GENERAL DYNAMICS (NYSE: GD)

Aerospace and Defense

Mohanbir Gill | Managing Director | mohanbir.gill@mail.utoronto.ca

We Initiate Coverage of GD at Market Perform and $325.89 Target Price

Bottom Line:

We are initiating coverage on General Dynamics, a market leader in aerospace and defense solutions, with a market perform rating and a $325.89 target price. We expect that a flatter learning will improve business jet deliveries through Q4 and FY25, which paired with growth in nuclear submarine production will improve the bottom line. Furthermore, we believe that margin improvement at the new artillery facility in Texas will support continued growth in the Combat Systems segment. We model top line growth to be approximately 15% underpinned by stronger aircraft deliveries and demand for vehicles and munitions. This unprecedented growth will be followed by single-digit sales growth between 3-5% year over year from FY25 through to FY29.

We are bullish on the near-term and mid/long-term outlook of General Dynamics driven by robust aircraft deliveries and long-term revenue growth in the marine systems segment. The current high threat environment has also garnered demand for defense segment products, but has also produced supply chain headwinds. The aerospace segment's broad portfolio and the deliveries of the new G700 will help it rebound from certification struggles. General Dynamics will also continue to increase volume on the high-priority Columbia-class ballistic missile submarine program and realize higher throughput on the Virginia-class attack submarine program due to facility modernizations. With strong demand across all sectors, the company is poised to outperform the market.

Key Points

Strategic Innovation – General Dynamics' Electric Boat division is making significant strides in the Columbia-class submarine program, central to the U.S. Navy's strategic deterrence mission. This project underscores GD's commitment to developing high-priority defense technology. By focusing on new engineering solutions, such as the X-Stern rudder system and advanced nuclear reactor designs, the company is designing capable and technologically advanced submarines. They continue to improve production efficiency on the Virginia-Class lots, exhibiting their ability to innovate according to defense needs. In the aerospace segment, Gulfstream is focusing on ultra-long-range jet models like the G700 and upcoming G800. Despite supply chain delays, Gulfstream is capitalizing on the stable demand for executive jets by innovating within both manufacturing and delivery processes. The recent certification of the G700 and the scheduled release of the G800 are critical steps in Gulfstream's strategy to capture more market share from competitors like Textron and Bombardier.

Capturing Accelerated Demand – General Dynamics is strategically positioned to capture the surging demand for defense products and services as global conflicts drive countries to expand their arsenals with advanced munitions and armored vehicles. The company's recent investment in a Texas-based munitions facility is central to this strategy. With an anticipated 83% increase in production capacity, the facility is poised to meet rising demand for 155mm artillery shells, crucial for defense support in Ukraine.

Efficient Capital Expenditure – General Dynamics is demonstrating efficient capital allocation across its Marine and Combat Systems, positioning itself as a leader in defense and marine technology. GD has plowed a high amount of capital over the past year, which has allowed it to maintain a 7% operating margin. The stable, long-term cost-reimbursement contracts in Marine Systems, coupled with a historically high ROIC, enhance the company's current competitive positioning and ability to attain future contracts for projects such as the SSN(X) next-generation submarine program. Additionally, investments in the Texas munitions facility bolsters General Dynamics capacity to meet global defense demand, especially for 155mm artillery shells. This capital efficiency enables GD to strengthen backlog, which the market has mispriced.

Market Perform
Target Price $325.89

Suitability	Moderate Risk/Income

MARKET DATA

Current Price	$292.99
52-Week Range	$238.31-$313.11
Market Cap	$81.10
Enterprise Value	$90.24
Current Net Debt	$9.07
Dividend Yield	1.92%
EPS	$13.97
Beta	0.56

KEY FINANCIAL METRICS

	2022A	2023A	2024E
Revenue	$39.4	$42.3	$48.6
% Growth	*2.4%*	*7.3%*	*14.9%*
EBITDA	$5.4	$5.4	$6.0
% Margin	*13.7%*	*12.8%*	*12.3%*
NOPAT	$4.0	$3.0	$4.3
% Margin	*10.0%*	*-7.2%*	*10.5%*
UFCF	$4.1	$2.7	$3.5
% Change	*16.0%*	*-33%*	*29.7%*

KEY MULTIPLES

VALUATION	
P/E	22.49x
EV/Sales	1.96x
P/BV	3.53x
P/CFPS	25.68x
LIQUIDITY	
Current Ratio	1.44x
Cash Ratio	0.12x
Interest Coverage Ratio	
LEVERAGE	
Debt/Assets	20.22%
Debt/Capital	34.23%
Debt/EBITDA	1.69x
EFFICIENCY	
Return on Invested Capital	12.69%
Return on Equity	16.63%
Return on Assets	6.23%
Cash Conversion Cycle	71.04

Source(s): Bloomberg, General Dynamics Filings
All figures in billions of USD except per share values.
Data as of November 3, 2024.

Table of Contents

Company Description

Incorporated in 1952, General Dynamics has a long history in the aerospace and defense industries, initially providing a wide array of military equipment including tanks, rockets, submarines, and warships. In the early 1990s, it narrowed its focus, retaining only its military vehicle and submarine businesses before beginning an expansion in the mid-1990s, acquiring Gulfstream Aerospace and other businesses. Today, General Dynamics operates through a diversified portfolio, including aerospace, marine systems, combat systems and information technology. The company's strategy combines organic growth with acquisitions, positioning it as a key defense contractor and major player in the private jet industry. Recent developments include contracts for Columbia-class submarines, the launch of the Gulfstream G700, and expansion in IT and aerospace. The acquisition of CSRA in 2018 further strengthened its IT capabilities. General Dynamics remains committed to operational excellence, customer service, and shareholder value.

Business Unit Discussion

General Dynamics Aerospace Engineering – Rebounding and Reaching New Heights

The Aerospace segment is a leading producer of business jets and a frontrunner in aircraft repair, support, and completion services. This segment has two business units: **(1)** Gulfstream Aerospace Corporation and **(2)** Jet Aviation. The group was formed in 1999 when the company acquired Gulfstream Aerospace Corporation, a manufacturer and developer of business jets. Along with providing a wide range of aircraft, Gulfstream offers comprehensive support for the more than 3,000 aircraft units in service globally.

Gulfstream Aerospace will be pushing deliveries this year and prepares to launch its newly innovated G400 and G800 models next year.

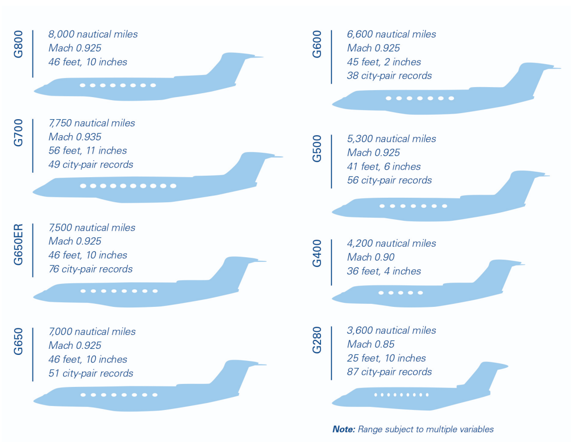
GULFSTREAM AEROSPACE POISED TO EXECUTE

Gulfstream currently offers eight models of business jets (Exhibit 1): **(1)** G800 **(2)** G700 **(3)** G650ER **(4)** G650 **(5)** G600 **(6)** G500 **(7)** G400 and **(8)** G280. The current lineup features midsize to ultra-long range, ultra-large-cabin jets, crafted for transcontinental and intercontinental travel. Gulfstream's long-range G700 recently gained certification from the U.S. Federal Aviation Administration (FAA) and has entered the delivery stage. A delay in the certification of the model in late 2023 caused revenue to fall short of projections, but our expectation is that General Dynamics will push new deliveries to recover lost revenues in 2025. Gulfstream conceived the ultra-long range G800 and the smaller G400 in 2021. Both will come into service around 2Q25, with the production line already beginning to prepare.

G800 models possess an impressive 14,800 km range and will be priced at approximately $72.5 million. The G700, which has similar capabilities, is priced at $80 million. The long-range G500 and the G600 models entered service in 2018 and 2019, respectively, and succeeded the G450 and G550 models.

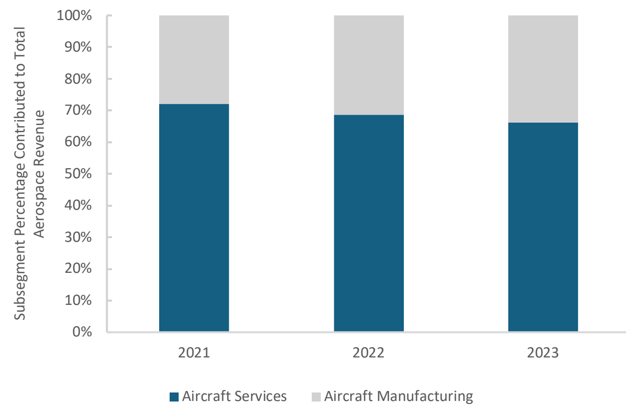
The G500 and G600 models are part of Gulfstream's mid-sized models, with carrying capacities of 13 passengers, and have top speeds of 0.925 Mach, impressive for a business jet. The slightly larger G600 is priced at $59.5 million and the G500 costs $49.5 million. In 2023, Gulfstream's manufacturing division generated $5.7 billion in revenues primarily under fixed-price and some times-and-materials contracts, with 111 deliveries across the year. While there was a decline in aircraft sales due to regulatory delays with the G700's launch, aircraft manufacturing revenues remained stable and significantly contributed to comprehensive aerospace revenue (Exhibit 2).

Exhibit 1: Gulfstream's Robust Business Jet Lineup Has Depth …



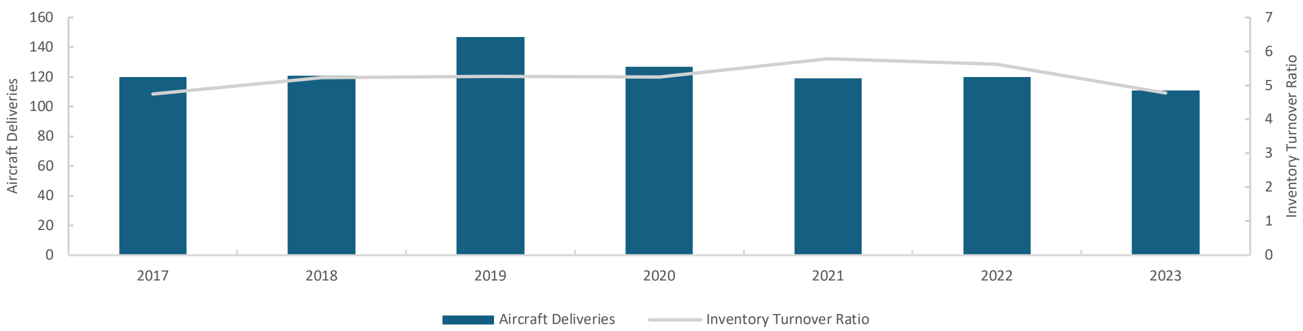
Source(s): Company Filings

Exhibit 2: … Which Drives Stable Aircraft Manufacturing Revenues



Source(s): Company Filings, S&P Capital IQ, VIG Research

Exhibit 3: Supply Chain Issues Within the Marine Systems and Aerospace Segment Cause Lower Deliveries – These Headwinds Will Persist for Inventory Turnover in 2024



Source(s): Company Filings, S&P CapitalIQ, VIG Research

SECURING STABLE VOLUME KEY FOR JET AVIATION

The Jet Aviation group specializes in business jet services and sales of preowned and Gulfstream models. They offer aircraft management, covering maintenance, route planning, crewing, fuel procurement, and technical support for individuals and commercial customers. Jet Aviation provides custom interior completion services, aircraft chartering, and luxurious fixed-base operator (FBO) services for seamless and individualized travel experiences. Additionally, larger corporations outsource maintenance, crew training, and operational support to Jet Aviation to reduce costs.

