2019 ANNUAL REPORT
Dear Shareholders,

Significant changes have occurred at Taylor Devices over the last year. There have been substantial improvement efforts initiated at every level of the Company. These changes included aggressive sales strategies, accelerated efforts to implement Lean Manufacturing principles throughout our facilities, along with key changes in management positions.

At the Annual Shareholder’s Meeting last fall, we reported on some key initiatives and strategies that would accommodate our corporate goals of increasing revenue and profitability. While working through this climate of change, we are happy to report that we have been able to record very good results for Fiscal Year 2019. We continue to stay focused on both maintaining and improving our long-term goals.

Sales for the fiscal year ending May 31, 2019 were $33,619,031 compared to last year’s sales of $24,363,967; an increase of 38%. Operating income was $3,013,792 compared to $647,633 in 2018. Net income was $2,544,525 compared to $443,370 in 2018; an increase of 474%. Taylor Devices’ firm order backlog at the end of the 2019 fiscal year was $13.3 million compared to $23.1 million at the close of the 2018 fiscal year. The backlog product mix consists of approximately 43% aerospace and defense, 52% seismic products, and 5% commercial/industrial products. Despite this decline in backlog from the previous year, management is forecasting a solid year in FY2020 as many major projects are continuing to materialize into firm orders.

Featured within our 2019 Annual Report are three major bridge projects involving seismic dampers that we have been involved with. These are the Vincent Thomas Bridge, the Gerald Desmond Bridge and the San Francisco Oakland Bay Bridge (SFOBB) all located within the state of California. As reported last year, the SFOBB damper project was the largest order ever received at Taylor Devices. Production of these large devices will continue through early 2020. We successfully completed the work on the Vincent Thomas Bridge project in 2018 and the Gerald Desmond Bridge project finishes within the current calendar year.

Also featured in this Annual Report is the Phalanx Close-in Weapons System currently used by several navies around the world on their surface vessels. Taylor Devices first started working on specialized energy absorbing devices for this system with General Electric and the U.S. Navy back in the late 1970s. Now, forty years later, we are still proudly providing the same components for that system. Recently, we received a large order for these devices that have assuredly stood the test of time.

Our management team and all our employees remain diligent in meeting and exceeding our projected plans for growth and profitability. We are confident in all our efforts moving forward and continue to build a successful future for Taylor Devices, Inc.

Sincerely,

TAYLOR DEVICES, INC.

Alan R. Klembczyk
President
To our Shareholders,

It is with great honor that I write this, my first Shareholders letter, as the new CEO for Taylor Devices Inc. After only a short time with the company, I am happy to report that the key prerequisites for successful growth and prosperity: great people, differentiating technologies and capabilities that are valued by customers in multiple markets, are alive and well here at Taylor.

Before I highlight some of the priorities that we are focusing on to drive continued profitable growth, I must congratulate the Team on an outstanding 2019 fiscal year. Sales of $33.6m, second highest in the company’s history exceeded only in 2016 when sales finished at $35.7m, were significantly greater than last year’s $24.4m. While sales from our Construction, Aerospace/Defense and Industrial customers all experienced year on year growth, sales from our Construction customers dominated with an increase of almost $8m this year vs. last year. Costs were well managed by the Team as indicated by Gross Profit which, as a percentage of sales, improved 2.6% year on year; $9.0m (26.9% of sales) this year vs. $5.9m (24.3% of sales) last year. Operating Income finished at $3.0m (8.9% of sales) this year vs. $0.65m (2.7% of sales) last year. Net Income landed at $2.5m (7.6% of sales) vs. $0.44m (1.8% of sales) last year. Backlog finished at $13.3m vs. $23.1m at the end of FY2018. This decrease in backlog is due partly to improved execution of orders (higher volume with less past due orders) but also the timing of larger orders that we receive from our Construction customers. The strong overall US economy coupled with an unprecedented U.S. Defense budget are driving a favorable outlook for FY2020, particularly for products provided to our Construction (seismic and wind protection for buildings and bridges, both new and retrofit) as well as Aerospace/Defense (dampers, actuators and springs for various components and subsystems on Space and Military Platforms) customers. We expect the United States to dominate our sales by geographic region in FY2020 as it did in FY2019 (just under 80% of total annual sales).

