



P A R K  
A E R O S P A C E  
C O R P .

**22<sup>nd</sup> Annual Needham Growth Conference**  
**January 15, 2020**

## Forward Looking Disclaimer

*This presentation contains forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements give current expectations or forecasts of future events or our future financial or operating performance, and include Park's expectations regarding revenues, EBITDA, EBIT, and growth opportunities and projected pro forma financial information for Park's business. The forward-looking statements contained in this presentation are based on management's good-faith belief and reasonable judgment based on current information, and these statements are qualified by important risks and uncertainties, many of which are beyond our control, that could cause our actual results to differ materially from those forecasted or indicated by such forward-looking statements.*

*Factors that could cause actual events or results to differ materially from Park's expectations or forecasts are set forth under the caption "Factors That May Affect Future Results" in Item 1 and in Item 1A "Risk Factors" of the Company's Annual Report on Form 10-K for the fiscal year ended March 3, 2019, and in subsequent reports filed with or furnished to the Securities and Exchange Commission. Except as may be required by any applicable laws, the Company assumes no obligation to update such forward-looking statements, which are made as of the date hereof or an earlier date specified herein, whether as a result of new information, future developments, or otherwise.*



# Our Business

- **Park Aerospace Corp.** develops and manufactures Solution and Hot-Melt Advanced Composite Materials used to produce composite structures for global aerospace markets:
  - ✓ Wide array of prepreg materials specifically designed for hand lay-up or automated fiber placement (AFP) manufacturing applications
  - ✓ Film Adhesive materials (in final stages of development with Major Aerospace Customer)
  - ✓ Lightning Strike Protection materials (“Electroglide®”)
- Park Aerospace’s Advanced Composite Materials are used to produce primary and secondary structures for:
  - ✓ Jet Engines
  - ✓ Large Transport Aircraft
  - ✓ Regional Transport Aircraft
  - ✓ Military Aircraft
  - ✓ Unmanned Aerial Vehicle (UAVs or “Drones”)
  - ✓ Business Jets & General Aviation Aircraft
  - ✓ Rotary Wing Aircraft
  - ✓ Other Specialized Aerospace Applications

