	16.0%	(5)%
Northrop-Grumman Corporation	\$59,107	\$69,750	\$37,336	\$5,688	1.9x	12.3x	15.2%	9 %
General Dynamics Corporation	\$54,129	\$66,808	\$38,565	\$4,431	1.7x	15.1x	11.5%	22 %
L3 Harris Technologies, Inc.	\$44,834	\$51,790	\$18,135	\$3,538	2.9x	14.6x	19.5%	10 %
BAE Systems Plc	\$24,259	\$30,118	\$24,711	\$3,488	1.2x	8.6x	14.1%	17 %
Thales SA	\$21,961	\$25,392	\$19,366	\$2,424	1.3x	10.5x	12.5%	22 %
Elbit Systems Ltd.	\$5,755	\$6,791	\$4,710	\$433	1.4x	15.7x	9.2%	(13)%
Kratos Defense & Security Solutions Inc	\$3,147	\$3,124	\$773	\$80	4.0x	38.9x	10.4%	34 %
Moog Inc.	\$2,921	\$3,799	\$2,785	\$168	1.4x	22.6x	6.0%	45 %
	Median Mean	\$40,954 \$53,428	\$22,038 \$27,286	\$3,513 \$3,797	1.7x 2.0x	14.9x 17.2x	12.2% 12.6%	19 % 17 %





SUMMER 2021 | DEFENSE INDUSTRY SPOTLIGHT

#### PACIFIC CONSOLIDATED INDUSTRIES RECAPITALIZED BY TJM CAPITAL PARTNERS

In March 2021, Meridian Capital completed the successful recapitalization of Pacific Consolidated Industries, LLC ("PCI" or the "Company"), a portfolio Company of Main Street Capital Corporation (NYSE: MAIN), by TJM Capital Partners ("TJM").

Founded in 1984 and based in Riverside, California, PCI is a leading provider of deployable, onsite, liquid and gaseous oxygen and nitrogen generating systems. PCI's products serve applications where it is inefficient to utilize distributed industrial gases including aerospace and defense, medical, water and wastewater treatment, oil & gas, and general industrial end-markets.

Bob Eng, CEO of PCI shared "On behalf of PCI Gases, we're very excited to partner with TJM's partners and investors to drive further growth on a broader scale by expanding our market reach and value-added offerings and solutions to new and existing customers, particularly in the medical and industrial oxygen markets."



#### SHIELDS MANUFACTURING ACQUIRED BY PRECINMAC PRECISION MACHINING

In December 2020, Meridian Capital announced the successful acquisition of Shields Manufacturing, Inc. ("Shields" or the "Company") by Precinmac Precision Machining ("Precinmac"), a portfolio company of Pine Island Capital Partners, LLC, Bain Capital Credit, LP, and Compass Partners Capital.



Founded in 1991 and located in Tualatin, Oregon, Shields serves the semiconductor, life sciences, and aerospace markets providing precision CNC machined components and complex assemblies. The Company specializes in complex mechanical and optical assemblies with extensive metal and plastic machining capabilities.

Bill and Ruthie Shields, co-owners of Shields, shared, "Meridian acted as a committed and thoughtful advisor throughout the entire transaction, helping Shields and its shareholders reach an outstanding outcome in a challenging environment. We're excited for Shields to join the Precinmac family with a strong alignment on culture and capabilities that the combination brings to Shields' customers."





# MERIDIAN CAPITAL SUMMER 2021 | DEFENSE INDUSTRY SPOTLIGHT

## **NOTABLE TRANSACTIONS: DEFENSE**

_	nnounced <u>ate</u>	Acquirer/Investor	<u>Target</u>	Target Description
	May-21	Red Cat Holdings	Skypersonic	Manufacturer of drones.
	May-21	Brightstar Capital Partners	Engineering Research and Consulting	Provider of engineering and consulting services.
	May-21	Ott Ventures	Sting Industries	Developer of modular drones.
	May-21	Arlington Capital Partners	Qarbon Aerospace	Provider of aerospace services.
	May-21	AeroVironment	Telerob	Manufacturer of remote-controlled robots.
	May-21	Enjet Aero	Birken Manufacturing	Manufacturer of engine assemblies/components.
	May-21	Noblis	McKean Defense	Provider of naval sustainment and logistics services.
	Apr-21	AMETEK	Abaco Systems	Provider of open architecture electronic systems.
	Apr-21	BDT Capital Partners	American Glass Products	Manufacturer and designer of glazing products.
	Apr-21	Elbit Systems	Elisra	Manufacturer of high-tech electronic devices.
	Apr-21	Elbit Systems	Sparton	Manufacturer of electromechanical devices.
	Apr-21	Nikon	Morf3D	Provider of additive manufacturing services.
	Apr-21	Elbit Systems	BAE Systems Rokar International	Developer of defense products.
	Apr-21	Panta Holdings	Fokker Services	Provider of aircraft maintenance services.
	Apr-21	Anduril	Area-I	Designer and developer of unmanned aircraft systems.
	Mar-21	Prudent American Technologies	CAM Military	Manufacturer of military equipment.
	Mar-21	J.F. Lehman & Company	Trillium Engineering	Manufacturer of engineered camera gimbals.
	Mar-21	TJM Capital Partners	Pacific Consolidated Industries	Manufacturer of ruggedized onsite liquid, gaseous oxygen, and nitrogen generators.
	Mar-21	Waterland Private Equity Investments	Celestia Technologies Group	Provider of technology products, systems and services.
	Mar-21	BlackSoil	ideaForge	Developer of aerial vehicles and drones.
	Mar-21	OpenGate Capital	TREALITY Simulation Visual Systems	Manufacturer and seller of aerospace/defense products.
	Mar-21	VSE	HAECO Special Services	Provider of fully integrated MRO support solutions.