Priorities for FY2020 are execution with an emphasis on quality and delivery. Continuous improvement of our key business processes, driven by our on-going Lean efforts and variation reduction, as well as improved cross-functional teaming and empowered ownership of our plan by all employees will be primary areas of focus to help drive our success. Accordingly, I am very much looking forward to working with the Team to build upon the strong foundation and rich heritage that has been established over the past sixty-four years to achieve our primary goal of continued profitable growth.

Sincerely,

TAYLOR DEVICES, INC.

Timothy J. Sopko
Chief Executive Officer
Having just joined the Company in June 2019, it has been my pleasure meeting the great people of Taylor Devices as well as some of our key customers. The work we do is of great importance to the health and well-being of others, and I am excited to be a part of the Team, making a difference to those who utilize our products.

The fiscal Year 2019 had brought in many new and positive changes and we are looking to continue on that path and incorporate even more improvements for the Fiscal Year 2020 and beyond in many areas of the Company. Specifically, in Operations, steps to improve our on-time-delivery to our customers are being undertaken.

To that end, we will be making the following changes:

| Prioritize our initiatives and track actions via Strategy Deployment.
| Bring accountability to everything that we do through consistent leadership.
| Manage our performance through daily stand-up meetings, identifying gaps between plan and actual.
| Identifying and eliminating waste through Kaizen events.

The fiscal Year 2020 will also see us implement a more efficient method to plan our production, thereby removing the waste within the current state methods and ensuring we are effective at meeting our customer due dates that we have committed to. This will help ensure that our overall corporate goals are met in terms of increasing revenue and profitability.

Lastly, we will judiciously spend capital to provide our people with the safest and most productive manufacturing processes and equipment for our industry so that we may continue to maintain and improve upon our reputation and competitiveness long-term.
FROM THE CHIEF FINANCIAL OFFICER

MARK V. MCDONOUGH
Chief Financial Officer

Sales in the Aerospace/Defense sector for Fiscal Year 2019 represented 34% of the total sales and 43% of our year-end backlog. Sales were up 12% at $11,383,329 compared to $10,205,900 in FY18. Revenue has been stable based on the steady recurring orders of our mature products on healthy U.S. Government programs.

Taylor Devices continues to work on new programs that will help sustain and improve sales for many years to come. Likewise, there are significant efforts in Research and Development being conducted to help ensure corporate goals are met and surpassed.

A full development and qualification program, driven by new customer specifications for landing gear shock absorbers on drone aircraft, is currently underway. This work is complemented by the development of similar products for an overseas customer.

The Aerospace/Defense team effectively overcame many technical challenges in Fiscal Year 2019. This was highlighted by successful qualification testing of our Abort Springs Assemblies for the Orion Space Capsule. Each launch of the Space Launch System Vehicle will require a complete shipset of assemblies, returning us to the Moon and beyond, while ensuring sustained sales for the Company.

A contract for Ground Wind Damper (GWD) System to be used on a new rocket will bolster our continuing manufacture of many distinct energy absorbers located on the launch pad. An additional order was received to perform system level testing of the GWD which accommodates the release of the system from the rocket at liftoff. Completion of testing and the qualification of this system is scheduled for December 2019.

The Company continues their work on a substantial U.S. Government contract involving the testing of various shock isolation components utilized in Naval applications. Taylor Devices’ world-class testing facility proves to be an industry-wide standout. We continue to explore new business opportunities for our unique testing capabilities.

FROM AEROSPACE/DEFENSE PRODUCTS

JOHN C. METZGER
Vice President, Engineering

While beating fiscal 2018 results is nothing to overemphasize, bouncing back from last year’s disappointing results with a sales level that is better than all past years but one and with a profit level that beats all past years but two is encouraging after the first change in Taylor Devices’ leadership in over twenty-five years. The 38% increase in revenue over fiscal 2018 was dominated by domestic sales of Seismic/Wind protection units. While sales volume to customers for Seismic/Wind protection increased by 65% over last year, we also enjoyed sales increases to Aerospace/Defense customers (12%) and industrial customers (5%). As sales in the United States increased by 40% over last year’s very low level, they also beat the average level of domestic sales for the prior four years by 19%. Sales to customers in Asia increased for the second straight year but remain below the average level for the prior four years. We improved our gross margin by a bit and gross profit jumped 53% from last year. Selling expenses rose with sales while our operating income improved more than fourfold over last year’s level. The net income for fiscal 2019 is the third best in the history of the Company and 9% better than the average of the prior four years. Earnings per share was 72 cents for fiscal 2019 compared to 13 cents for the prior year and 66 cents average for the prior four years.