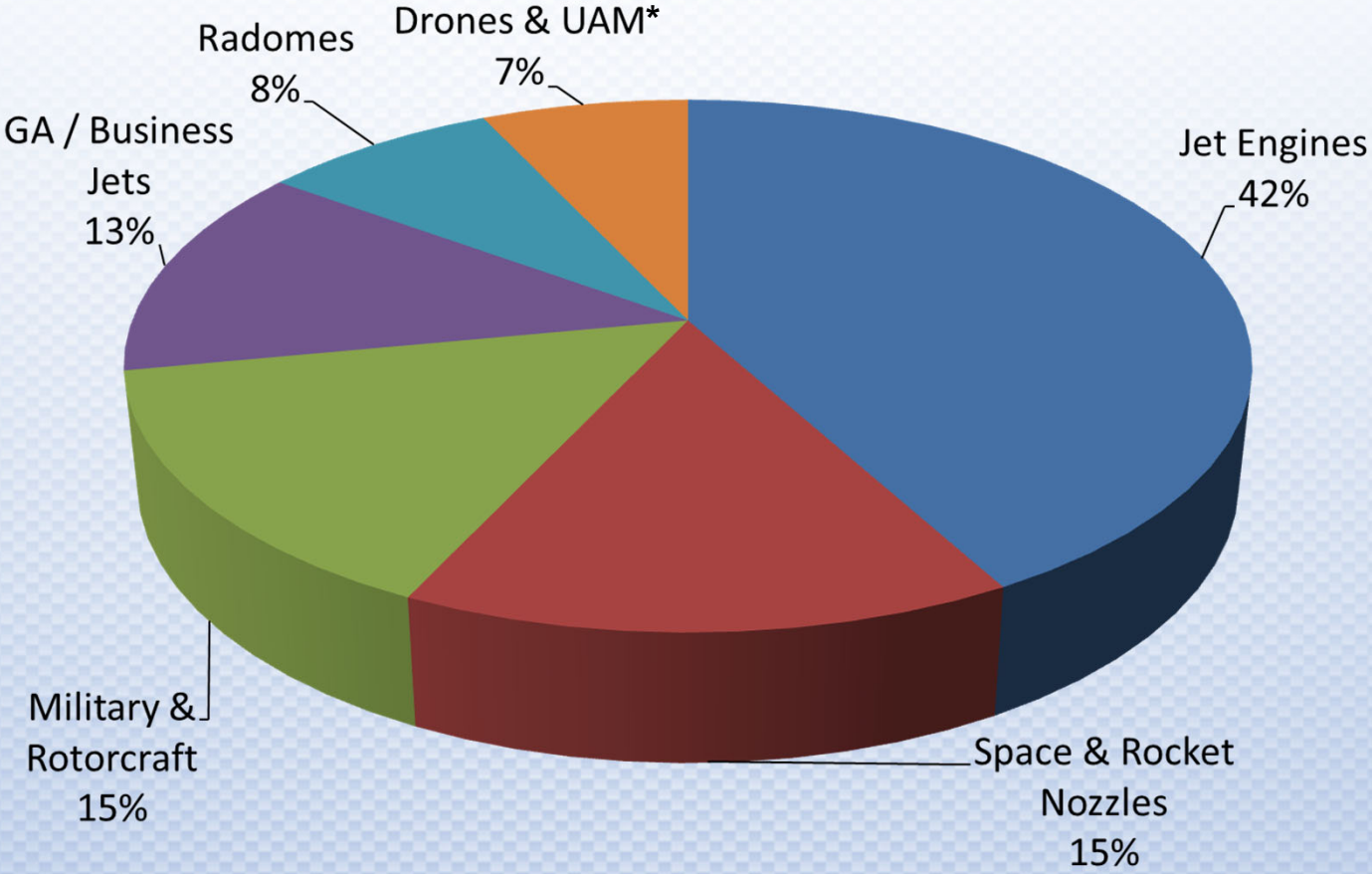


# Our Business (Continued)

- Park Aerospace also offers:
  - ✓ Specialty Ablative materials for Rocket Motors and Nozzles
  - ✓ Specially designed materials for Radome Applications
  
- As a complement to our Advanced Composite Materials offering, Park Aerospace designs and fabricates Composite Parts, Structures and Assemblies and Low-Volume Tooling for the Aerospace Industry
  - ✓ Parts include Park Aerospace's proprietary "Sigma Strut"™ and "Alpha Strut"™ product lines
  - ✓ Markets for parts and structures:
    - ❖ Prototype and Development Aircraft
    - ❖ Special Mission Aircraft
    - ❖ Aircraft "STC" Mods
    - ❖ Spares for Legacy Military and Civilian Aircraft
    - ❖ Exotic Spacecraft
    - ❖ **Private Space**



# Park's Estimated FY2019 Revenues by Aerospace Market Segment

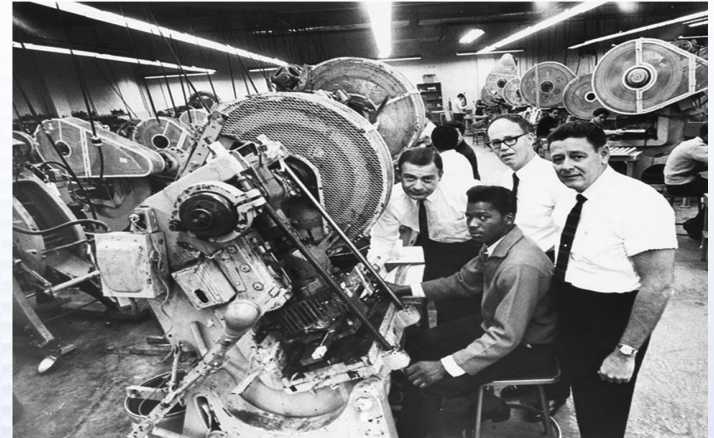


\*UAM stands for Urban Air Mobility. Urban Air Mobility vehicles are also referred to as Air Taxi or eVTOL (electric Vertical Take-Off and Landing) vehicles



