



Kratos Defense & Security Solutions

Investor Brief

March 2021

Technology Innovation for National Security

Technology Innovation for National Security

Kratos specializes in areas where technology advances can have a force multiplier effect.



Kratos - Overview

***Product Focused Technology
Company in the National Security
Industry, Key Intellectual Property
Ownership***

***Commercial, Entrepreneurial, and
Venture Capital Culture and Backed
Business Model and Approaches***

***Industry Leading Positions in Our
Core Market Areas:***

Space & Satellite

Drones and Artificial intelligence

Microwave Electronics

Kratos – Differentiators

***At Kratos - Affordability is a
Technology***

***Demonstrated Rapid Development
and Fielding of Products and
Systems***

***Recognized “Go To” Alternative,
Affordable Product and System
Provider***

***Utilize and Integrate Proven
“Leading Edge Technology” vs
Unproven “Bleeding Edge
Technology” = Reduced Technical,
Schedule and Financial Risk***

Macro Industry Overview & Kratos

- *After ~25 Years of Addressing Terrorist Threats and Asymmetric Warfare, a Recapitalization of Strategic Weapon Systems to Address Peer/Near Peer Threats is Underway: Drones & AI, Space & Satellites, Microwave Electronics, Missile Defense & Hypersonic, Strategic Systems*
- *Kratos has Made Significant Internally Funded Investments to Achieve its Market Leading Positions and Strong Forecasted Organic Growth Profile, with Investments Expected to Continue in 2021 to Support Multiple New Program Awards*
- *Organic Growth Forecast to Increase and Accelerate in 2022 as New and Development Programs Expected to Transition to Production*

