AeroVironment<sup>™</sup>

PROCEED WITH CERTAINTY

# **Investor and Analyst Event**

Nasdaq MarketSite, New York City June 27, 2018

AeroVironment<sup>®</sup> PROCEED



AeroVironment<sup>™</sup>

PROCEED WITH CERTAINTY

## Welcome

Steve Gitlin, VP Corporate Strategy and Investor Relations





## Safe Harbor Statement

- Certain statements in this presentation may constitute "forward-looking statements" as that term is defined in the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, without limitation, any statement that may predict, forecast, indicate or imply future results, performance or achievements, and may contain words such as "believe," "anticipate," "expect," "estimate," "intend," "project," "plan," or words or phrases with similar meaning. Forward-looking statements are based on current expectations, forecasts and assumptions that involve risks and uncertainties, including, but not limited to, economic, competitive, governmental and technological factors outside of our control, that may cause our business, strategy or actual results to differ materially from the forward-looking statements.
- Factors that could cause actual results to differ materially from the forward-looking statements include, but are not limited to, reliance on sales to the U.S. government; availability of U.S. government funding for defense procurement and R&D programs; changes in the timing and/or amount of government spending; our ability to perform under existing contracts, including the asset purchase agreement for the proposed sale of our EES business, and obtain new contracts; risks related to our international business, including compliance with export control laws; potential need for changes in our long-term strategy in response to future developments; unexpected technical and marketing difficulties inherent in major research and product development efforts; the impact of potential security and cyber threats; changes in the supply and/or demand and/or prices for our products and services; the activities of competitors and increased competition; failure of the markets in which we operate to grow; uncertainty in the customer adoption rate of commercial use unmanned aircraft systems; failure to remain a market innovator and create new market opportunities; changes in significant operating expenses, including components and raw materials; failure to develop new products; the extensive regulatory requirements governing our contracts with the U.S. government; product liability, infringement and other claims; changes in the regulatory environment; and general economic and business conditions in the United States and elsewhere in the world.
- For a further list and description of such risks and uncertainties, see the reports we file with the Securities and Exchange Commission, including our most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, which are available at www.sec.gov. We do not intend, and undertake no obligation, to update any forward-looking statements, whether as a result of new information, future events or otherwise.



## **Interpretive Notes to the Financial Presentation**

- Unless otherwise noted, the amounts presented in this presentation reflect the results from continuing operations.
- Efficient Energy Systems ("EES") business is reclassified to discontinued operations for all periods presented, unless otherwise noted.
- As the FY18 Revenue and EPS Guidance were based on the consolidated performance of the UAS business segment (continuing operations) and EES business (in FY18, reclassified to discontinued operations), this presentation contains, where noted, results consolidating continuing and discontinuing operations results for comparison purposes to FY18 Guidance.



# Agenda

Торіс	Time	Presenter	
Welcome	8:30 - 8:40	Steve Gitlin	
Tomorrow, Together	8:40 - 9:10	Wahid Nawabi	
UAS Overview	9:10 - 9:40	Kirk Flittie	
Break	9:40 - 9:55		
Financials	9:55 - 10:30	Teresa Covington	
Customer Panel	10:30 – 11:00	Steve Gitlin Flemming Olstroem, Major, Danish Army Ulf Bogdawa, CEO SkyDrones, SA	
Q&A, Closing	11:00 – 11:30	Wahid Nawabi, Teresa Covington	



AeroVironment<sup>™</sup>

PROCEED WITH CERTAINTY

## **Tomorrow, Together**

### Wahid Nawabi, President and Chief Executive Officer





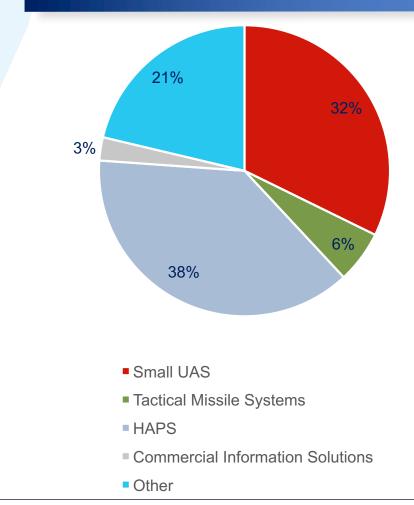
## AeroVironment is a Technology Solutions Provider at the Intersection of Future-Defining Capabilities





## **Growing Patent Portfolio Protects our Unique IP**

Percentage of U.S. Patents Issued to AeroVironment by Business



- 155 U.S. patents issued
- Additional 67 applications pending
- Does not include trade secrets
- Dedicated internal and external IP counsel



### **Strong Fiscal 2018 Performance**

- \$271 million revenue from continuing operations (\$309 with discontinued operations)
- Exceeded revenue, earnings per share guidance
- Record fourth quarter-ending funded backlog of \$174 million
- Strong international demand 40% of company revenue
- Strong DoD funding evident in government fiscal year 2019 (GFY19) budget request



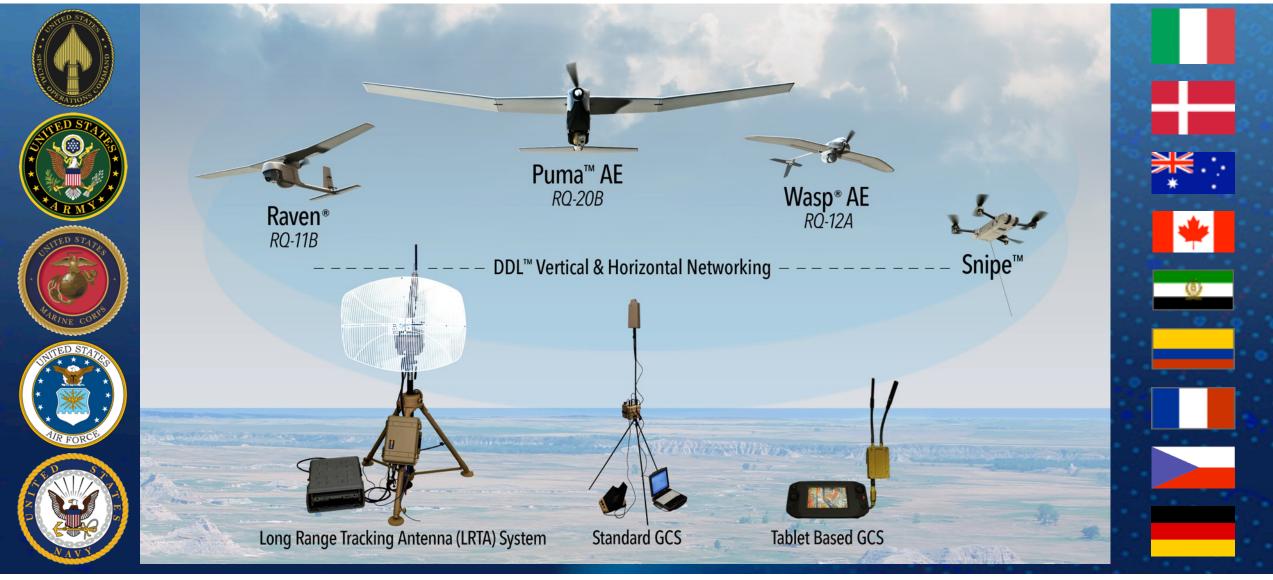
## **Strategic Actions Taken**

- Focus on UAS and TMS EES divestiture
- Equity investment in HAPSMobile, Inc. likely to require significantly higher investments in future
- Partnering with others to pursue our business objectives

