

2026: Starting Off Strong

- The SPADE Defense Index Outperformed the S&P500 by More Than 10% in 1Q2026.
- 10 Firms in the Index Gained 30% in 1Q26
- Assets Tracking the Index Added \$1.5 Billion YTD to Roughly \$8.4 Billion
- A 15-Year Average Total Return of 16.21%.
- A 5-Star Rating from Morningstar * * * * *

SPADE Defense Index Statistics

3/31/26 Close 19,456.52
12/31/25 Close 18,410.17

All-time Intraday High:
3 March 2026 21,893.39

All-time Closing High:
3 March 2026 21,288.14

Price Return	SPADE Defense	S&P 500
1Q26	5.68%	[4.63%]
2025	36.44%	16.39%

COMMENTARY

As we come to the close of the first quarter of 2026...

- Hostilities between the US / Israel and Iran continue.
- A temporary ceasefire between Israel and Lebanon has begun.
- War was declared between Pakistan and Afghanistan.
- The US president proposed a \$1.5 Trillion budget for FY2027 defense spending.
- The war between Russia and Ukraine has entered into year four with no end in sight.
- The future of NATO has been called into question as the White House alienates many of its long-standing allies.
- The defense sector now has 46 ETF products targeting the sector that have attracted \$68 Billion in assets under management.

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SPADE Defense Index March 2026 Rebalance

Added: Carpenter Technology (CRS)

Removed: C3.ai (AI)

Corporate Actions Affecting the Index in 2026

- Honeywell plans separate its Aerospace & Automation businesses in 2H2026.
- CAE's board is investigating a sale of the business.
- KBR announced plans to spin off its Mission Technology Solutions (MTS) segment into a separate, tax-free public company by mid-to-late 2026

Dividend

The Invesco Aerospace and Defense ETF returned a total dividend of \$0.046 per share on March 23. Prior twelve month dividend totaled \$0.656 per share.

Licensed Products

Exchange Traded Fund (ETF)

The SPADE Defense Index is licensed by Invesco and serves as the underlying index for the Invesco Aerospace & Defense ETF (NYSE Arca: PPA).

A Morningstar 5-Star Fund

★ ★ ★ ★ ★

Options Trading

Options on the Invesco Aerospace and Defense ETF (ticker: PPA) are available.

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2026 Forecast (April Update)

During periods of global instability, investors have historically increased their allocation to defense sector stocks and funds as a means to hedge against the risk associated with conflict-driven news.

It is our opinion that the environment in 2026 is conducive for continued relative outperformance by the aerospace and defense sector with investors benefiting from:

- Increasing geopolitical tensions in multiple regions of the world with a high possibility that major new engagements conflate and capture the news;
- Greater spending on defense in the US, Europe, Asia, the Middle East, and elsewhere, and;
- Robust commercial aerospace & space markets.

We expect that 4Q2026 will see increased volatility in the sector following the results of the US Congressional elections. Should the Democratic Party recapture one or both houses of Congress, investors may see that as a short-term opportunity to call the top and exit their positions in the sector. Historically, though, returns by the sector are more dependent on the level of perceived safety in the world than by which political party is in charge. The following free report provides historical data regarding broader market return based on control of the White House and Congress -- <https://spadeindex.com/Files/election.pdf>

The World Today

Global military spending has increased annually for the past dozen years with 2026 seeing record high—and a total expected to approach \$3 Trillion in 2027.

Defense spending, which was already trending upward, accelerated in response to the Russian invasion of Ukraine in February 2022. The past several years have seen western European nations increase spending on security at levels that are the largest in more than a generation—since the conclusion of World War II. Meanwhile, in the United States, spending on defense topped \$1 trillion and the White House has proposed a \$1.5 trillion budget for FY2027.

There should be no doubt that the world has become increasingly more unstable in the 2020s. Historically defense stocks perform best in times of uncertainty, global

instability, and fear—whether perceived or real. It doesn't matter if it is because of a conflict, the forthcoming threat of a conflict, the aftermath of a terrorist action, or a worry that our current state of readiness or our ability to use a new technology or defend against it is not where it needs to be.

Let's look at some of the key questions and issues for investors.

First Quarter 2026: Escalating Military Actions

The quarter started out with a US military raid on Venezuela to capture its president and bring him back to the US to face charges of operating a drug-smuggling ring. A few weeks later, at the end of February, attention shifted toward the attack by Israel and the US on Iran. Now roughly 45 days later, there's a temporary cease fire between Israel and Lebanon as those nations figure out how to dismantle the Iranian supported proxy Hezbollah once and for all. A proposed ceasefire between Iran and the US brokered by Pakistan failed. This should not have been a surprise since both sides, regardless of talking a good game to the media, really weren't even in the same ballpark. Iran wanted control of the Strait of Hormuz, the right to research and use nuclear technology, and a release of frozen assets and the removal of economic sanctions on the nation. The US wanted Iran to cease all nuclear technology activities, open navigation through the Strait of Hormuz, and also, continue preventing Iran from accessing funds that could be used to fund terrorist agendas via its proxies around the world and maintaining the embargo on the nation so that it cannot supply weapons to NATO adversaries such as Russia and North Korea, not to mention Hezbollah and the Houthi rebels.