# MERIDIAN CAPITAL SUMMER 2021 | DEFENSE INDUSTRY SPOTLIGHT

## **NOTABLE TRANSACTIONS: DEFENSE (cont.)**

Announced Date	Acquirer/Investor	<u>Target</u>	Target Description
Mar-21	General Atomics Europe	Ruag Aerospace Services	Provider of maintenance services.
Mar-21	CAE	L3Harris Technologies	Provider of defense training and simulation technology.
Mar-21	ComSovereign	Sky Sapience	Developer of fielded tethered aerial rotorcraft platforms.
Mar-21	Renk	L3Harris Technologies	Manufacturer of motors and generators.
Feb-21	AE Industrial Partners	Deployable Space Systems	Manufacturer of deployable space systems.
Feb-21	AeroVironment	Arcturus UAV	Manufacturer/integrator of unmanned aerial systems.
Feb-21	FDS Avionics	Calculex	Manufacturer of data recording and routing systems.
Feb-21	Essex Industries	Stevens Manufacturing Company	Manufacturer of precision machined OEM parts.
Feb-21	Infosys	ideaForge	Developer of aerial vehicles and drones.
Feb-21	QuantiTech	Millennium Engineering and Integration	Provider of engineering services.
Feb-21	Aeronautics	Magal Security Systems	Provider of security solutions.
Feb-21	Peraton, Veritas Capital	Northrop Grumman (Federal IT Business)	Provider of federal IT and mission support services.
Jan-21	HarbourVest Partners, Hermetic Solutions Group	Cristek	Manufactures specialty connector products.
Jan-21	Teledyne Technologies	FLIR Systems	Designs and develops detection technology.
Dec-20	Commerce West Bank (Debt Financing & Growth Capital)	Pacific Consolidated Industries	Manufacturer of ruggedized onsite liquid, gaseous oxygen, and nitrogen generators.
Dec-20	Lockheed Martin	Aerojet Rocketdyne Holdings	Manufactures launch systems and space applications.
Dec-20	Raytheon Technologies	Blue Canyon Technologies	Manufactures spacecraft and components.
Dec-20	Moog	Genesys Aerosystems	Provides military autopilot systems and components.
Dec-20	Charger Investment Partners	Advanced Composite Products and Technology	Manufactures engineered composite structures.
Dec-20	AE Industrial Partners, Redwire	LoadPath	Develops deployable structures and thermal products.
Nov-20	Lockheed Martin	i3	Develops hypersonic missiles.
Nov-20	Kratos Defense & Security Solutions	5-D Systems	Provides military and engineering services.





# MERIDIAN CAPITAL SUMMER 2021 | DEFENSE INDUSTRY SPOTLIGHT

### **NOTABLE TRANSACTIONS: AEROSPACE**

Announced <u>Date</u>	Acquirer/Investor	<u>Target</u>	Target Description
May-21	Arlington Capital Partners	Qarbon Aerospace	Provider of aerospace services.
May-21	Experience Investment	Blade Urban Air Mobility	Operator of a digitally powered aviation company.
Apr-21	J&E Precision Tool	Alloy Specialties	Manufacturer of engine components.
Apr-21	Spirit AeroSystems Holdings	Applied Aerodynamics	Provider of aircraft maintenance services.
Apr-21	Greenbriar Equity Group	PCX Aerostructures	Manufacturer of large structural airframe assemblies.
Apr-21	Kepler Capital, Warburg Pincus	Aquila Air Capital	Operator of a commercial aerospace company.
Apr-21	Searchlight Capital Partners	Technical Airborne Components Industries	Designer and manufacturer of rods and struts.
Apr-21	Panta Holdings	Fokker Services	Provider of aircraft maintenance services.
Mar-21	Qell Acquisition	Lilium	Developer of electric jets.
Mar-21	Waterland Private Equity Investments	Celestia Technologies Group	Provider of technology products, systems, and services.
Mar-21	Jaws Spitfire Acquisition	Velo3D	Developer of metal laser sintering printing machines.
Mar-21	Insight Equity	Altron	Provider of contract electronics manufacturing services.
Mar-21	24/6 Capital Partners	Senior Aerospace Connecticut	Manufacturer of precision metallic parts.
Mar-21	China Science & Merchants Investment Management	Hanfei Aviation Technology	Provider of a drone and civil aviation technology service.
Mar-21	OpenGate Capital	TREALITY Simulation Visual Systems	Manufacturer of aerospace and defense products.
Mar-21	Vector Acquisition II	Rocket Lab	Manufacturer of commercial rocket launchers.
Mar-21	Tower Arch Capital	LifePort	Designer and manufacturer of cabin components.
Mar-21	NavSight Holdings	Spire	Provider of satellite-powered data and analytics solutions.
Feb-21	One	MarkForged	Provider of industrial 3D printing services.
Feb-21	Vance Street Capital	FDS Avionics	Manufacturer of aircraft electronic systems.
Feb-21	Osprey Technology	BlackSky	Provider of real-time geospatial intelligence services.
Feb-21	StandardAero	Signature Aviation	Provider of engine repair and overhaul services.