10

Continuously evaluating deploying our balance sheet for strategic investments

## **The Pioneer and Leader in Small UAS**





# **Small UAS Market Potential**

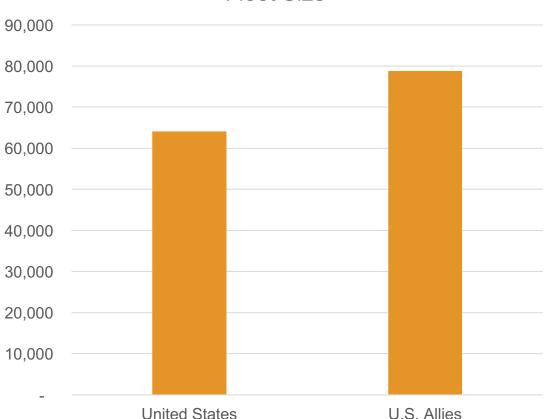
Potential small unmanned aircraft fleet size – U.S.:

- Approximately 1,281,900 active duty troops<sup>1</sup>
- Approximately 9,500 Raven B Puma AE and Wasp small unmanned aircraft in DoD as of 2013<sup>2</sup>
- Calculated ratio of 135 troops per AeroVironment small unmanned aircraft
- Potential fleet size at 20:1 ratio = 64,125

Potential small unmanned aircraft fleet size U.S. allies:

- Approximately 3,150,000 active duty troops in allied military forces
- Potential fleet size at 40:1 ratio = 78,750

Total potential small unmanned aircraft market potential: 142,875



#### Potential Small Unmanned Aircraft Fleet Size

<sup>1</sup> globalfirepower.com (allies included in estimate: South Korea, Egypt, Turkey, Italy, Japan, Saudi Arabia, France, U.K., Germany, Greece, Spain, Canada, Australia, Belgium) <sup>2</sup> U.S. Department of Defense Unmanned Systems Integrated Roadmap FY2013-2038



### The Pioneer and Leader in Loitering Munitions (TMS)



#### Rapid Response, High-Precision, Wave-Off Capability



## **TMS Market Potential**

- Based on current
   Switchblade adoption:
  - Approximately 450,000 active duty U.S. Army soldiers <sup>1</sup>
  - 1,318 LMAMS rounds budgeted for fiscal 2019 procurement <sup>2</sup>
  - Calculated ratio of 341 soldiers per LMAMS round
- Potential procurement opportunity at ratio of 100 soldiers to LMAMS round = 4,500



- Based on Legacy Weapon Systems Procurement
  - U.S. Department of Defense budgeted <u>\$2.5 billion</u> in fiscal 2018 for:
    - Tactical Missiles
    - Anti-Tank/Assault Missiles
    - Mortar Ammunition
    - Rockets
    - Grenades
    - Artillery Ammunition
    - Sonobuoys
- AeroVironment TMS could address a portion of these applications

<sup>1</sup> Heritage.org 2017 Index of Military Strength

<sup>2</sup> Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority Feb 2018



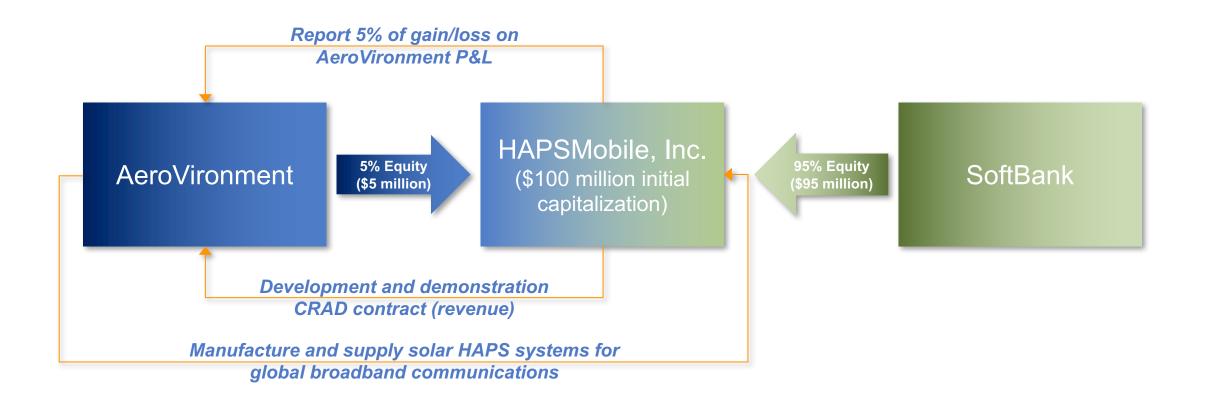
## **The Pioneer and Leader in HAPS**







## **HAPSMobile Joint Venture Business Relationship**





# The First "Drone as an App" Integrated Commercial Information Solution







## **Strategic Takeaways**

- AeroVironment is a pure-play solutions company focused on robotics, sensors, analytics and connectivity technologies
- 2. Excellent fiscal 2018 results
- 3. We are at the forefront of multiple large, promising global value creation opportunities
- 4. Strong financial position that enables our growth strategy
- 5. Demonstrated track record of capitalizing on growth opportunities