The strong fiscal 2019 sales ate into our sales order backlog, which stands at $13.3 million on May 31, 2019. This is down from $23.1 million at the end of fiscal 2018. The sales order backlog is weighted slightly more towards customers in Aerospace/Defense with 84% to domestic customers. We are encouraged by continued new sales order activity in the early months of the 2020 fiscal year. While there is much work to be done to close on many of the sizable opportunities currently being planned around the world, based on our sales order backlog at year end and new order activity in the early stages of the new fiscal year, we are optimistic that our profitable growth will continue through fiscal 2020. As we continue to grow our business in 2020, we are working to become more efficient in our operations as we strive to increase customer interest in our products.

We will continue to work with our advisors to keep abreast of changes in the regulations and to remain in compliance with them in order to ensure that accurate, reliable financial and business information is provided to investors and other users of this annual report and our interim reports.
Fiscal Year 2019 was another solid year for Taylor Devices’ Industrial Product Lines. Sales increased 65% to $20,168,586 for our construction-related products with a modest 5% to $2,067,071 for our crane buffers and other catalog items. The total for both product lines represents 66% of the Company’s sales for the year.

FY19 represented a breakthrough year under our new president, Alan Klembczyk. Expansion of a much-needed, separate marketing division within the sales department has allowed us to refocus our efforts into a more direct approach. We have consolidated our reach by bringing more of our marketing in-house, where it was previously outsourced.

During the summer of 2018, Taylor Devices hired Sebastian Habermehl as a Marketing Specialist to handle and oversee marketing initiatives. As a result, our social media presence has increased with relevant and current content being spread to a broader-reaching audience. We have also amped-up our conference attendance with the primary goal of meeting more clients face-to-face, as well as introducing an expanded consumer base to our technology.

Another change for the sales department is the transformative evolution of the Taylor Devices website. We modified the website with a refreshed, inviting look into our three market segments which include industrial, seismic/wind, and aerospace/military. This revised website displays a clarified approach reaching the relevant product lines and information. Although this is the first major improvement to our website in many years, we are already undergoing another revision with plans to roll-out an even better user experience. It will allow us to bring all updating in-house, with the implementation of changes upon immediate demand.

During October 2018, Taylor Devices held its first annual international sales representative meeting in downtown Buffalo. This meeting provided a hands-on forum for collaboration and direct learning about our industry. It opened communication for helping both the seasoned as well as the new representatives better understand our product lines and markets while gaining valuable insight about marketing and selling these products.

During FY19, orders for our seismic and wind damping technology yielded several projects. Along with the completion of forty replacement seismic dampers for the featured Vincent Thomas Bridge, and the continued supply of thirty-four huge Gerald Desmond Bridge dampers, Taylor Devices received another contract from Caltrans. It consisted of one hundred replacement dampers, utilizing our new technology called “LMD” (Lost-Motion Device), for the San Francisco-Oakland Bay Bridge’s west-span. We will also be continuing with the supply of Loma...
Linda Hospital vertical isolation components throughout FY20.

Some other projects include the seismic retrofit of the National Air and Space Museum in Washington, D.C., the 888 North Main Street Project in Santa Ana, CA, the TMD dampers for the One Vanderbilt skyscraper in NYC, and the supply of seismic dampers for UCLA’s Franz Hall retrofit. Taylor Devices was also awarded contracts to supply fluid viscous dampers for a base-isolated, high-speed internet data center in California, a semiconductor chip manufacturing facility in Taiwan, along with a number of residential projects in Taiwan, and several building projects in Japan.

A solid backlog of existing orders at the end of FY19 as well as new and retrofit construction projects in the pipeline provide a great outlook for FY20 expectations. We have upgraded our CRM software, which is helping us to improve focus on the relevant and critical items.

On the technical side, our recognized ability to suit our customer’s needs with special products and innovative technologies allow us to maintain our reputation as a world industry leader while keeping our brand recognition at the forefront of our clients’ attention.