Marine Systems Set to Sail Smoothly

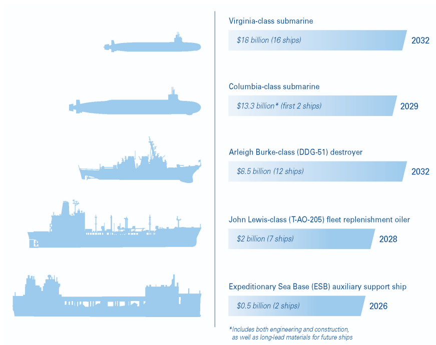
General Dynamics' Marine Systems segment is a leader in designing, building, and maintaining nuclear-powered submarines and surface combatants for the U.S. Navy. Along with manufacturing ships, the segment also provides lifecycle support and modernizes Navy ships, ensuring advanced capabilities. There are three business units under this segment: **(1)** Bath Iron Works **(2)** Electric Boat and **(3)** NASSCO.

Bath Iron Works is a shipyard specializing in building surface combatants for naval purposes, with it heading 12 non-nuclear projects since the conclusion of World War II, including the Zumwalt-class destroyers and Arleigh Burke-class destroyers. Electric Boat is centered around the engineering, construction, repair, and modernization of nuclear submarines for the U.S. Navy, currently building the Virginia-class and Columbia-class projects.

NASSCO designs and constructs auxiliary and support ships for the U.S. Navy and oil tankers and dry cargo carriers for commercial markets. It also provides repair services for the U.S. Navy's fleet. The comprehensive segment currently has five fundamental projects (Exhibit 4).

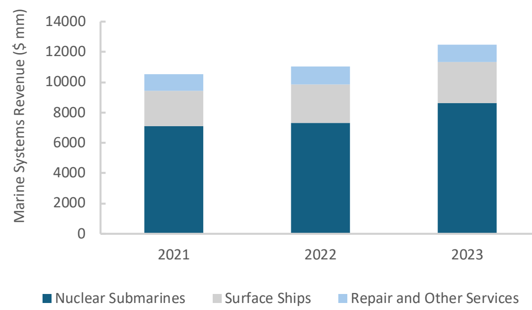
Electric Boat generated $8.6 billion in revenues through the construction and servicing of their nuclear-powered submarines, supporting a 12.9% growth in Marine Systems (Exhibit 5). Surface ships contributed $2.7 billion and marine repairs and services provided $1.1 billion for total revenues of $12.5 billion. Almost all revenue came exclusively from the U.S. Department of Defense ($12.3 billion) and a smaller share came from foreign military sales ($129 million). There was nearly an even split between revenues from cost reimbursement and fixed-price contracts; fixed-price contracts are generally more exposed to risk as there is no guarantee that costs will be recovered or incentives will be realized.

Exhibit 4: The 5 Fundamental Projects For the U.S. Naval Forces



Source(s): Company Filings

Exhibit 5: Marine Systems Revenue Growth Was Underpinned By Higher Volume Of Engineering Services On The Columbia-Class Program, Partially Offset By Virginia-Class Supply Chain Disruptions



Source(s): Company Filings, S&P CapitalIQ, VIG Research

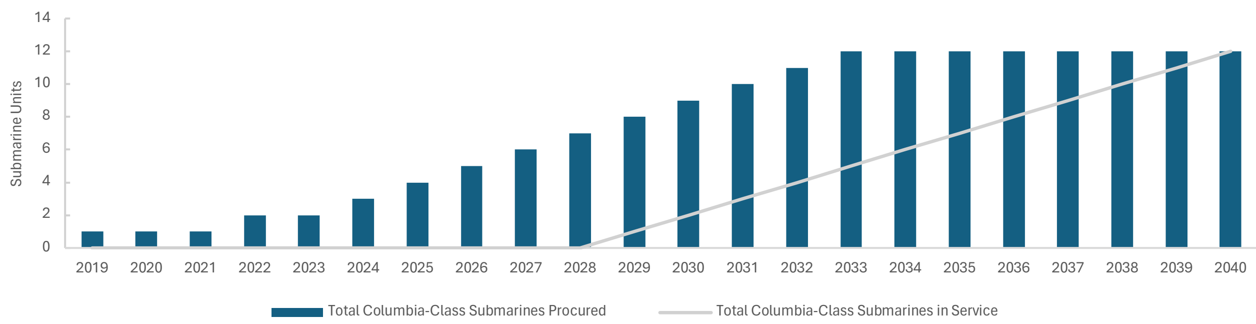
BATH BUILDS BEST – BATH IRON WORKS SET TO DELIVER ON DESTROYERS

As of 2023, the business unit is responsible for producing the Arleigh Burke-class (DDG-51) guided-missile destroyer, with the Navy awarding the shipyard a contract outlining the construction of three Flight III DDG-51 destroyers in 2023. These cost approximately $2.5 billion to procure apiece. There are a total of twelve ships in backlog (performance obligations) scheduled for delivery through to 2032. Bath Iron Works manages modernization and lifecycle support for all Navy Destroyers. The shipyard recently completed construction on three Zumwalt-class stealth ships as this program was succeeded by the Flight III DDG-51 destroyers. There are 12 ships under the DDG-51 performance obligations, with total backlog of $6.5 billion. This implies strong demand, but this project is also very lengthy and protracted, meaning we expect that Bath Iron Works will provide flat revenue figures for the coming years, without taking into account potential contract awards.

THE BEST NEVER REST – ELECTRIC BOAT STEAMING THROUGH SUPPLY CHAIN DISRUPTIONS

This business unit's two primary programs were listed above: **(1)** the Columbia-Class Ballistic-Missile Submarine (12-boat program) and **(2)** the Virginia-Class Attack Submarine (16 submarines in backlog up to 2032). The Columbia-class program received the highest possible rating from the government's Defense Priorities and Allocations System because they are set to replace the Ohio-class ballistic-missile submarine fleet, with delivery up to 2033 (Exhibit 6). Deliveries for Columbia models will begin in 2027, while construction on Virginia submarines is well underway. Electric Boat aims to produce 1 Columbia-class submarine and 2 Virginia-class submarines per year. Electric Boat offers submarine maintenance and modernization services for its naval partners. The Virginia-class program's performance obligations are valued at $18 billion, while the first 2 Columbia-class submarines are currently valued at approximately $13.3 billion.

Exhibit 6: The Columbia-Class Delivery Schedule Entails The Navy Procuring Approximately One Unit Per Year Until 2033, Paving The Way For Stable Revenues For General Dynamics, Given Efficient Operation and On-Time Delivery

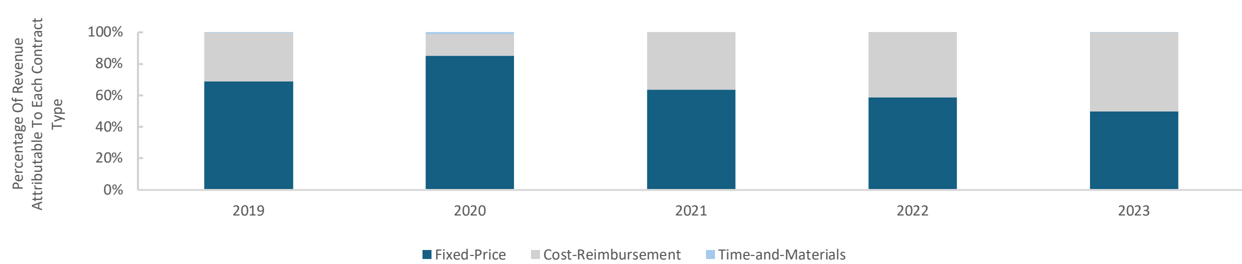


Source(s): Company Filings, VIG Research

NATIONAL STEEL AND SHIPBUILDING COMPANY (NASSCO) – A VISION BEYOND THE NAVY

Specializing in Naval auxiliary and support ships, NASSCO is currently procuring the Expeditionary Sea Base (ESB). These are mobile sea-based platforms supporting the deployment of forces, equipment, supplies, and warfighting capability, and the John Lewis-class (T-AO-205) fleet replenishment oilers. Two ESBs are currently in backlog with delivery through to 2026, while 7 T-AO-205 oilers are in backlog with deliveries through to 2028. NASSCO also designs and builds crude oil tankers and cargo ships and conducts full-service maintenance and surface-ship repair operations across its three shipyards. The 7 T-AO-205s in backlog will provide $2 billion and construction on the two ESBs is expected to provide $0.5 billion. We expect NASSCO revenues to behave like Bath Iron Works revenues. Unfortunately, both business units will not see considerable margin improvement due to continued supplier struggles.

Exhibit 7: While The Proportion of Marine Systems Fixed-Price Contracts Has Decreased, There Will Be Lower Profitability Loss Driven by Supply Chain Delays as General Dynamics Will be Able to Recover Costs



Source(s): Company Filings, VIG Research

Combat Systems – Unleashing Next-Gen Machinery

The Combat Systems segment manufactures land solutions worldwide, ranging from wheeled and tracked combat vehicles, weapons systems, bridge systems, and munitions. There are 3 business units under Combat Systems: **(1)** European Land Systems **(2)** Land Systems and **(3)** Ordnance and Tactical Systems.

The comprehensive segment earned $8.3 billion in revenue, with $5.04 billion coming from meeting performance obligations on military vehicles. Munitions contributed $2.4 billion to the total revenue, but this figure will grow due to increased productive capacity and a new artillery projectile metal parts facility in Texas, producing calibers ranging from 60mm to 155mm. The U.S. government approved a $3.1 billion budget to purchase 155mm shells from General Dynamics.

Munitions will be a key revenue driver in the short term due to the high global threat environment. Israel is being supplied the majority of 155mm shells and with the conflict not waning, demand will continue. The high increase in overall Combat Systems backlog also suggests a heightened demand for combat vehicles of any capacity; the U.S. recently started shipments of a military aid package valued at $49 billion to Ukraine, with M1 Abrams tanks and 155mm munitions being part of the package.

EUROPEAN LAND SYSTEMS (ELS) – CONTINUING WORK WITH ALLIES

ELS produces six types of tracked and wheeled combat vehicles: **(1)** ASCOD **(2)** Piranha **(3)** Pandur **(4)** Duro **(5)** Eagle and **(6)** Merlin. The Piranha, a versatile wheeled vehicle, supports multiple weapon stations and is amphibious, while the smaller Pandur offers similar capabilities. The Eagle vehicle has high payload and strong armor, and the Duro is a modular off-road transport. The ASCOD tracked family functions as adaptable light tanks. ELS also produces eight bridge systems for varied payloads and provides integrated support services for combat vehicle maintenance and upgrades. International sales to U.S. allies will continue to generate revenue due to the high threat environment and will offset any efficiency lags in the artillery facility's expansion.

