



2015 INVESTOR AND ANALYST DAY

***Positioning for Long-Term Value Creation***

**Simi Valley, CA**

July 9, 2015

# Safe Harbor Statement

- This presentation contains "forward-looking statements" as that term is defined in the Private Securities Litigation Reform Act of 1995. 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; changes in the supply and/or demand and/or prices for our products; the activities of competitors; failure of the markets in which we operate to grow; failure to expand into new markets; changes in significant operating expenses, including components and raw materials; failure to develop new products; changes in the regulatory environment; product liability, infringement and other claims; 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. 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.

# Objective

- Gain better understanding of AeroVironment and its prospects for long-term value creation by:
  - Meeting members of our senior management team
  - Meeting key program managers and employees
  - Viewing product demonstrations
  - Hearing from our customers

# Agenda

Topic	Presenter	Time
Welcome	Steven Gitlin, <i>VP Investor Relations</i>	7:30 – 7:45
Long-Term Value Creation Strategy	Tim Conver, <i>Chairman and Chief Executive Officer</i>	7:45 – 8:15
Efficient Energy Systems	Ken Karklin, <i>VP and General Manager, EES</i>	8:15 – 8:45
Break		8:45 – 9:00
Unmanned Aircraft Systems	Kirk Flittie, <i>VP and General Manager, UAS</i>	9:00 – 10:00
Financial Review	Teresa Covington, <i>VP Finance</i>	10:00 – 10:30
Travel		10:30 – 11:00
Flight Demonstration		11:00 – 11:30
Travel		11:30 – 12:00
Customer Panel & Lunch		12:00 – 1:00
Solution Expo	All	1:00 – 1:30
Summary	Steven Gitlin, <i>VP Investor Relations</i>	1:30 – 1:45
Optional Factory Tour		1:45 – 2:45

# **Tim Conver**

*Chairman and Chief Executive Officer*

# AeroVironment Investment Thesis

## Profitable Growth through Technology Based Innovation

- Investing into growth portfolio for long-term stockholder value
- Prepared to invest to secure large, high ROIC growth opportunities

## Differentiated Solutions with Leading Market Positions

- Pioneer & market leader in Small UAS and EV solutions
- Next-generation technology for electric UAS, autonomy and decision-support solutions

## Multiple High-Value Market Opportunities

- Market leader in core business
- Large UAS: significant unmet needs
- Tactical Missile Systems: potentially high volume
- Commercial UAS: large emerging opportunity

## Strong Financial Performance

- Growing, profitable core business
- Strong balance sheet
- Consistent gross profit margin

# Business Model – Growth Portfolio Builds On Profitable Core Business

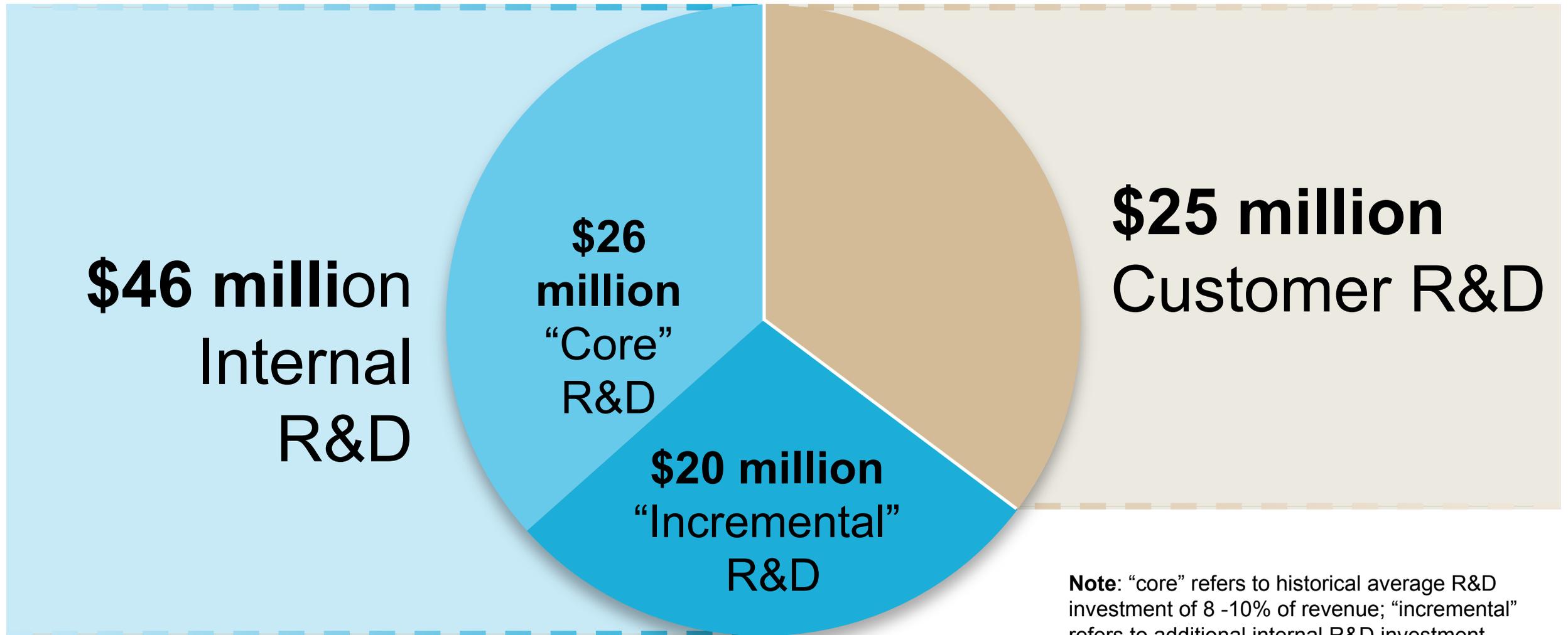
## Core Business

- Market-leading positions
- Growth opportunities
- Expanding customer base
- Expanding geographic scope

## Growth Portfolio

- Several multi-billion dollar addressable markets
- Leading positions in emerging opportunities
- Investing in fiscal 2015 and 2016 for long-term value creation

# Fiscal 2015 R&D Investments Support Our Growth Strategy in Three Strategic Areas...



**Note:** “core” refers to historical average R&D investment of 8 -10% of revenue; “incremental” refers to additional internal R&D investment

# 1. Large UAS (LUAS)

## *More than \$20 Billion Potential Annual Target Market*

- Combined Global Observer High Altitude Long Endurance (HALE) and Tern Medium Altitude Long Endurance (MALE)
  - Global Observer: active customer discussions
  - Tern: committed to delivering most capable and effective solution for phase III contract decision later this year



See slides 41 and 42 for market estimates

## 2. Tactical Missile Systems (TMS)

### *\$1 Billion Potential Annual Target Market*

- Demonstrated three Switchblade variants for Family of TMS
  - Expect at least one to produce product revenue in fiscal 2016
  - Expect other two likely will receive additional customer funding in fiscal 2016 – extend demonstrations into fiscal 2016
  - Potential fourth Switchblade variant may attract customer funding this year
- Preparing for LMAMS program of record requirements



See slide 39 for market estimates

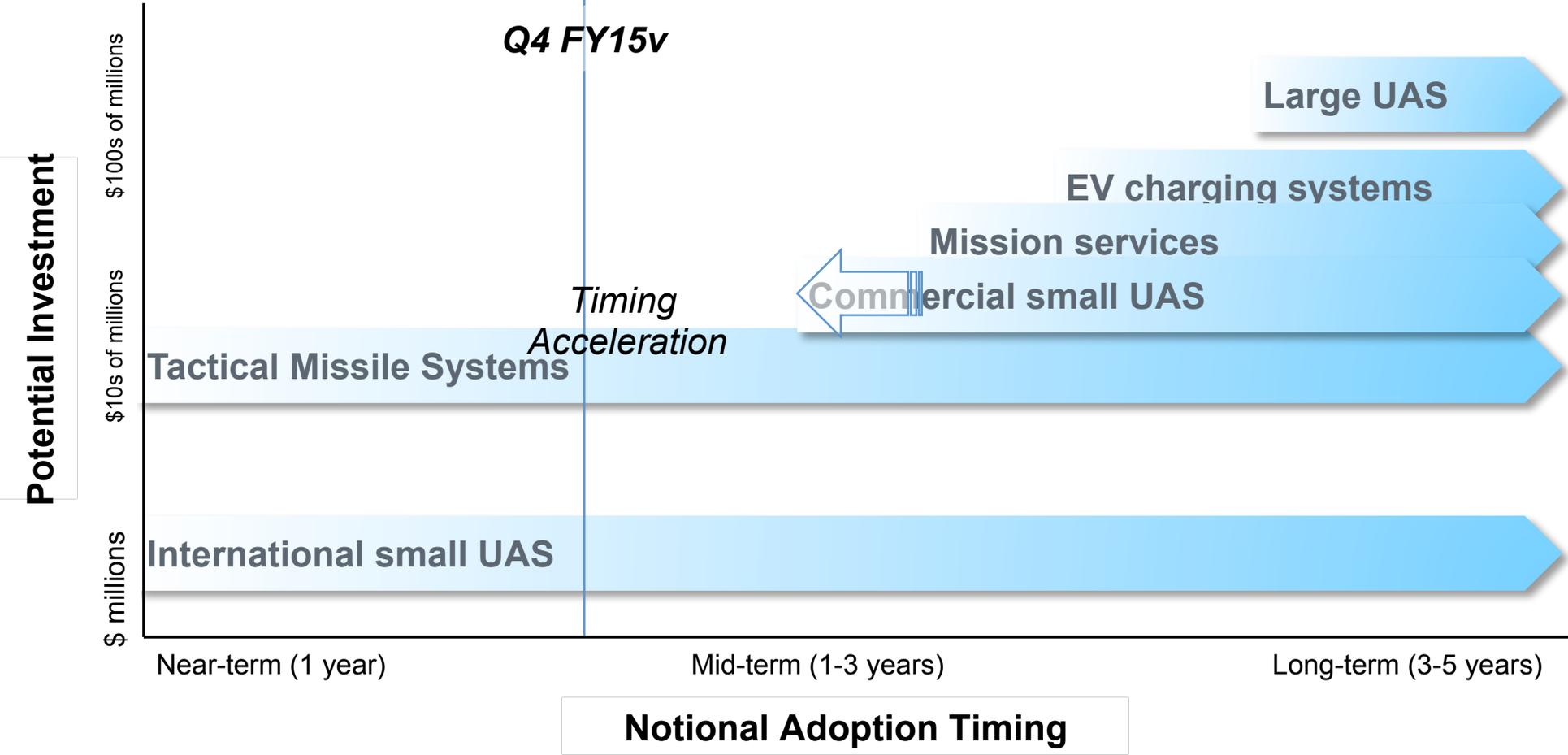
### 3. Commercial UAS (CUAS) *\$Multi-Billion Potential Market*

- Hardware and software development to optimize for applications and requirements for commercial versus military customers
- Pilot programs with lead adopters in large market opportunities, such as our multi-year information services agreement with BP
- Increasing customer engagement