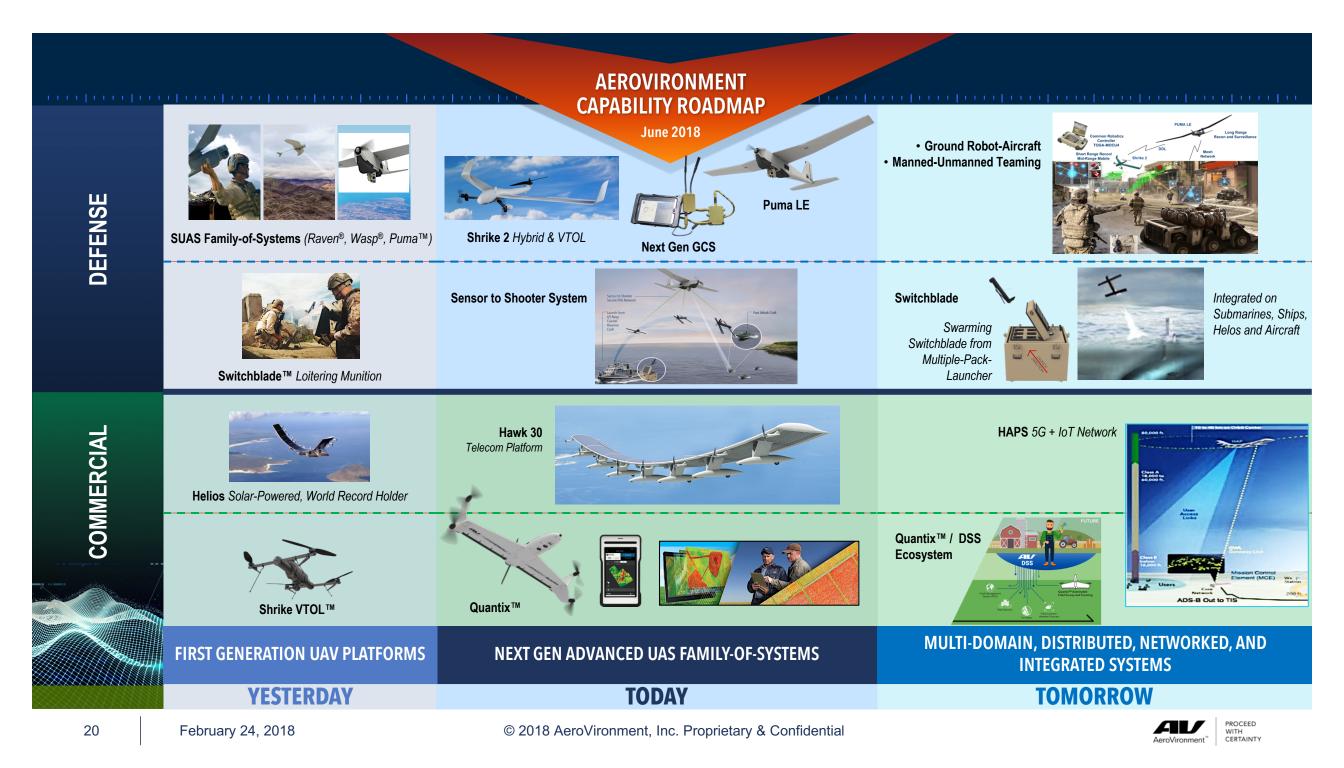


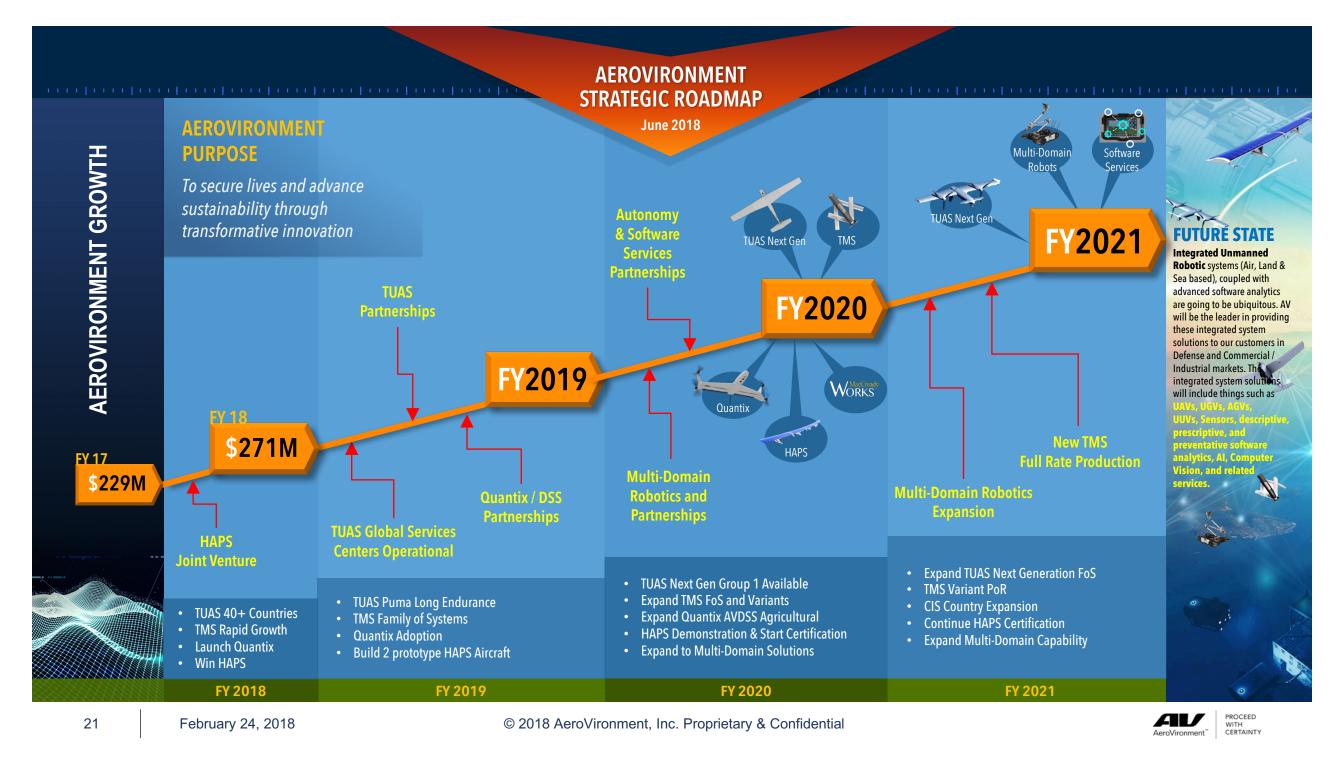
AeroVironment<sup>™</sup>

PROCEED WITH CERTAINTY

# Unmanned Aircraft Systems Kirk Flittie, VP and General Manager







## AeroVironment is a Technology Solutions Provider at the Intersection of Future-Defining Capabilities





# Integrated, Highly Engineered System Designed for Real-World Military Operations

#### Flight Computer (AeroVironment design)

Interfaces with next generation M-Code GPS

Sensors

Low-light

Nighttime

(AeroVironment design)

Electro-optical

All-Environment

• Supports third party applications, advanced algorithms for image processing and navigation

- Smart Battery
- (AeroVironment design)
- High safety and durability
- High power quality

#### High-Efficiency Electric Motor

- (AeroVironment design)
- Low acoustic signature
- No maintenance
- Rugged design

#### Airframe /

- (AeroVironment design)
- Rugged and lightweight composite airframe for repeated hard landings
- All-Environment: fresh and salt water, snow, ground
- Designed for reliability in real-world operating conditions

#### Digital Radio (AeroVironment design)

- Ability to operate in challenging EW/cyber environments
- Wideband mode supports HD video and additional bandwidth for secondary payloads
- AES-256 encryption reduces probability of intercept
- Frequency hopping improves ability to operate in the presence of noise and jamming

#### **Maximum Portability**

- Hand-launch and auto-land: no additional launch or landing equipment required
- No tools required for assembly or dis-assembly
- Modular design permits infield maintenance and upgrade





# AeroVironment is the Leading Supplier of UAS to the U.S. Department of Defense (DoD)

- Family of rugged, secure, interoperable systems
- More than 85% share of DoD UAS fleet \*
- Winner of five DoD small UAS programs of record
- Secured more than 90% of Army ID/IQ task order dollars since December 2012
- New procurement opportunities for Army Soldier Borne Sensor (SBS) and Short Range Reconnaissance (SRR)

\* U.S. Department of Defense Unmanned Systems Integrated Roadmap, 2013



## **Small UAS: Growing International UAS Footprint**

#### **45** ALLIED COUNTRIES (AS OF JUNE 2018):

Afghanistan, Australia, Belgium, Bulgaria, Burundi, Canada, Colombia, Czech Republic, Denmark, Egypt, Estonia, Ethiopia, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Jordan, Kenya, Latvia, Lebanon, Lithuania, Luxembourg, Macedonia, Malaysia, Netherlands, Norway, Pakistan, Philippines, Romania, Saudi Arabia, Singapore, Spain, Sweden, Thailand, Tunisia, Turkey, UAE, Uganda, UK, Ukraine, Uzbekistan, Yemen