The quarter also saw Pakistan declare war against Afghanistan after a number of terrorist attacks. There is, of course, the ongoing conflict between Russia and Ukraine and tension in Asia between China and Taiwan. On top of this, the White House proposed a \$1.5 Trillion (yes, that's a capital T) defense budget for FY2027. So stock prices should be booming, right?

Well, they are up nearly 13% percent this year and have outgained the broader market defined by the S&P500 by more than 8%. This follows a year when the SPADE Defense Index outperformed the market by 20%.

But a larger surge in share prices that one would expect hasn't yet happened. Let's try to figure out why.

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The White House's proposed FY27 budget

The recently released fiscal year 2027 budget proposal by White House called for roughly a 50% increase in defense spending. This would increase defense spending by \$500 billion, bringing total spending up near \$1.5 Trillion...much of which would go to companies to restock and expand military hardware assets.

The headline \$1.5 Trillion figure is actually broken down into a \$1.15 Trillion base budget and a reconciliation budget of \$350 billion. This addition offers a fast track process that limits Senate debate and can be approved by a simple majority vote...so without any Democratic party support or bringing it to a floor vote.

Still, the probability that it passes is slim. Many believe that the narrow margin of Republican control in the House and Senate is unlikely to overcome a lack of support from the combination of Republican budget hawks and Democrats. As such, we are unlikely to see a budget deal pass and FY2027, to begin in October, is likely to be operated under a continuing resolution (with budget levels remaining at current levels).

Supplemental war spending

We are more than halfway into the 90 days a President has before asking Congress to approve a military engagement. There is concern whether a supplemental bill to fund the war effort—which in the first two weeks was estimated at \$2 billion per day—will be approved by Congress. The total amount sought hasn't been agreed upon but a \$99B–\$200B amount has been floating around DC. This level seems to be too high to pass Congress and has been called “dead on arrival” by members of Congress and defense analysts. A smaller amount would likely pass.

Many in Congress, on both sides of the aisle, aren't clear about the purpose of the war and what the US hopes to achieve from it. None of the reasons provided—denying Iran the ability to produce a nuclear weapon, removing the threat of their missiles and drones from region, keeping tanker traffic through the Strait of Hormuz stable to ensure lower prices for energy, chemicals, and fertilizer—has become a rallying point.

So how much the US will increase defense spending remains unknown.

How Long will the War with Iran Continue?

The unpredictability of US government actions combined with the lack of a defined end goal make this hard to predict. It has become apparent that either:

- Iran's inventory of missiles and drones was either greater than estimated,
- Iran has gotten very lucky in evading US defensive countermeasures, or
- US intelligence failures lacked in providing exact locations of the military targets, missed identifying assets, or underestimated what firepower would be necessary to destroy underground facilities beneath rock and mountain formations.

Initial attempts for a cease fire have failed and negotiations seem to be at a standstill.

So How Does This End?

Option 1: The US declares a victory and states their mission objectives have been obtained.

Option 2: The US expands the operation, employs ground forces, and attempts to achieve their desired goals.

Wildcard 1: Though under attack, Arab nations have not directly responded. Why? Probably to let the US do the dirty work and see how it plays out. In our opinion, the direct engagement by Arab nations will appear to lead to a wider war but by employing ground troops, it would likely end more quickly and have more international support.

Wildcard 2: There was a rumor in mid-March that Iran, aided by Iraqis working for the US military in Iraq, were planning a major attack on the US base there. This was expected to occur on March 20, the end of Ramadan... but didn't. Were it to happen, the response by the White House would be significant and a massive escalation. The Administration would not want to appear weak by not responding in full force.

Multiple international efforts—Pakistan, Oman, Egypt, Turkey, and Germany—have tried to broker a peace but neither Iran nor the US seems willing to accept the others extreme conditions for a cease fire.

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Why haven't the people of Iran overthrown what should be a weaker government after the death of many of its key leaders?

It's been quietly reported that military personnel and the Islamic Revolutionary Guard Corps are engaged in mass and indiscriminate killings of civilians protesting or who are simply outside after curfews. There is widespread fear and multiple thousands are believed to have been executed. But with a news blackout in the nation, it is hard to confirm.

Another element is the new Supreme Leader of Iran, Mojtaba Khamenei, the son of the former Supreme Leader, has reportedly suffered a disfiguring injury to his face and significant injuries to one or both of his legs. His condition leads analysts to wonder who is actually in charge.

More on the FY-2027 Defense Budget

In a normal year, the highlight of Q1 for defense analysts is the release of a new proposed defense budget from the White House and the many articles and reports that come out from the Pentagon's Controllars Office, think tanks, and defense media outlets.

Details of what's inside fuel investor appetite to determine the winners and losers. How many extra planes and tanks will be ordered? What new R&D initiatives will be receiving increased funding. But this year, of course, is not a typical one. The budget release was met with a whimper not a bang.

Documents that we have relied upon for years—the Pentagon's *Green Book*, its *Budget Briefing*, and the *Program Acquisition by Weapons System* report—all now cease to exist (or at least their release has been delayed). Even the famous *CIA Factbook*, an incredible resource with facts and figures about countries around the world, has been discontinued. Sadly without the data from these resources, the volume of material being produced about the budget is lacking.

Unfortunately, though some budget topline figures have been announced, without the more detailed breakdown that was available in the prior-year reports / supplemental budget documents, it is difficult to truly understand what exactly is to be funded. For example, in one section the US Air Force (stated as Air + Space Forces) has a proposed budget of \$101.2B, yet in another place there are proposed budgets for the USAF R&D of \$74.2B, USAF Procurement of \$62B, and a Space Force budget of \$71.2B. A narrative

explaining what these figures includes is critical to understanding the numbers presented.