Exhibit 8: The ASCOD in Action

Source(s): The Defense Post

Exhibit 9: The Piranha is a Versatile Tracked Vehicle

Source(s): GDELS

LAND SYSTEMS' POWERFUL FLEET POISED TO DELIVER ON CONTRACTS

The Land Systems business unit at General Dynamics specializes in producing a diverse range of tracked, wheeled, specialty, and autonomous military vehicles across ten product types, including the: **(1)** M1A2 Abram SEPv3 **(2)** M1A1 Main Battle Tank **(3)** M10 Booker **(4)** AJAX **(5)** Stryker **(6)** Sgt. Stout (Stryker-based) **(7)** LAV families **(8)** Multi-Utility Tactical Transport (MUTT) **(9)** Tracked Robot 10-ton (TRX) and **(10)** Specialty Vehicles. The M1A2 and M1A1 tanks are renowned for their durability and advanced capabilities, while lighter options like the M10 Booker and AJAX (offered in six variants) are designed for agility. The Stryker A1 and its air-defense variant, Sgt. Stout, enhance battlefield versatility, while the LAVs support a variety of military roles globally. Autonomous models like the MUTT and TRX relieve soldier burden and enhance operational safety. Specialty vehicles, such as the Buffalo MPCV for route clearance, address highly specific needs.

As the flagship unit of Combat Systems, Land Systems boasts one of the most comprehensive product lines in the industry. Due to the elevated threat environment remarked multiple times, demand for certain products is elevated, which is a catalyst for revenue growth in the short- and mid-term. The contract value of international and domestic vehicle orders outweighed weapons systems and munitions orders, serving as a strong counterweight to any inefficiencies that may arise due to artillery expansion work (Exhibit 10).

Exhibit 10: High Vehicle Contract Value Mitigates Potential Inefficiencies in Munitions Expansion

Source(s): Company Filings, VIG Research

Exhibit 11: The M10 Booker – Crown Jewel of GD Land Systems

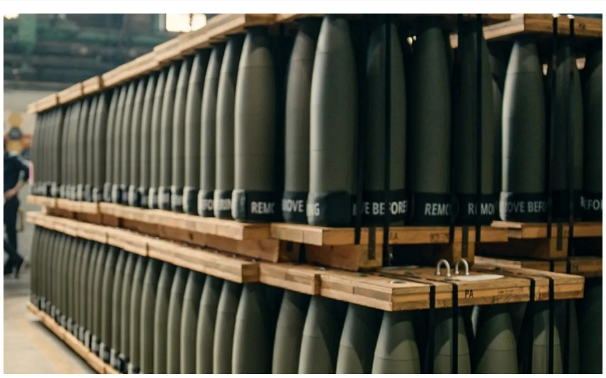
Source(s): GDLS

TAKING ADVANTAGE OF MUNITIONS DEMAND KEY FOR ORDNANCE AND TACTICAL SYSTEMS (OTS)

OTS, Products – OTS is a global leader in the development of highly capable and effective munitions. Their ammunition products fit under five categories: **(1)** Small Caliber Ammunition **(2)** Medium Caliber Ammunition **(3)** Large Caliber Ammunition **(4)** Artillery Ammunition and **(5)** Mortar Munitions and Components. Small caliber munitions are produced for various militaries (American allies) and are typically fit for assault rifles and snipers. OTS's medium caliber munitions have a wider range of uses, ranging from 20mm to 50mm cannon ammunition; this depth in this product line means General Dynamics supplies to various branches. Large caliber munitions are rated for tanks and have armour-piercing capabilities. Artillery and mortar ammunition are used on the battlefield for indirect fire support, supporting advancing troops and destroying enemy defenses. To power their lethal munitions, OTS develops and sells propelling charges and systems.

OTS also manufactures missile subsystems, including structural components for missiles and rockets, the Hydra-70 family of rockets, and hardware that makes lethal payloads even more effective. Currently, OTS is a global supplier of munitions and is considered a leader in the supply of tank ammunition, medium caliber munitions, mortar shells, propellants, the installation of Hydra-70 rockets, and most importantly, the 155mm family of munitions (Exhibit 8). In 2023, OTS spent capital to expand its existing metal parts production capacity from 18,000 to 86,000 rounds per month by 2025 and expand its existing propellant capacity from 4 million to 16 million pounds per year by 2028, while establishing the capacity for 155mm load, assemble, and pack (LAP) to 50,000 rounds per month by 2025. These measures are to satisfy accelerated global munition demand and to enhance the U.S. Army's stores. OTS has taken careful steps to build a favourable product mix because they will be able to realize revenue at a faster pace than vehicle deliveries due to the shorter duration of these contracts.

Exhibit 12: A Visual Of 155mm Deliveries



Source(s): General Dynamics – Ordnance and Tactical Systems

Technologies Segment Products Serve Key Interests of The American Government

A key revenue driver, the technologies segment provides a spectrum of IT services, digital platforms, and other products to global militaries looking for advanced hardware and software capabilities. There are two business units under this segment: **(1)** Information Technology (GDIT) and **(2)** Missions Systems.

The technologies segment contributed to 31% of General Dynamics' revenues, generating $12.9 billion throughout 2023. Annualized revenue gains over the previous year were primarily driven by strong demand for IT services and the acquisition of a C5ISR business in 2022. 2024 revenue is expected to increase to $13 billion, but the total addressable market of global military AI is increasing at an approximate CAGR of 14.49%, which is positive as General Dynamics has swiftly established market share. However, revenues should grow at a stable rate and will perform at current revenue projections. The only headwind the segment currently faces is slower government adoption of AI but could mitigate these issues by providing services to allow faster adoption, making it more attractive for continued government spending.

GENERAL DYNAMICS INFORMATION TECHNOLOGY (GDIT) – BUYING INTO AI

GDIT's digital solutions and services are known as Digital Accelerators, and they meet specific mission needs, including zero trust, AI applications, hybrid multi-cloud, and defensive cyber solutions. The segment focuses on digital consulting, modernizing large-scale IT enterprises, and deploying technologies to optimize and protect customer networks and data. Operating across thousands of digital modernization programs, GDIT's portfolio includes cloud services, cybersecurity, network modernization, AI, application development, high-performance computing, and next-generation wireless communications. Notable projects include hybrid cloud services for the National Geospatial-Intelligence Agency and modernizing the electronic health record system for the Indian Health Service.

MISSION SYSTEMS – DRIVING INNOVATION, ENSURING SUCCESS

Mission Systems is a defense electronics manufacturer and integrator for C5ISR applications across all domains, offering both prime contract programs and subcontract positions with large platform providers. Its portfolio includes encryption products for national security systems, advanced RF systems for the U.S. Army, and space operations and integration services for the U.S. Space Development Agency. The business supports maritime operations with systems for Navy submarine programs, such as fire-control and weapon launch systems. Mission Systems also invests in autonomous capabilities, providing manufacturing and assembly for Unmanned Undersea Vehicles (UUVs) and supporting manned and unmanned aerial vehicle platforms with mission-critical processing and security subsystems.

INDUSTRY ANALYSIS

U.S. defense spending set to remain strong, with growth reaching a plateau. The fiscal defense budget of $841 billion is up 3% from 2023, underpinned by demand for nuclear deterrence and R&D efforts in artificial intelligence. The majority of funding will be utilized in procuring next-generation air, ground, and naval vehicles to meet defense requirements. The Department of Defense is also offering supply chain support for defense companies as an incentive to meet future demand stabilize the industrial base. U.S. defense spending as a percentage of GDP currently stands at 3.1% with expectations to decrease to 2.8% by 2033. Essential activities will become the priority in the mid-term, but current DOD interest is in R&D. The proposed 2025 budget is approximately $850 billion, which shows a continued commitment to defense priorities.

Heightened threat environment driving spending priorities. Recent conflicts in the Middle East, Ukraine, and now perceived threats in China are raising concerns about national security, thus there is a global sentiment to modernize armed forces and to prepare military reserves. Furthermore, there is also a focus on transitioning to agile and advanced technology platforms.

Global supply chain complexities driving dynamic solutions. Aerospace and defense companies are expected to see continued global supply chain disruption, leading to production delays and increased pricing and expensive imports for raw materials and components. With China leading market share of 50-70% in 13 major critical minerals, companies may have to build raw material reserves. Strategic reserves paired with commitments to bulk buying of long lead time items, the digitization of supply operations, and exploring alternate supply investments to bolster their chain for the future could position companies to absorb cyclical risk.

Supply chain issues continue to impact production involving specialized parts, causing out-of-sequence work.

INDUSTRY UPSIDE FACTORS

MRO demand to continue growing as the business jet market set to rebound from last year. Maintenance, repair and overhaul (MRO) demand remains strong due to high travel volume, supply chain disruptions in manufacturing, and grounded aircraft. The underperformance of new engine models has stretched use of aging aircraft, causing an uptick in maintenance, while overhaul capacity is backed, the market is growing at a stable pace. The business jet market slowed down from its peak in 2022, but orders remain strong. Deliveries are expected to increase approximately 10% in 2024 and major manufacturers are seeing record-high backlog. Long-range and ultra-long-range aircraft will have dominant market share and are expected to represent more than half of total business jet spending.

High M&A potential in Europe as strong balance sheet issuers look to consolidate. Companies with balance sheet headroom and strong liquidity are engaging in share buybacks to take advantage of an industry ripe for consolidation. Easing monetary policies combined with demand for segment diversification has created a favourable environment to engage in M&A.

Customer Overview

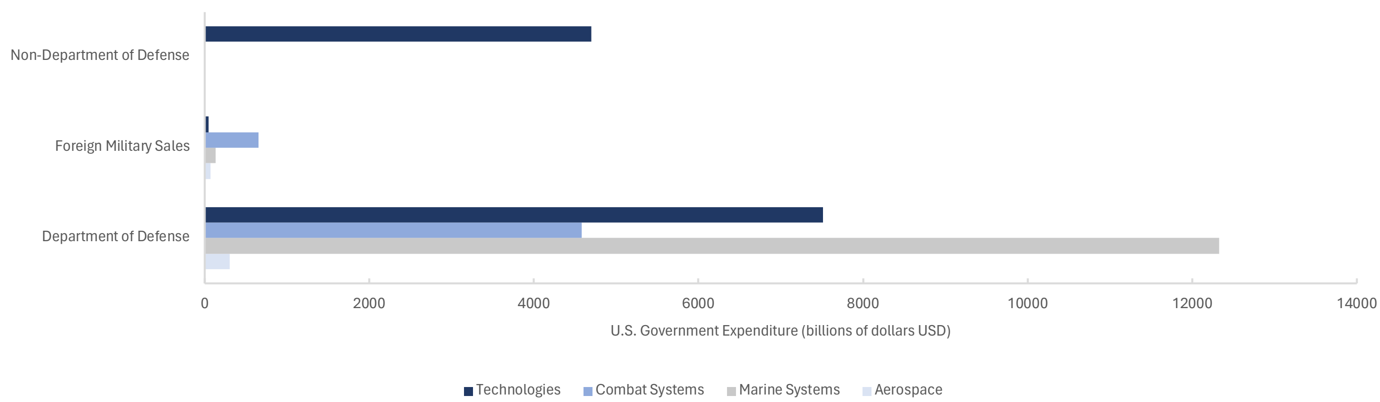
General Dynamics had $93.6 billion of backlog with a further $38.3 billion is estimated potential contract value at the beginning of the year. These orders and contracts are mainly concentrated in the United States, with a majority of their revenue arising from the Department of Defense through fixed-price contracts. Despite this consolidation, Gulfstream, Jet Aviation, and European Land Systems have significant international operations, which provide diverse streams of revenue.

U.S. Government – The U.S. government has contracted General Dynamics on multiple projects, with the most significant being the M10 Booker, the Abrams Mian Battle Tank, the Columbia and Virginia-Class submarines and Revenue from the U.S. government consists primarily of fixed-price, cost-reimbursement, and time-and-materials contracts. Fixed-price production contracts represented 53% of U.S. government revenue in 2023. Cost-reimbursement contracts, which cover research, engineering, repair, and maintenance services, accounted for 41%, with time-and-materials contracts making up the remaining 6%.