Kratos – Primary Business Areas

**Target
Drones**



**Missile
Defense Systems**



**Tactical
Drones**



**Hypersonic
Systems**



**Space & Satellite
Communications**



**Strategic
Deterrence**



**Microwave
Electronics**



**Next Generation
Engines for Drones/
Missiles**



Unmanned Aerial Target Drone Systems



BQM-177



BQM-167



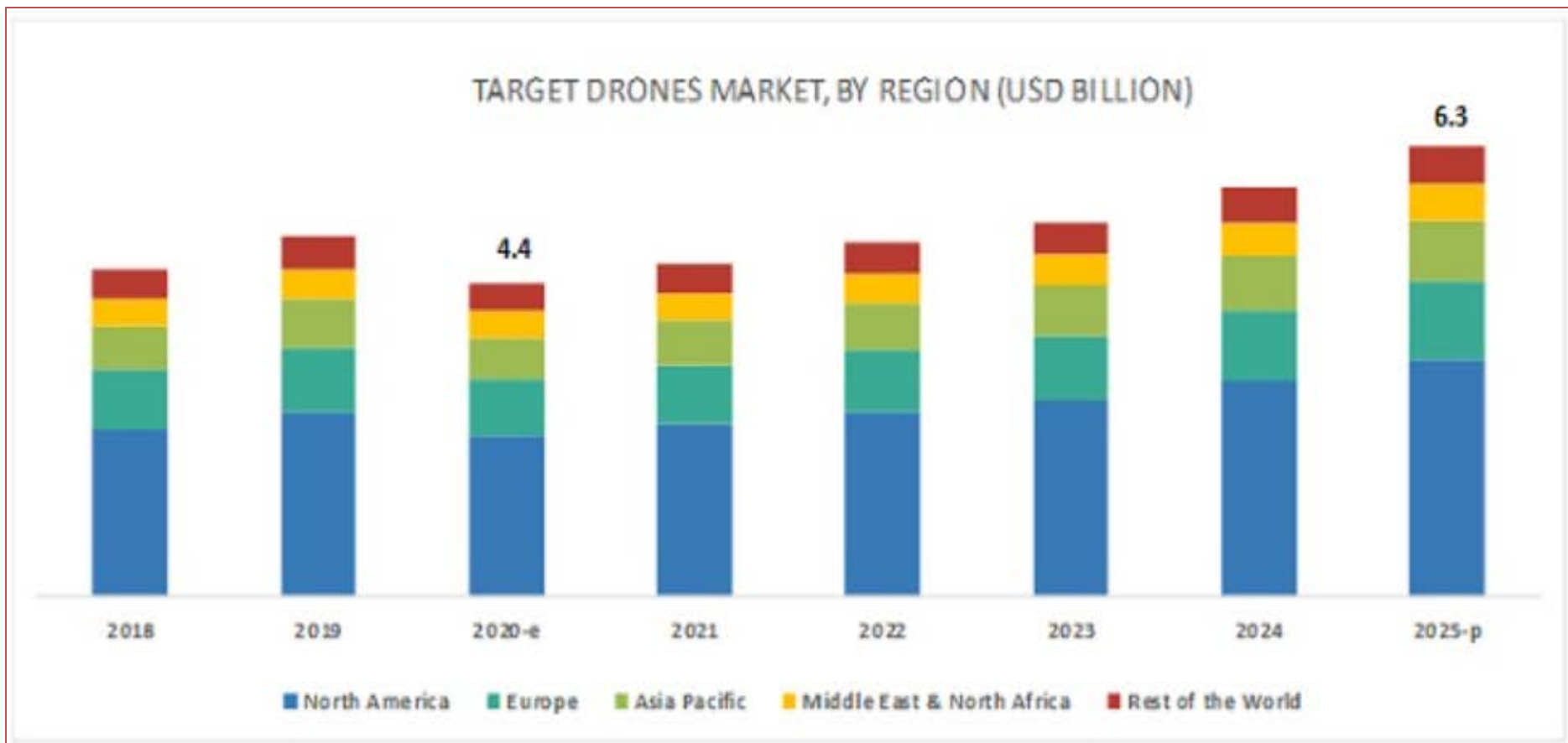
MQM-178



- Kratos is the leading provider of the Highest Performance, Threat Representative Target Drones in the world
- Kratos Drones exercise U.S. and our Allies' Radars and Weapon Systems – Kratos Target Drones are “shot down” and replaced
- Growth is being driven by the Recapitalization of Strategic Weapon Systems and the need to Test and Evaluate these systems

Kratos - Target Drones

Target Drones Market worth \$6.3 billion by 2025, at a CAGR of 7.6%



Source: MarketsandMarkets™ Inc. June 2020

Unmanned Aerial Tactical Drone Systems



Valkyrie



Gremlin



Mako



Airwolf

- Kratos is the leading provider of affordable, high performance, tactical jet powered drone UASs in the industry – four drone variants in this Class flying today
- Multiple major DoD Programs will require hundreds/thousands of affordable/attritable drones in this Class: Skyborg, ABMS, Golden Horde, ACE, IBCS, etc.
- Low Cost (~\$400K - ~\$3M) Leading Technology Force Multipliers
- Overwhelm the adversary with quantities while protecting the warfighter
- Kratos drones are the highest performance UAVs in the world
- Russian and Chinese Threats, A2/AD environments driving funding and growth



Skyborg Could Develop Multiple Drones For Many Missions

The Air Force is "driving toward" 2023 for initial operating capability for Skyborg, says AFRL Director Brig. Gen. Heather Pringle.



WASHINGTON: The high-priority [Skyborg program](#) to develop low-cost, autonomous drones able to team with piloted aircraft could reach initial operating capability by 2023, says AFRL

Source: Breaking Defense February 4, 2021

*The Valkyrie
Flying in
Formation
with an F-22
& F-35*



*DARPA
Gremlins*

Kratos – “We Ain’t Them!”

- Kratos’ expertise is in affordable composite jet unmanned drone aircraft and systems
- We don’t build large, manned, military and commercial aircraft
- Kratos’ production facilities, lines, methods are optimized for the aircraft we produce, i.e., Low Cost, High Performance
- We have multiple aircraft types in rate production today in quantities of 30-50+ each per year
- Our production facilities and lines do not “mirror” the Primes’ production facilities and lines; this is by design. We don’t produce \$100M aircraft or even \$10M (a piece) aircraft, ours are significantly less costly and our methods are optimized for the system/performance/price we are delivering
- Interestingly, if you look at the major primes and their aircraft build facilities; for low cost, and/or rapid development systems, they tend to use small boutique divisions of their companies or partners who are optimized accordingly. They do not use their major production facilities
- A prime element of the key to our success across our Targets and Tactical systems is our ability to truly design to cost both in development and production
- Our Company size is a major discriminator here in our ability to take this Low Cost approach and remain profitable/viable as a business. Affordability is a Technology at Kratos
- The major primes are not “configured” to do business at this systems’ cost and scale