Elsewhere: What is China Thinking?

Defense analysts in Washington, Taipei, and Tokyo had begun to believe that an attack on Taiwan by China would be a gradual and calculated effort featuring blockades, ship inspections, cutting communications, etc. These efforts would be ramped up to see what sort of measured response the US would offer. The attack on Iran added an element of unpredictability. Analysts are starting change their assumptions that the risk of open war would be too costly. Would President Trump manage the situation or order a direct and unexpected attack on China while negotiating a solution as they did in Iran?

Elsewhere: Russia vs. Ukraine

Russia's war in Ukraine is now in its fifth year and the cost to Russia has been significant. A recent article by a research fellow from Stanford University's Hoover Institution estimated the cost to be \$2.5 trillion (a bit higher than their annual GDP). Additionally, the Center for Strategic and International Studies has stated that this war has claimed 325,000 Russian lives with 875,000 wounded or missing. In comparison, the 10-year war between the Soviet military and Afghanistan saw just 15,000 Soviet soldiers killed; the US lost roughly 58,000 soldiers in Vietnam. Ukraine has been able to maintain a standoff with Russia forces though with considerable damage. In the trenches, Ukraine is now able to field updates to its unmanned aerial vehicles (UAVs), sometimes within 24 hours to adjust to Russian tactics. Its skills in this area are being sought by US and other allied nations both in the rapid production of inexpensive drones and also their counterdrone systems and technologies. Meanwhile, German defense minister Boris Pistorius has stated that with a conclusion to hostilities, Russia could be capable of launching an attack on a NATO territory by 2029-2030...hence, a need to provide continued support for Ukraine as it keeps Russia occupied and the fighting away from a direct conflict with their nation or another NATO member.

* * *

Defense Sector Trends

Below are a dozen technological and operational trends reshaping the sector in 2026.

1. Rise of the Technology Disruptors: National security customers are showing interest in working with firms and technologies sourced from outside the traditional defense industrial base. As the market evolves, there is increased competition with non-traditional players, many of whom are not publicly traded. Examples of firms in this category include: Anduril, Palantir, SheildAI, and SpaceX.

2. Emerging Battlefields / Space: Space is increasingly viewed as a contested domain and plays a vital role in the Golden Dome missile defense initiative. Modernizing advanced space systems and satellite protection are key to modern defense capabilities.

3. Emerging Battlefields / Electronic Warfare: Ensuring GPS resilience and electromagnetic spectrum dominance to protect existing assets has become a baseline requirement

4. Emerging Battlefields / Drones, Counter-Drone Actions, and Autonomy: The war between Russia and Ukraine has exponentially scaled the use and impact of un-piloted vehicles. There is a growing emphasis on expanding cost-effective drone production, counterdrone technologies (to eliminate the threats posed by one or a fleet of vehicles), and a range of emerging technologies (such as enabling the fielding of autonomous wingmen to fly alongside crewed jets in a collaborative combat environment aircraft or that enable a single operator to control a fleet of drones.)

5. Artificial Intelligence: This is moving beyond research into integration. AI is (a) being scaled into back-office activities such as procurement, logistics, and real-time maintenance scheduling; (b) becoming central to military airpower by focusing on shortening the “observe-orient-decide-act” loop via AI-enabled battle management and threat prioritization; and (c) being used by DoD for AI-driven anomaly detection to counter enemy actors that use AI to automate reconnaissance and identify vulnerabilities.

6. Hypersonics: Developing operational missiles as well as the advanced air defense countermeasures to stop enemy use of them.

7. Addressing Aging Assets: With production backlogs for new aircraft, operators (commercial and military) are flying legacy aircraft fleets longer. There is renewed emphasis on predictive maintenance and aftermarket services to keep existing assets mission ready. Maintenance, Repair,

and Overhaul (MRO) sales continue to be strong. Aviation Week has projected increasing demand at 3.2% CAGR between 2026 and 2035, with the share focused on engines rising to 53% (good news for engine manufacturing primes GE, Honeywell, and RTX/Pratt & Whitney and MRO operators).

8. Enhanced Cybersecurity: 2026 marks first full year of strict Cybersecurity Maturity Model Certification (CMMC) enforcement. Contractors must now have demonstrable auditable security controls to win or keep DoD contracts.

9. Commercial Aerospace: Multi-year backlogs fueled by rising fleet utilization, fleet growth, and steady gains in passenger and cargo demand should continue to provide a tailwind for Aerospace & Defense firms.

10. Increased Global Activity: This is associated with Europe’s multi-year rearmament, Asian naval readiness, and a high priority for nations around the globe to expand their air defenses against missiles and drones.

11. Modernization and Expansion of Naval Fleets: The United States and China have both deemed this a high priority.

12. The US Industrial Base:

The Pentagon has stated that it is critical to address supply chain vulnerabilities and has been investing in areas that:

- (a) Expand the ability to source critical components from suppliers located within the United States;
- (b) Encourage vertical integration via acquisition or strategic partnerships and/or with international suppliers to ensure critical production; and
- (c) Make use of additive manufacturing. This has moved beyond prototyping; 3D printing is being used for full-scale production of complex and lightweight components.