U.S. Commercial - U.S. commercial revenue is driven mainly by business jet aircraft sales and related services, amounting to $5.8 billion in 2023 (14% of total revenue). The Aerospace segment's backlog indicates significant global demand, with approximately 40% of orders originating from customers outside North America. For instance, Gulfstream jets are purchased by commercial airlines, charter companies, corporations, and high-net-worth-individuals. Jet Aviation customers also fall under this category and the extensive network of more than 30 FBO facilities services customers worldwide. The remaining commercial revenues come from modernization work on regular tankers and watercraft at NASSCO.

Non-U.S. Government & Commercial - Non-U.S. customers are a variety of governments (allies of the United States) and commercial entities worldwide, totaling $6.1 billion in 2023, or 14% of General Dynamics consolidated revenue. The company's non-U.S. defense subsidiaries maintain long-standing relationships as regional suppliers, providing diverse products and services. Government customers are tied to European Land Systems, Ordnance and Tactical Systems, and GDIT services. Business jets and a host of the Jet Aviation services are also available to customers abroad.

Exhibit 13: A Breakdown of Revenues From The U.S. Government by Segment – 72% of 2023 Revenue Came From U.S. Government Expenditures and We Expect Similar Trends in 2024



Source(s): Company Filings, VIG Research

Investment Positives

EARLY G700 STRUGGLES ERODE MARKET SHARE, AEROSPACE REVENUES EXPECTED TO EXPERIENCE REVENUE GROWTH

Gulfstream Corporation, the lead business unit of the General Dynamics aerospace segment, has a dominant position in producing long-range executive jets (Exhibit 14). 89 of their 111 aircraft sold in 2023 had long-range capacity, which exhibits continued high consumer demand for Gulfstream's large-cabin models. Despite exceptional performance compared to its closest competitors in this subsector, the business unit failed to meet its 2023 delivery outlook primarily due to supply chain issues and prolonged certification conflicts with its newest model, the ultra-long-range G700. This led to manufacturing underperformance through late 2023 and early 2024, with a high volume of aircraft services driving revenue growth. Aircraft services benefitted from stronger flight activity and well-established maintenance cycles, driving last year's 0.6% annual revenue growth.

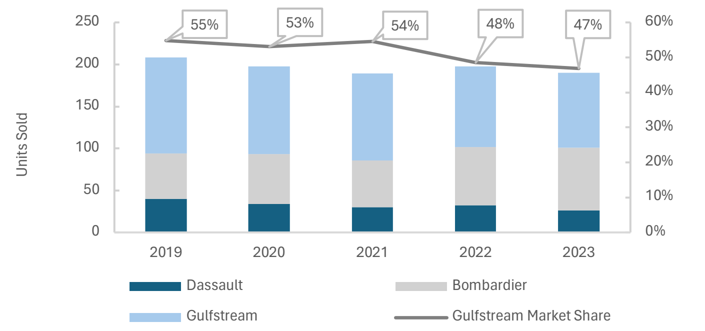
The U.S. Federal Aviation Administration was expected to clear regulations on the G700 in late 2023 however it was certified in late March this year, causing inventory to build up to $9.6 billion due to multiple units listed as complete and ready for sale. General Dynamics continues to face certain supply chain pressures which has caused them to revise the initial target of 50-52 2024 G700 deliveries to approximately 42 deliveries. While it requires a strong Q4, we expect Gulfstream will execute 26-27 G700 deliveries. Improving demand for business jets through corporate and fractional ownership will be strong enough to allow Gulfstream to deliver approximately 135-140 units over the year.

Gulfstream Aerospace will deliver 135-140 business aircraft by the end of the year and looks to deliver 26-27 G700 units this quarter.

We expect aircraft manufacturing to rebound as backorders are executed through 2H2024 and G700 units take flight. This, combined with strong maintenance, repair, and operations (MRO) service demand from commercial airlines, will result in aerospace revenues outperforming expectations. In the long-term, aerospace revenues will contribute a higher percentage to total revenues due to demand on the G700 and the all-new G800, expected to gain certification in mid-2025, providing a hedge against the defense segments (Exhibit 15).

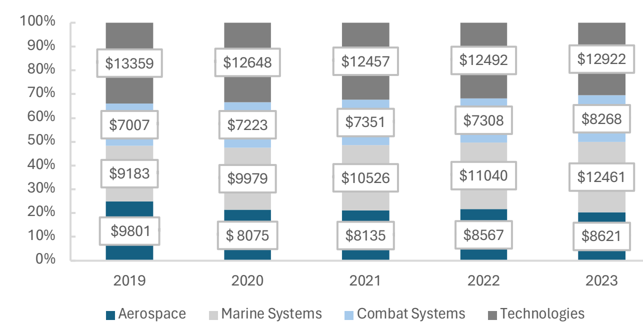
Due to the consecutive release of the two models, the company will face a flatter learning curve with the G800 relative to the G700. This will not only incite further revenue growth but will result in another significant improvement in the aerospace operating margin. Any hindrances encountered during initial production and delivery of the G800 should be offset by the stable and strong demand indicators for the aerospace services mentioned above. Textron and Bombardier, their main competitors, have faced pushback from unions in the form of strikes, compromising some of their projected deliveries for 2H24. With Gulfstream not facing such employee pressures and expectations for the G800 to take flight within 2Q25, General Dynamics can capture more business jet demand compared to their counterparts.

Exhibit 14: Gulfstream Maintains A Dominant Position In The Long-Range Business Jet Market Despite Recent Interruptions



Source(s): GAMA, company filings, VIG Research

Exhibit 15: Strong Delivery Execution and Introduction of G700 and G800 Will Increase Aerospace Revenue Exposure (USD mm)



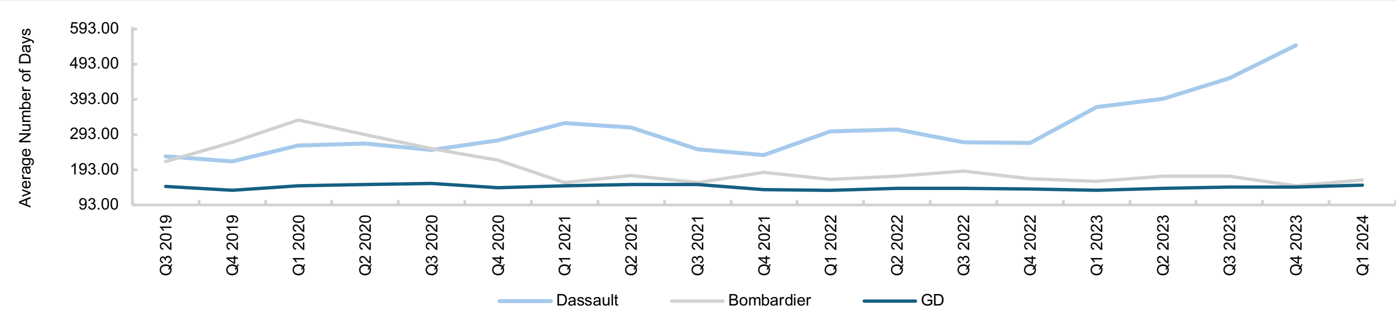
Source(s): S&P CapitalIQ, VIG Research

The book-to-bill ratio, a key indicator of order demand, reached 1.4x at Gulfstream in Q3 which signifies that demand is not waning. We expect that the ratio will fall in Q4 as General Dynamics sets out to make over 60 aircraft deliveries over the quarter. Jet production takes place in 20-unit blocks and it is generally observed that the margin rate of each block improves by 600-700 bps as the learning curve flattens As production and delivery on the second block of G700 units takes place in Q4, we expect that General Dynamics should be slightly above their 13.2% annual operating margin guidance. Overall operating margin of 20-30 bps above the 14% guidance. We expect that annual revenues will be $0.1-$0.2 billion above the current guidance of $12.3 billion as abnormal pressures faced in Q3 caused guidance to be more conservative.

GENERAL DYNAMICS' QUICK SALE PACE WILL BE AN ASSET AS THE G700 & G800 COME INTO SERVICE

General Dynamics has a robust cash conversion cycle across all its business units, underpinned by dynamic asset turnover. As G700 deliveries take place this year and the G800 is approved next year, Gulfstream has efficient systems in place to capture demand for its products compared to its closest business jet competitors (Exhibit 16). This will allow the subsidiary to regain market share in the long term and further establish itself as the leading manufacturer of business aircraft. We expect that the cash conversion cycle's current stable trend should persist.

Exhibit 16: A Fast Cash Conversion Cycle Favours General Dynamics Over Long-Range Business Jet Rivals



Source(s): S&P CapitalIQ

DESPITE INITIAL COST GROWTH, GENERAL DYNAMICS SET TO GAIN MORE VOLUME ON COLUMBIA-CLASS PROGRAM

Electric Boat, General Dynamics' marine systems submarine-building business unit, realized high volume on the high-priority Columbia-class program, making headway for the government to purchase the second submarine in 2024. It is part of the American Navy's strategic deterrence mission, which is an initiative meant to dissuade hostile nations from launching nuclear attacks.

It is part of the American Navy's strategic deterrence mission, which is an initiative meant to dissuade hostile nations from launching nuclear attacks. Submarine-launched ballistic missiles will play a central role in the success of the mission; the Navy has prioritized the Columbia-class program as it will replace the aging Ohio-class ballistic submarines and will be able to match hostile nuclear advancements.

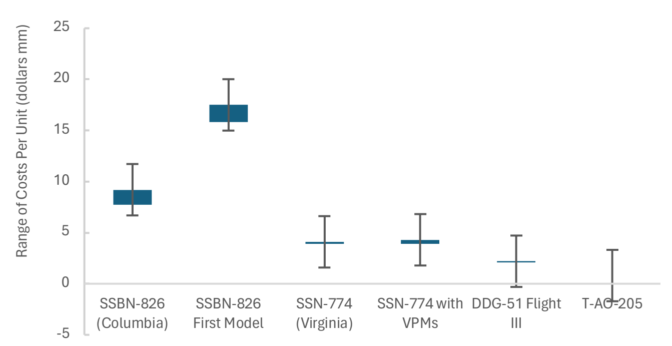
The first of twelve Columbia-class units reached 36% completion as of June 30, 2023, with construction planned to be completed by 2028. The Q1 update on the Columbia program was notably positive, reaffirming a strong schedule for deliveries driven by the steepest ramp of the personnel curve being cleared.

Total procurement costs for the twelve submarines are expected to be approximately $100.2 billion to $119 billion according to the 2024 Navy shipbuilding plan. High cost variance is expected for Columbia units, with estimates ranging from $15.8 to $17.5 billion for the first ship and subsequent unit costs are expected to range from $7.7 to $9.2 billion (Exhibit 17). The Congressional Budget Office expects costs to be on the higher end of the scale, but the program is subject to higher cost growth due to its scale and technological complexity. Engineering and manufacturing the advanced X-Stern rear rudder system and long-life nuclear reactor for each unit have already caused predicaments as they require highly specialized parts.

General Dynamics is the prime contractor on the Columbia-class program and subcontracted Huntington Ingalls Industries to build modules for the duration of the program. Together they form a nuclear submarine duopoly, working on both the Columbia and Virginia-class programs. Huntington has a more dynamic role with the Virginia program, designing the stern, torpedo room, sail and bow, with Electric Boat responsible for the engine room, control room, and pressure hull structure. Currently, Electric Boat is working on Virginia Blocks IV and V, with 16 Virginia-class submarines in backlog providing stable revenues through to 2032. Supply chain impacts on the final six ships in Virginia Block IV offset the magnified volume of the Columbia program. However, continual capital investments (approximately 60% of total capital expenditures over the last 5 years) made into the modernization of Electric Boat modernization should support further submarine manufacturing growth and begin mitigating supply chain interruptions (Exhibit 18). Furthermore, the low debt/capital ratio implies that improvements are being made organically and balance sheet health will remain strong. This is also underpinned by heavy government involvement on shipyard revampment.