## Small UAS Future: The U.S. Army is Embracing Robotics & Autonomous Systems (RAS)

#### **Objectives:**

- Increase situational awareness
- Lighten the Soldiers' physical and cognitive workloads
- Sustain the force with increased distribution, throughput, and efficiency
- Facilitate movement and maneuver
- Protect the force

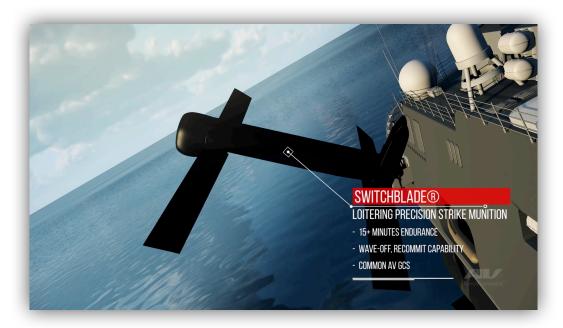


Source: U.S. Army Robotics and Autonomous Systems Strategy, March 2017



# Tactical Missile Systems: Smarter Missile Technology

- \$111 million in orders from August 2017 through May 2018 from U.S. Army and Marine Corps
- \$113 million in proposed procurement funding for Switchblade in GFY19 DoD budget request
- Variants include Blackwing<sup>™</sup> submarinelaunched reconnaissance and connectivity solution
- Networked solution with AeroVironment and other systems



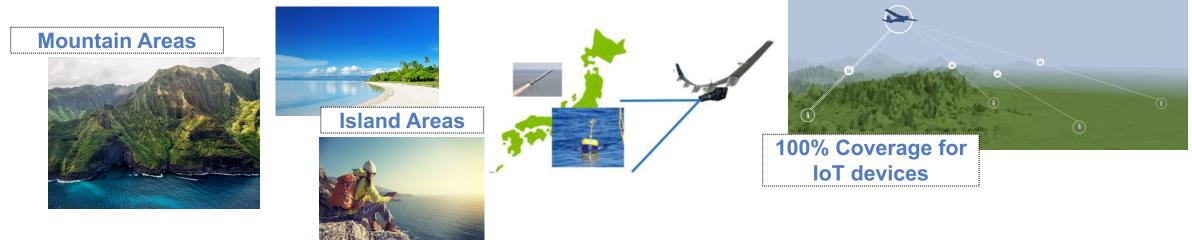


## **HAPS Opportunity**

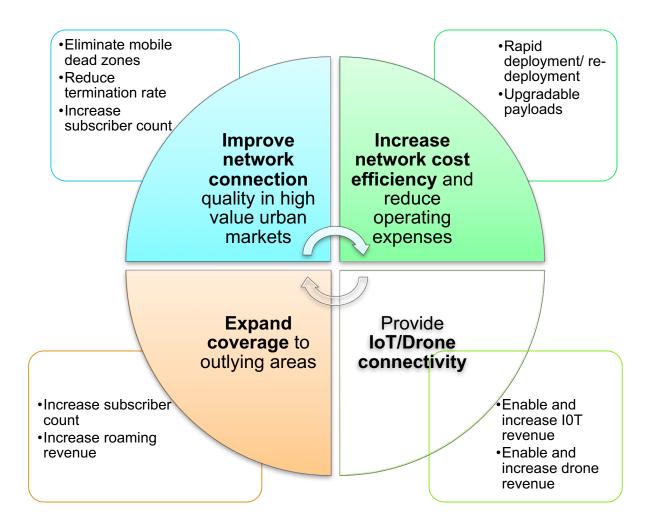
- Mobile connection, anytime, anywhere
- IoT and drones ubiquitous link
- Safety and security disaster areas
- Defense and monitoring complements satellite coverage



Network & Traffic Control



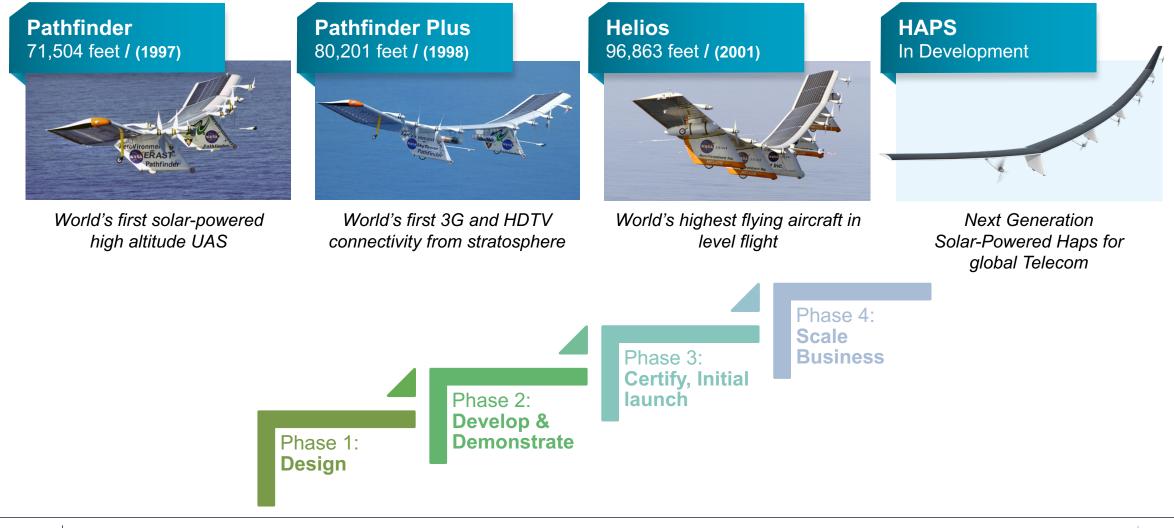
## **HAPS Telecommunications Benefits**



- Deployable with existing handset technology
- Broader coverage (one aircraft = 1,800 towers)
- Flexible deployment (wherever, whenever)



## Our HAPS Business Builds on AeroVironment's Unique Experience with Solar-Powered High-Altitude UAS



## **Commercial Information Solutions**

- Entered market with disruptive solution
- Building channel through agriculture dealers
- Gaining experience
- Opportunities for strategic partnerships to accelerate education and awareness
- Integrated ecosystem of hardware, sensors, software and connectivity





## Strong Visibility for AeroVironment Solutions in Government Fiscal 2019 Budget Request







# Break



AeroVironment<sup>™</sup>

PROCEED WITH CERTAINTY

## **Financial Overview**

Teresa Covington, Senior VP and Chief Financial Officer



## **AeroVironment Strong Financial Position**

- Strong, profitable core business across a diverse global customer base
- Attractive growth portfolio opportunities
- Balance sheet provides flexibility to act decisively to support adoption of AeroVironment solutions
- Key Fiscal 2019 Expectations:
  - Continued strength in Small UAS and Tactical Missile Systems businesses
  - Continue to execute on new growth opportunities: HAPS and Commercial Information Solutions
  - Complete divestiture of EES business segment \*
  - Identify strategic inorganic growth opportunities

\* Efficient Energy Systems business segment is reclassified to discontinued operations for all periods presented, unless otherwise noted.