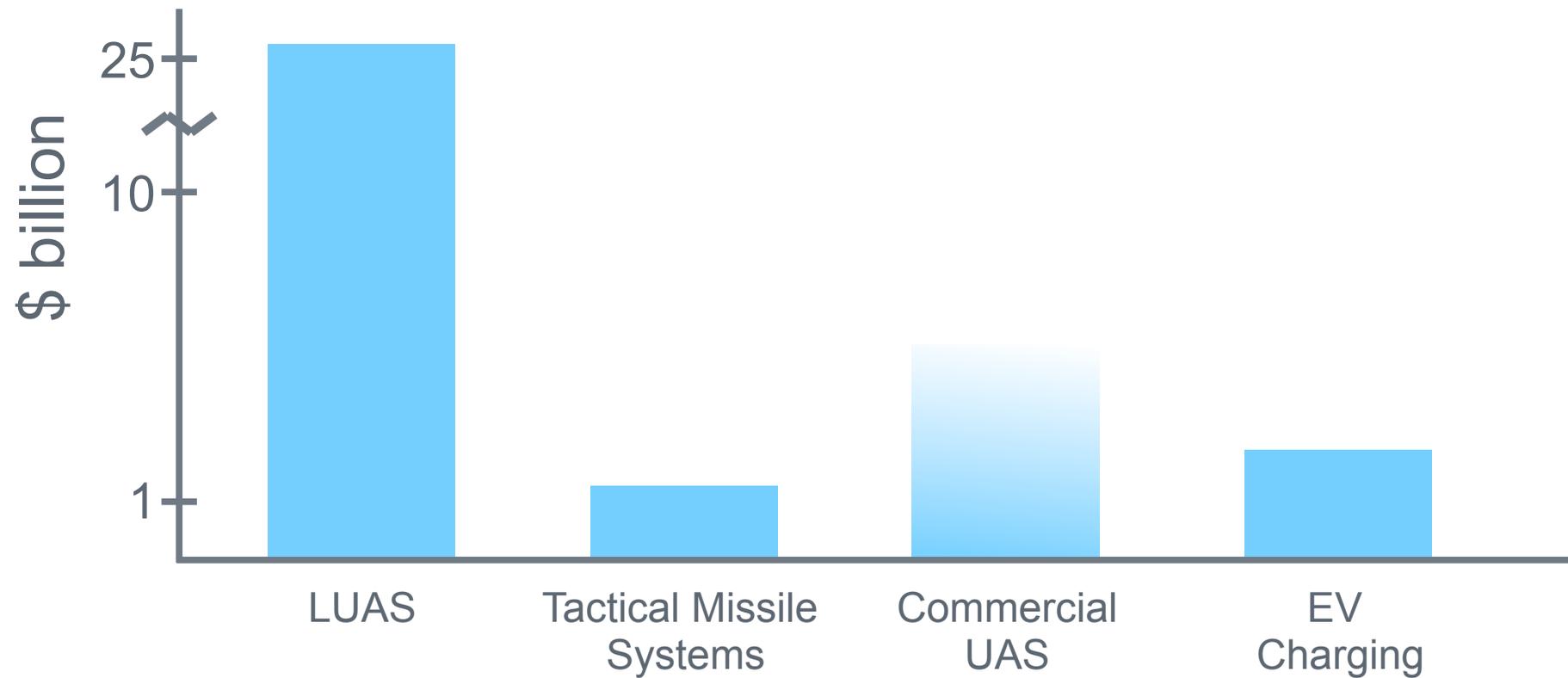


# Positioned for Multi-Opportunity Growth Across Varying Timeframes and Investment Levels

– Adoption timing (beginning of arrows) can shift over time



# Strategically Positioned for Multi-Billion Dollar Market Opportunities – Estimated Potential Market Sizes



Source: Frost & Sullivan, U.S. Department of Defense, company estimates

# Fiscal 2016 Guidance

\$260m–\$280m

Revenue

36% to 37.5%

Gross Profit Margin

***Anticipated  
Growth in:***

Tactical Missile Systems

International Small UAS

Advanced Programs

Large UAS

# How Our Investments are Furthering Our Strategy

- ✓ Developing next-generation technology
- ✓ Alignment with market needs
- ✓ Deepening customer engagement and investment
- ✓ Improved competitive positioning
- ✓ Growing customer activities consistent with market adoption
  - Development & demonstration funding – TMS
  - Requests for information & teaming MOUs – GO
  - Requests for demonstration & service agreements – CUAS

***Strategic Investments Helped Expand Our Growth portfolio and Position AeroVironment for New Market Opportunities***

# **Ken Karklin**

*Vice President and General Manager, EES*

# Energy Management Solutions for Electric Vehicle Development, Production & Operation

25,000

AeroVironment Level 2  
EVSE deployed in North  
America

19,000

Industrial EVs charged  
every day by AeroVironment  
PosiCharge

# Growing International EES Footprint

## 39 COUNTRIES OUTSIDE THE US AND US TERRITORIES (AS OF MAY 2015):

Australia, Brazil, Canada, Chile, China, Columbia, Ecuador, Egypt, El Salvador, Finland, France, Germany, Guam (US Territory), Hong Kong, Iceland, India, Indonesia, Ireland, Italy, Japan, Jordan, Macau, Malaysia, Mali, Mexico, Netherlands, New Zealand, Norway, Panama, Portugal, Puerto Rico (US Territory), Singapore, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, UAE, United Kingdom



# EV Test Systems

- Serving in R&D labs for automakers, battery developers, government agencies, universities
- Introduced new digital system capable of more than one megawatt
- Growth strategy: focus on adjacent applications



# Industrial EV Charging Systems

- Leading solutions for automated vehicles, electric forklifts, reach trucks and tugs
- Factories, airports, distribution centers
- Expanding into adjacent market segments

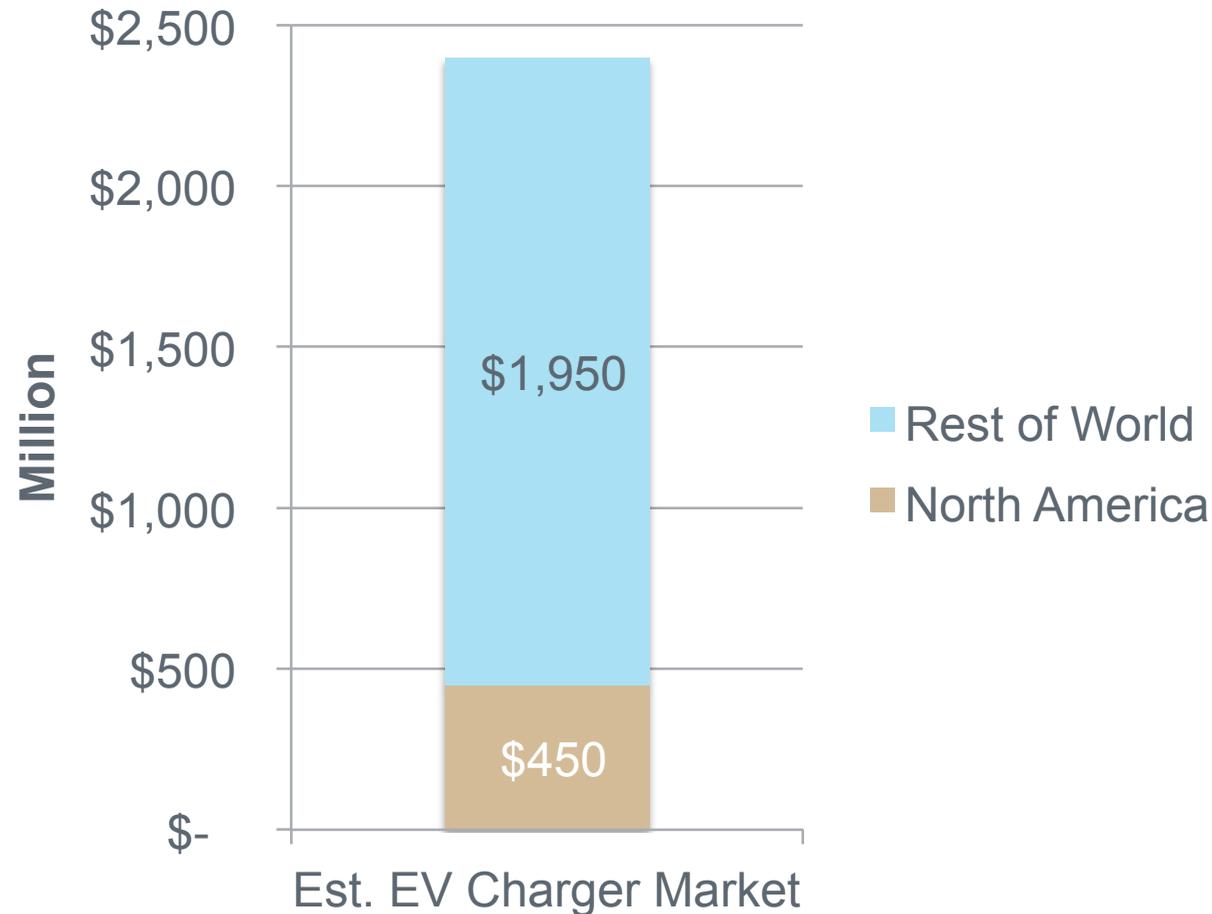


# Passenger EV Charging Solutions

- Innovative and practical charging solutions for EV drivers
- Home, workplace, public and highway
- Now a Tier-1 automotive supplier
- Charge smarter, driver farther