# Park's 65<sup>th</sup> Anniversary

- Park founded on March 31, 1954 by Jerry Shore and Tony Chiesa with ~ \$60 Thousand Investment
- Company started in a small “factory” (garage?) in Woodside, Queens with 5 employees
- 1954 Results:
  - ✓ Sales: \$124,206.59
  - ✓ Pretax Profit: \$887.38
  - ✓ Taxes Paid: \$226.21
- First Invoice: \$300 (hand written)
- Many obstacles and roadblocks thrown Park’s way in early days, but our Beloved Founders were UNSTOPPABLE
- The Unstoppable Spirit of our Beloved Founders lives with us today in our Minds and our Hearts



Park's Founders

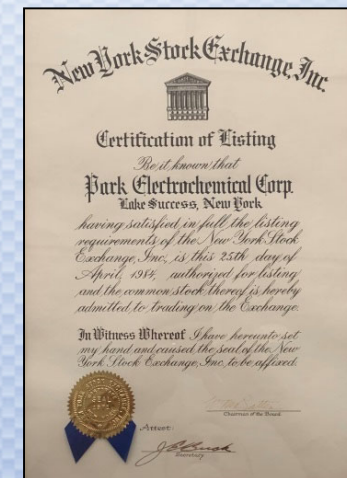
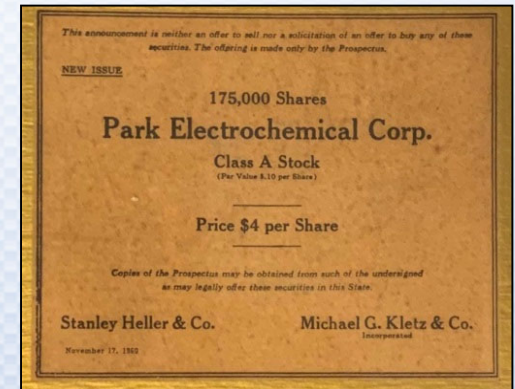
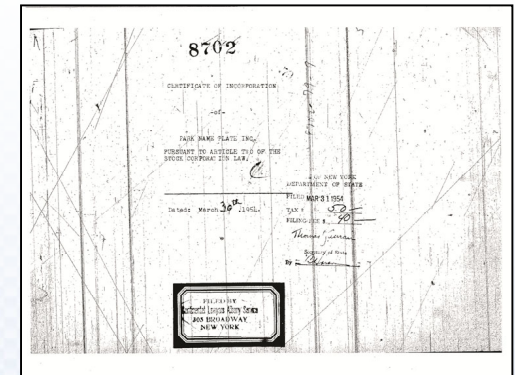


Park's First Location



# Our History

- March 31, 1954** Park is Founded by Jerry Shore and Tony Chiesa with ~ \$60 Thousand Investment
- November 17, 1960** Park goes Public
- 1961** Park acquires New England Laminates Company (“Nelco”) in Stamford, CT for ~ \$200 Thousand
- 1984** Park lists on NYSE
- 1985** Park commences regular Quarterly Cash Dividend
- Mid-1980’s** Park had become global Electronics Business with other ancillary businesses



# Our History (Continued)

Jan 2007 Park commits to Aerospace as second major area of business focus

Jan 17, 2008 Ground-breaking of Park's New Aerospace Facility in an empty field in Newton, KS

May 2009 Park's Newton, KS Aerospace Facility opens (kind of!)