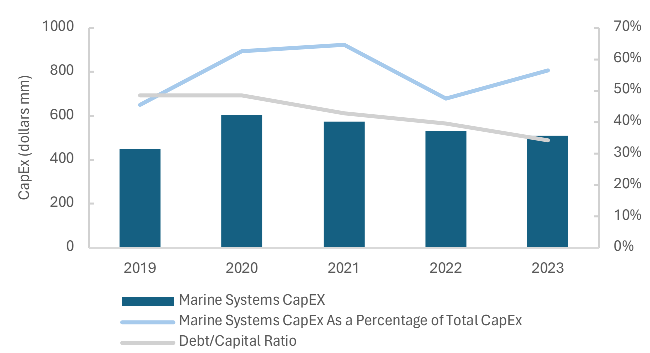
Continued capital expenditure into Electric Boat modernization will help mitigate supply chain and workflow disruption.

Exhibit 17: The Widest Cost Range In The Marine Systems Segment Projects Belongs To The Columbia-Class Program



Source(s): Congressional Budget Office, VIG Research

Exhibit 18: Organic Capital Expenditure Will Mitigate Cost Overruns, Supply Chain Disruptions And Increase Operational Efficiency



Source(s): S&P CapitalIQ, Company Filings, VIG Research

General Dynamics' Electric Boat business unit is well-positioned to continue benefitting from the high-priority Columbia-class submarine program, which is a pillar of the U.S. Navy's strategic nuclear deterrence mission. With strong progress toward the scheduled 2028 delivery of the first of 12 ships, GD is set to realize substantial, stable revenue over the next decade. The Columbia-class program is a $100+ billion initiative designed to replace aging Ohio-class submarines, with procurement costs for each submarine ranging between $15.8 to $17.5 billion for the first unit and $7.7 to 7.9 billion dollars as average cost for the next 11 units. Following the production of the first unit, Electric Boat will face better operating margins and sustained top line growth due to the high learning curve of the initial process.

The program continues to face cost pressures due to its scale and technological difficulties, along with other supply chain pressures, which has caused management to reaffirm the overall Marine Systems operating margin guidance to 6.9% for the fiscal year. However, GD's strong government partnerships and ongoing shipyard modernization efforts are expected to mitigate these risks. We expect that Marine Systems will finish with a 7.0% operating margin in 2024 and should continue this trend throughout the coming years. Revenue growth should stabilize at approximately 4-5% unlike this year, where we will end in the double digits. Huntington Ingalls also underperformed in Q3, and General Dynamics cited continued broad supply chain issues, but despite the out-of-sequence work, General Dynamics will be able to generate approximately $14 billion of Marine Systems revenues this year.

HIGH CAPITAL EXPENDITURE ON SHIPYARDS WILL BE KEY IN BACKLOG GROWTH AND SECURING PRIME CONTRACTS

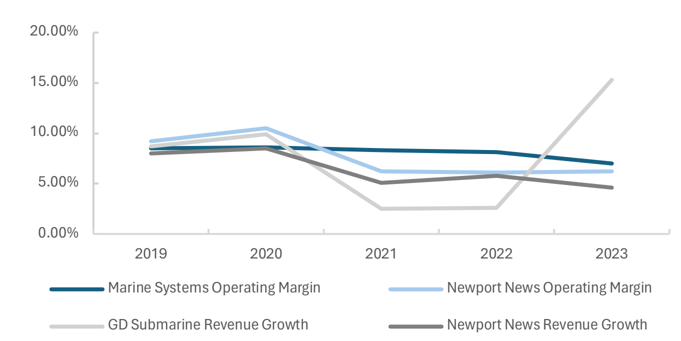
Marine Systems' deployment of capital over the past year allowed it to outperform Newport Seas, the shipbuilding segment of Huntington Ingalls. Despite General Dynamics being the prime contractor in the Columbia-class program, they maintained a 7% marine systems operating margin, which was 80bp higher than Newport Seas and realized a 15.3% submarine manufacturing revenue gain (Exhibit 19).

This signifies that despite supply chain headwinds on the Virginia-class program and cost growth on the DDG-51 Flight III program, General Dynamics still utilized resources more efficiently and reduced costs even though Columbia-class volume increased. Moving forward, increased operational efficiency from shipyard modernization at General Dynamics will continue strong near-term and mid-term revenue growth. Furthermore, a majority of General Dynamics nuclear submarine contracts are long-term cost-reimbursements, meaning revenues are expected to be stable and incentives will be provided contingent on certain operational obligations.

Improved operations are valuable in the long term as the Navy plans to stop procuring Virginia-class submarines in favour of the SSN(X) next-generation attack submarines. While the design and capabilities for the next-gen submarines have not been clarified, they are expected to be an advanced version of the Seawolf class, equipped with advanced stealth technology and more torpedo capacity than the Virginia class.

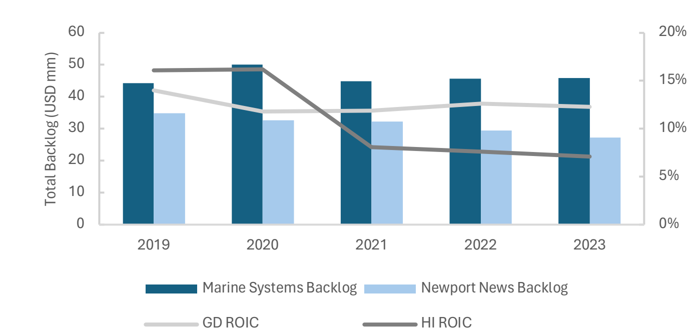
Current trends favour General Dynamics to be the prime contractor on SSN(X) development, with costs ranging from $6.7 to $8 billion per unit. General Dynamics has a historically high ROIC, which is approximately 13% compared to Huntington Ingalls' volatile ROIC. Based on this information, we expect that the government will be inclined to agree to further long-term contracts with Electric Boat and its backlog growth will outpace the declining performance obligations of Huntington Ingall (Exhibit 20).

Exhibit 19: Electric Boat's Nuclear Submarines Revenue Growth Is Impressive, With The Operating Margin Set To Improve In 2024



Source(s): S&P CapitalIQ, Company Filings, VIG Research

Exhibit 20: A Track Record Of Efficient Capital Deployment Makes General Dynamics A Favourable Contractor For The SSN(X)



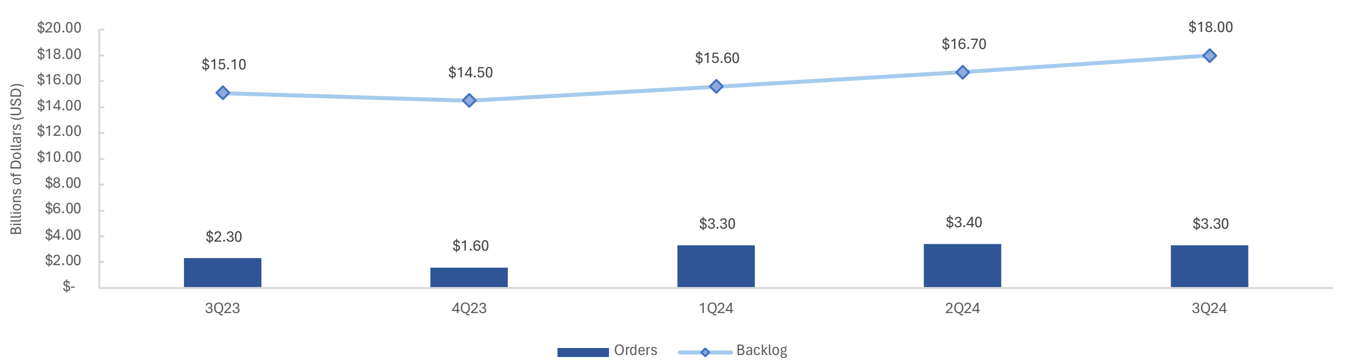
Source(s): S&P CapitalIQ, Company Filings, VIG Research

General Dynamics' sustained cooperation with the government to meet the requirements of the strategic nuclear deterrence mission combined with operational efficiencies and a high ROIC will allow Electric Boat to secure favourable contract positions and further reinforce their long-term backlog. In essence, the market has mispriced the effect of continued shipyard capital expenditures and its implications on mitigating manufacturing disruptions. Furthermore, the high amount of capital being ploughed into Marine Systems will unlock better terms on contracts for future projects. These investments show that the projects are a strategic priority for General Dynamics and delays in production will therefore most likely stem form supply chain disruptions, which are out of the company's hands.

LOADING UP LONG TOM SHELLS – COMBAT SYSTEMS CAPTURING 155MM ARTILLERY DEMAND AND MORE

General Dynamics has capitalized upon the high global tensions, which have incited armed forces to bolster their stockpiles and integrate advanced weaponry. Recently, the company invested in a munitions facility in Texas, which is projected to increase production capacity by 83% and will be key in satisfying the demand for 155mm artillery shells in Ukraine. While operating margins have been lower due to the initial setup at the facility, but with production ramping up, margin expansion will trend upwards. We expect that the current guidance for the operating margin should hold at 14.4%. Continued demand for the Abrams main battle tank and wheeled armed vehicles was highlighted by the strong 1.5x book-to-bill ratio in 2Q24. Overall, the company will face margin issues in Q4 as they have to ramp up production at the Texas facility to deliver on munitions contracts. However, it should be offset by the strong demand for vehicles and annual revenues for Combat Systems will approximately be $8.8 billion. All in all, the market has failed to price in the effects of the Texas facility and the strong backlog of orders in Combat Systems, which is currently the highest it has been since 2016 (Exhibit 21). This should mean that strong growth will continue into 2025 and as munitions production becomes more efficient, the segment should realize 6.0-7.0% revenue growth next year.

Exhibit 21: A Strong Backlog Combined with Increased 155mm Production Capacity Will Continue Strong Combat Systems Revenue Growth



Source(s): Company Filings

Key Risks and Mitigants

(1) Over 70% of the company's revenue comes from the U.S. government, rendering a high correlation between earnings and the magnitude of defense spending. The budget is sensitive to multiple factors, including the global threat environment, changes in legalities, macroeconomic factors, domestic political environment, etc. While the upcoming election can potentially cause regulatory shifts and changes in the current budget, the Aerospace and Defense industry will continue to secure contracts under current global political tensions. General Dynamics has historically generated a majority of their U.S. government revenues from long-term, fixed-price contracts, meaning projections are less subject to fluctuations.

(2) Financial performance is heavily dependent on the robustness of the company's supply chain, and it is expected that other entities will meet their obligations. General Dynamics faces high risk from its single-source suppliers involved in some of their manufacturing processes. However, the company has an extensive supplier network and an analysis of their suppliers shows that they are not exposed to many single source channels.

(3) The Aerospace segment is impacted by consumer demand for business jets, which is highly elastic. Shifts in economic conditions, debt markets, and pricing pressures are all factors that could lead to lower Gulfstream sales and reduced service demand. General Dynamics continues to strategically expand into emerging markets, improve their operational efficiency, and innovate advanced models to mitigate demand shift effects.

Key Events

ISRAEL-GAZA TENSIONS CREATE ACCELERATED DEMAND FOR GD PRODUCTS BUT DAMAGE SUPPLY PIPELINES

As conflict in the Middle East continues, particularly involving Israel's engagements in Gaza, Lebanon, and Iran, demand for weaponry and defense equipment has surged. Israel, backed by U.S. defense spending has launched counter attacks across Lebanon in a push to make Hezbollah retaliate. This has resulted in widespread destruction as both parties are firm in their stance to defend their interests. General Dynamics, which supplies precision-guided munitions such as bunker buster bombs used by Israel, stands poised to benefit from this demand increase.