# EV Charging Solutions Estimated Annual Potential Market: \$2.4 billion

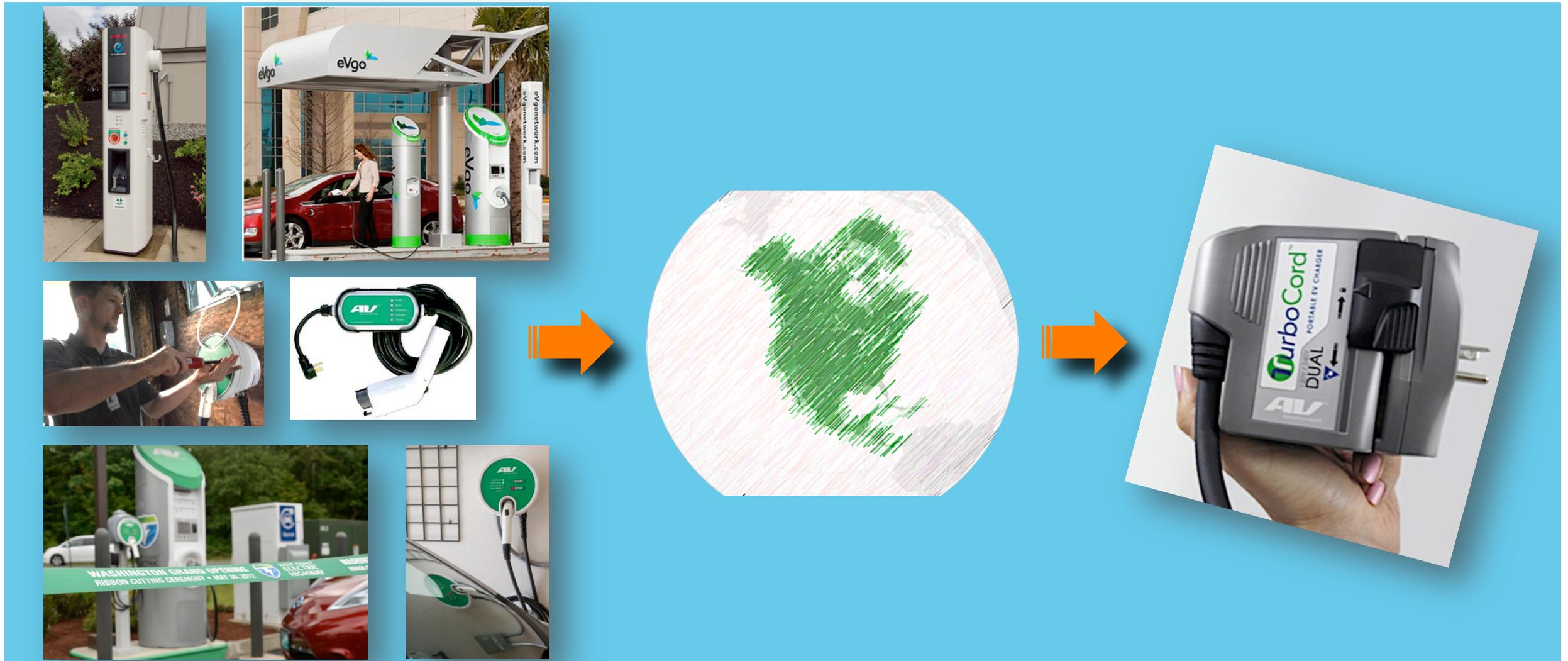


Source: company estimates

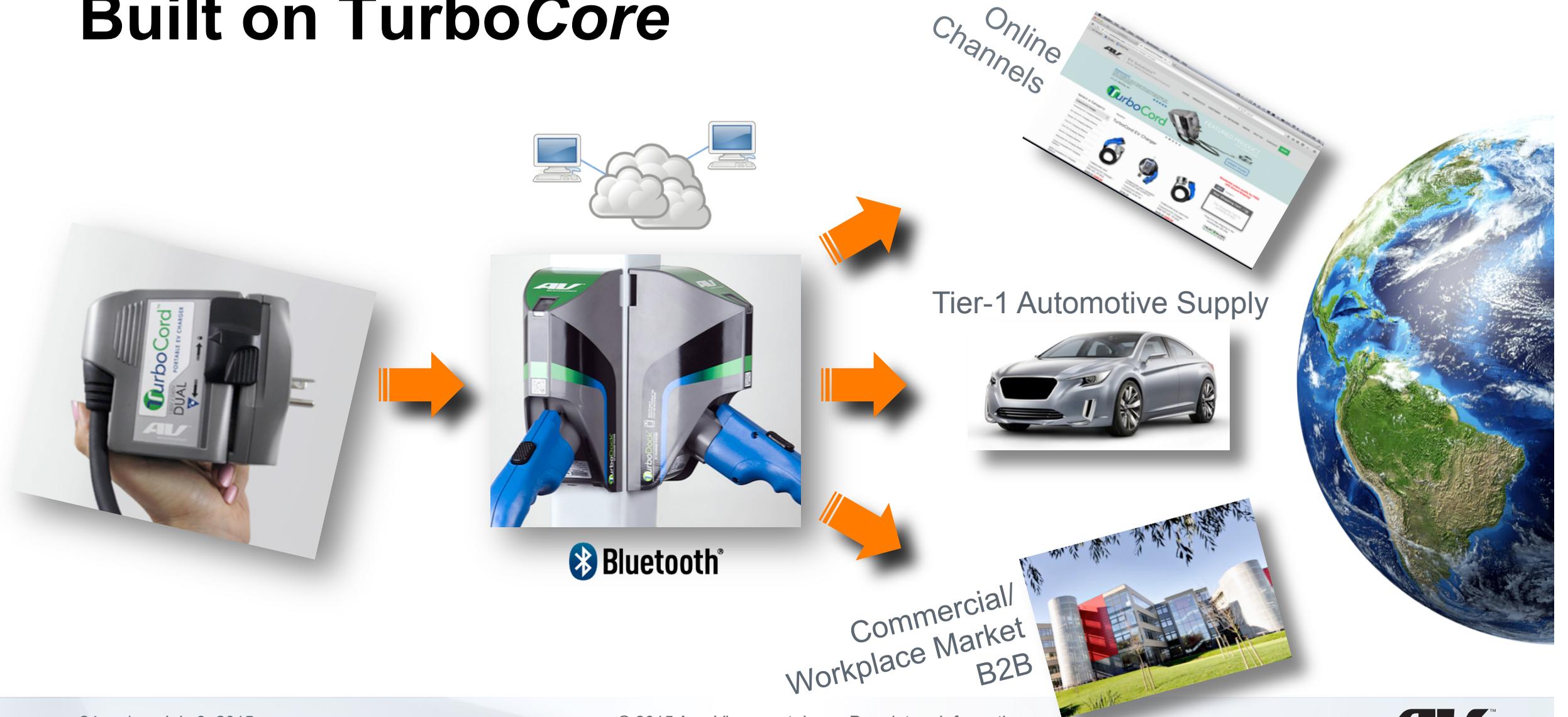
Assumptions used to estimate potential market size:

- Annual light vehicle shipments per year
  - North America = 15 million
  - Rest of World = 65 million
- Potential future plug-in percentage of global light vehicle shipments = 5%
- Average charger price per vehicle = \$600

# Evolution of Our EV Charging Solutions Strategy



# Passenger EV Charging Growth Strategy Built on TurboCore



# EES Summary

- Strong positions in markets for EV Test, Industrial EV charging and Passenger EV charging systems
- High value market opportunity for passenger EV charging solutions globally
- TurboCore drives growth

# 15 Minute Break

# **Kirk Flittie**

*Vice President and General Manager, UAS*

# AeroVironment – Leader in Unmanned Aircraft Systems

25,000

New and replacement small unmanned aircraft delivered

31

Allied nations have procured AeroVironment Small UAS

# Delivering *Powerful Insight. On-Demand.* to a Range of Industries and Customers



Color Video



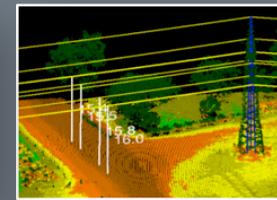
Thermal Video



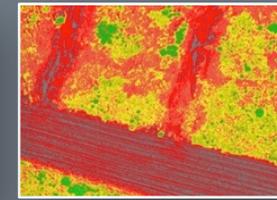
High Resolution Imagery



Communications



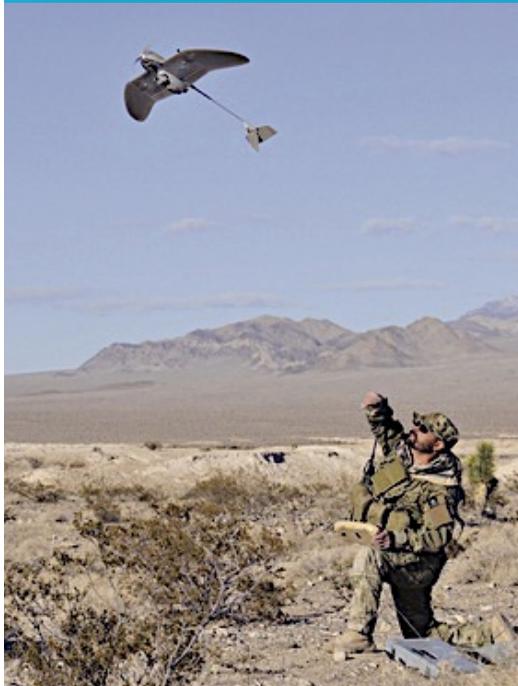
LiDAR



Multi-Spectral

# Four Business Areas Focusing on Large Market Opportunities

## Small UAS



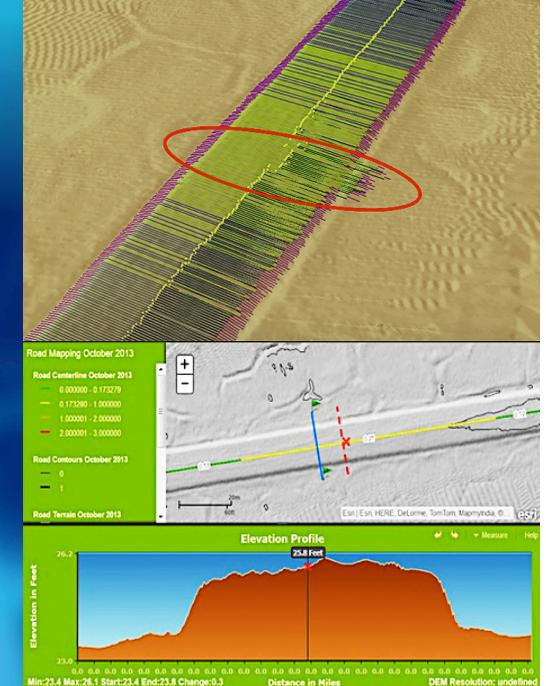
## Large UAS



## Tactical Missile Systems

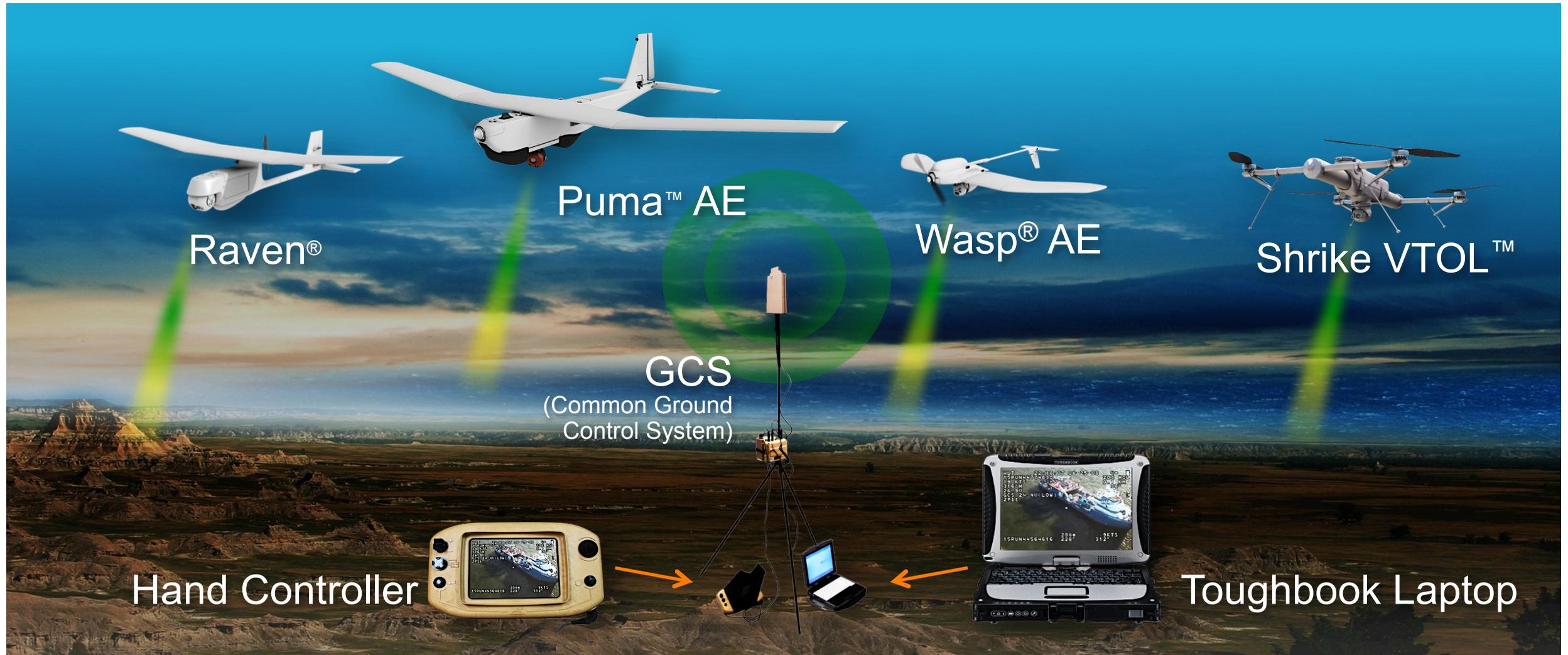


## Commercial UAS



# Family of Small Unmanned Aircraft Systems

Tactical ISR



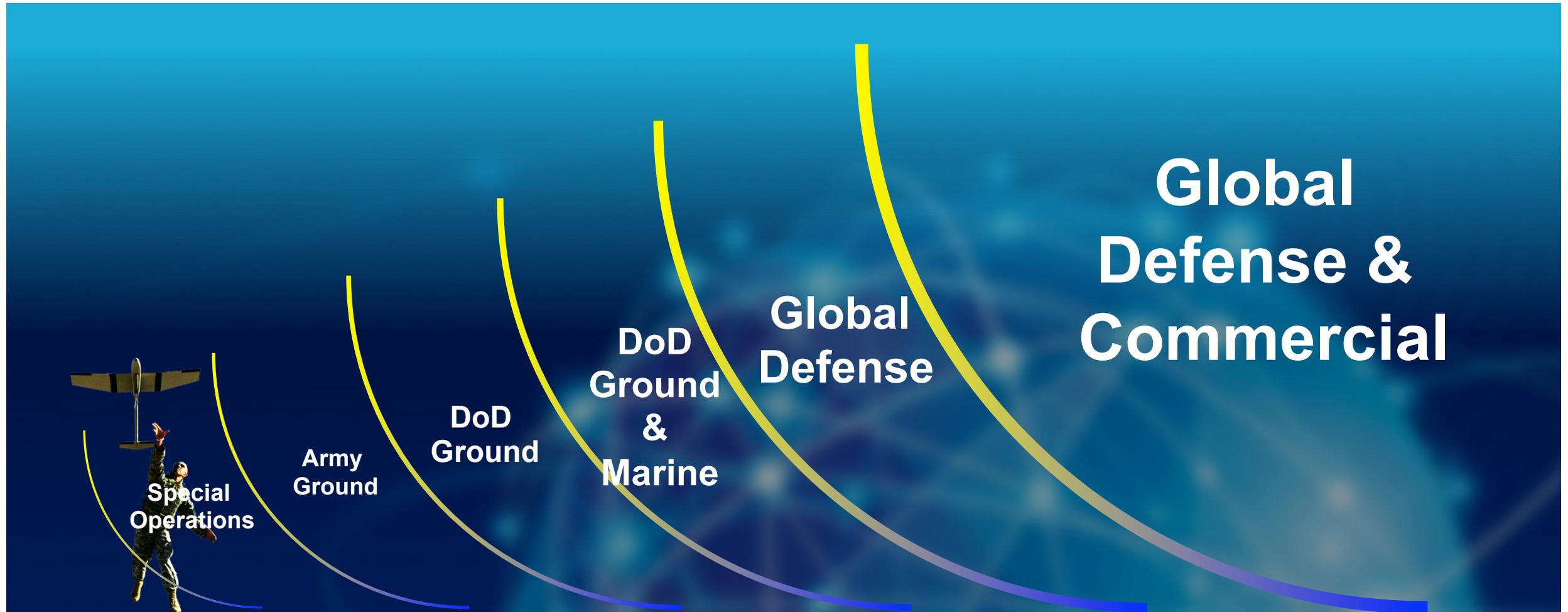
# Family of Systems Addressable Market

- Adopted by all U.S. ground forces
- New capabilities attracting U.S. Navy interest for maritime operations
- **\$671 million** revenue forecast for global tactical small UAS market in 2016<sup>1</sup>