While the Pentagon is targeting production increases of 400% for missiles, missile defense systems, and drones, for example, finding qualified employees and parts from suppliers to meet that demand is a large and slow effort.

Thoughts on Mergers and Acquisitions

M&A has historically been a means for larger defense firms to quickly acquire technology; gain skilled workers, many times with clearance; obtain existing contracts and market access, broaden product offerings; and stay competitive. With shifting security priorities, a demand for next-generation capabilities, and increasing competition from new technology and non-traditional defense firms, innovation cycles are accelerating.

2026 was thought to be a banner year with more than a dozen IPOs and spinoffs expected and record deals in terms of firms and value. The war in

Iran has delayed some of these, but we don't anticipate that approvals of deals from the highest levels of government to be an obstacle.

In 2026, we expect a:

- Rise in cross-border dealmaking to capitalize on local/global opportunities.
- Continued dealmaking by, and from, private equity and strategic buyers.
- Larger firms divested non-core assets and using that capital to focus on areas they deem a priority.
- The higher-growth defense segments / priority focus areas to be: (a) Space systems, munitions and missile

supply chains, and defense electronics and sensors (all elements of Golden Shield), (b) AI/autonomy/software enabled capabilities including those for drones, (c) firms offering counter-drone solutions

M&A Areas in Play

- Unmanned Systems and Autonomy – DoD's needs for drones and counter-drones
- ISR (Intelligence, Surveillance, Reconnaissance)
- Cyber and Electronic Warfare
- Space Technology (satellite tech, communications, and missile defense)

Potential 2026 IPOs and Corporate Actions

IPOs

- Aevox
- Anduril (US)
- SpaceX (US)
- Hawkeye 360 (US)
- Sierra Space (US)
- Shield AI (US)
- Skydio Drones (US)
- KNDS (Europe)
- Czechoslovak Group "CSG"
- Israel Aircraft Industries
- Bagira Systems (Israel)
- Rafael Systems (Israel)
- Gabler Group (Germany)

Spinoffs

- Honeywell Aerospace
- KBR Mission Technology Solutions

For Sale

- CAE's board announced in that it was investigating a sale of its business.

1Q2026 M&A Deals

15 January 2026: Parsons acquired Alamira, a provider of analytics, signals intelligence, cyber, missile warning, and space capabilities to national security customers. \$375 Million

23 January 2026: Eaton Corp acquired Ultra PCS, a manufacturer of high integrity control products for aerospace, vehicle, and soldier applications. \$1.550 Billion

29 January 2026: VSE Corporation completed its acquisition of Precision Aviation Group, a global provider of aviation Maintenance, Repair, and Overhaul Services. \$2.15 Billion

3 February 2026: Karman Space & Defense acquired Seemann Composites, a manufacturer of composite structures and components for marine, defense, aerospace, and industrial applications. \$221M

17 February 2026: Booz Allen acquired DeFY Securty, a provider of cybersecurity, technology and staff services.

18 March 2026: Iveco Group's defense business which includes the IDV and ASTRA vehicle brands was acquired by Leonardo. The deal combines IDV's wheeled and tracked platforms with Leonardo's electronic systems. \$1.845 Billion

By The Numbers (1Q26)

\$2.6 Trillion – Estimate by the International Institute for Strategic Studies for global defense spending in 2025. China is at \$251B and Russia spent \$161B.

\$1.5 Trillion – The White House's FY2027 budget calls for a \$1.15 Trillion base budget + \$350B from a reconciliation bill. It allocates \$760B for weapons development and procurement with significant funding for shipbuilding, the Golden Dome missile shield, and the F-35 program.

\$200 Billion – Amount the Pentagon is asking for to cover costs associated with the Iran conflict. It's been reported that the early part of the war cost \$2.1 billion daily.

\$96 Billion – Boeing from Qatar Airways for 160 777x and 787 planes with GE engines + 50 additional options.

\$100 Billion – India to order commercial aircraft from Boeing, including \$70-80B for the planes, potentially topping \$100B when including engines and spare parts.

\$50 Billion – Army issued a solicitation for IT and professional services. Marketplace for the Acquisition of Professional Services (MAPS) will replace RS3 and ITES-3S and span 10 years.

\$36.1 Billion – Korean Air to Boeing for 103 aircraft for delivery between 2026 and 2039, including 20 777-9, 25 787-10, 50 737-10s, and 8 777-8 freighters.

\$30 Billion – NASA proposal to build a lunar base over the next decade.

\$23 Billion – The Trump administration approved arms sales to the UAE, Kuwait, and Jordan including \$16B for air defense systems and \$7B in weapons.

\$16 Billion – Amount the US Air Force intends to spend on the Advanced Propulsion Acquisition Contract designed to support rapid development of next-generation engines.

\$15.4 Billion – General Dynamics Electric Boat from the US Navy to expand its role in the Columbia-class submarine program through 2035.

\$14 Billion – Boeing from Cathay Airlines for its long haul expansion; its first Boeing widebody purchase in a decade.

\$12.5 Billion – The FAA plans to obligate \$6.25B of this total by the end of FY26 toward updating the air traffic control modernization system. An additional \$20B on top of the \$12.5B estimate is needed to complete the modernization.

\$11.74 Billion – The Missile Defense Agency to RTX for the Standard Missile-3, up from \$3.33 billion.