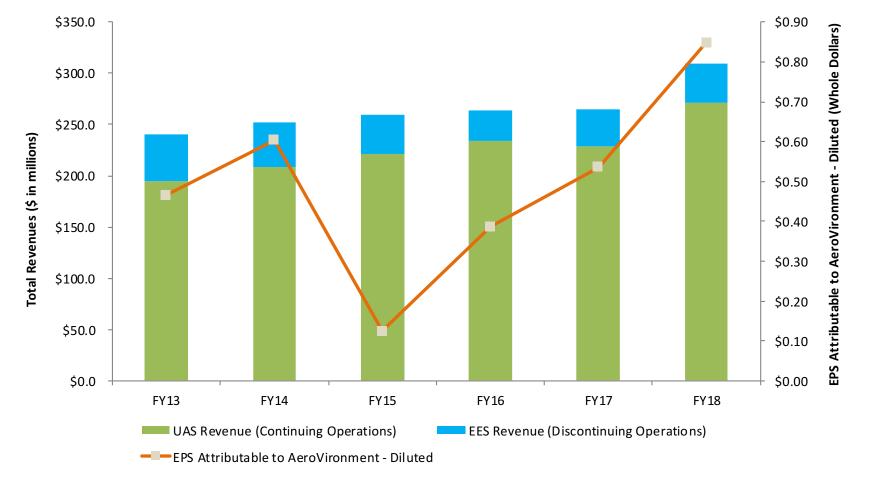
## **Delivered Strong Financial Performance in Fiscal 2018**

\$M, excluding EP	FY17	FY18 *	Variance	Fiscal 2018 Guidance
Revenue:				
Continuing Operations	\$228.9	\$271.1	\$42.2	
Discontinued Operations	\$35.9	\$37.9	\$2	
Total Revenue *	\$264.9	\$309	\$44.2	\$280 - \$300 - Exceeded
Total Revenue Growth %	NQ	16.6%		
R&D Expense	\$28.5	\$26.4	\$(2.1)	
R&D % of Continuing Operations Revenue	12.4%	9.8%		9%-10% of Revenue R&D range Inline with Expectations
EPS Attributable to AeroVironment – Diluted *	\$0.54	\$0.84	\$0.30	\$0.45 - \$0.65 - Exceeded
Year-End Funded Backlog	\$70.9	\$174.3	\$103.4	Record year-ending backlog

\* Notes: Unless otherwise noted, the amounts presented in the table above reflect the results from continuing operations. As the FY18 Revenue and EPS Guidance were based on the consolidated performance of the UAS business segment (continuing operations) and EES business (in FY18, reclassified to discontinued operations), we presented Total Revenues (revenue from continuing and discontinued operations) and EPS Attributable to AeroVironment – Diluted in the table above, for comparison purposes to FY18 Guidance.



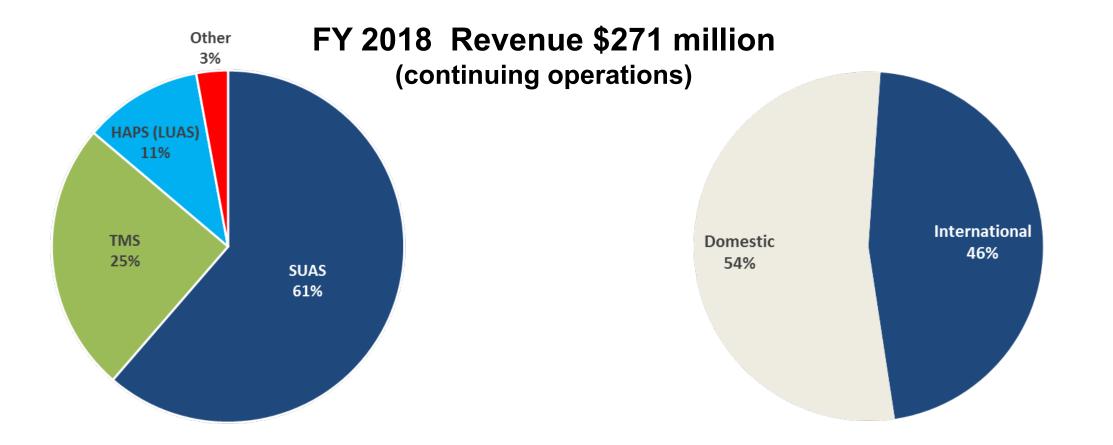
## **Revenue and EPS Growth After Sequestration** FY15 – FY17 Investments driving profits and revenue growth



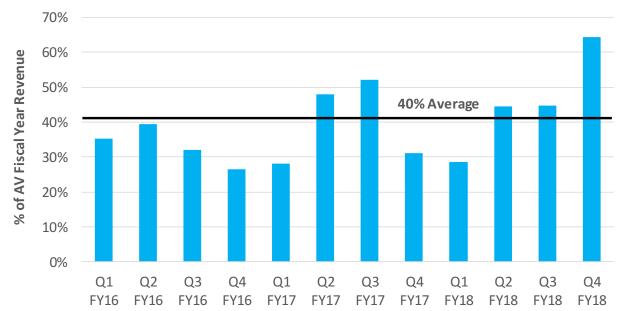
**Notes:** Revenue presented includes revenue from both UAS Business Segment (continuing operations) and the EES Business (in FY18, reclassified to discontinued operations). Diluted EPS is the fully diluted net income per share attributable to AeroVironment.



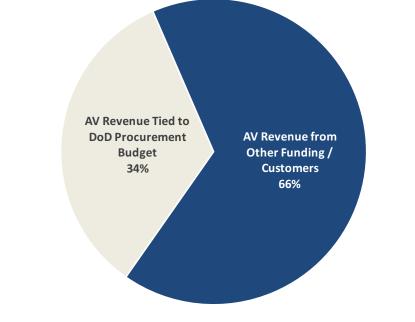
## FY18 Revenue Profile – TMS & International Becoming Cornerstones of Business; HAPS Growing



# Majority of AeroVironment Revenue Not Historically Tied to DoD Procurement Budget Line Items



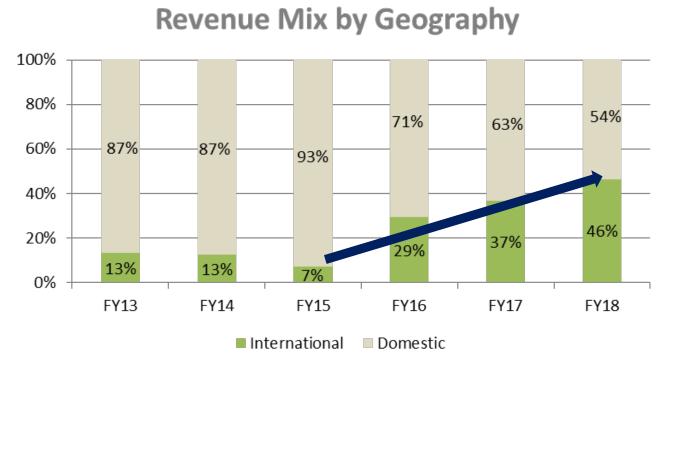
#### End of Qtr. Funded Backlog vs. AeroVironment Annual Revenue