<sup>1</sup> Source: Frost & Sullivan – *Global Military Unmanned Aerial Vehicles Market Assessment*, Sept. 2014

# AeroVironment Family of Small Unmanned Aircraft Systems Target Markets Evolution



# Growing International Small UAS Footprint

## 31 COUNTRIES OUTSIDE OF THE US (AS OF MAY 2015):

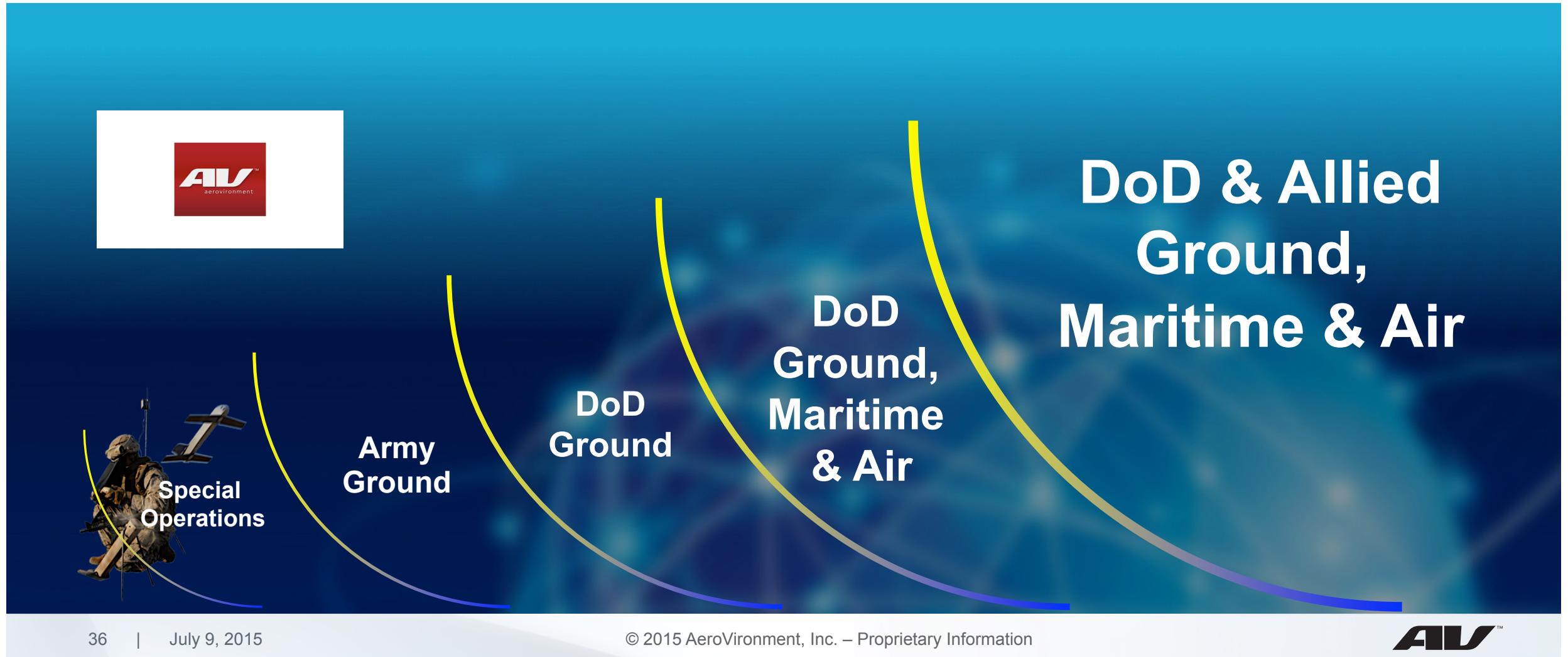
Australia, Italy, Denmark, Czech Republic, Spain, Netherlands, Thailand, Lebanon, Saudi Arabia, Estonia, Norway, Uganda, Sweden, Romania, Singapore, UK, France, Malaysia, Hungary, Japan, Kenya, Yemen, Colombia, Canada, Tunisia, Macedonia, Bulgaria, Uzbekistan, Lithuania, Burundi, Egypt



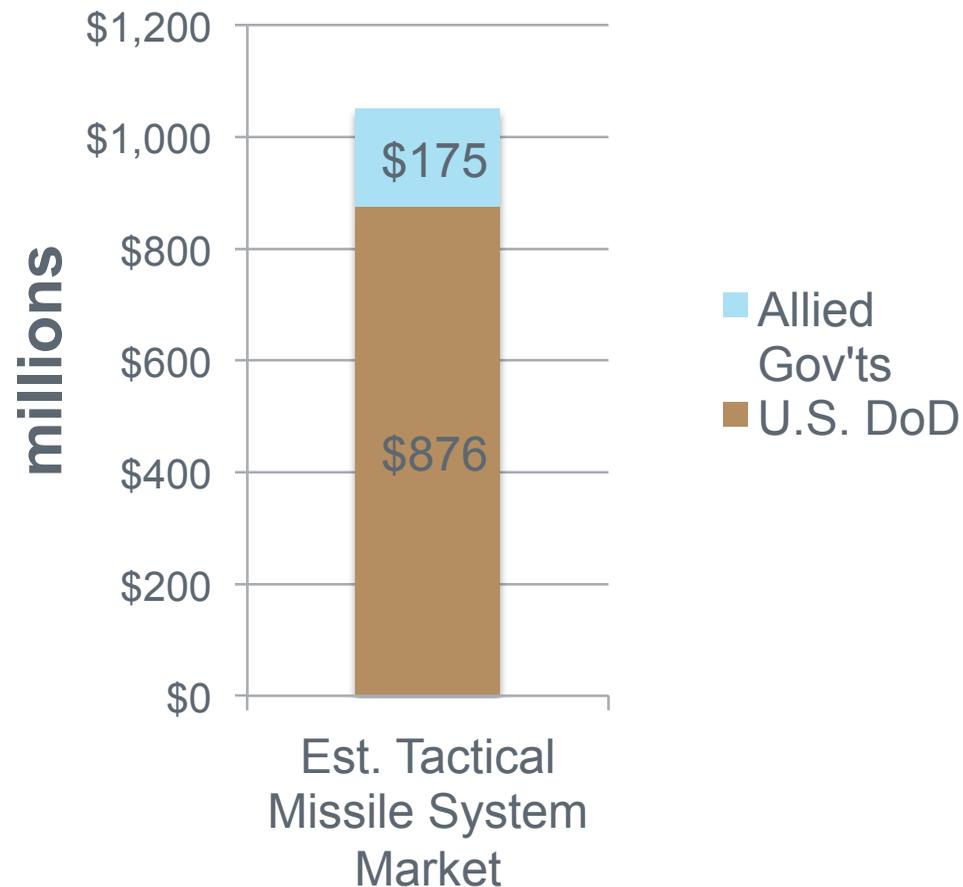
# Small UAS Well Suited for Multiple International Opportunities

Market	Description	Market Drivers
Foreign Military	Urgent Operational Requirements due to threats (terrorism, border infiltration). Build up of CONOPS. Try before you buy products.	Limited budgets. Reluctance to commit to large capital investments.
Border Security	International border security. Key areas in Middle East (UAE, SA), South East Asia and South America.	Increasing threat. Large borders to cover. Increase coverage w/out significant increase in cost.
Critical Infrastructure Oil and Gas	Intelligence, Surveillance and Reconnaissance (ISR) Security Services to augment existing tech. Static over watch of infrastructure, pipeline surveil. Middle East, Africa, South America, South East Asia.	Increasing risk in Middle East. Cost reduction. Lower risk to operational personnel. Quick response.
Anti-Piracy	ISR ops off vessels. Early detection and avoidance. Search & Rescue. Deterrence.	Increasing Piracy. Skyrocketing shipping costs. Aversion to arming commercial ships.
Counter Narcotics and Illicit Trafficking	ISR services to augment current manned aircraft technologies.	Increased threat to US. Responsiveness

# AeroVironment Family of Tactical Missile Systems Target Markets Evolution



# Tactical Missile Systems Estimated Annual Potential Addressable Market: \$1 billion



## Assumptions used to estimate potential market size:

- Comparable weapons systems currently procured: Grenades, Javelin, Hellfire missiles, TOW missiles, Hydra rockets, Mortars, MLRS, Shoulder launched munitions, Griffin, SOPGM, Laser Maverick
- Total Government Fiscal 2015 budget for comparable weapons systems listed above \$876 million
- Est. 20% incremental allied demand of \$175 million

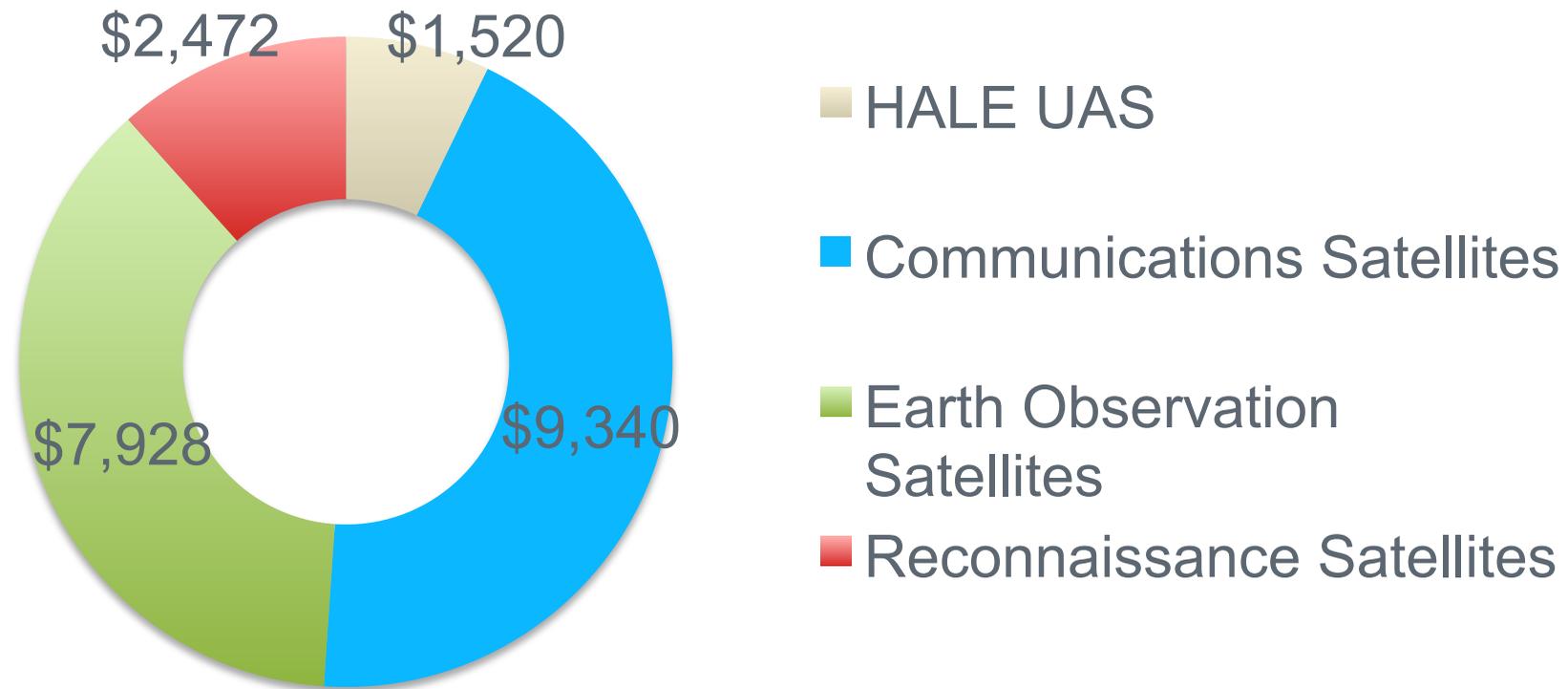
Source: U.S. Department of Defense Undersecretary of Defense (Comptroller)