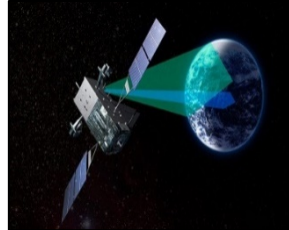
Space & Satellite Communications



WGS



SBIR



OPIR



TITAN



AEHF



HBTSS

- Kratos is the leading provider of Satellite Command & Control (C²) and Telemetry, Tracking & Control (TT&C) Ground Systems in the world and a leader in the Transition to Open Architecture, Software Defined, and Digital to IP Data Conversion Systems. Kratos supports ~80% of Space Missions
- Disaggregation of Ground Segment Procurement from Space System Procurement opening large new market opportunities for Kratos
- Kratos' Global owned and operated RF Monitoring Network is one of our most valuable and unique assets – Increasing # of satellites driving Space Monitoring Demand
- Space and Satellite Communications are one of the fastest growing and well funded DoD areas due to Russian and Chinese threats, Hypersonic System Tracking and Targeting, etc.
- Thousands of LEO and MEO satellites planned for the future, including to track Hypersonic Threats (HBTSS) Program and Sensor to Shooter Data Processing – Tactical Interface Tracking Application Node (TITAN) Program
- Large, New 5G and Ground Station as a Service (GSaaS) opportunity just beginning

Kratos Unveils New Platform that Turns Satellites, Antennas into Software-Defined Systems

Kratos Defense & Security Solutions has rolled out a new software platform, "OpenSpace," composed of virtual products that enable satellite operators and Ground-as-a-Service (GSaaS) providers to design their own fully software-defined, dynamic ground systems, the company announced October 20.

Source: Satellite Today October 21, 2020



Introducing Azure Orbital: Process satellite data at cloud-scale



Posted on September 22, 2020

[Yves Pitsch](#) Principal Program Manager, Azure Networking

Data collected from space to observe Earth is instrumental in helping address global challenges such as climate change and furthering of scientific discovery and innovation. The cloud is central to both modern communications scenarios for remote operations and the gathering, processing, and distributing the tremendous amounts of data from space.

Today we're announcing the preview of [Azure Orbital](#). The new ground station service enables satellite operators to communicate to and control their satellites, process data, and scale operations directly with Microsoft Azure. With Azure Orbital, the ground segment, including the ground stations, network, and procedures, becomes a digital platform now integrated into Azure and complemented by many partners.

[Amergint](#), [Kratos](#), [KSAT](#), [Kubos](#), [SES](#), [US Electrodynamics INC](#), and [Viasat](#) have joined the ecosystem of Azure Orbital partners, each of them bringing their unique value and expertise for the benefits of our customers.

Microsoft is well-positioned to support customer needs in gathering, transporting, and processing of geospatial data. With our intelligent cloud and edge strategy currently extending over 60 announced cloud regions, advanced analytics, and AI capabilities coupled with one of the fastest and most resilient networks in the world—security and innovation are at the core of everything we do.



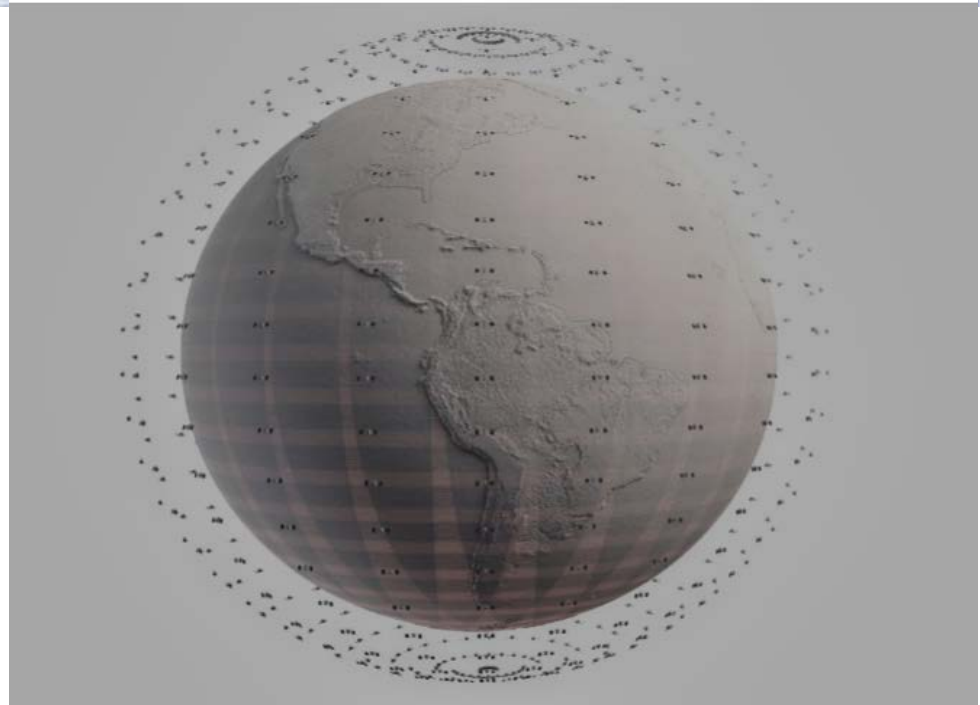
OneWeb Gathers Additional Funding, Bringing Total To \$1.4 Billion + Reduces Size Of Their Constellation