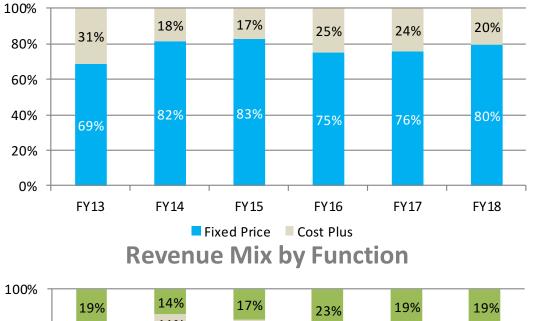


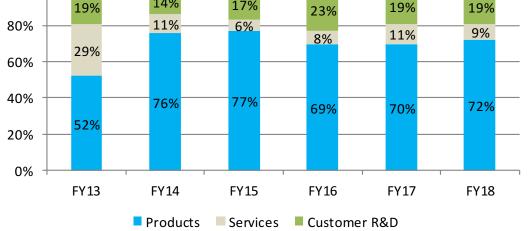
AV Revenue vs. GFY16-17 DoD Procurement Budgets



## A Growing International Business, and Mix Dominated by Fixed Price and Product Sales Revenue Mix by Contract Type







PROCEED

WITH CERTAINTY

AeroVironment

## **Gross Margin Trends – Sensitive to Mix and Volume**



Gross margin impacted by the mix between products and services...

...and quarterly sales volume



## Multi-Faceted Investment Strategy Levers P&L and Balance Sheet

	Investments					
	Short Term	Medium Term	Long Term			
Organic	Significant Revenue and Margin Contribution	Market Validation	Exploration			
U	Acquisitions					
Inorganic	JV, Licensing, Strategic Investments					

## **Uses of Capital:**

- Internally Funded R&D
- Growth Working Capital
- Growth Capital Expenditures
- Inorganic
   Investments
- Return of value to stockholders



## **AeroVironment Compares Favorably to Small Cap Defense/Defense Tech Peers**

25.1% 16.7% 16.5% Median: 3.6% Median: 4.5% 13.9% 11.1% 8.5% 4.9% 7.0% 5.6% 5.6% 4.5% 2.0% 1.0% 3.6% 0.1% 2.5% (1.9%) (2.5%)(9.1%) (4.5%)AVAV ESLT FLIR IRBT ATRO DCO OSIS VSAT KVHI MRCY KEYW TDG COL HRS GD NOC LMT RTN LLL BA

Most Recent Fiscal Year Gross Margin %

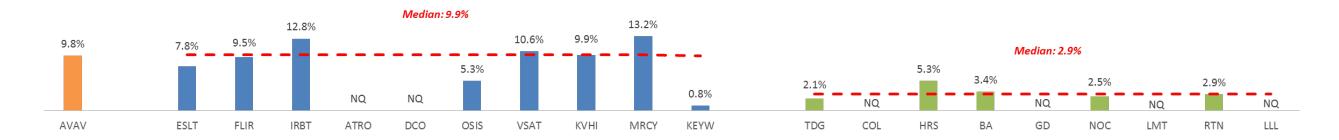
Most Recent Fiscal 3-Year Revenue CAGR



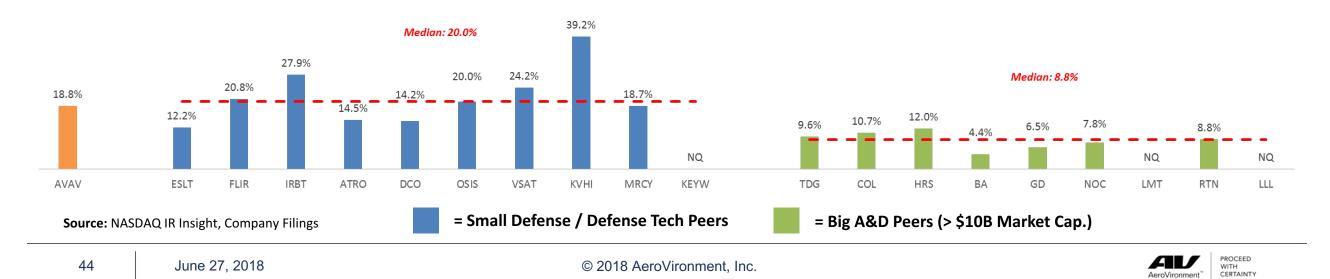


## AeroVironment Compares Favorably to Small Cap Defense/Defense Tech Peers

Most Recent Fiscal Year R&D Expense as a % of Revenue

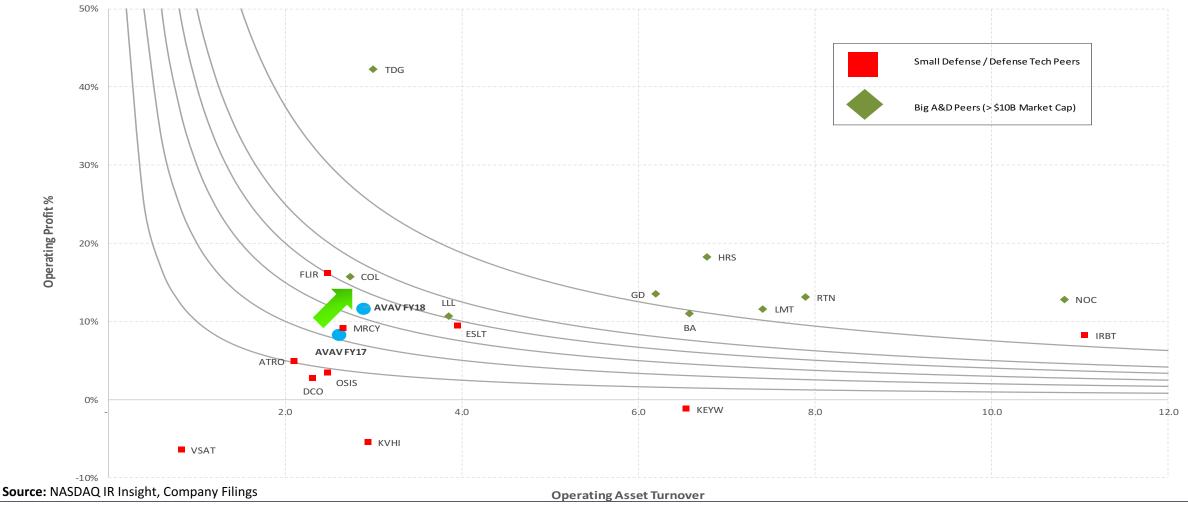


Most Recent Fiscal Year SG&A Expense as a % of Revenue



## Return on Net Operating Assets (RNOA) - Improving Asset Utilization Aligned with Defense Technology Peers

AV Comparable Company RNOA





# **HAPS Financial Reporting**

### Accounting for HAPS Mobile, JV

- Joint Venture
  - 5% ownership stake
  - Equity method of accounting
    - 5% of the JV gain/(loss) recorded as Equity method of, net of tax (no tax benefit)
- Design Development Agreement/ Other Revenue
  - Not to exceed \$75.8 million cost-plus fixed-fee contract
  - \$7.5M fixed price contract