# Key TMS opportunities

- Switchblade demand and urgent needs
- Developed three Switchblade variants (ground, air, sea) in fiscal 2015
  - Anticipate one of them to generate product revenue in fiscal 2016
  - Anticipate continued customer funding for two variants
  - Potential for development of fourth variant in fiscal 2016
- LMAMS Program of Record – likely delayed beyond government fiscal 2017 (Switchblade is the only deployed solution so far)

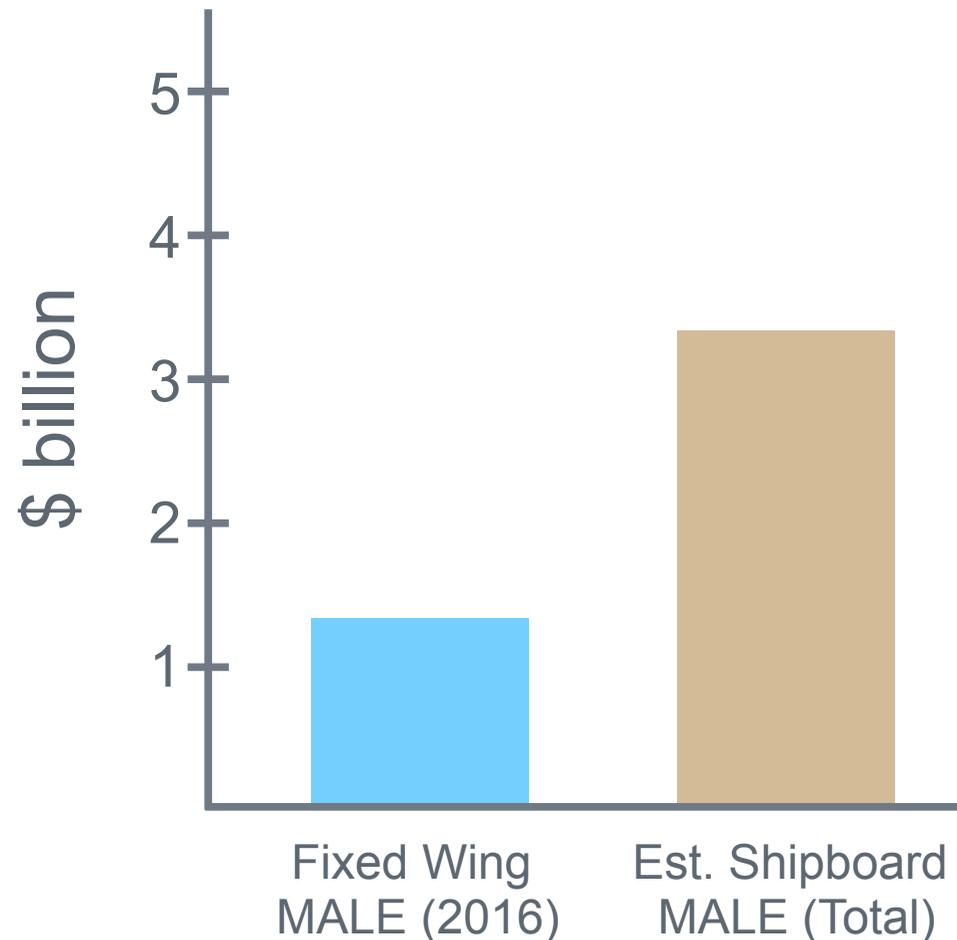
# HALE Total Potential Addressable Market - \$22 billion

## Revenue Forecast in Millions (2016)



Source: Frost & Sullivan – *Global Launch Systems and Satellites*, Dec 2014, *Global Military Unmanned Aerial Vehicles Market Assessment*, Sept. 2014

# MALE Addressable Market - \$1.3 Billion (2016) *Plus* \$3.4 Billion Total Potential Additional Opportunity



Assumptions used to estimate potential additional market size:

- Grey Eagle price est.: \$21.5 million
- 106 US Navy warships that could accommodate Tern-type UAS: DDG, LPD, LSD, LCS, JHSV, MLP, CVN
- \$2.3 billion U.S. Navy shipboard opportunity (likely larger if more than one per some ships)
- Allied navies = 25% of US Navy demand, or \$575 million
- Non-naval applications = 25% of US Navy demand, or \$575 million
- Current fixed wing MALE market size = \$1,354.2 billion for 2016 (Frost and Sullivan)

Source: Frost & Sullivan *Global Military Unmanned Aerial Vehicles Market Assessment*, Sept. 2014, company estimates

# Commercial UAS Enterprise Information Services Addressable Market

## ■ Energy

- Reduce Oil and Gas maintenance expense
- Reduce electric utility powerline inspection expense

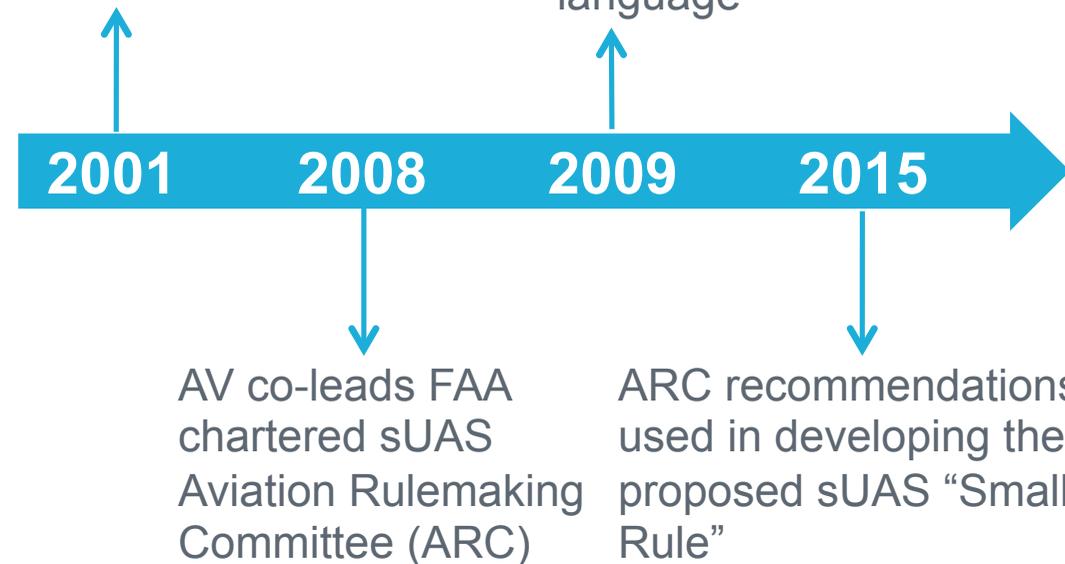
## ■ Agriculture

- Determine annual crop value
- Optimize resource consumption
  - Fertilizer
  - Water
  - Pesticide

# A Long Road to UAS Integration – Recent Progress

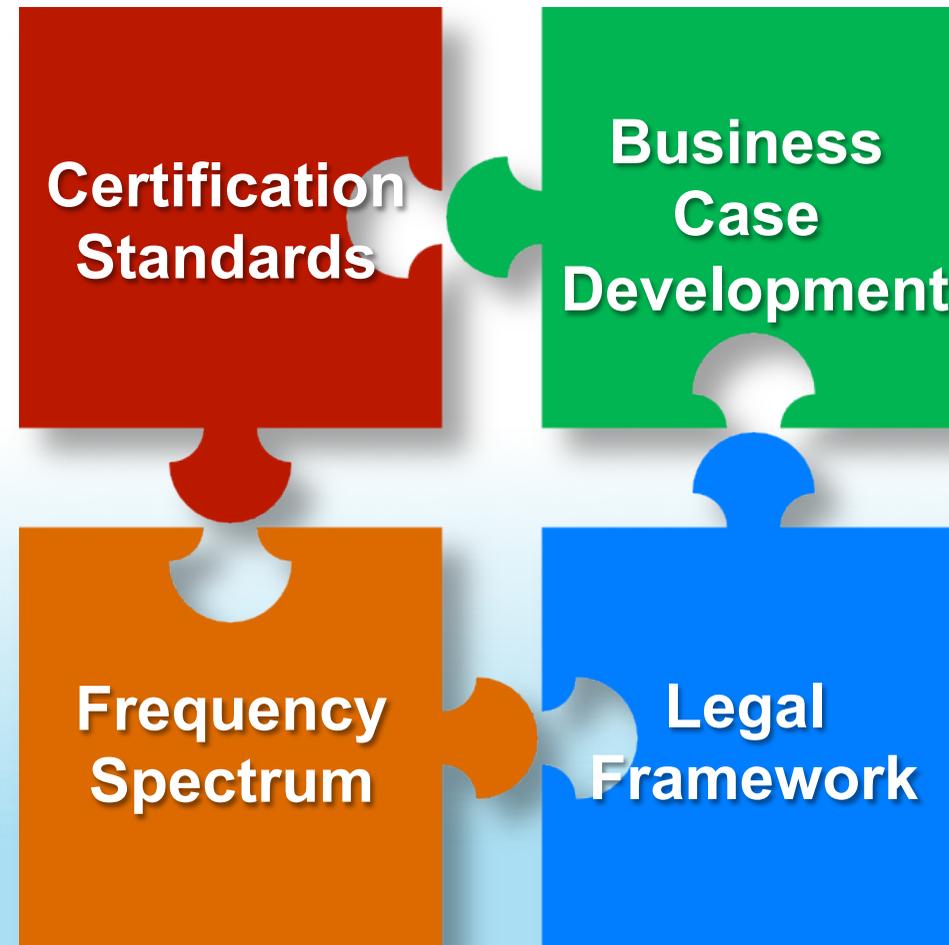
UAV National Industry Team (UNITE): High Altitude Long Endurance (HALE) UAS in the NAS for civil applications

sUAS ARC provides recommendations to FAA  
UNITE and AUVSI help shape 2012 FMRA language