PHOTO COURTESY
Vincent Thomas Bridge | Craig Winters | Industrial/Seismic Products Division
CORPORATE DATA

OFFICERS AND DIRECTORS

F. ERIC ARMENAT | Secretary and Director
JOHN BURGESS | Chairman of the Board of Directors
RANDALL L. CLARK | Director
ALAN R. KLEMBTZK | President and Director
MARK V. MCDONOUGH | Chief Financial Officer and Director
TIMOTHY J. SOPKO | Chief Executive Officer

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Lumsden & McCormick, LLP
Cyclorama Building
369 Franklin Street
Buffalo, NY 14202-1702

GENERAL COUNSEL

Barclay Damon, LLP
Barclay Damon Tower
125 East Jefferson Street
Syracuse, NY 13202

MANAGERS

TODD AVERY | Vice President, Operations
SUSAN EWING | Human Resources Manager
DONALD HORNE | Chief Engineer
CHARLES KETCHUM III | Quality Assurance/Quality Control Manager
NICHOLAS MARSOULAS | Production Control Manager
JOHN METZGER | Vice President, Engineering
PETER MILICIA | Accounting / Shareholder Relations Manager
MICHAEL ROGOWSKI | Supply Chain Manager
ERIC ROTH | Scholl Operations Manager
ROBERT SCHNEIDER | Industrial/Seismic Products Sales Manager
THOMAS STRUZIK JR. | Large Machine Shop Supervisor
KEVIN SUPLICKI | Information Systems Manager
DENNIS WARMUS | Manufacturing Engineering Manager
CRAIG WINTERS | Industrial/Seismic Products Sales Manager

TRANSFER AGENT AND REGISTRAR

Computershare Investor Services
150 Royall Street
Canton, MA 02021
800-522-6645
www.computershare.com

A copy of the TDI financial report Form 10-K can be found on our website at www.taylordevices.com/investors. It can also be obtained by written request to the attention of Peter Milicia at Taylor Devices, Inc., 90 Taylor Drive, North Tonawanda, NY 14120-0748.
The Company’s Common Stock trades on the NASDAQ Capital Market of the National Association of Securities Dealers Automated Quotation (NASDAQ) stock market under the symbol TAYD.

The high and low sales information noted below for the quarters of Fiscal Year 2019 and Fiscal Year 2018 were obtained from NASDAQ.

As of May 31, 2019, the number of issued and outstanding shares of Common Stock was 3,478,559 and the approximate number of record holders of the Company’s Common Stock was 509. Due to a substantial number of shares of the Company’s Common Stock held in street name, the Company believes that the total number of beneficial owners of its Common Stock is less than 2,000. No cash or stock dividends have been declared during the fiscal year ended May 31, 2019.

Taylor Devices’ Annual Shareholders Meeting will take place on Friday, November 1, 2019, at 11:00 a.m. This year’s meeting will be held at the Millennium Buffalo, 2040 Walden Avenue, Buffalo, New York 14225. Shareholders desiring accommodations may call the Millennium Buffalo at 716-681-2400.
THE BRIDGE
Connecting Long Beach with Terminal Island, where the Port of Long Beach and the Port of LA reside, the two busiest ports in the USA, the Gerald Desmond Replacement Bridge features a new cable-stayed design. Thirty-Four 900 pounds force Taylor Devices’ Fused Fluid Viscous Dampers with various strokes to +/- 1m are being installed at the towers. Fluid Viscous Dampers use fuses to carry service loads. These fuses will then release under an earthquake input, to allow damping.

OWNER
Port of Long Beach

ARCHITECT
Brownlie Ernst and Marks

GENERAL CONTRACTOR
Joint venture with SFI (Shimmick/FCC/Impregilo)

STRUCTURAL ENGINEER
Arup

WEST SPAN OF THE SAN FRANCISCO-OAKLAND BAY BRIDGE (SFOBB)

THE BRIDGE
Ninety-six Taylor Devices’ Seismic Dampers will be installed on the San Francisco-Oakland Bay Bridge. These dampers are equipped with new “Lost Motion” devices designed to isolate the dampers from continuous small amplitude vibrations from traffic and other sources. Dampers will now be able to protect the bridge from earthquakes and extend the service life of the devices. Extensive prototype testing was performed by Taylor Devices to demonstrate the effectiveness of the new design prior to acceptance by the design team at Caltrans.

OWNER
California Department of Transportation (Caltrans)

STRUCTURAL ENGINEER
Caltrans

GENERAL CONTRACTOR
California Engineering Contractors
VINCENT THOMAS BRIDGE  
(RETROFIT OF  
SUSPENSION BRIDGE)

THE BRIDGE  
Crossing the Los Angeles Harbor, the Vincent Thomas Bridge is the 4th longest suspension bridge in California and the 76th longest span in the world. Forty long-stroke Taylor Devices’ Seismic Dampers were installed at the tower-to-deck interfaces. An advanced clamping system with pin slot allows the dampers to isolate traffic vibrations, while providing energy dissipation to keep the bridge secure under earthquake input.