February 28, 2014 (11:00 PM) Park makes first production shipment to MRAS\* for engine nacelles and other engine structures for Legendary Boeing 747 Aircraft



\*Middle River Aerostructure Systems, a subsidiary of ST Engineering Aerospace



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# Our History (Continued)

- December 2018 Park enters into Firm Pricing Agreement with MRAS through 2029
- December 2018 Park announces Major Expansion of Newton, KS Facility
- December 2018 Park sells its Electronics Business to AGC Inc. of Tokyo, Japan
- December 2018 Park's transformation from an Electronics Company into an Aerospace Company is complete
- July 17, 2019 Park changed name from Park Electrochemical Corp. to **Park Aerospace Corp.**



# Our History (Continued)

- December 1, 2019** Park has \$144 million in cash (and marketable securities) and Zero Long-Term Debt
- January 8, 2020** Park declared a special dividend of \$1.00 per share payable February 20, 2020 to shareholders of record on January 21, 2020
- January 8, 2020** Including this special dividend and the regular quarterly dividend payable February 4, 2020 to shareholders of record on January 2, 2020, Park will have paid approximately \$536 Million, or \$26.15 per share, of cash dividends since the beginning of FY05
- January 15, 2020** Park has paid 35 years of regular, quarterly cash dividends without ever skipping a dividend or reducing the dividend amount



# Major Jet Engine Company Programs

- Firm Pricing LTA through 2029 with Middle River Aerostructure Systems (MRAS), a subsidiary of ST Engineering Aerospace
- Redundant Factory...Construction in Progress
- Sole Source for Composite Materials for Engine Nacelles, Thrust Reversers and Inner Fixed Structures for Multiple Programs, including:
  - ✓ B747-8 with GENx 2B Engines
  - ✓ A320neo with LEAP-1A Engines
  - ✓ A321neo with LEAP-1A Engines
  - ✓ A321XLR with LEAP-1A Engines
  - ✓ Comac 919 with LEAP-1C Engines
  - ✓ Comac ARJ with CF34-10A Engines
  - ✓ Bombardier Global 7500 with Passport 20 Engines
- Park Composite Materials are Sole Source on large primary structure component for Passport 20 Engines (not included in MRAS LTA)
- POs for Composite Materials for Containment Wrap for GE9X Engines for B777X (GE Aviation Program not included in MRAS LTA; Park has not been awarded this program at this time)



The Legendary Boeing 747



# Major Jet Engine Company Programs (Continued)

- Joint Development and Collaboration projects with MRAS related to:
  - ✓ AFP Manufacturing...Development complete and Park Material is qualified and in production
  - ✓ Lightning Strike Protection Material...Development complete and Park Material is qualified and in production; Park is Sole Source on A320neo family of aircraft
  - ✓ Film Adhesive Material...In final stages of development; expected to be qualified and in production in CY2021
  
- Revenues from Major Jet Engine Company Programs were \$21.4 Million in the first nine months of FY20
  
- Annual Revenues from Major Jet Engine Company Programs not expected to fully ramp up until FY2026 (based upon Customer Provided Forecast)



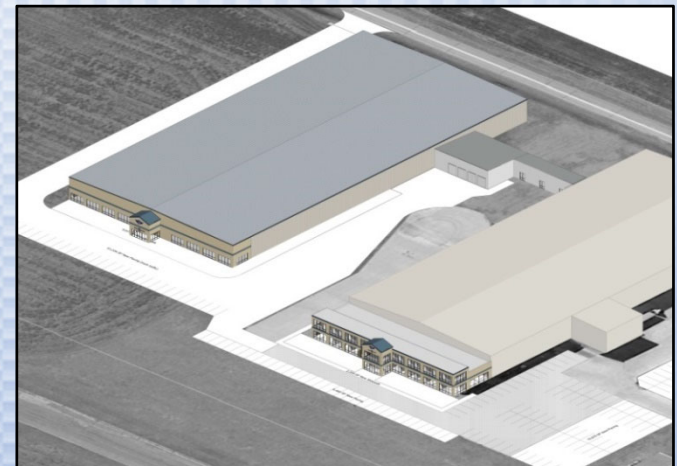
# Update on Major Jet Engine Company Programs