### **Financial Reporting**

## Joint Venture \*

	<u>FY18</u>	<u>Total</u>
Cash (\$M)	(\$3.3)	(\$5.2)
Other assets long-term (\$M)	\$2.0	\$5.2
Equity method (loss), net of tax (\$M)	(\$1.3)	(\$5.2)

## Design Development Agreement

	<u>FY18</u>	<u>Total</u>
Revenue (\$M)	\$22.1	\$75.8
Other Revenue (\$M)	\$7.5	\$7.5
Unbilled receivables and retentions (\$M)	\$3.1	

\* Notes: Excludes exchange loss on conversion to Japanese Yen



## FY19 – Financial Guidance Continuing Operations

\$N	lillions, excluding EP	FY17*	FY18	FY19 Guidance			
	Revenue	\$228.9	\$271.1	\$290 - \$310			
	Growth	(2)%	18%	7% - 14% Growth			
	Gross Profit	\$95.2	\$108.9				
	Gross Margin	42%	40%				
	R&D Expenses	\$28.5	\$26.4				
	R&D	12%	10%	10% - 11% of Revenue			
	Diluted EPS from Continuing Operations	\$0.72	\$0.95	\$1.10 - \$1.40 @ 5% ownership of HAPS Mobile JV and inclusive of a one-time gain due to litigation settlement of \$0.25 - \$0.26			
	Anticipated diluted share count: 24.1 million to 24.3 million Estimated Tax Rate on Continuing Operations: 15% - 18%						



## **Financial Takeaways**

- Strong financial position
- Increasingly diverse revenue streams
- Margin sensitivity to revenue mix and volume
- Increasing focus on strategic investments
- Anticipating continued growth



# Tomorrow, Together: Customer Panel

Flemming Olstroem, Major, Branch Head IMINT&UAS Research and Development Division Danish Army Intelligence Centre

Ulf Bogdawa, Director/CEO SkyDrones Tecnologia Aviônica S/A











# **Danish Army Unmanned Aerial Systems**

SUAS Danish Army since 2007



MAY 22<sup>ND</sup> 2018



## FROM RAVEN TO PUMA AE

- 2007 2013 Raven B (12.000<sup>(+)</sup> hrs)
  - DNK SOF procurement
  - DNK Army Troop trial (Afghanistan 2008-2013)
- 2012 now Puma AE (9.000<sup>(+)</sup> hrs)
  - DNK Army and SOCOM
- Organization
  - Four man Section; three Sections/Platoon; two Platoons
    - One Platoon supports one Battalion
    - Intelligence, Surveillance & Reconnaissance (ISR)
    - Actionable Intelligence at Battalion and Company levels







## **PUMA AE MISSIONS**











UNCLASSIFIED









UNCLASSIFIED



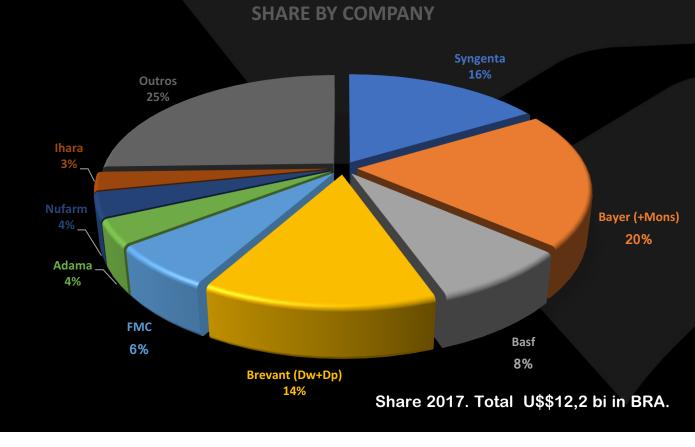




# SkyAgri

## SkyAgri – SkyDrones Farm Services

# IT'S ALL ABOUT MARKET SHARE IN A US\$ 12,2 BILLION BUSINESS



Chemical companies understand that to keep the Market Share they need information and they need to deliver more than chomicals

SkyAgri

## **Focus: Provide Farm**





### **Farmer Benefits**

- Will get precise managerial crop information
- Will be able to use spraying drones in unreachable/unsafe areas or stop using manual spraying
- Will have this information integrated with Enterprise Resource Planning Software if needed
- Will have means to reduce costs and boost productivity



# FARMERS DON'T WANT FLYING CAMERAS, THEY NEED PRECISE INFORMATION. THEY DON'T WANT SPRAYING MACHINES, THEY NEED RESULTS

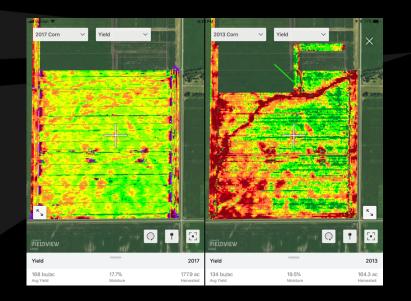
(and this is how we are giving it to them)

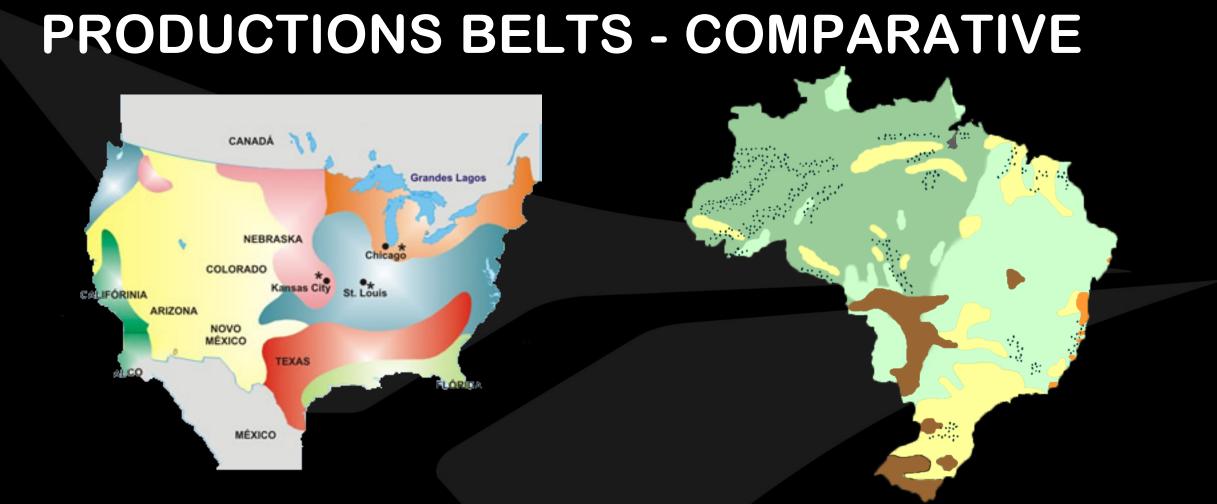
## **Climate Field View - Monsanto**











Belts EUA – Agricultural belts predominantly monoculture specialized in production

> Main Crops 2017 Corn – 33,34 hectares -> 357,26 mmt Soy – 35,85 hectares -> 115,80 mmt