\$11.1 Billion – US approved a military package for Taiwan including battlefield communication equipment and missiles including National Advanced Surface-to-Air Missile Systems.

\$10 Billion – The US Air Force Research Laboratory is seeking proposals that support a variety of science and technology initiatives. The multiple award contract covers air, space, cyberspace, electronics warfare, and other technologies.

\$8.1 Billion – Boeing from Vietnam Airlines for 50 737-8 narrowbody aircraft.

\$3.81 Billion – RTX from the US Navy for F-35 engine production contract modifications covering Lots 18 and 19.

\$3.8 Billion – The US State Department approved the sale of 30 Boeing AH-64E Apache helicopters to Israel, part of a \$6.67B defense package to enhance Israel's self-defense.

\$2.8 Billion – Boeing contract from the Pentagon to upgrade South Korea's F-15K Slam Eagle to the F-15EWX standard.

\$2.7 Billion – Boeing for post-production support services for Apache helicopters. This follows a \$4.7B award in December for the production of the helicopters.

\$2.4 Billion – Boeing from the US Air Force for contract modifications to the E-7A program.

\$2 Billion – RTX getting a \$2B boost bringing the total to \$4.6B for secure satellite communications terminals from the US Air Force.

\$2 Billion – Boeing from the US Air Force to begin engine replacements on the B-52H Stratofortress bombers which aims to extend the life of the fleet into the 2050s.

\$1.8 Billion – Leonardo completed its acquisition of Iveco's defense assets enhancing its land warfare capabilities.

\$1.4 Billion – GE Aerospace from the US Navy for T408 engines and spares to equip the US Marine Corps CH-53K King Stallion helicopters through 2032.

\$1.1 Billion – Netherlands rushing an order for additional Patriot air defense systems to secure a production slot and avoid a delay until 2033.

\$1.025 Billion – RTX from the US Army for a contract modification for production of the Lower Tier Air and Missile Defense Sensor.

\$1 Billion – US State Department approved submarine sales to the UK under the AUKUS partnership. The sale includes technical support, parts, simulation equipment, and engineering from HII and General Dynamics Electric Boat.

\$1 Billion – Amount GE is investing in US manufacturing and suppliers to meet demand for jet engines.

\$1 Billion – RTX is investing in its Patriot missile supply chain as EU demand grows.

\$1 Billion – The Pentagon will invest in L3Harris rocket motor unit using a government convertible security to ensure a steady supply of rocket motors for missiles such as the Tomahawk and Patriot interceptor. The structure of this deal is new for the defense sector.

\$999.9 Million – The US Air Force Research Laboratory is opening a competition for R&D supporting its Research Engineering Development and Analysis for Cyber Targeting program that focuses on adversary system analysis and technology development to counter evolving threats.

\$988 Million – General Dynamics Information Technology from the US Navy to modernize C5ISR systems.

\$981 Million – US Space Force issued a solicitation to build a physical test range known as the National Space Test and Training Complex.

\$966.7 Million – Raytheon from the Missile Defense Agency to support the Army Navy Transportable Radar Surveillance Control Model-2 radar system.

\$900 Million – Boeing from US Air Force to sustain T-38C Talon avionics system as it prepares for the T-7A Red Hawk.

\$805 Million – Canada to L3 Harris MAS for maintenance and material support of the Royal Canadian Air Force's fleet of CC-330 Husky aircraft.

\$740 Million – General Dynamics Mission Systems from the US Navy to support the Strategic Weapon System's fire control subsystem for ballistic and guided missile subs.

\$739 Million – SpaceX from US Space Force for 9 missions.

\$585 Million – Collins Elbit Vision Systems for mounted display hardware for F-35 helmets, covering both US, international partners and foreign military sales.

\$500 Million – Honeywell has committed funds to modernize its military technology manufacturing as part of a multi-year Pentagon contract.

\$454.9 Million – Leidos to modernize the US Air Force's Cloud One platform.

\$446.8 Million – Kratos from US Space Force to develop the ground system for the Resilient Missile Warning Tracking Constellation.

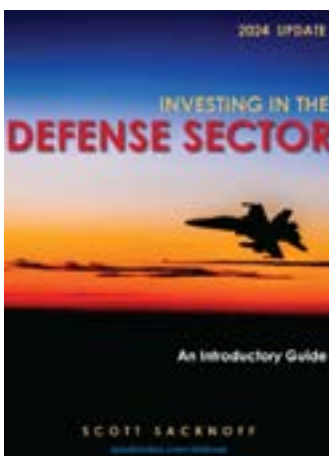
MORE NEWS

Boeing (as of 1/31/26) had a commercial backlog of 6 more than 6,000 aircraft, equating to nearly 10 years of production coverage at the forecasted pace.

Boeing Australia partnered with Rheinmetall to pitch the MQ-28 Ghost Bat UAV to Germany military.

NATO stated that Europe and Canada increased defense spending by 20% in 2025 noting support from Moscow from China, North Korea, Iran, and Belarus.

European Commissioner for Defense and Space Andrius Kubilius has emphasized the need for European production of air-defense missiles at the Paris Defense and Strategy Forum; highlighting Ukraine's need for 2,000 Patriot missiles annually while US production is currently 750 per year.