Source: Pitchbook





# SUMMER 2021 | DEFENSE INDUSTRY SPOTLIGHT

## **NOTABLE TRANSACTIONS: AEROSPACE (cont.)**

Annound <u>Date</u>	ed <u>Acquirer/Investor</u>	<u>Target</u>	Target Description
Feb-2		Archer Aviation	Manufacturer of renewable aircraft.
Feb-2	Karman Systems, Trive Capital	AAE Aerospace	Developer of fabrication devices for the aerospace industry.
Feb-2	1 Global Emerging Markets	Skyworks Aeronautics	Developer of aerospace technologies.
Feb-2	Directional Aviation Capital, OneSky Flight	Associated Aircraft Group	Provider of helicopter charter and maintenance services.
Feb-2	1 N/A	Kaman Composites - UK Holdings	Manufacturer of aviation tools.
Feb-2	1 General Atomics	Tiger Innovations	Developer of spacecraft and space-related systems.
Feb-2	1 Eaton	Sargent Fletcher	Manufacturer and supplier of aircraft equipment and parts.
Jan-2	Aspirational Consumer Lifestyle	Wheels Up	Operator of a membership-based aviation company.
Jan-2	Reinvent Technology Partners	Joby Aviation	Developer of vertical electric aircraft.
Jan-2	AE Industrial Partners, Redwire	Oakman Aerospace	Develops space technologies.
Jan-2	1 TransDigm Group	Cobham Aerospace Connectivity	Manufactures communication and navigation systems.
Jan-2	1 The Jordan Company	Innoflight	Manufactures cryptographic and avionic systems.
Dec-2	0 Hanwha Chemical	Cimarron Composites	Manufactures high-pressure hydrogen tanks.
Dec-2	0 J.F. Lehman & Company	CTS Engines	Provides engine maintenance and repair services.
Dec-2	O American Industrial Partners	Orizon Aerostructures	Manufactures subassemblies aviation products.
Dec-2	Abrams Capital Management, Loar Group	Safe Flight Instrument	Manufactures flight safety and performance products.
Dec-2	Precinmac Precision Machining	Shields Manufacturing	Manufacturer of CNC machined components/assemblies.
Dec-2	0 AerSale	Monocle Acquisition	Supplier of aftermarket aircraft, spare engines, flight equipment, and maintenance services.
Dec-2	Jet Parts Engineering, Vance Street Capital	AeroSpares	Supplies commercial aerospace parts.
Dec-20	Alpine 4 Automotive Technologies	Impossible Aerospace	Manufactures high-performance electric aircrafts.
Dec-2	0 FLIR Systems	Altavian	Manufactures unmanned aircraft systems.

# **AEROSPACE & DEFENSE SECTOR**

#### MERIDIAN CAPITAL SECTOR COVERAGE

- Aerostructure & Interior Components
- Automation, Tooling & Engineering
- Defense Technology
- Ground Support Equipment

- MRO Services & Components
- Precision Machining, Fabrication & Sub-Assemblies
- Security Solutions & Services
- UAVs

#### MERIDIAN CAPITAL TRANSACTION EXPERIENCE













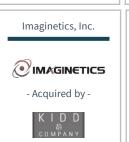
















ceradyne.inc.















Meridian Capital has been helping middle market business owners achieve their M&A and corporate finance goals since 1995.



#### INDUSTRY EXPERIENCE

Meridian's aerospace and defense practice provides comprehensive access to top industry-wide strategic and financial sponsor relationships, deep sector expertise, and proven transaction experience to help maximize shareholder value.

# TRANSACTION EXPERTISE

- Mergers & Acquisitions
- Growth Capital
- Strategic Advisory

# TAILORED PROCESSES

- High-Touch Approach
- Multidisciplinary Deal Team
- End-to-End Services

#### MERIDIAN CAPITAL'S AEROSPACE & DEFENSE TEAM



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# **About Meridian Capital**

Meridian Capital (www.meridianllc.com), a Seattle-based M&A advisory firm, has served as a trusted advisor to business owners on complex corporate finance, M&A, and strategic challenges for over 20 years. The firm differentiates itself through its deep industry insights, highly customized service approach, and end-to-end commitment to execution.

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