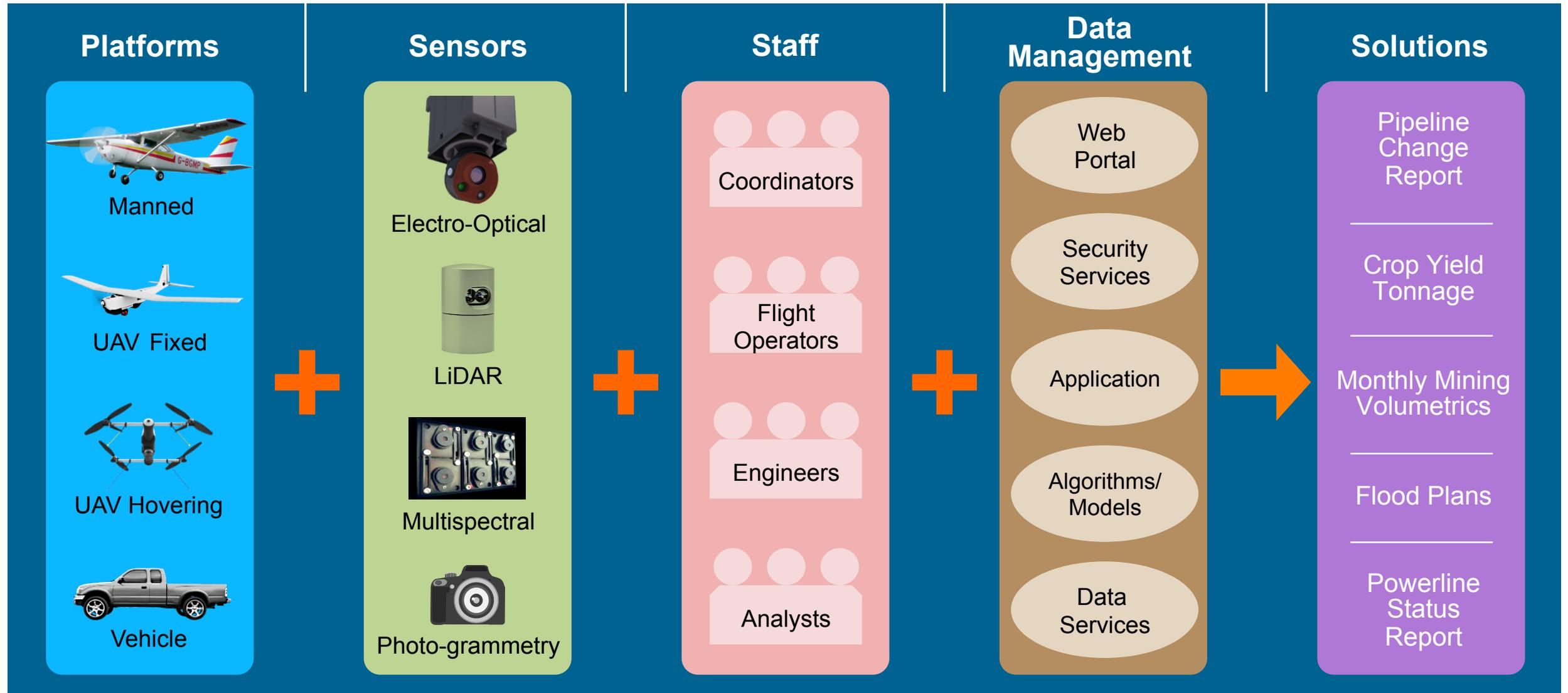


- **FAA Modernization and Reform Act (FMRA) of 2012**
  - Section 333 – more than 714 exemptions granted to date
  - Program to integrate UAS into the NAS at six FAA UAS test ranges: NV, AK, VA, NY, TX, and ND
  - Plan completed for permanent small UAS operating areas in Arctic and effort is underway
  - AeroVironment operating commercially in Alaska
- **Notice of Proposed Rulemaking (NPRM) for sUAS “Small Rule” published**
  - Public comments being adjudicated within the U.S. Government
  - Final rule for civil applications: 2016 or later
- **Operations over people and/or Beyond Visual Line of Sight**
  - Not addressed by the Small Rule
  - Special class certification under 21.17(b)

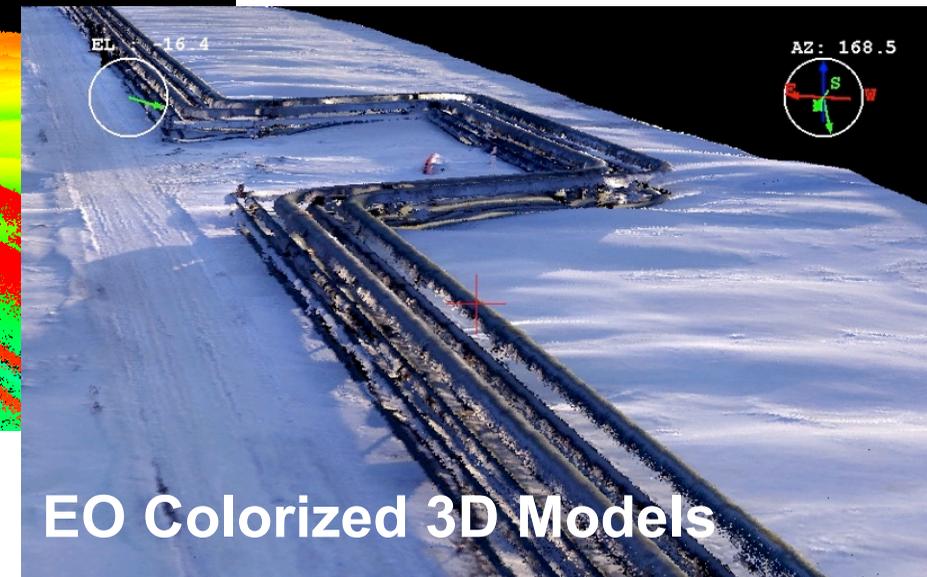
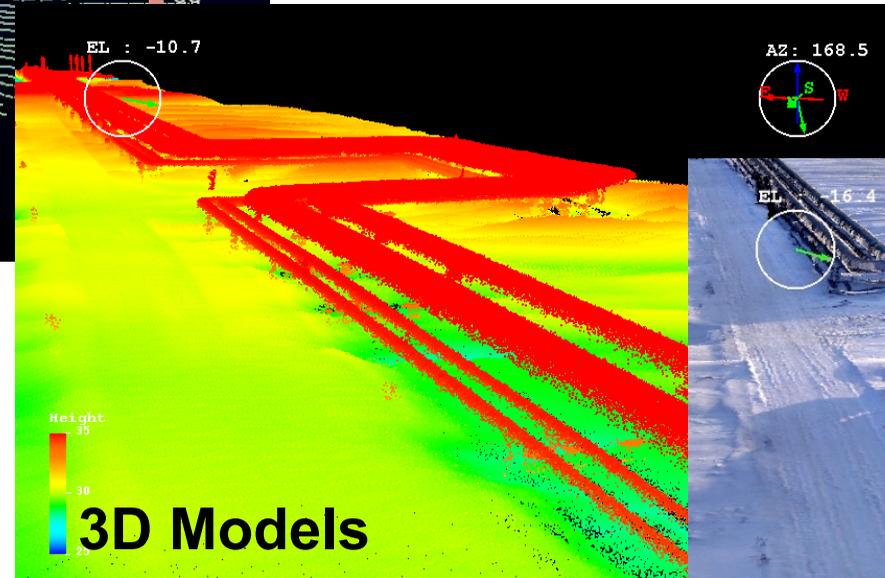
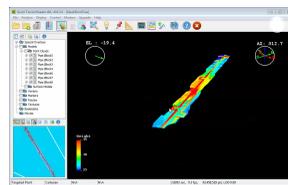
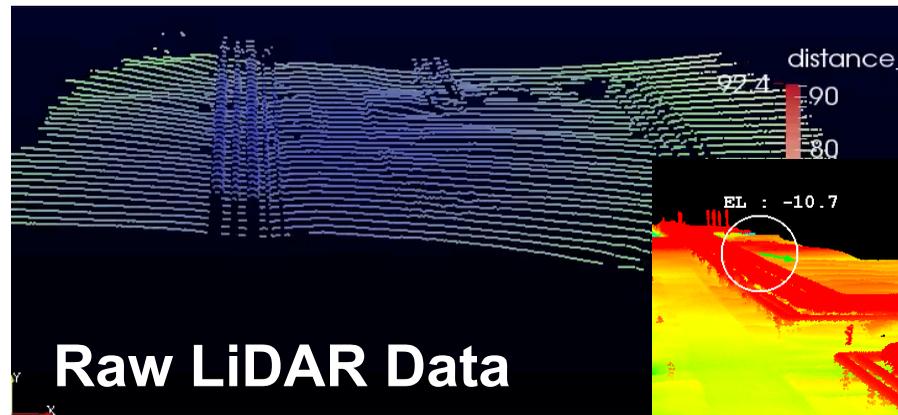
# Commercial UAS Enablers



# New capabilities to drive new Commercial solutions

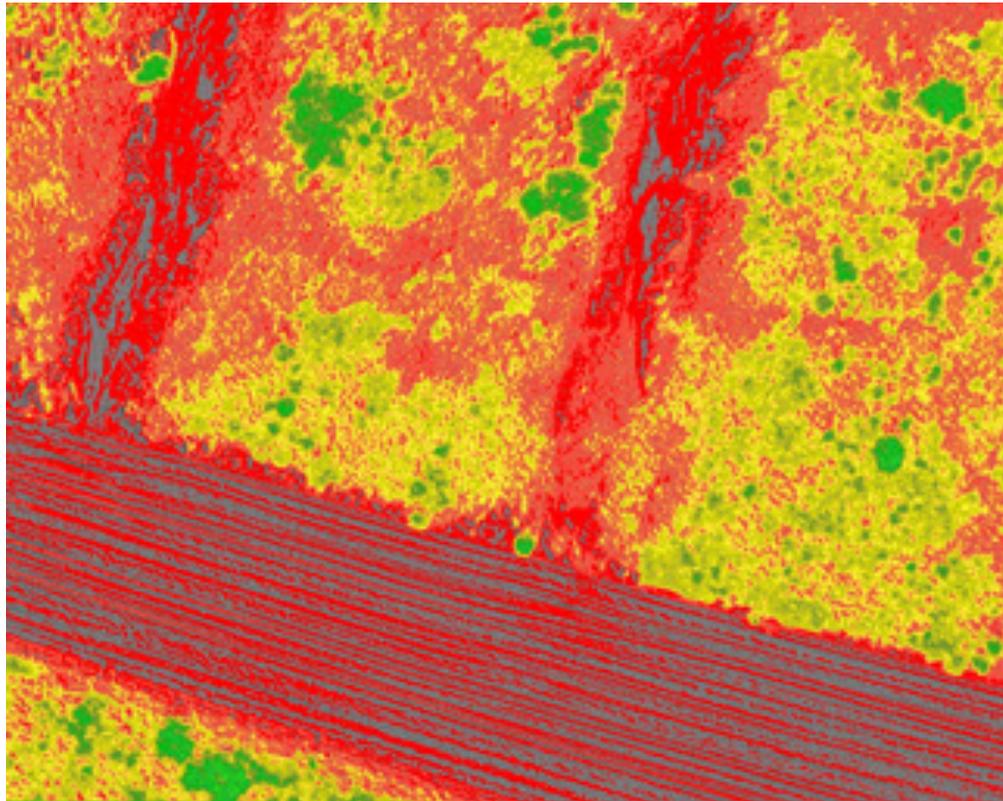


# Integrated Commercial Information Services



# Integrated Commercial Information Services

## *Agriculture Evaluation*



- Near IR, Red and Green images combined
- NDVI Vegetation Index
  - Green = Healthy
  - Yellow = Stressed
  - Other = Non-vegetation

# UAS Summary

- Multiple high-value market opportunities in our growth portfolio
- Continued leadership in our core business
- Solid progress in market and solution development
- Accomplishing key demonstration objectives for TMS, CUAS

# **Teresa Covington**

*Vice President, Finance*

*and former Interim Chief Financial Officer*

# AeroVironment Investment Thesis

**Profitable Growth through  
Technology Based Innovation**

**Differentiated Solutions with  
Leading Market Positions**

**Multiple High-Value Market  
Opportunities**

**Strong Financial Performance**

- Growing, profitable core business
- Strong balance sheet
- Consistent gross profit margin

# Continuing to Deliver on Objectives

## 2015 Financial Growth and Investment

- Revenue growth of 3% to \$259 million
- Gross margin improvement of 3% to 40%
- Investments of \$20 million in growth portfolio
- EPS of \$0.13

## Strong Balance Sheet and Cash Generation

- Cash and equivalents - \$275 million
- Strong operating cash flow
- Lower working capital
- Nimble, able to adjust to market demands