# Belts BRA – Agricultural belts in polyculture favored by climate

Main Crops 2017 Corn – 17,70 hectares -> 95,00 mmt Soy – 34,70 hectares -> 107,00 mmt

## **IT'S ALL ABOUT FRANCHISES**





SKYDRONES

Maintenance Center

**Flight Training School** 



SKYAGRI Aerial Mapping

Aerial Spraying

Agro Consulting

# AeroVironment QUANTIX

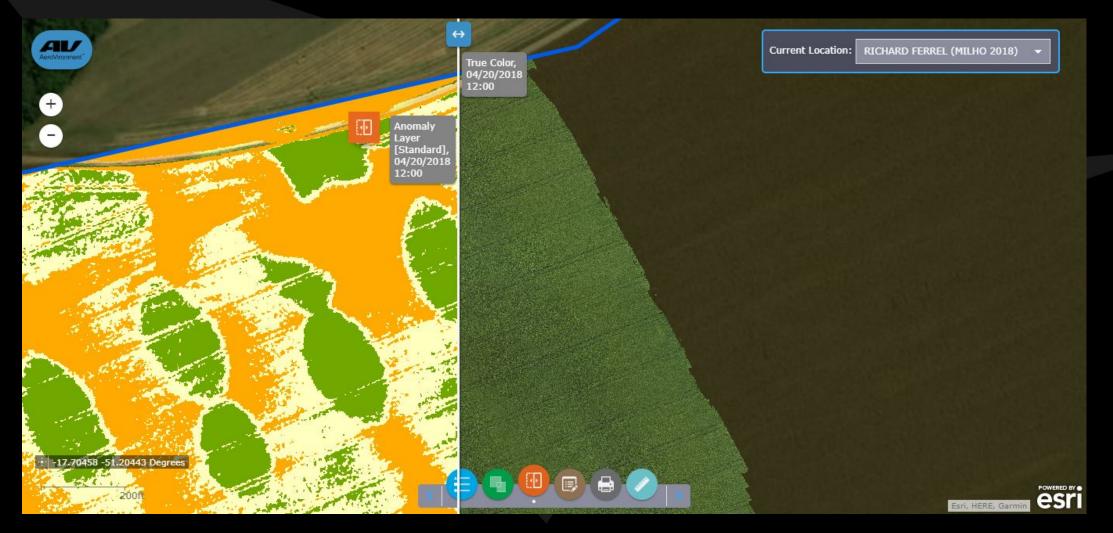




## Benefits

- Ease of use
- Tested in the harsh conditions of Goias
- Unlimited supply (faster manufacturing)
- Cloud processing support SkyDrones Algorithms
- Can be customized to project standards

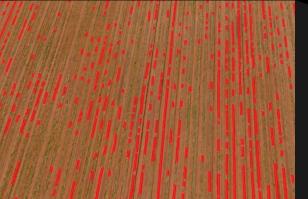
# AeroVironment Decision Support System



SkyAgri

## **SkyAgri** ALGORITHMS FOR AGRICULTURE

### **PLANT LINES AND FAULTS**



Sugar cane



### **PLANT FAILURE AREAS**



soy

### PLANT COUNTING







citrus

WEED



Sugar cane

AeroVironment<sup>™</sup>

PROCEED WITH CERTAINTY

# Summary and Q&A

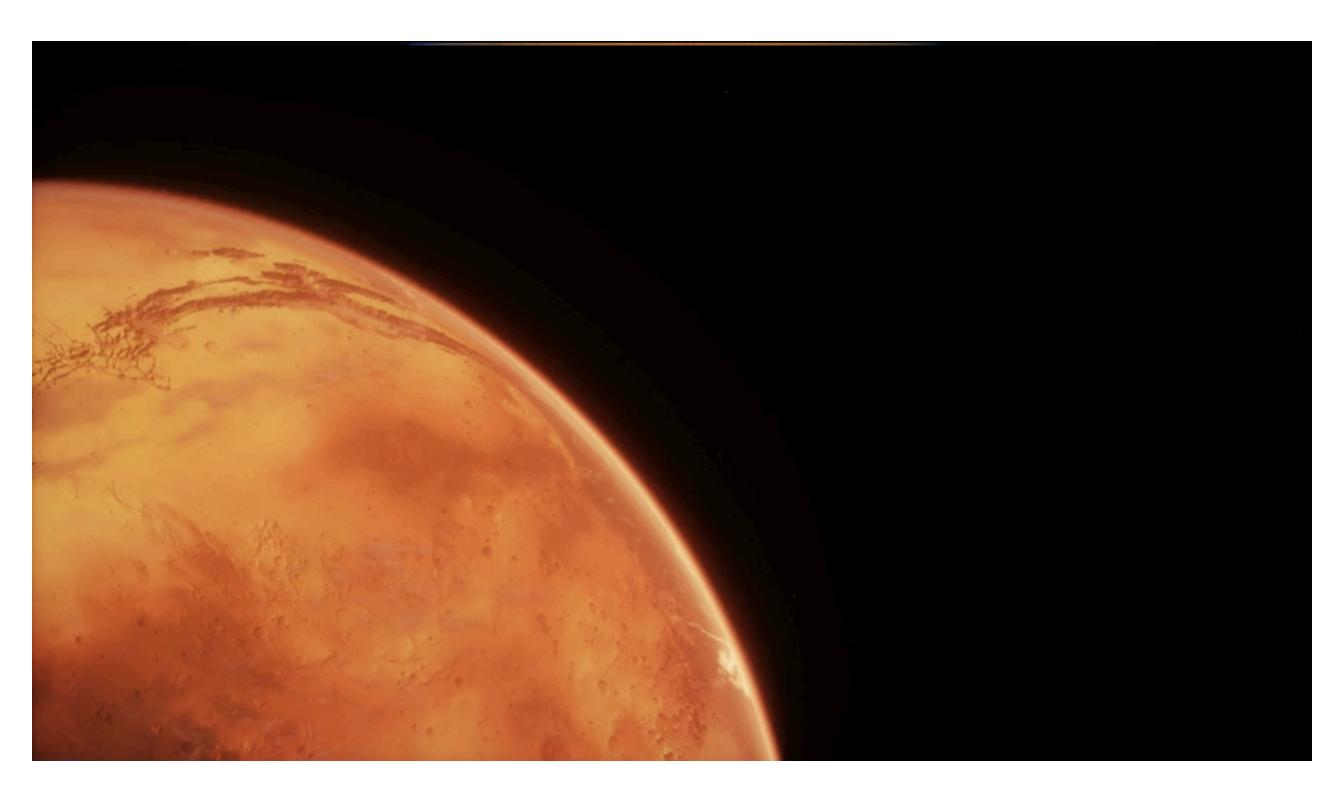
Wahid Nawabi, President and Chief Executive Officer Teresa Covington, Senior VP and Chief Financial Officer



# Key Takeaways

- Pure-play solutions company focused on robotics, sensors, analytics and connectivity technologies
- Leader in multiple market segments with promising growth opportunities
- Strong fiscal 2018 financial and operational performance
- Balance sheet to support strategic investments for longterm value creation





AeroVironment<sup>™</sup>

PROCEED WITH CERTAINTY

# Thank You