- Boeing 747-8: Flat...How long will “Queen of the Skies” be produced?
- A320neo/A321neo/A321XLR with LEAP-1A Engines: Strong and still ramping
- Bombardier Global 7500 with Passport 20 Engines: Ramping nicely
- Comac ARJ21 with CF34-10A Engines: Ramping nicely
- Comac 919 with LEAP-1C Engines: Ramp is still down the road
- Boeing 777X with GE9X Engines: Production schedule pushed out; current focus is development work (GE Aviation program not included in MRAS LTA)



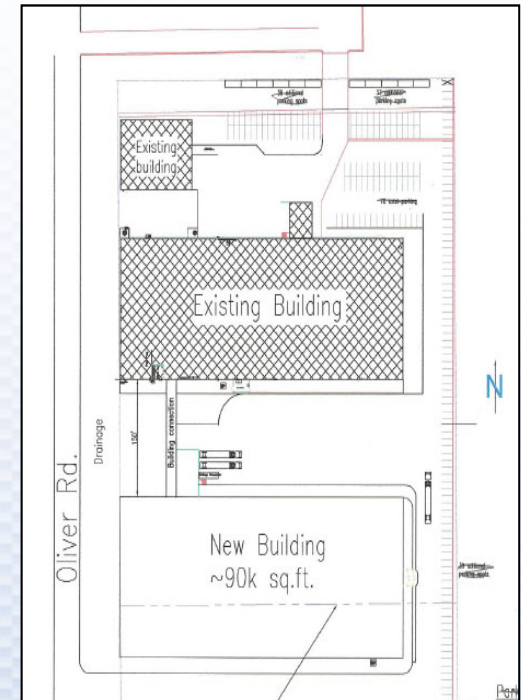
# Major Expansion of Newton, KS Facilities

- December 2018...Park announced Major Expansion of Newton, KS Aerospace Manufacturing and Development Facilities
  - ✓ Redundant Plant for MRAS and its Aircraft OEM Customers; Park promised to build plant once firm pricing through CY2029 was agreed to
  - ✓ Redundant Plant also needed for Manufacturing Capacity
  - ✓ Approximately 90,000 square feet
  - ✓ Expansion will approximately double size of current Newton, KS facilities
  - ✓ Approximately \$20.5 Million Investment
  - ✓ Ground-Breaking on August 15, 2019
  - ✓ Completion expected by end of CY2020
  - ✓ Expected to be qualified and in production by end of CY2021



# Major Expansion (Continued)

- Expansion includes:
  - ✓ New 60" Hot-Melt Film and Tape Manufacturing Lines
  - ✓ New Mixing and Delivery Systems
  - ✓ New R & D Lab
  - ✓ Expanded Production Lab
  - ✓ Additional Slitting Capacity
  - ✓ Additional Freezer and Storage Space
  - ✓ Space to accommodate additional Hot-Melt Tape Line or Solution Treating Line
  - ✓ Space to accommodate confidential development project
  - ✓ Additional Office Space



# Estimated Manufacturing Capacity\*

➤ Hot-Melt Treated Composite Materials:

60" Film and Tape Lines: \$45M

24" Film and Tape Lines: \$ 8M\*\*

➤ Solution Treated Composite Materials: \$55M

➤ Composite Parts Fabrication and Assembly: ???

➤ Estimated Total Composite Materials  
Manufacturing Capacity: \$108M

➤ Issue Related to \$45M of Hot-Melt Materials Manufacturing Capacity from 60" Film and Tape Lines:

- ✓ GE Programs business represents large majority of current Hot-Melt Business
- ✓ GE Programs business has been subject to significant short-term variability (peaks and valleys)
- ✓ Hot-Melt Materials production was approximately \$9.5M in FY20 Q3
- ✓ **But** Hot-Melt Materials manufacturing operations produced at an annualized run rate of **\$45M** during months of October and November of FY20 Q3!