OneWeb , jointly owned by the UK Government and Bharti Global, has secured additional funding from SoftBank Group Corp . (“SoftBank”) and Hughes Network Systems LLC (“Hughes”), bringing OneWeb’s total funding to \$1.4 billion. The capital raised to date positions the Company to be fully funded for its first-generation satellite fleet, totaling 648 satellites, by the end of 2022.

OneWeb’s mission is to deliver broadband connectivity worldwide to bridge the global Digital Divide by offering everyone, everywhere, access that includes the Internet of Things (IoT) future and a pathway to 5G. OneWeb’s LEO satellite system includes a network of global gateway stations and a range of user terminals for different customer markets capable of delivering affordable, fast, high-bandwidth and low-latency communications services.

SMALLSAT NEWS JANUARY 15, 2021 BY EDITORIAL



Microwave Electronics



Missile Defense



Radars



Electronic Warfare



ISR



Satellite Programs

- Kratos is a leading provider of Microwave Electronic Sub Systems and components in support of major C5ISR programs
- Global microwave electronics industry is seeing increased funding and rapid growth due to Recapitalization of Strategic Weapon systems to address peer/near peer threats. Successfully penetrating the satellite and spacecraft market
- KMED is the largest independent microwave electronics components and sub system provider in Israel, supporting Israel, India, USA and other customers
- Kratos typically the Sole Source Provider to our customers

Missile Defense and Hypersonic Programs



BMD Targets



Patriot



GBSD



SHORAD



AEGIS

- Kratos is the leading provider of Affordable Ballistic Missile Defense (BMD) Related Target Systems in the industry
- BMD Target Systems used to Test and Evaluate radar, missile defense and other systems and for operational readiness
- Kratos is the leading provider of missile and combat system/program sub systems and strategic deterrence systems
- Satellite Hypersonic and Ballistic Tracking Space Sensor (HBTSS) Program
- Integrated Battle Command System (IBCS) Missile Defense System Network Program and AEGIS Combat System
- Recapitalization of Strategic Weapon Systems to address peer/near peer threats driving business growth

Strategic Deterrence



GBSD



Hypersonic Systems

- Kratos is supporting the ~\$100 billion Ground Based Strategic Deterrence (GBSD), Minuteman III ICBM Replacement Program. In September 2020, Kratos was awarded a ~\$180 million contract to support Northrop Grumman for the development phase.
- Kratos supports multiple Hypersonic Systems Programs with our Launch System, Space and C5ISR Businesses
- GBSD and Hypersonic Systems are two of the best funded and fastest growing priority areas of DoD Budget
- GBSD, HBTSS, TITAN, IBCS, etc., Kratos supported Programs
- Recapitalization of Strategic Weapons Systems to address peer/near peer threats driving funding and growth