Investing in the Defense Sector: A Free Guide

Free Download: [HTTPS://SPADEINDEX.COM/FILES/INVESTING_DEFENSE_SECTOR_GUIDE.PDF](https://spadeindex.com/files/investing_defense_sector_guide.pdf)

A 58-page educational guide designed to provide investors with a basic understanding of the defense industry and its activities, what drives it, and the unique risks associated with investing in it. It is not meant to recommend or promote any individual company or fund. It is offered for free and can be shared by advisors, analysts, and investors without having to sign in or subscribe.

1Q26 Leaders

1	Iridium	59.61%
2	nLASER	52.01%
3	Elbit Systems	46.98%
4	Planet Labs	41.73%
5	TTM Technologies	41.19%
6	Keysight Tech	38.97%
7	Blacksky	34.19%
8	ViaSat	32.91%
9	AAR Corp	32.21%
10	Leonardo DRS	30.60%

1Q26 Laggards

1	AXON International	[25.22%]
2	Cadre Holdings	[24.88%]
3	Aerovironment	[24.33%]
4	Palantir	[17.70%]
5	LOAR Holdings	[15.75%]
6	Heico	[15.26%]
7	CAE	[14.37%]
8	Leidos	[15.26%]
9	Transdigm	[12.85%]
10	Parsons	[12.35%]

ETF Statistics (NYSE Arca: PPA)
Invesco Aerospace & Defense

Exchange / Ticker	NYSE / PPA
Assets (3/31/2026)	\$8.0 B
Closing Price (3/31/2026)	\$165.70
Dividend Yield*	0.88%
1Q2026 Volume**	19.99 Million
Turnover*	15%
Morningstar Rating***	***** (5-Star)

* Morningstar 3/31/26 ** Yahoo Finance - 3/31/2026 *** Morningstar 3/31/2026

Capture Ratio	3-Yr	5-Yr	10-Yr
Upside	136	111	115
Downside	98	70	87

1Q26 Results

1	Iridium	59.61%	31	Karman Holdings	9.40%
2	nLASER	52.01%	32	RTX	5.18%
3	Elbit Systems	46.98%	33	OSI Systems	4.10%
4	Planet Labs	41.73%	34	CACI Intl	2.08%
5	TTM Technologies	41.19%	35	General Dynamics	1.95%
6	Keysight Tech.	38.97%	36	Parker Hannifan	1.85%
7	Blacksky	34.19%	37	Textron	0.45%
8	ViaSat	32.91%	38	Mercury Systems	[0.14%]
9	AAR Corp	32.21%	39	SAIC	[5.70%]
10	Leonardo DRS	30.60%	40	Amphenol	[6.50%]
1	Ducommun	28.25%	41	AIRO Group	[6.97%]
12	Firefly Aerospace	27.27%	42	Kratos Defense	[7.11%]
13	ATI	26.75%	43	Booz Allen	[7.50%]
14	V2X	25.57%	44	General Electric	[7.88%]
15	Carpenter Tech.	25.26%	45	Rocketlab	[7.94%]
16	Lockheed Martin	24.96%	46	KBR	[8.31%]
17	Curtiss Wright	23.55%	47	Boeing Co	[8.33%]
18	Moog	20.16%	48	Standard Aero	[9.94%]
19	Northrop Grumman	19.65%	49	Amentum	[10.07%]
20	Teledyne Tech.	18.46%	50	Voyager Tech.	[10.52%]
21	Woodward	18.39%	51	Parsons	[12.35%]
22	BWX Technologies	18.31%	52	Transdigm	[12.85%]
23	L3 Harris	17.57%	53	Leidos	[13.79%]
24	Oshkosh Truck	17.18%	54	CAE	[14.37%]
25	Honeywell Int'l	15.86%	55	Heico	[15.26%]
26	Howmet	12.41%	56	LOAR Holdings	[15.75%]
27	Eaton	12.29%	57	Palantir	[17.70%]
28	Redwire	11.84%	58	AeroVironment	[24.33%]
29	Hill	11.71%	59	Cadre Holdings	[24.88%]
30	Hexcel	9.51%	60	AXON International	[25.22%]

Portfolio Price/Earnings	29.80	Beta (3-yr)	1.08
Portfolio Price / Book	5.35	Alpha (3-yr)	9.08
Portfolio Price / Sales	2.62	R-squared (3-yr)	62.34
Portfolio Price /Cash Flow	19.72%	STD Deviation	15.90
Long-Term Earnings	14.81%	Sales Growth	4.45%
Historical Earnings	12.79%	Cash Flow Growth	12.22%
		Book Value Growth	6.28%

Total Return (Avg Annual %)		Price Return by Decade (ex div)		
1-Year	42.80%		2000-2009	2010-2019
3-Year	27.90%	SPADE Defense	310.26%	189.73%
5-Year	18.65%	S&P 500	97.07%	[24.11%]
10-Year	17.74%	Alpha (bps)	12,053	12,118
15-Year	16.21%	Alpha (%)	120.53%	121.18%
Since Inception	13.58%			
Morningstar, 3/31/2026		SPADE Defense 2020-YTD	143.49%	
		Alpha Over S&P500	41.41%	

About the SPADE Defense Index®

The SPADE Defense Index (NYSE: DXS) provides an investment benchmark for the value that the market ascribes to companies involved with defense and its homeland security, and space components. The Index is designed to reflect the broad diversity of activities that is representative of companies involved with the sector—naval vessels, military aircraft, armored vehicles, helicopters, drones and remotely piloted vehicles, missiles and missile defense, command and control, secure communications, battlespace awareness, intelligence and reconnaissance, and space systems, as well as national/homeland security activities including border security, biometric screening systems, and military AI and cybersecurity efforts. SPADE Indexes, founded in 2004, specializes in designing and managing equity benchmarks for ETF and other products.