The recent $8.7 billion U.S. aid package to Israel for munitions and arms, part of nearly $18 billion allocated since the onset of the conflict, suggests a likely acceleration in demand for General Dynamics' products in the coming months. While it is difficult to ramp up production given a short timeline, General Dynamics has the capacity to enter further short-term munitions contracts and while profit margins may not be remarkably high, the high volume of demand should generate significant revenue. Demand for advanced weapon systems, electronic warfare solutions, and armored vehicles may also grow as conflict spreads and escalates regionally.

However, General Dynamics also faces potential supply chain faces disruption risks due to global instability and heightened military requirements. Given the increased demand for defense products across the U.S. and allied nations, the firm may experience constraints in sourcing critical materials and components, leading to potential production bottlenecks or delays. This is underpinned by the recent supply chain contractions which caused General Dynamics to underperform in delivering G700 units and continued delays at Bath Iron Works. The company must strategically manage and secure supply lines and enter in forward agreements on precious materials and specialized parts to mitigate these risks and ensure timely fulfillment of growing defense orders. Furthermore, entering in these agreements limits exposure to commodity price risks, which may tick up as Israel retaliates against Iran.

While heightened tensions between Israel and Palestine present accelerated demand, the war's effects on trade routes could potentially slow Marine Systems and Aerospace production.

GENERAL DYNAMICS ACQUIRES IRON EAGLEX IN A BID TO IMPROVE AI & MACHINE LEARNING CAPABILITIES

The acquisition of Iron EagleX marks General Dynamics commitment to meeting its strategic objectives in national security technology and client-specific mission requirements. Iron EagleX is a provider of technology solutions to the U.S. Special Operations Command (SOCOM) with a focus in AI, machine learning, cybersecurity, software development, and cloud computing. This strengthens GD's capabilities in providing efficient services in the evolving intelligence and data-driven environment we see in defense today. This aligns with GD's recent "digital accelerator" strategy which revolves around making investments in technologies such as zero trust, multi-cloud management, and mission-oriented AI.

GD added hundreds of employees to its talented GDIT segment, reinforcing its capacity to handle an expanding workload amid heightened security demands from China, Russia, and the evolving Ukraine conflict. This acquisition complements GD's recent investments in 5G and edge-computing technologies, partnerships with tech leaders like AWS and Cisco, and specialized R&D labs such as the Cyber Emerge Lab in Virginia.

Looking ahead, while the acquisition does not present an immediate boost in revenues, it positions GD to accelerate R&D in next-generation capabilities. This includes defensive cyber operations and post-quantum encryption, which will serve SOCOM's needs as they address complex geopolitical tensions and compete to defend the nation's secure databases. The Iron EagleX deal demonstrates GD's strategic foresight in acquiring firms that enhance its technological portfolio. This deal supports both immediate and future security demands and will ultimately drive accretive growth within GDIT.

Valuation Methodology

The base case output of our model implies a target share price of approximately $325.90, which is a blend of a DCF and a Comparable company valuation. This valuation models an 11% upside on the stock value as of November 2nd, 2024. We utilized a 6.85% discount rate and a 2.30% terminal growth rate for our base growth in perpetuity output. A 2.12x EV/Sales multiplies used at the end of the forecast period for our base exit multiple output. We chose to use the EV/Sales multiple as we forecast stable revenues in the future due to the advantage of a predictable defense expenditure budget. We also omit the earnings volatility caused by high-impact R&D in specific time periods and other non-recurring costs tied to general research.

The downside scenario implies a share price of $266.94 or a 9% downside based on a 7.35% discount rate, 2.10% terminal growth rate and a 2.00x exit multiple. Furthermore, we use the inclusive 25th percentile of the multiples used in our comparable companies set. This scenario would be driven by significant cost growth on the nuclear submarines projects and struggles in delivering the G700, G800, and G400 business jets. This downside is relatively low as the company is now past the steepest profit ramps in these projects.

The upside scenario implies a share price of $376 or a 28% upside based on a 6.55% discount rate, 2.50% terminal growth rate and a 2.18x exit multiple. Furthermore, we also use the inclusive 75th percentile of the multiples used in our comparable companies set. This scenario would be a product of a strong end to 2024 and gaining early certification on the G800 and G400 models to begin deliveries quickly. Lower nuclear submarine cost growth and continued munitions and vehicle demand would support this scenario.

We use a 5-year forecast period for the DCF and assign equal weights to the growth in perpetuity output and exit multiple output to derive a target price. This is then blended with the output provided by the comparable company valuation. We assigned a heavier weight to the comparable companies model as there was extensive data available on specific companies which had similar operations comparable to one of the 4 General Dynamics segments.

We utilized a general pool of companies, along with pure play companies and assigned a weight to derive a singular weighted forward P/E and EV/EBITDA multiple. While some volatility exists in earnings, we applied the P/E multiple because we believe that profits are generally stable across the A&D industry. Moreover, the multiple allows us to understand where General Dynamics stands in terms of generating profits compared to its competitors. The EV/EBITDA neutralizes the effects of varying capital structure across the industry. This allows for easier comparison for overall financial health. We also excluded the Boeing Company from our comparable sets as we believe that extenuating circumstances have caused their financial metrics to become distorted. Including such a company in the et could potentially distort and overvalue General Dynamics.

Exhibit 22: Calculation of Our DCF Price Target

Discounted Cash Flow Valuation

	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E	2028E	2029E
Revenue	$37,925.00	$38,469.00	$39,407.00	$42,272.00	$48,570.53	$50,416.21	$52,684.94	$54,528.91	$56,343.94	$58,122.80
YoY Growth %	*-3.62%*	*1.43%*	*2.44%*	*7.27%*	*14.90%*	*3.80%*	*4.50%*	*3.50%*	*3.33%*	*3.16%*
COGS	$31,600.00	$32,061.00	$32,785.00	$35,600.00	$40,313.54	$41,744.62	$43,570.44	$45,040.88	$46,483.75	$47,908.69
YoY Growth %	*-2.36%*	*1.46%*	*2.26%*	*8.59%*	*13.24%*	*3.55%*	*4.37%*	*3.37%*	*3.20%*	*3.07%*
SG&A	$2,113.00	$2,027.00	$2,021.00	$2,965.00	$3,157.08	$3,226.64	$3,319.15	$3,380.79	$3,425.76	$3,533.91
YoY Growth %	*-13.05%*	*-4.07%*	*-0.30%*	*46.71%*	*6.48%*	*2.20%*	*2.87%*	*1.86%*	*1.33%*	*3.16%*
Taxes	$571.00	$616.00	$646.00	$669.00	$781.72	$834.60	$888.31	$936.12	$986.27	$1,023.94
YoY Growth %	*-20.47%*	*7.88%*	*4.87%*	*3.56%*	*16.85%*	*6.77%*	*6.44%*	*5.38%*	*5.36%*	*3.82%*
EBIAT	$3,641.00	$3,765.00	$3,955.00	$3,038.00	$4,318.19	$4,610.35	$4,907.03	$5,171.12	$5,448.16	$5,656.26
YoY Growth %	*-5.16%*	*3.41%*	*5.05%*	*-23.19%*	*42.14%*	*6.77%*	*6.44%*	*5.38%*	*5.36%*	*3.82%*
D&A	$878.00	$890.00	$884.00	$863.00	$892.48	$980.09	$1,043.16	$1,116.10	$1,193.59	$1,257.55
YoY Growth %	*5.91%*	*1.37%*	*-0.67%*	*-2.38%*	*3.42%*	*9.82%*	*6.44%*	*6.99%*	*6.94%*	*5.36%*
CapEx	$967.00	$887.00	$1,114.00	$904.00	$968.98	$980.09	$985.21	$1,000.06	$1,013.42	$1,010.38
YoY Growth %	*-2.03%*	*-8.27%*	*25.59%*	*-18.85%*	*7.19%*	*1.15%*	*0.52%*	*1.51%*	*1.34%*	*-0.30%*
Change in WC	$2,364.00	$264.00	($340)	$273.00	$708.39	$588.24	$626.10	$659.79	$695.14	$721.69
YoY Growth %	*95.05%*	*-88.83%*	*-228.79%*	*-180.29%*	*159.48%*	*-16.96%*	*6.44%*	*5.38%*	*5.36%*	*3.82%*
Unlevered Free Cash Flow	**$1,188.00**	**$3,504.00**	**$4,065.00**	**$2,724.00**	**$3,533.31**	**$4,022.10**	**$4,338.89**	**$4,627.36**	**$4,933.18**	**$5,181.73**

Discount Rate **6.85%**

Growth in Perpetuity		Exit Multiple Method		Blended	
Terminal Growth Rate	2.30%	EV/Sales Exit Multiple	2.115820728	Exit Multiple Weight	50%
Terminal Value	$116,503.54	Terminal Value	$122,977.43	Growth in Perpetuity Weight	50%
Discounted Terminal Value	$78,287.42	Discounted Terminal Value	$82,637.71	**DCF Output**	**$335.84**
Implied Enterprise Value	$99,248.00	Implied Enterprise Value	$103,598.29		
Implied Market Cap	$90,182.00	Implied Market Cap	$94,532.29		
Implied Share Value	**$327.93**	**Implied Share Value**	**$343.75**		

Source(s): Company Filings, VIG Research, Metrics in USD mm and Per Share Values in USD as of October 30th

Exhibit 23: DCF Sensitivity Analysis

		WACC									
		4.75%	**5.25%**	**5.75%**	**6.25%**	**6.75%**	**7.25%**	**7.75%**	**8.25%**	**8.75%**	**9.25%**
	1.00%	$366.39	$366.39	$366.39	$366.39	$366.39	$366.39	$366.39	$366.39	$366.39	$366.39
	1.30%	$366.89	$366.89	$366.89	$366.89	$366.89	$366.89	$366.89	$366.89	$366.89	$366.89
	1.80%	$367.74	$367.74	$367.74	$367.74	$367.74	$367.74	$367.74	$367.74	$367.74	$367.74
TGR	**2.30%**	$368.59	$368.59	$368.59	$368.59	$368.59	$368.59	$368.59	$368.59	$368.59	$368.59
	2.80%	$369.44	$369.44	$369.44	$369.44	$369.44	$369.44	$369.44	$369.44	$369.44	$369.44
	3.30%	$370.29	$370.29	$370.29	$370.29	$370.29	$370.29	$370.29	$370.29	$370.29	$370.29
	3.80%	$371.14	$371.14	$371.14	$371.14	$371.14	$371.14	$371.14	$371.14	$371.14	$371.14

		2029 NTM EV/Sales										
		2.00x	**2.02x**	**2.04x**	**2.06x**	**2.08x**	**2.10x**	**2.12x**	**2.14x**	**2.16x**	**2.18x**	**2.20x**
	$50,000.00	$286.11	$287.33	$288.55	$289.77	$291.00	$292.22	$293.44	$294.66	$295.88	$297.10	$298.33
	$52,000.00	$296.33	$297.60	$298.87	$300.14	$301.41	$302.68	$303.95	$305.22	$306.49	$307.77	$309.04
	$54,000.00	$306.55	$307.87	$309.19	$310.51	$311.83	$313.15	$314.47	$315.79	$317.11	$318.43	$319.75
2029	**$56,000.00**	$316.77	$318.14	$319.51	$320.88	$322.24	$323.61	$324.98	$326.35	$327.72	$329.09	$330.45
Sales	**$58,000.00**	$326.99	$328.41	$329.83	$331.24	$332.66	$334.08	$335.50	$336.91	$338.33	$339.75	$341.16
	$60,000.00	$337.21	$338.68	$340.14	$341.61	$343.08	$344.54	$346.01	$347.48	$348.94	$350.41	$351.87
	$62,000.00	$347.43	$348.95	$350.46	$351.98	$353.49	$355.01	$356.52	$358.04	$359.55	$361.07	$362.58
	$64,000.00	$357.65	$359.22	$360.78	$362.35	$363.91	$365.47	$367.04	$368.60	$370.16	$371.73	$373.29
	$66,000.00	$367.87	$369.49	$371.10	$372.71	$374.33	$375.94	$377.55	$379.16	$380.78	$382.39	$384.00