Turbine Technologies and Engines



Engine



Gray Wolf



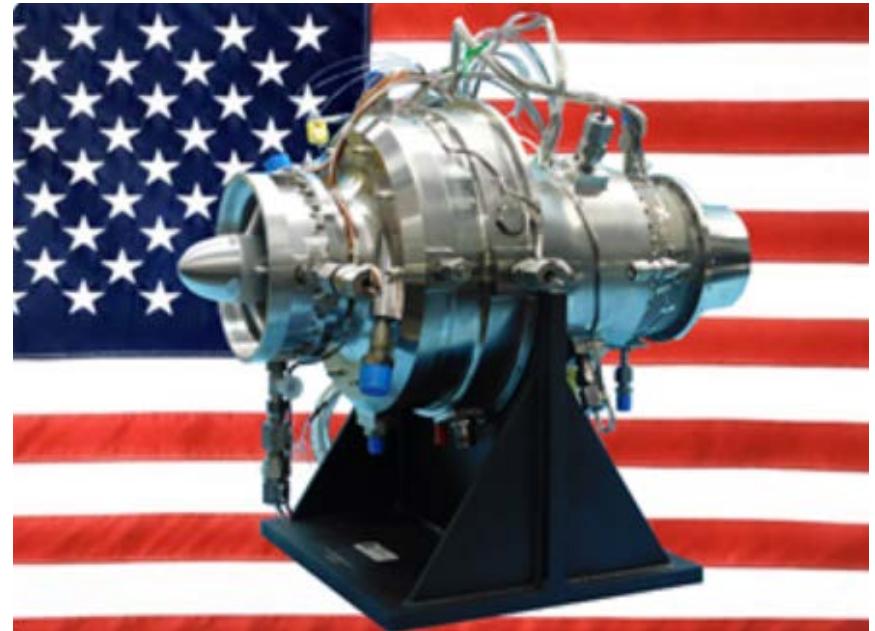
Speed Racer

- The Engine is typically the #1 Bill Of Material (BOM) cost element in a jet drone, cruise missile and powered munition system
- Kratos is looking to disrupt this class of engine market, similar to our drone initiatives; rapid development and fielding, improved performance and affordability
- DoD wants new technology, alternative engine providers and competition
- Thousands of engine applications and opportunities forecast: Gray Wolf, Speed Racer, Golden Horde, Skyborg, ABMS, Arsenal Plane, Attritables
- Kratos has multiple engines under customer funded development programs, including in the space and satellite area

Kratos Awarded \$12.7 Million Task Order to Complete Cost Optimized Turbojet Engine for Future Cruise Missiles and Attritable UAVs

SAN DIEGO, Jan. 12, 2021 (GLOBE NEWSWIRE) -- Kratos Defense & Security Solutions, Inc. (Nasdaq: KTOS), a leading National Security Solutions provider, announced today that Kratos' Turbine Technologies Division (KTT) has been awarded a \$12.7 million task order under its Advanced Turbine Technologies for Affordable Mission (ATTAM) ID/IQ contract. The program will be managed by the Turbine Engine Division of the Air Force Research Laboratory (AFRL/RQT). The award follows the successful ground testing of an affordable turbojet designed for use in future low-cost cruise missiles and attritable Unmanned Aerial Vehicles (UAVs). The design and test of the 200lb thrust-class turbojet engine was completed in under 18 months, demonstrating Kratos' ability to meet the needs of today's warfighter. Testing included characterization of the engine from ignition to overspeed conditions, characterization of engine performance including thrust, fuel efficiency and electrical power output, and engine durability. Testing was performed at the recently commissioned Kratos engine-test facility in Indiantown, Florida.

The objective of the awarded task order is to complete the engine development for flight testing and to demonstrate the targeted life low-cost engine architecture. Work will be performed by KTT in Florida.