## Growth Opportunities

### Core Business

- Small UAS
- Passenger EV charging

### Growth Portfolio

- TMS – Switchblade variants
- LUAS – Tern phase II/III and GO
- Commercial UAS

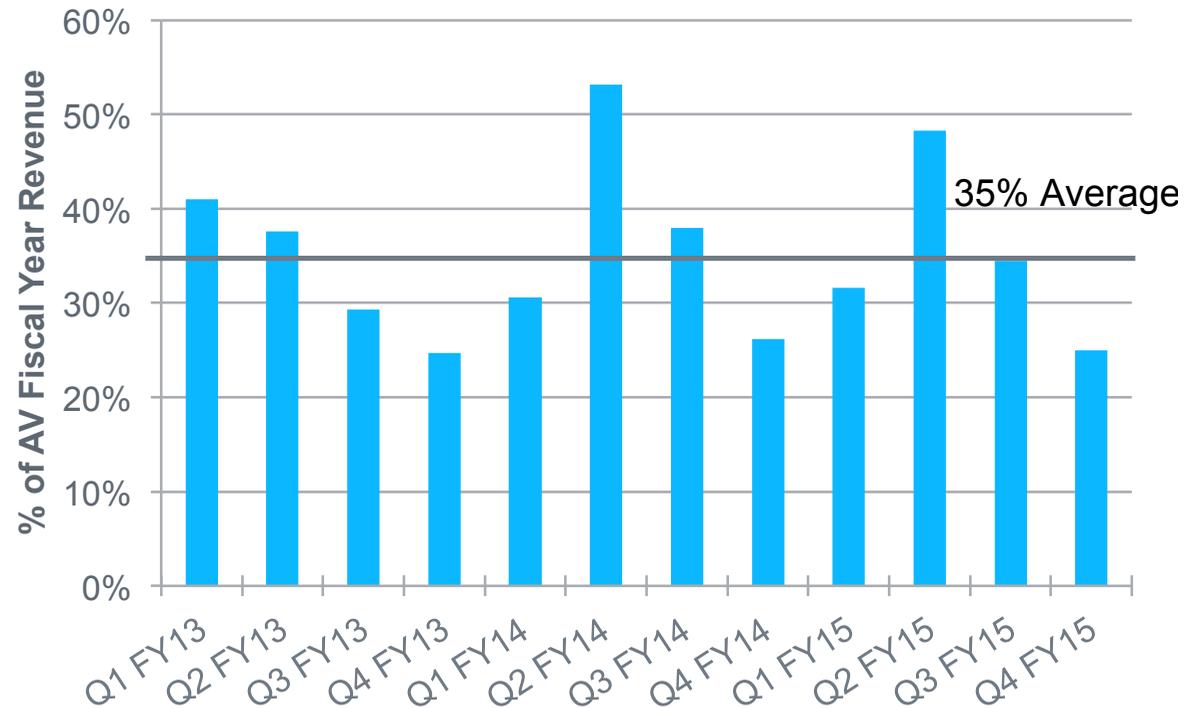
## Recognized Technology Leader

- Top Performing Company \$250 million - \$1 Billion – *Aviation Week*
- More than 85% market share of U.S. Department of Defense unmanned aircraft fleet

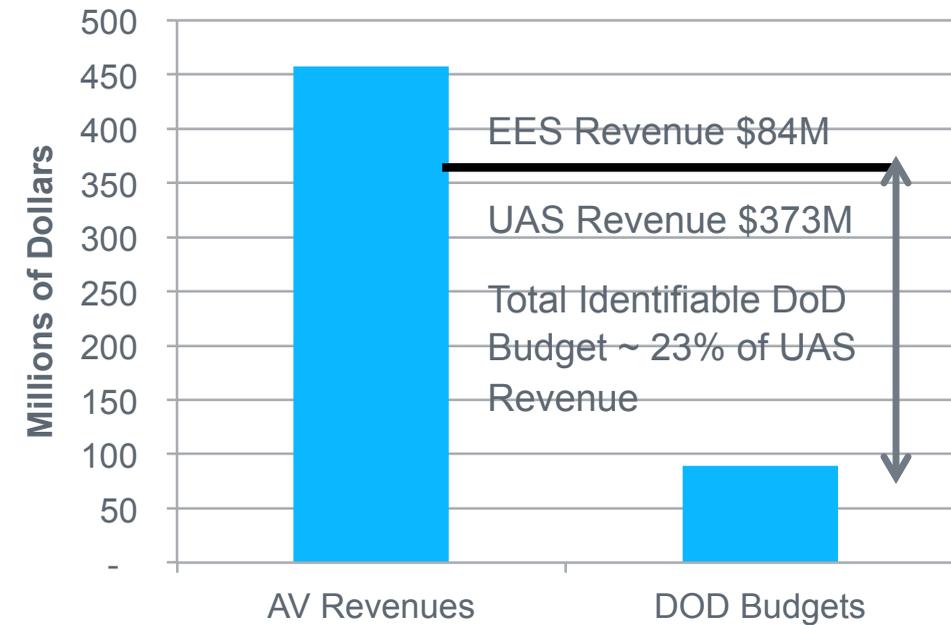
# Near-Term Revenue Visibility

## *Variable and Largely Independent of DoD Budget*

End of Qtr. Funded Backlog/  
AeroVironment FY Revenue

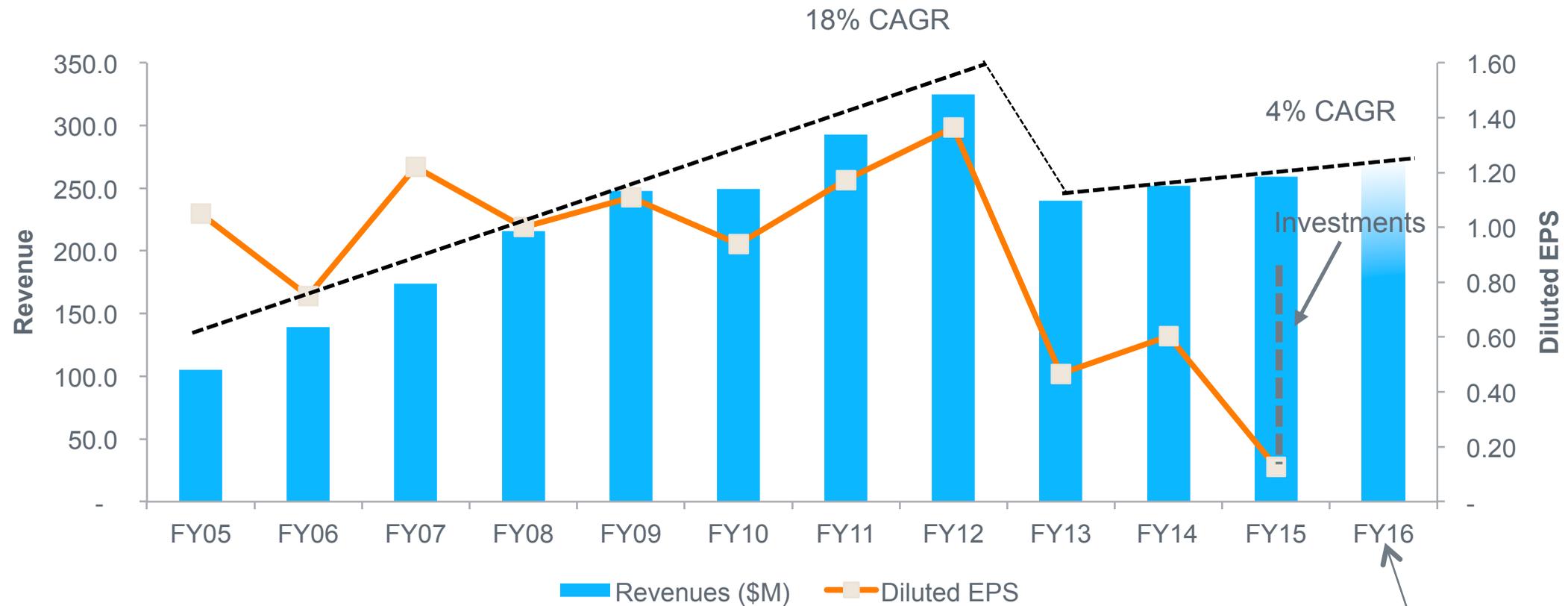


AeroVironment Revenue vs.  
GFY13-14 DOD Budgets



# Revenue and EPS Reset after Sequestration

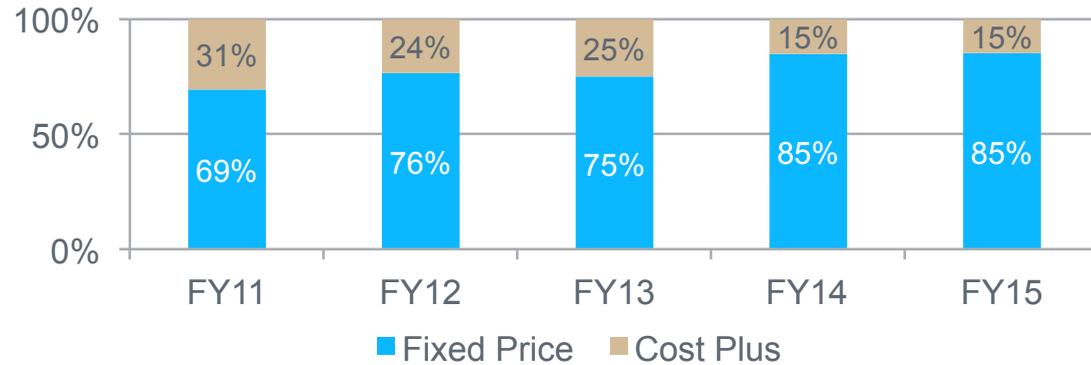
## *Investing Core Business Profit into Long-Term Growth*



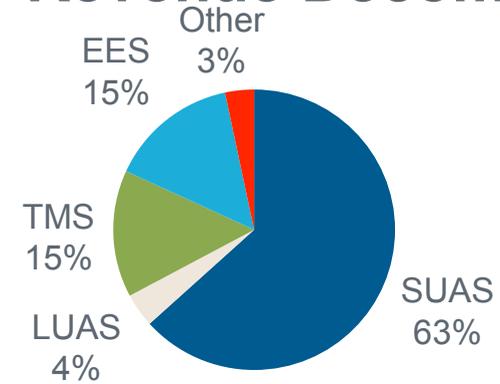
Based on midpoint of fiscal 2016 guidance range