Source(s): Factset, Company Filings, VIG Research, Metrics in USD mm and Per Share Values in USD as of October 30th

Exhibit 24: Our Comparable Company Valuation

General Dynamics Comparable Company Valuation

Comparable Company Sector	General Dynamics Equivalent	Raw Weighting	Pure Plays Adjusted	Mean EV/EBITDA 2024E	Mean EV/EBITDA 2025E	Mean P/E 2024E	Mean P/E 2025E
General Aerospace & Defense	-	-	40%	-	14.03x	-	18.70x
Business Aircraft & Aircraft Services	Aerospace	20%	12%	-	12.56x	-	20.72x
Military Watercraft	Marine Systems	29%	18%	-	12.45x	-	20.37x
Defense Components, Munitions, and Combat Vehicles	Combat Systems	20%	12%	-	13.52x	-	22.50x
Government and Military Information Technology	Technologies	31%	18%	-	15.18x	-	21.50x
Weighted				-	13.72x	-	20.20x

Estimated Company Financials

($ in Millions)	2022A	2023A	2024E	2025E
EBITDA	$5,485.00	$4,570.00	$5,812.90	$6,465.30
% Growth		-16.68%	27.20%	11.22%
EPS	$12.19	$12.02	$13.97	$16.16
% Growth		-1.39%	16.22%	15.68%
Net Debt	$10,872.00	$9,170.00	$6,018.30	$4,725.20

Shares Outstanding	275.0
EV/EBITDA Imp. EV	$88,717.25
EV/EBITDA Imp. Price	$305.43
P/E Imp. Price	$326.47
Public Comps Target Price	**$315.95**
Public Comps Weight	50%
DCF Output	$335.84
DCF Output Weight	50%
Final Target Price	**$325.89**

Source(s): Factset, Company Filings, VIG Research, Metrics in USD mm and Per Share Values in USD as of October 30th

Exhibit 25: Our Comparable Company Set

General Dynamics Comparable Companies

Company	Ticker	Price	Market Cap	Dividend Yield	EBITDA 2024E	EBITDA 2025E	EV/EBITDA 2024E	EV/EBITDA 2025E	EPS 2024E	EPS 2025E	P/E 2024E	P/E 2025E
General Aerospace and Defense												
Northrop Grumman	NYSE:NOC	$505.34	$73,625.70	1.63%	$5,817.10	$6,161.60	14.61x	13.79x	$25.88	$27.97	19.53x	18.07x
Lockheed Martin	NYSE:LMT	$545.94	$129,407.00	2.42%	$9,761.70	$10,188.00	14.91x	14.29x	$26.68	$27.78	20.46x	19.66x
RTX	NYSE:RTX	$121.86	$162,197.70	2.07%	$12,742.70	$13,984.70	15.65x	14.26x	$5.58	$6.11	21.83x	19.94x
L3Harris Technologies	NYSE:LHX	$245.41	$46,546.50	1.89%	$3,920.70	$4,281.20	15.04x	13.78x	$13.08	$14.32	18.76x	17.14x
General Aerospace & Defense Mean	-	-	-	-	-	-	-	14.03x	-	-	-	18.70x
General Aerospace & Defense Median	-	-	-	-	-	-	-	14.03x	-	-	-	18.87x
Business Aircraft & Aircraft Services												
Bombardier	TSX:BBD.B	$100.21	$7,534.10	3.26%	$1,351.10	$1,596.10	9.50x	8.04x	$4.38	$6.55	17.17x	11.49x
Embraer S.A.	BOVESPA:EMBR3	$8.51	$6,299.00	-	$684.00	$834.30	11.66x	9.56x	$0.43	$0.50	20.10x	17.37x
Textron	NYSE:TXT	$82.06	$15,223.10	0.10%	$1,562.40	$1,802.20	10.79x	9.35x	$5.46	$6.62	15.03x	12.40x
Thales S.A.	ENXTPA:HO	$164.13	$33,801.40	2.28%	$3,376.20	$3,733.60	11.46x	10.36x	$9.11	$10.23	17.91x	15.96x
TransDigm Group	NYSE:TDG	$1,329.63	$74,607.40	-	$4,154.60	$4,690.70	22.49x	19.92x	$33.68	$39.27	39.47x	33.86x
General Electric	NYSE:GE	$174.64	$189,011.80	0.64%	$8,106.30	$9,220.10	20.62x	18.13x	$4.31	$5.26	40.50x	33.23x
Business Aircraft & Aircraft Services Aircraft Mean	-	-	-	-	-	-	-	12.56x	-	-	-	20.72x
Business Aircraft & Aircraft Services Median	-	-	-	-	-	-	-	9.96x	-	-	-	16.67x
Military Watercraft												
Rolls Royce Holdings	LSE:RR.	$7.21	$61,281.10	-	$3,917.80	$4,393.10	15.96x	14.23x	$0.23	$0.27	31.73x	26.95x
Huntington Ingalls	NYSE:HII	$250.49	$9,823.00	2.15%	$1,079.10	$1,168.90	11.56x	10.67x	$16.59	$18.17	15.10x	13.79x
Military Watercraft Mean	-	-	-	-	-	-	-	12.45x	-	-	-	20.37x
Military Watercraft Median	-	-	-	-	-	-	-	12.45x	-	-	-	20.37x
Defense Components, Munitions, and Combat Vehicles												
Moog Inc.	NYSE:MOG.A	$194.74	$6,214.90	0.57%	$493.70	$540.30	14.61x	13.35x	$7.40	$8.28	26.31x	23.52x
Leonardo DRS	NasdaqGS:DRS	$31.64	$8,365.50	-	$387.10	$444.50	22.19x	19.32x	$0.87	$1.03	36.24x	30.60x
Airbus	ENXTPA:AIR	$151.84	$120,301.50	1.29%	$8,540.10	$10,875.50	12.84x	10.08x	$5.60	$7.78	26.95x	19.40x
BAE Systems	LSE:BA.	$16.47	$49,746.30	2.43%	$4,860.80	$5,326.10	12.41x	11.32x	$0.89	$1.01	18.69x	16.46x
Defense Components, Munitions, and Combat Vehicles Mean	-	-	-	-	-	-	-	13.52x	-	-	-	22.50x
Defense Components, Munitions, and Combat Vehicles Median	-	-	-	-	-	-	-	12.34x	-	-	-	21.46x
Government and Military Information Technology												
SAIC	NasdaqGS:SAIC	$146.33	$7,246.30	1.01%	$689.70	$717.90	13.58x	13.05x	$8.21	$9.02	17.83x	16.23x
Parsons Corporations	NYSE:PSN	$110.00	$11,680.90	-	$588.30	$665.60	21.22x	18.75x	$3.22	$3.68	34.20x	29.87x
Leidos Holdings	NYSE:LDOS	$185.74	$24,783.90	0.86%	$2,021.70	$2,059.50	14.01x	13.75x	$9.62	$10.10	19.30x	18.40x
Government and Military Information Technology Mean	-	-	-	-	-	-	-	15.18x	-	-	-	21.50x
Government and Military Information Technology Median	-	-	-	-	-	-	-	13.75x	-	-	-	18.40x
General Dynamics	**NYSE-GD**	**$301.37**	**$82,867.30**	**1.88%**	**$5,812.90**	**$6,465.30**	**$15.49**	**13.93x**	**$13.97**	**$16.16**	**$21.57**	**18.65x**
Unweighted Mean	-	-	-	-	-	-	-	**13.47x**	-	-	-	**20.75x**
VIG Estimates	-	-	-	-	-	-	-	**13.72x**	-	-	-	**20.20x**

Source(s): Bloomberg, VIG Research, Metrics in USD mm and Per Share Values in USD as of October 30th

Management Team and Executive Compensation

Management

Phebe Novakovic, Chairman and Chief Executive Officer – Phebe N. Novakovic has been chairman and CEO of General Dynamics since 2013, after joining the company in 2001 and holding roles such as COO, EVP for Marine Systems, and SVP for planning and development. Previously, she served in defense and intelligence roles, including as special assistant to the Secretary of Defense and working with the CIA. Novakovic holds an MBA from the Wharton School and serves on various boards, including Abbott Laboratories and the Association of the United States Army.

Jason Aiken, Executive Vice President, Technologies and Chief Financial Officer – Jason Aiken is the executive vice president for technologies at General Dynamics, having joined the company in 2002 and held roles such as CFO of Gulfstream Aerospace. Before his tenure at General Dynamics, he was an audit manager at Arthur Andersen LLP, focusing on defense contractors. Aiken holds an MBA from Northwestern's Kellogg School and a Bachelor of Business Administration and Accounting from Washington and Lee University.

Mark Burns, Vice President of the company and President, Gulfstream Aerospace – Mark Burns has been president of Gulfstream Aerospace since 2015 and serves as vice president of General Dynamics. With over 35 years at Gulfstream, he started as a computer-aided design operator in 1983 and advanced through various leadership roles, including vice president of Customer Support and the Savannah service center. A native of Savannah and a mechanical engineering graduate from Georgia Southern University, Burns is also active on multiple aviation and community boards, such as the General Aviation Manufacturers Association and the World Economic Forum Aerospace Governors.

Robert Smith, Executive Vice President, Marine Systems – Robert Smith serves as Vice President and President of Jet Aviation at General Dynamics, bringing over 20 years of aviation industry experience. He began his career at Electric Boat in 1989 as Director of Contracts and Estimating and later moved to General Dynamics NASSCO, where he served as CFO until 2012. Smith holds an MBA in Finance from Rensselaer and a Bachelor of Science in Electrical Engineering from Clemson University.

Mark Roualet, Executive Vice President, Combat Systems – Mark Roualet is the Executive Vice President of General Dynamics, overseeing the Combat Systems group, which includes European Land Systems, Land Systems, and Ordnance and Tactical Systems. Since joining General Dynamics through Chrysler Defense Inc. in 1981, he has held various senior roles, including President of General Dynamics Land Systems and Senior Vice President and COO. Roualet earned a bachelor's degree from Michigan Technological University and an MBA from the University of Dayton, and he serves on the Council of Trustees for the Association of the United States Army.

Compensation

The General Dynamics executive compensation plan is structured in a traditional format, wherein compensation aligns with company performance and shareholder interests, with a mix of base salary, annual incentives, and long-term incentives (LTI):

- **Annual Base Salary:** Executives receive a market-competitive base salary that reflects their experience, potential, and performance, providing a stable, fixed level of compensation.
- **Annual Incentive Compensation (Cash):** This performance-based cash bonus depends on achieving predefined financial metrics: EPS (25%), FCF (25%), operating margin (20%), and overall individual strategic/operational performance (30%). These metrics are linked to key financial and operational outcomes.

- **Long-Term Incentive Compensation (Equity):**
  - **Performance Stock Units (PSUs):** Making up 50% of the LTI, PSUs are tied to three-year ROIC and relative TSR metrics, aligning executives' incentives with long-term financial performance.
  - **Stock Options (30%):** These options link executives' compensation to the company's stock performance.
  - **Restricted Stock (20%):** Vested over a three-year period, restricted stock aligns executives with TSR and serves as a retention tool.