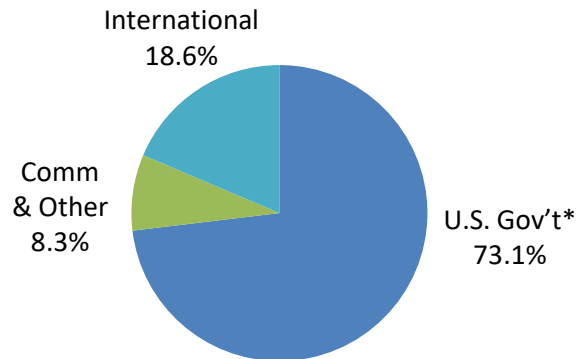


Kratos – Fourth Quarter and FY20 Execution Highlights

- Q420 Revenue \$206.4 million, up from Q419 Revenue of \$185.1 million. Organic growth in Unmanned Systems, Space and Satellite, Microwave Electronics, and Rocket Support Solutions businesses and contribution from ASC Signal acquisition offset by reduction in scope of certain international Training Services contracts with net impact of \$5.7 million and COVID-19 related impacts in commercial satcom, aero and services businesses
- Q420 Adjusted EBITDA of \$22.3 million, up from Q419 Adjusted EBITDA of \$20.2 million, primarily due to increased revenues and favorable revenue mix including certain programs and products in more mature lifecycles
- Q420 Operating Income \$9.0 million, down slightly from Operating Income of \$9.3 million due to Q420 increase in non-cash stock compensation expense of \$3.7 million and increase in R&D expense of \$2.6 million
- Q420 Book-To-Bill ratio 1.2 to 1, LTM Book-to-Bill ratio 1.4 to 1. LTM Book-To-Bill ratio 1.4 to 1 for KGS and KUAS.
- Q420 Backlog \$922.2 million, up from Q320 Backlog of \$873.1 million. Q420 Funded Backlog \$643.3 million, Q420 Unfunded Backlog \$278.9 million
- Qualified Bid and Proposal Pipeline \$9.0 billion, up from \$8.3 billion at Q320

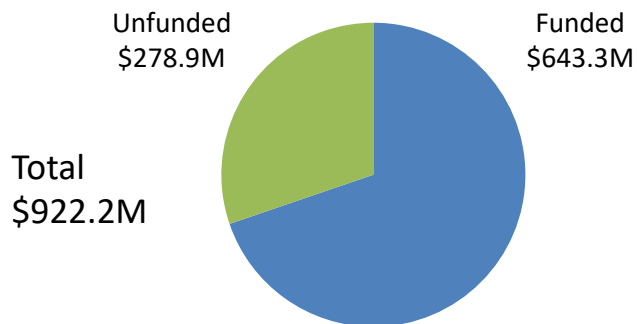
Kratos – Recent Financial Highlights – FY20

Year Ended 12/27/20
Revenue by Customer

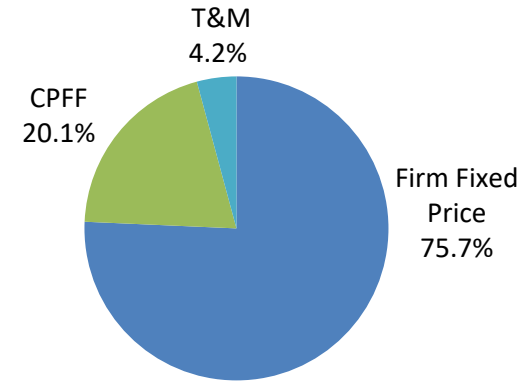


*Includes Foreign Military Sales (FMS)