Rules

The SPADE Defense Index was designed to be RIC (registered investment company) compliant for the purpose of enabling financial products. Companies are required to meet an eligibility criteria that includes market valuation (>\$250M), listing on a major US exchange, and have sufficient liquidity. Importantly, each firm must be considered systematically important to the defense of the United States and their defense business is systematically important to the revenues and health of the firm. We follow an enhanced modified market cap methodology that employs our TrueCap® strategy, enabling the index to more accurately handle firms with diversified operations. Full details can be found at: www.spadeindex.com/defense

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Index Performance (ex div)			
	SPADE Defense Index	S&P 500	Alpha (bps)
YTD	5.68%	[4.63%]	1031
2025	36.44%	16.39%	2005
2024	24.88%	23.31%	157
2023	17.70%	24.23%	[653]
2022	8.56%	[19.44%]	2800
2021	6.61%	26.89%	[2028]
2020	[0.73%]	16.26%	[1699]
2019	38.49%	28.88%	961
2018	[8.15%]	[6.24%]	[191]
2017	28.92%	19.43%	949
2016	17.95%	9.53%	842
2015	3.23%	[0.73%]	396
2014	11.77%	11.39%	38
2013	48.27%	29.60%	1867
2012	16.30%	13.41%	289
2011	[2.75%]	[0.00%]	[275]
2010	12.78%	12.78%	[316]
2009	21.71%	23.45%	[174]
2008	[38.03%]	[38.49%]	46
2007	22.17%	3.52%	1964
2006	19.33%	13.62%	571
2005	5.30%	3.00%	230
2004	20.47%	8.99%	1148
2003	37.27%	26.38%	1089
2002	[2.87%]	[23.37%]	2050
2001	0.94%	[13.04%]	1488
2000	4.98%	[10.14%]	1512
1999	15.31%	19.53%	[422]
1998	6.63%	26.67%	[2004]