\*Manufacturing Capacity is highly variable and significantly impacted by product mix

\*\*Assumes being used exclusively for GE9X Containment Wrap Program; Park has POs for this program through end of CY2020, but Park has not been awarded this program at this time; this is a GE Aviation Program and not an MRAS Program





# Estimated Manufacturing Capacity (Continued)

- As a result of short-term variability (peaks and valleys) of GE Programs business, it may be difficult to handle the peaks with \$45M of Hot-Melt Materials Manufacturing Capacity
- Additional Hot-Melt Materials Manufacturing Capacity provided by expansion will not be available and qualified for approximately 2 years
- Our Solution: Increase Hot-Melt 60" Film and Tape Lines Manufacturing Capacity from \$45M to \$55M by:
  - ✓ Moving all GE9X Production to 24" Film and Tape Lines
  - ✓ Increasing 60" Film and Tape Lines Up-time by approximately 10%
- *Necessity is Mother of Invention!*



# FY2020 Q4 and FY2020 Forecast Estimates (Historical Data In Thousands)\*

	FY19 Q1	FY19 Q2	FY19 Q3	FY19 Q4**	FY20 Q1	FY20 Q2	FY20 Q3	FY20 Q4	FY2020
Sales	\$10,393	\$11,211	\$12,853	\$16,659	\$14,950	\$13,723	\$15,847	\$15.0M to \$16.0M	\$59.5M to \$60.5M
EBITDA	\$1,386	\$1,663	\$2,948	\$4,251	\$3,372	\$2,406	\$3,622	\$3.1M to \$3.6M	\$12.5M to \$13.0M

- As of January 10, 2020, amount shipped in FY20 Q4, plus amount booked to be shipped in FY20 Q4: ~\$13.6M
- Off to slow start in December of FY20 Q4 as a result of:
  - ✓ Lengthy shut-down for major maintenance
  - ✓ Carbon fiber shortage; fiber was airfreighted from Japan last week
- Factors expected to affect FY20 Q4 EBITDA:
  - ✓ Outside testing costs related to data development for new product
  - ✓ GE9X Program manufacturing trials and development expenses
  - ✓ Film Adhesive manufacturing trials and development expenses
  - ✓ Costs of operating 24" Hot-Melt lines for GE9X
  - ✓ Legacy costs (expected to continue through FY20 Q4)

\*From Continuing Operations

\*\*14 Week Quarter



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## FY2017, FY2018 and FY2019 Results\* (In Thousands)

	FY2017	FY2018	FY2019
Sales	\$31,837	\$40,230	\$51,116
Gross Profit	\$8,299	\$11,288	\$16,184
Gross Margin	26.7%	28.1%	31.7%
EBITDA	\$1,055	\$4,704**	\$10,248

\*From Continuing Operations

\*\*Before Special Items



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# Park's Long-Term Forecast Estimates

	FY20	FY21	FY22	FY23	FY24
Sales	\$59.5M to \$60.5M	\$68M to \$73M	\$78M to \$84M	\$86M to \$92M	\$94M to \$100M
EBITDA	\$12.5M to \$13.0M	\$16.0M to \$19.5M	\$19.0M to \$22.5M	\$22.0M to \$25.5M	\$24.5M to 28.0M
EBIT	\$10.5M to \$11.0M	\$14.0M to \$17.5M	\$17.0M to \$20.5M	\$19.5M to \$23.0M	\$22.0M to \$25.5M

- Forecast assumes Organic Growth and no Additional Revenue from Acquisitions
- Note that Major Jet Engine Company Programs Forecast does not fully ramp up until FY26
- Park tends to run lean...Always
- Park attempts to do more with less...Always
- Park adds cost as we ramp very cautiously and carefully
- Park sold its Electronics Business on December 4, 2018, and we have now been operating as a standalone Aerospace Business for a full year
  - ✓ Based upon this full year's experience, we believe we have a better understanding of our operating costs, and, in particular, our labor and overhead costs, which are, and are expected to be, higher than originally anticipated
- Start-up and qualification costs for Major Facilities Expansion, which are expected to be incurred in FY21 and FY22, are not well defined at this time