Exhibit 26: Management Compensation 2023

Name	Salary (USD)	Stock Awards (USD)	Option Awards (USD)	Non-Equity Incentive Plan Compensation (USD)	Change in Pension Value & Deferred Compensation Earnings (USD)	All Other Compensation (USD)	Total (USD)
Phebe N. Novakovic	1,700,000	11,246,277	4,649,716	4,287,000	-	699,783	22,582,776
Jason W. Aiken	1,100,000	4,353,404	1,799,967	1,874,000	36,155	80,669	9,244,195
Mark L. Burns	875,000	3,446,407	1,424,875	1,297,000	-	80,035	7,123,317
Robert E. Smith	875,000	2,684,494	1,110,082	1,283,000	90,211	79,645	6,122,432
Mark C. Roualet	875,000	2,721,049	1,124,801	1,341,000	186,453	81,207	6,329,510

Source(s): Company Filings, VIG Research

Please read disclosures/risk and liability information beginning on page 22, including Analyst information on page 23.

COMPANY DESCRIPTION

General Dynamics Corporation operates globally as an aerospace and defense company, structured into four primary segments: Aerospace, Marine Systems, Combat Systems, and Technologies. This segment produces and sells business jets under the Gulfstream brand. It also provides comprehensive services including aircraft maintenance, repair, and management; aircraft-on-ground support; completion services; charter services; staffing solutions; and fixed-base operator services for business aviation customers. Marine Systems designs and constructs nuclear-powered submarines, surface combatants, and auxiliary ships for the U.S. Navy. It also builds Jones Act-compliant commercial vessels, including crude oil and product tankers, container ships, and cargo ships. Additionally, this segment offers maintenance, modernization, and lifecycle support services for naval ships and provides program management, planning, engineering, and design support for submarine construction programs. This segment focuses on land combat solutions, manufacturing a range of vehicles including wheeled and tracked combat vehicles like the Stryker and Piranha models. It also produces weapons systems, munitions, mobile bridge systems, tactical vehicles, main battle tanks, and armored vehicles. The segment offers modernization programs, engineering support, and sustainment services to ensure the operational readiness of military forces. The Technologies segment delivers information technology solutions and mission support services. It specializes in mobile communication, computing, command-and-control systems, and intelligence, surveillance, and reconnaissance (C5ISR) solutions for military, intelligence, and federal civilian clients. Additionally, this segment offers cutting-edge services in cloud computing, artificial intelligence, machine learning, big data analytics, DevSecOps, and unmanned undersea vehicle manufacturing and assembly. Incorporated in 1952 and headquartered in Reston, Virginia, General Dynamics continues to innovate and lead in both defense and commercial sectors.

Important Disclosures

This document was produced by Vertige Investment Group for internal use and/or direct publication; distribution to or by unauthorized parties is strictly forbidden. Prior to making any decision to invest in a public security, investors should seek their own legal advice and be aware of any legal considerations relevant to making, maintaing, or divesting such investment.

Vertige Investment Group is a student organization based at the University of Toronto, established to provide its members with opportunities to engage in financial research and develop their understanding of the finance industry. **It is important to understand that Vertige Investment Group is not an incorporated body, partnership, or legal entity of any kind.** The organization operates purely as an educational entity, driven by students for the benefit of student learning and experience. **The research publications produced by Vertige Investment Group are created with the sole purpose of enhancing educational knowledge and should in no way be interpreted as professional investment advice.** These publications are the result of student efforts, relying on publicly available information and academic resources. Consequently, the accuracy, completeness, and reliability of the research cannot be guaranteed. **The content presented is intended to foster academic discussion and learning among students and should not be used as the basis for making real-world investment decisions. Members of Vertige Investment Group are students who do not possess any professional licenses or certifications. They engage in research activities as part of their educational development, without the oversight or endorsement of any regulatory bodies.** The insights and analyses presented in Vertige's publications reflect the students' academic understanding and interpretations, and not those of certified financial professionals. Given these circumstances, it is crucial for readers and recipients of Vertige Investment Group's research publications to exercise caution and seek advice from certified financial advisors before making any investment decisions. Vertige Investment Group disclaims any responsibility for any losses or damages incurred as a result of relying on the information contained in its publications.

This document is not directed to, or intended for distribution to or use by, any person or entity that is a citizen or resident of, or located in, any locality, state, country, or other jurisdiction where such distribution, publication, availability, or use would be contrary to law or regulation. The securities discussed in this document may not be eligible for sale in some jurisdictions. This research is not an offer to sell or a solicitation of an offer to buy any security in any jurisdiction where such an offer would be illegal. It does not constitute a personal recommendation nor does it take into account the particular investment objectives, financial situations, or needs of individual readers. Information in this report should not be construed as advice designed to meet the individual objectives of any particular investor**. Investors should not consider this report as a factor in making their investment decision.** Consultation with your investment advisor is recommended. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur.

The information provided is as of the date indicated and is subject to change. It should not be deemed a recommendation to buy or sell any security. **Certain information has been obtained from third-party sources we consider reliable, but we do not guarantee that such information is accurate or complete.** Members of the Vertige Investment Group may have information that is not available to the contributors of the information contained in this publication.

Vertige Investment Group, including affiliates and members, may execute transactions in the securities listed in this publication that may not be consistent with the ratings appearing in this publication. All expressions of opinion reflect the judgment of the Research Department of Vertige Investment Group or its affiliates as of the date of publication and are subject to change. Vertige Investment Group, including affiliates and members may perform services for, or solicit business from, any company mentioned in this document.

Research reports by Vertige Investment Group are disseminated and made available for educational purposes via electronic publication on our internal proprietary websites. Not all research reports are directly distributed to external platforms or aggregators. Certain research reports may only be disseminated on our internal proprietary websites; however, such research reports will not contain estimates or changes to earnings forecasts, target price valuations, or investment or suitability ratings. Individual Research Analysts may also opt to circulate published research to

select individuals electronically. This electronic communication distribution is discretionary and is done only after the research has been publicly disseminated via our internal proprietary websites. The level and types of communications provided by Research Analysts to recipients may vary depending on various factors, including but not limited to, individual preference regarding the frequency and manner of receiving communications from Research Analysts. For research reports, models, or other data available on a particular security, please visit our proprietary websites or contact Vertige Investment Group directly.

RATINGS AND DEFINITIONS

Vertige Investment Group (Canada) Definitions: Outperform (MO2): The stock is projected to appreciate and outperform the respective sector over the next 12 months. Market Perform (MP3): The stock is expected to perform roughly in line with the respective sector over the next 12 months and could potentially be used as a source of funds for higher-rated securities. Underperform (MU4): The stock is forecasted to underperform the respective sector over the next six to 12 months and should be sold. Suspended (S): The rating and price target have been temporarily suspended. This may be due to market events that have made coverage impractical, or to comply with regulations or firm policies under certain circumstances. The previous rating and price target are no longer valid and should not be relied upon.

Vertige Investment Group (U.S.) Definitions: Outperform (MO2): Expected to appreciate or outperform the respective sector over the next 12-18 months. For higher-yielding and more conservative equities, such as REITs and certain MLPs, this rating is used for securities where the relative safety of the dividend is acceptable and a total return modestly exceeding the dividend yield is anticipated over the next 12-18 months. Market Perform (MP3): Expected to perform generally in line with the respective sector over the next 12 months. Underperform (MU4): Expected to underperform the respective sector over the next six to 12 months and should be sold. Suspended (S): The rating and price target have been temporarily suspended. This may be due to market events that have made coverage impractical, or to comply with applicable regulations or firm policies in certain circumstances. The previous rating and price target are no longer effective and should not be relied upon.

SUITABILITY RATINGS (SR)

Medium Risk/Income (M/INC): Equities with lower to average risk from companies that have sound financials, consistent earnings, and dividend yields exceeding that of the S&P 500. These securities are often designed to provide a reliable dividend or return of capital. Medium Risk/Growth (M/GRW): Equities with lower to average risk from companies boasting sound financials, consistent earnings growth, potential for long-term price appreciation, a possible dividend yield, and/or share repurchase programs. High Risk/Income (H/INC): Equities with medium to higher risk from companies that focus on delivering a significant dividend but may experience less predictable earnings (or losses), more leveraged balance sheets, volatile market conditions, financial and competitive challenges, and higher price volatility (beta), along with potential principal risk. Income streams from dividends or capital distributions in this category may be less predictable. High Risk/Growth (H/GRW): Equities with medium to higher risk from companies in fast-growing and competitive sectors, facing less predictable earnings (or losses), more leveraged balance sheets, fluctuating market dynamics, financial or legal challenges, higher price volatility (beta), and potential principal risk. High Risk/Speculation (H/SPEC): Equities with high risk from companies with short or unprofitable operating histories, limited or unpredictable revenues, very high success risks, significant financial or legal issues, or substantial risk of principal loss.

ANALYST INFORMATION

At Vertige Investment Group (VIG), all roles, including those of Equity Research analysts, associates, vice presidents, and managing directors are held by students on a voluntary basis. As a student organization at the University of Toronto, VIG does not offer financial compensation for any position. Instead, members gain valuable experience, skills, and educational growth through their participation in research activities and other club initiatives. Factors contributing to the evaluation of an analyst's performance at VIG include: (i) Quality and overall productivity of research, including the accuracy and depth of analysis; (ii) Recognition and feedback from peers and academic mentors; (iii) Effectiveness in supporting and collaborating with other club members; (iv) Contributions to club initiatives and research publications; and (v) Engagement and active participation in VIG events and meetings.

The analyst responsible for the preparation of this research report attests to the following: (1) that the views and opinions rendered in this research report reflect their personal views about the subject companies or issuers, and (2) that no part of the research analyst's work was, is, or will be directly or indirectly related to specific recommendations or views in this research report. Additionally, said analyst(s) has not received any form of compensation from any subject company. All research conducted and published by VIG is for educational purposes only and does not constitute professional investment advice.

VERTIGE INVESTMENT GROUP RELATIONSHIP DISCLOSURES

The person(s) responsible for the production of this communication declare(s) that, to the best of their knowledge, there are no relationships or circumstances (including conflicts of interest) that may in any way impair the objectivity of this research. This applies equally to any individuals closely associated with them. It is possible, however, that the individuals involved in this communication may have holdings in the financial instruments discussed, and any such holdings will be disclosed. Vertige Investment Group has protocols in place to manage and mitigate such risks to ensure the integrity and objectivity of our research.

RISK FACTORS

General Risk Factors: The following are some general risk factors that pertain to the businesses of the subject companies and the projected target prices and recommendations included in Vertige Investment Group's research: (1) Industry fundamentals, such as customer demand or product/service pricing, could change and adversely impact expected revenues and earnings; (2) Issues relating to major competitors, market shares, or new product expectations could change investor attitudes toward the sector or the stock in question; and (3) Unforeseen developments related to the management, financial condition, or accounting policies or practices could alter the prospective valuation.

COMPANY SPECIFIC RISK FACTORS

General Dynamics: We believe General Dynamics is a risky investment based on the cyclicality driven by geopolitical tensions and risks associated with the aerospace and defense industry. These risks include fluctuations in the defense budget, high contracting competition, regulatory changes, exposure to global economic shifts, commodity shortages, changes in foreign policies, uncertainty with joint ventures and asset investments. Specific risks to General Dynamics include high exposure to the U.S. governemnt, changes in interest rates, credit risks, supply chain risks, contract execution risks, cybersecurity threats, audit risks and global disasters. General Dynamics must effectively mitigate these risks to continue receiving prime backlog and adapt to fluctuating global defense spending.