OWNER  
California Department of Transportation

ARCHITECT  
Mofatt & Nichol Engineers

GENERAL CONTRACTOR  
Golden State Bridge

STRUCTURAL ENGINEER  
McLean & Schultz

PHOTO COURTESY
UPPER  
LEFT: San Francisco-Oakland Bay Bridge (SFOBB) | iStock  
CENTER: Gerald Desmond Bridge | Port of Long Beach  
RIGHT: Vincent Thomas Bridge  
Craig Winters | Industrial/Seismic Products Division

LOWER  
LEFT: San Francisco-Oakland Bay Bridge (SFOBB) | Taylor Devices  
CENTER: Gerald Desmond Bridge | Taylor Devices  
RIGHT: Vincent Thomas Bridge | Taylor Devices
After graduating from the University of Buffalo in 1987 with a degree in Mechanical Engineering, Mr. Klembczyk has held key positions in Sales and Engineering at Taylor Devices over the last 30 years including Design Engineer, Assistant Chief Engineer, Chief Engineer, Vice President of Sales and Engineering and was appointed President of the Company and Member of the Board of Directors in June 2018.

Mr. Klembczyk has spent most of his career managing the Taylor Devices Engineering Department along with designing and developing shock and vibration mitigating products for a diverse customer base. These include hundreds of applications to improve performance under wind, seismic, shock and vibration for many aerospace, industrial and structural applications.

Mr. Klembczyk has been responsible for establishing new Sales & Marketing policies and has been directly involved with defining internal Company policy and strategic direction in cooperation with all levels of Taylor Devices’ Management. He has been an integral part of the team that managed upgrades to the Quality System and obtaining 3rd party certification to International Standards ISO 9001, ISO 14000 and Aerospace Standard AS9100.

Mr. Klembczyk has served for many years on the Technical Advisory Group for the US Shock and Vibration Information & Analysis Center (SAVIAC) and the Shock and Vibration Exchange (SAVE). Additionally, he has been a tutorial and course instructor for various organizations internationally and has participated in technical conferences and symposia.

Mr. Klembczyk has participated in many research projects for products for military & aerospace, industrial, and structural applications. He has served as Program Manager for many of these projects and has worked with academia including the University at Buffalo’s MCEER: Earthquake Engineering to Extreme Events, among others.

He has published several papers describing unique applications for structural dampers, tuned mass dampers, vibration isolators, shock absorbers, and shock isolators and holds US Patents for some of these components. These papers have been published by SAVE, SAVIAC, the Society for Experimental Mechanics (SEM) and the Applied Technology Council (ATC).
Mr. Clark holds a Bachelor of Arts degree from the University of Pennsylvania, and earned his Masters of Business Administration from the Wharton School of Finance and Commerce. He is and has been the Chairman of Dunn Tire LLC since 1996. From 1992 to 1996, Mr. Clark was Executive Vice President and Chief Operating Officer of Pratt & Lambert, until it was purchased by Sherwin-Williams.

Mr. Clark has been employed in the tire industry for many years. He was named President of the Dunlop Tire Corporation in 1980, was appointed to the Board of Directors in 1983, and named President and Chief Executive Officer in 1984. He was one of seven Chief Executives of operating companies appointed to the Group Management Board of Dunlop Holdings, PLC., and was Chairman of the Board and Chief Executive Officer of Dunlop Tire Corporation in North America from 1985 to 1991. In 2012 he was inducted into the Tire Industry Association Hall of Fame.

From 1977 to 1980, Mr. Clark was Vice President of Marketing for the Dunlop Tire Division. From 1973 to 1977, he was employed by Dunlop as Director of Marketing at the company’s Buffalo, NY headquarters. From 1968 to 1973, Mr. Clark was employed by the B.F. Goodrich Company.

Mr. Clark is currently a Director of Merchants Mutual Insurance Company. He recently retired as a Director of Computer Task Group, a publicly traded company, and The Ten Eleven Group. He is a past President of the International Trade Council of Western New York, past Chairman of the Buffalo Chamber of Commerce, and past Chairman of Invest Buffalo Niagara. He is also a past Chairman of AAA of Western and Central New York. Mr. Clark was appointed by Governor George Pataki and served on the Council for the State University of New York at Buffalo. Recently he was appointed to the Board of Trustees of the University at Buffalo Foundation.