# Factors Affecting Accuracy of Park's Short-Term and Long-Term Forecasts

- All Major Jet Engine Company Programs, except B747-8, are ramping or in development
- Severe stress on Aerospace Industry supply chain
- Because of tight manufacturing capacity, reduced carbon fiber and fabric raw material inventory and tight carbon fiber supply, there is very little slack and leeway in system, making it difficult to recover from supply or production short-falls
- Park's philosophy regarding its forecasts...no sandbagging



# FY20 Q3 Top Five Customers (in Alphabetical Order)

- AAR Corp.
- GKN Aerospace
- Kratos Defense and Security Solutions
- Lockheed Martin
- Middle River Aerostructure Systems (MRAS),  
subsidiary of ST Engineering Aerospace

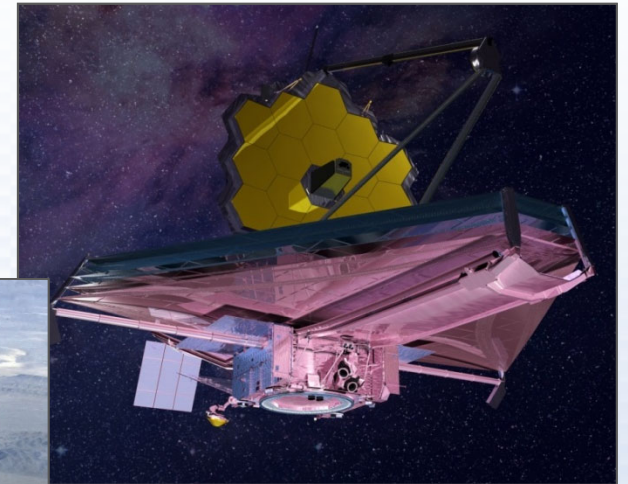


# Park Aerospace Unusual Programs of Interest



McDonnell Douglas DC-10

Northrop Grumman RQ-4 Global Hawk



NASA's James Webb Space Telescope



Boeing E4-B Doomsday Aircraft



Private Space Program



# Recent Developments

- Ground-Breaking for Major Expansion of Newton, KS Facility on August, 15, 2019
- Park Rang Closing Bell at NYSE on August 26, 2019
- Park changed name from Park Electrochemical Corp. to **Park Aerospace Corp.**
- Kratos Defense & Security Solutions...Park's products are qualified on and being used in the manufacture of Kratos' Target and Tactical Unmanned Aerial Systems, including the XQ-58A Valkyrie Tactical UAS
- Major Private Space Company...NRE in progress
- Qualified for initial low rate production on new eVTOL Program
- Qualified on new Hypersonics Program...Original PO received





# Recent Developments (Continued)

- DC-10/KC-10 Aircraft...In production of “niche” component using Park materials
- Northrop Grumman recently announced plans to increase production of Global Hawk/Triton UAVs; Park’s materials are qualified and in production on those programs
- December 20, 2019 WSJ Article reporting a deal for CFM International to produce an increased volume of LEAP-1A engines for A320neo family of aircraft...What does this mean for Park?
- Airbus A320/A321neo Paris Air Show Announcements
  - ✓ CFM announced orders and commitments for more than 1,150 LEAP-1A Engines\*
  - ✓ IndiGo announced it ordered 560 LEAP-1A Engines for A320neo and A321neo Aircraft, the largest engine order in history\*
- Airbus A321XLR Aircraft Announced at Paris Air Show!!!



# Recent Developments (Continued)

- Single Isle vs. Wide Body Aircraft...Paradigm Shift? Park seems to be well positioned on Single Isle Aircraft with A320neo family of Aircraft and Comac 919 Aircraft; Park has no content we are aware of on B737 MAX Aircraft
- Park still immersed in battling through challenges relating to steep program ramps, ongoing severe stress on Aerospace Industry supply chain, tight supply of raw materials, operating with tight raw materials inventories and Park's own manufacturing capacity limitations...but we don't quit, back down or relent...that is not the Park way...





# Thank You!



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