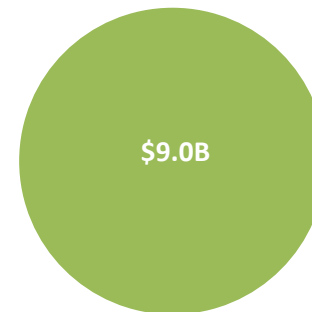
Backlog Ended 12/27/20



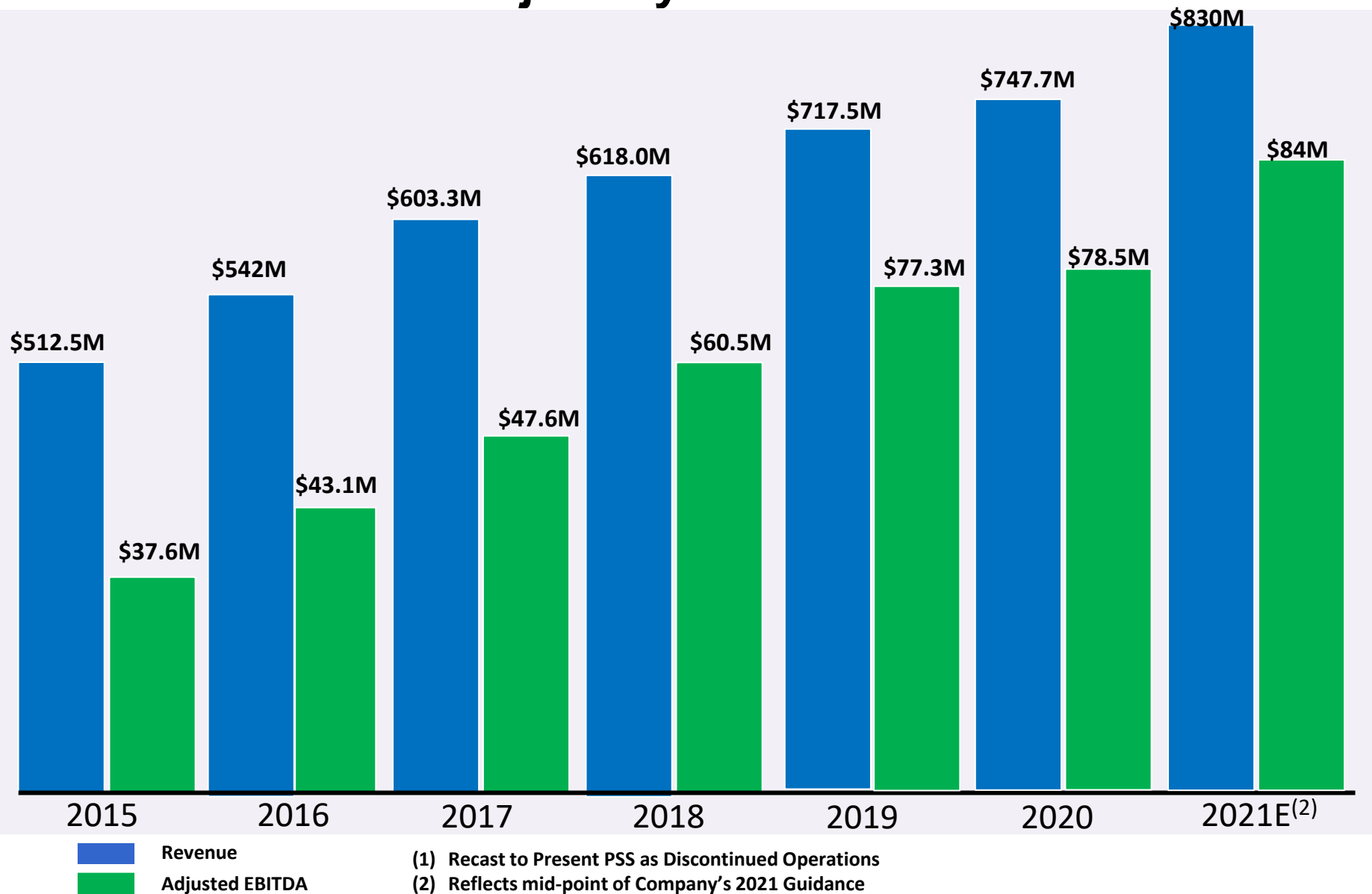
Year Ended 12/27/20
Contract Mix



Bid & Proposal Pipeline Ended 12/27/20



Kratos – Growth Trajectory⁽¹⁾



Kratos – Recent Financial Highlights – Q420

	<u>Q420</u>
Gross Debt	\$301.0M
Cash	\$380.8M
Net Cash	\$79.8M
LTM Adjusted EBITDA	\$78.5M

- Kratos' Balance Sheet Positioned to Support Expected Future Growth and Investments Required For Multiple Recent New Program Awards, New Opportunities and Forecasted Growth
- Kratos is Focused Primarily on Organic Growth with Existing Programs/Platforms/Systems
- No Major Acquisitions Planned

Kratos – Investment Summary

- *Technology Company in National Security Industry with Multiple New Program Awards Positioning Kratos for Long Term, Sustained Future Organic Growth, Forecast to Increase and Accelerate Beginning in 2022, as New and Development Programs Mature and Transition to Production*
- *Primary Business Focus Areas Include: Drones and Artificial Intelligence, Space and Satellites, Microwave Electronics, Hypersonics and BMD*
- *Tactical Drone Opportunity Could Transform Kratos as a Company*
- *Affordability is a Technology and Affordability will be of Increasing Importance and a Key Differentiator for Kratos*
- *2021 Currently Forecast to be Final Year of Increased Internal Investments to Execute on and Pursue New Programs and Opportunities, Resulting in Expected Increased and Accelerating Growth Trajectory in 2022*

Technology Innovation for National Security

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Kratos specializes in areas where technology advances can have a force multiplier effect.