Mr. Armenat has more than 37 years of business experience across a myriad of industries both private and public. He is currently the President and Chief Executive Officer of Multisorb Filtration Group which he successfully spearheaded the sale of in early 2018 from a private equity owner. Multisorb is the world leader in the active packaging industry solving complex technical challenges in the pharmaceutical, food, and industrial markets.

From 2012 to 2016, Mr. Armenat served as President and Chief Executive Officer for several companies owned by private equity. These companies included healthcare delivery, medical waste collection and disposal as well as active packaging. He was responsible for the successful business improvement and eventual divestiture of the companies.

From 2009 to 2012, Mr. Armenat served as Chief Operating Officer of Avox Systems (Zodiac Aerospace), a leading supplier of aircraft oxygen systems. From 1994 to 2009, he served as Vice President of Operations and then President and General Manager of Carleton Technologies (Cobham Mission Systems), a global leader of technology for the military and commercial aviation markets. Mr. Armenat also worked as an Operations Management Consultant with Ernst and Young beginning in 1984.

Mr. Armenat earned his Bachelor of Science Degree in Industrial Engineering from Southern Illinois University and his MBA in Finance and Accounting from St. Bonaventure University. He also proudly served in the United States Airforce.
Mr. McDonough, who joined Taylor Devices in June 2003, is a Certified Public Accountant in New York State and holds a BBA degree from Niagara University, awarded in 1982. He has been involved in financial management of various Western New York manufacturing organizations for over twenty-five years. He has extensive experience in international operations coupled with a long history of implementing systems of internal controls. From 1986 to 1989 he was an auditor with the Buffalo office of Ernst & Young, LLP.

Mr. McDonough is a member of the New York State Society of Certified Public Accountants and the American Institute of Certified Public Accountants.

Mr. Sopko’s business experience spans more than thirty years in Aerospace (Military and Civil), Industrial as well as Commercial markets with a primary focus in the areas of Engineering, Product Development, Program Management, Operations, and Business Management.

Prior to joining Taylor Devices as CEO in April 2019, Mr. Sopko was Vice President and General Manager of Carleton Technologies Inc. (d.b.a. Cobham Mission Systems) in Orchard Park, New York, a Department of Defense Contractor where he also held the positions of General Manager, Director of Engineering and Programs, Director of Engineering and Director of Business Development. Under Mr. Sopko’s leadership as VP and GM, Carleton successfully grew annual sales from $110m to over $200m.

After nine years of Design Engineering and Program Management in industry (1988-1997), Mr. Sopko co-founded Comprehensive Technical Solutions Inc., a New York State S-corporation which provides product design engineering services to companies across the United States as well as producing and supporting a portfolio of internally funded products.

Mr. Sopko is a Mechanical Engineering graduate of The State University of New York at Buffalo and has been a member of The University’s Mechanical and Aerospace Dean’s Advisory Board since 2012. Mr. Sopko is also an author and/or co-author on several US Patents.
MK 15 PHALANX CLOSE-IN WEAPON SYSTEM (CIWS)

MK 15 Phalanx CIWS provides warships an inner layer point defense capability against anti-ship missiles, aircraft and nautical warfare threats that have penetrated other fleet defenses. Consisting of a radar-guided 20 mm cannon mounted on a swiveling base, the Phalanx has been used by multiple navies around the world, notably the U.S. Navy, the Royal Canadian Navy, the British Royal Navy, and the U.S. Coast Guard.

The weapon is capable of automatically detecting, evaluating, tracking, and engaging threats in less than one second. The Phalanx program has had an active and continuous production, upgrade, and overhaul program since production of the Block 0 variant in 1978. The current Phalanx variant, Block 1B, was introduced in 1999 and improves upon the weapons capabilities to compete with the exponentially increasing technology of modern warfare.

- **Gun**: 1 × 20 mm M61 Vulcan 6-barreled Gatling cannon
- **Height**: 15.5 feet (4.7 m)
- **Weight**: 13,600 pounds (6,200 kg)
- **Rotation**: 150° from either side of centerline
- **Rate of Rotation**: 115° per second
- **Elevation**: −25° to +85°
- **Rate of Elevation**: 115° per second
- **Muzzle Velocity**: 3,600 feet per second (1,100 m/s)
- **Rate of Fire**: 4,500 rounds per minute
- **Maximum Burst Size**: 1,000 rounds
- **Ammunition Capacity**: 1,550 rounds
- **Effective Firing Range**: Classified