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End of March 2026		100.0%						Market	Forward	Price/	Price/		
								Cap	P/E	Sales	Book		Div Yld
		Percent	31-Dec-25	31-Mar-26	YTD	QTD		12/31/25	(ttm)	ttm	mrq		forward %
Company	Ticker	31-Mar-26	Price	Price	% Ch	% Ch		2,276					
Iridium	IRDM	0.09%	17.38	27.74	59.61%	59.61%		2.91	21.18	3.34	6.29		2.24%
nLASER	LASR	0.20%	37.51	57.02	52.01%	52.01%		3.18	114.29	12.17	12.87		
Elbit Systems	ESLT	3.66%	577.71	849.09	46.98%	46.98%		40.37	50.49	5.09	9.55		0.47%
Planet Labs	PL	0.80%	19.72	27.95	41.73%	41.73%		9.68	-1397.50	31.44	49.73		
TTM Technologies	TTMI	0.41%	69.00	97.42	41.19%	41.19%		10.12	21.70	3.48	5.71		
Keysight Tech.	KEYS	0.83%	203.19	282.37	38.97%	38.97%		48.43	27.51	8.53	7.80		
Blacksky	BKSY	0.08%	18.75	25.16	34.19%	34.19%		0.93	-34.31	8.73	9.53		
Viasat Inc	VSAT	0.49%	34.46	45.80	32.91%	32.91%		6.22	71.94	1.35	1.36		
AAR Corp	AIR	0.39%	82.79	109.46	32.21%	32.21%		4.353	19.33	1.39	2.61		
Leonardo DRS	DRS	0.96%	34.09	44.52	30.60%	30.60%		11.84	31.63	3.25	4.33		0.83%
Ducommun	DCO	0.16%	95.13	122.00	28.25%	28.25%		1.83	23.20	2.22	2.75		
Firefly Aerospace	FLY	0.20%	22.37	28.47	27.27%	27.27%		4.55	-25.78	28.49	3.81		
ATI	ATI	1.29%	114.76	145.46	26.75%	26.75%		19.919	29.19	4.34	10.96		
V2X	VVX	0.18%	54.55	68.50	25.57%	25.57%		2.14	10.39	0.48	1.97		
Carpenter Technology	CRX	1.26%	314.66	394.15	25.26%	25.26%		22.44	37.19	7.62	11.30		0.18%
Lockheed Martin	LMT	7.54%	483.67	604.39	24.96%	24.96%		139.29	18.90	1.86	20.59		2.26%
Curtiss Wright	CW	1.65%	551.27	681.12	23.55%	23.55%		25.14	40.82	7.19	9.91		0.15%
Moog Inc.	MOGA	0.61%	243.55	292.64	20.16%	20.16%		9.29	25.47	2.29	4.50		0.42%
Northrop Grumman	NOC	5.30%	570.21	682.24	19.65%	19.65%		97.37	22.60	2.32	5.81		1.38%
Teledyne Technologies	TDY	0.81%	510.73	605.01	18.46%	18.46%		28.02	23.54	4.58	2.66		
Woodward	WWD	1.28%	302.32	357.92	18.39%	18.39%		21.47	34.79	5.66	8.27		0.38%
BWX Technologies	BWXT	1.17%	172.84	204.49	18.31%	18.31%		18.73	39.50	5.86	15.17		0.53%
L3 Harris	LHX	4.10%	293.57	345.15	17.57%	17.57%		64.56	25.35	2.95	3.28		1.47%
Oshkosh Truck	OSK	0.29%	125.63	147.21	17.18%	17.18%		9.22	10.28	0.88	2.03		1.66%
Honeywell Intl	HON	4.68%	195.09	226.03	15.86%	15.86%		143.68	19.69	3.84	10.33		2.13%
Howmet	HWM	4.01%	205.02	230.46	12.41%	12.41%		92.76	41.67	11.24	17.29		0.21%
Eaton	ETN	1.97%	318.51	357.67	12.29%	12.29%		138.92	22.78	5.06	7.14		1.23%
Redwire	RDW	0.15%	7.60	8.50	11.84%	11.84%		1.63	-18.48	4.87	1.53		
HII (Huntington Ingalls)	HII	1.33%	340.07	379.90	11.71%	11.71%		14.959	18.7	1.2	2.94		1.50%
Hexcel	HXL	0.56%	73.90	80.93	9.51%	9.51%		6.44	26.51	3.40	4.90		0.90%
Karman Holdings	KRMN	0.66%	73.17	80.05	9.40%	9.40%		10.59	82.20	22.47	27.68		
Raytheon Technologies	RTX	7.91%	183.40	192.90	5.18%	5.18%		259.64	25.66	2.93	3.97		1.45%
OSI Systems	OSIS	0.30%	255.06	265.51	4.10%	4.10%		4.51	23.05	2.51	5.17		
CACI Intl	CACI	0.94%	532.81	543.87	2.08%	2.08%		12.01	17.02	1.34	2.90		
General Dynamics	GD	4.56%	336.66	343.22	1.95%	1.95%		92.96	19.00	1.77	3.62		1.79%
Parker Hannifan	PH	3.72%	878.96	895.24	1.85%	1.85%		112.99	26.30	5.52	7.90		0.84%
Textron	TXT	1.13%	87.17	87.56	0.45%	0.45%		15.25	12.02	1.03	1.94		0.09%
Mercury Systems	MRCY	0.41%	73.01	72.91	-0.14%	-0.14%		4.38	48.64	4.64	2.97		
SAIC	SAIC	0.29%	100.66	94.92	-5.70%	-5.70%		4.28	8.92	0.59	2.78		1.56%
Amphenol	APH	2.03%	135.14	126.35	-6.50%	-6.50%		155.311	24.48	6.72	11.55		0.84%
AIRO Group	AIRO	0.02%	8.18	7.61	-6.97%	-6.97%		0.24	-46.09	2.89	0.32		
Kratos Defense & Security	KTOS	1.13%	75.91	70.51	-7.11%	-7.11%		13.17	65.82	9.78	5.96		
Booz Allen	BAH	0.66%	84.36	78.03	-7.50%	-7.50%		9.41	12.36	0.82	9.20		2.99%
General Electric	GE	7.77%	308.03	283.77	-7.88%	-7.88%		299.33	33.23	6.53	15.93		0.69%
Rocketlab	RKLB	2.18%	69.76	64.22	-7.94%	-7.94%		36.57	486.18	60.76	20.27		
KBR	KBR	0.31%	40.20	36.86	-8.31%	-8.31%		4.68	8.61	0.60	3.10		1.84%
Boeing Co	BA	8.01%	217.12	199.03	-8.33%	-8.33%		156.41	43.11	1.75	28.67		
Standard Aero	SARO	0.76%	28.68	25.83	-9.94%	-9.94%		8.59	15.32	1.42	3.24		
Amentum	AMTM	0.38%	29.00	26.08	-10.07%	-10.07%		6.362	9.47	0.45	1.40		
Voyager Technologies	VOYG	0.09%	26.14	23.39	-10.52%	-10.52%		1.38	-28.15	8.30	3.61		
Parsons	PSN	0.23%	61.80	54.17	-12.35%	-12.35%		5.80	14.60	0.91	2.19		
Transdigm	TDG	2.65%	1329.85	1158.96	-12.85%	-12.85%		64.45	25.19	7.18	-7.05		
Leidos	LDOS	1.06%	180.40	155.52	-13.79%	-13.79%		19.66	12.10	1.14	4.00		1.08%
CAE	CAE	0.76%	30.42	26.05	-14.37%	-14.37%		8.38	28.41	1.72	2.26		
Heico	HEI	1.27%	323.59	274.20	-15.26%	-15.26%		38.26	43.28	8.26	8.49		0.09%
LOAR Holdings	LOAR	0.30%	68.00	57.29	-15.75%	-15.75%		5.36	53.74	10.81	4.57		
Palantir	PLTR	1.31%	177.75	146.28	-17.70%	-17.70%		349.85	78.33	78.17	47.36		
AeroVironment	AVAV	0.83%	241.89	183.05	-24.33%	-24.33%		9.263	45.18	5.75	2.13		
Cadre Holdings	CDRE	0.10%	40.84	30.68	-24.88%	-24.88%		1.31	21.45	2.15	4.07		1.31%
AXON International Inc.	AXON	1.79%	567.93	424.69	FALSE	-25.22%		34.144	40.18	12.28	10.51		

Data Provided by Morningstar, Yahoo Finance/Thomson Reuters (PEG), Morningstar (div)