# Fiscal 2015 Revenue Trends and Mix – a Balanced Portfolio Supports our Growth Objectives

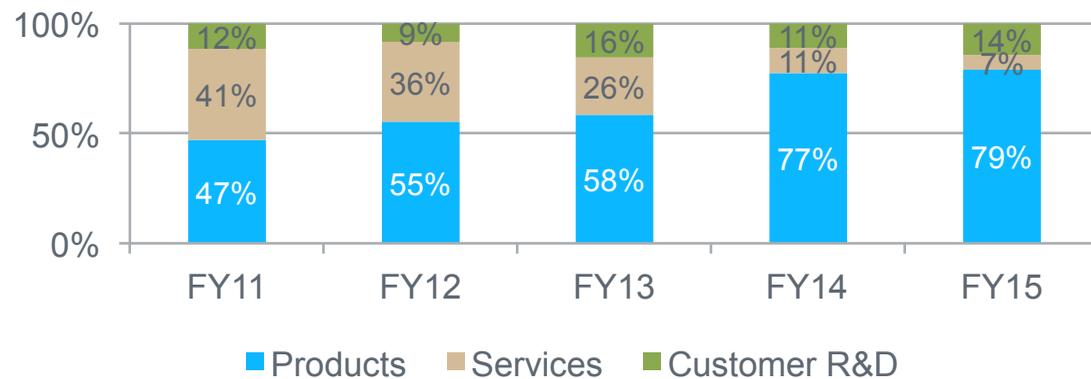
## Revenue Mix by Contract Type



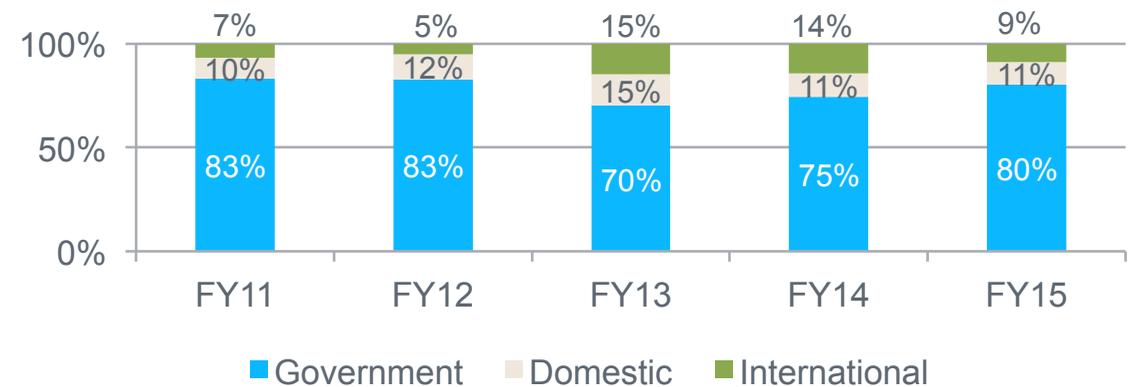
## AV FY15 Revenue Decomposition



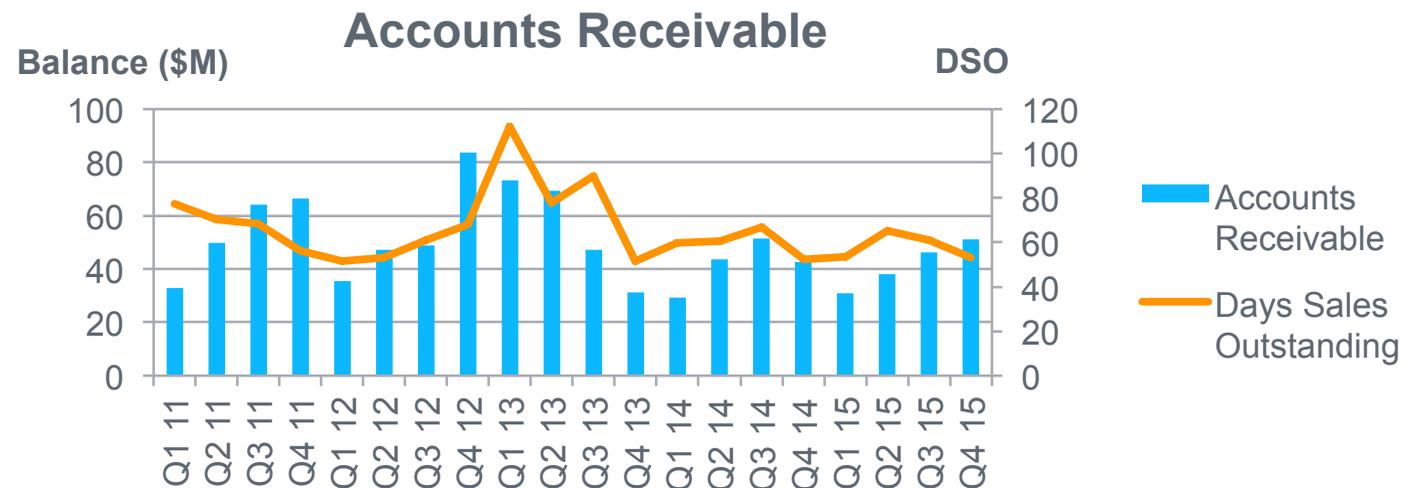
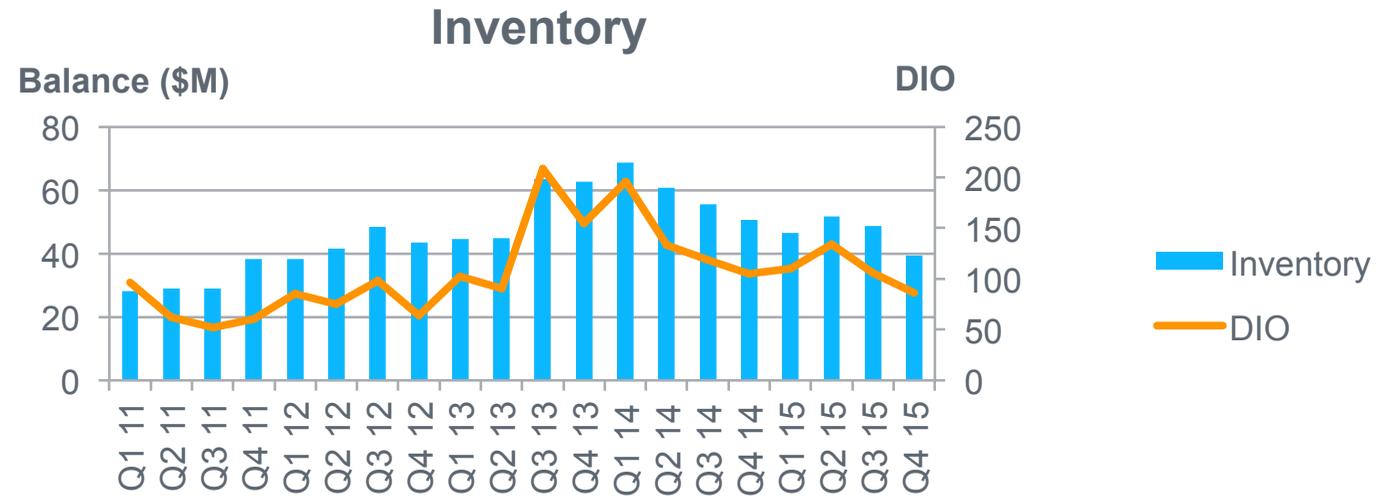
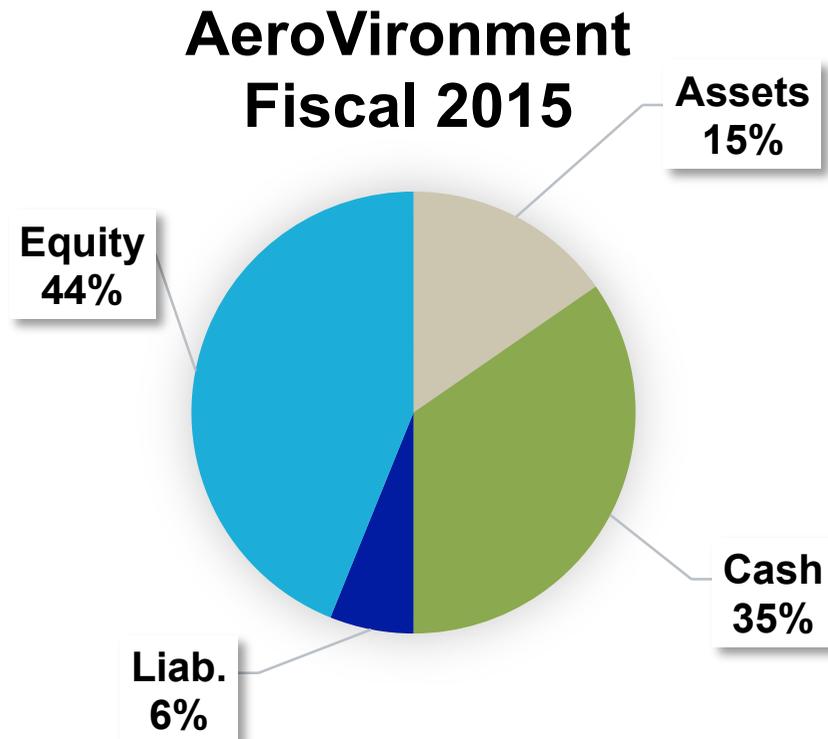
## Revenue Mix by Function



## Revenue Mix by Geography/ Customer

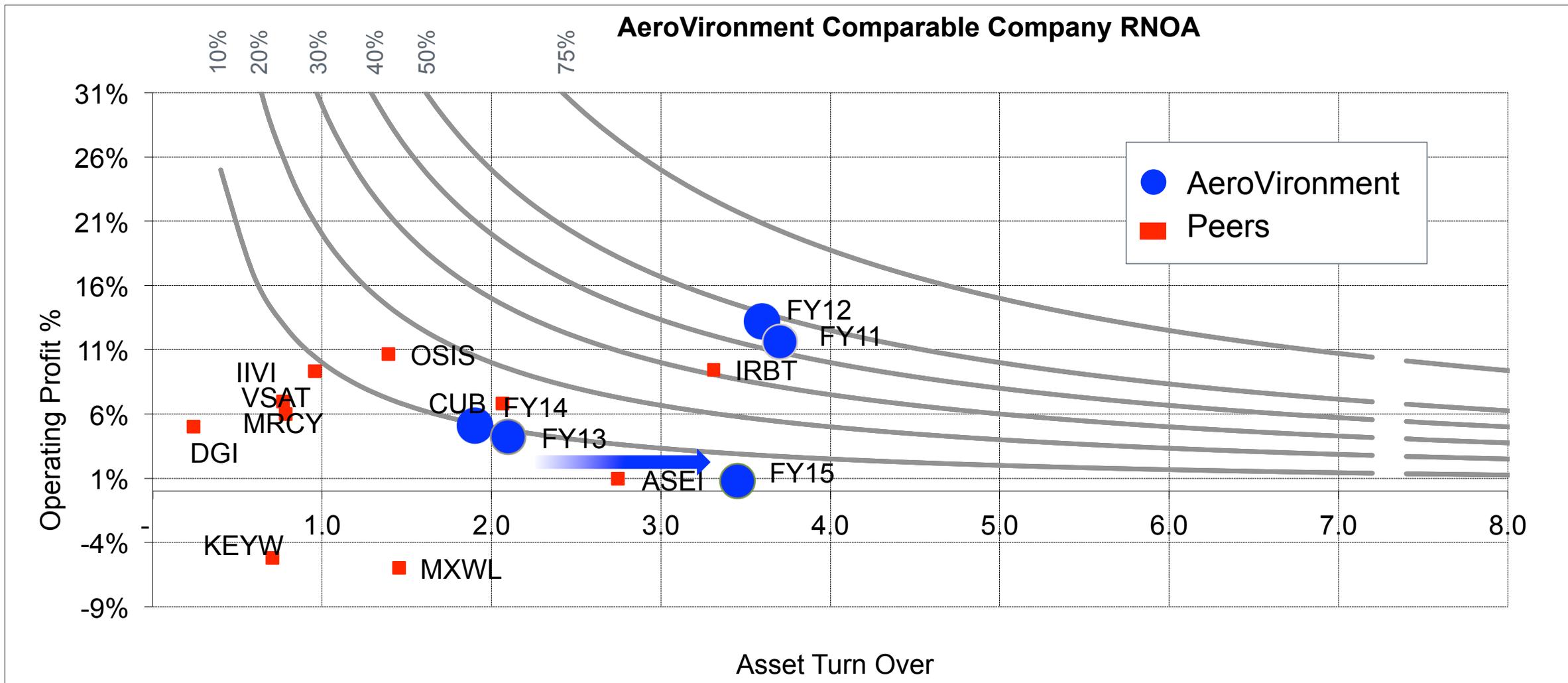


# Strong Balance Sheet and Focus on Cash Management



# Return on Net Operating Asset (RNOA) Benchmark

## *Returning to Asset Utilization Efficiency, Investing in Growth*



# Fiscal 2016 Guidance

	FY13	FY14	FY15	FY16 Guidance
<b>Revenue (\$M)</b>	<b>240.2</b>	<b>251.7</b>	<b>259.4</b>	<b>260–280</b>
<i>Growth</i>	<i>–26%</i>	<i>5%</i>	<i>3%</i>	<i>Flat–8% Growth</i>
<b>Gross Profit (\$M)</b>	<b>92.5</b>	<b>93.6</b>	<b>104.3</b>	<b>94–105</b>
<i>Gross Profit % of Revenue</i>	<i>39%</i>	<i>37%</i>	<i>40%</i>	<i>36% – 37.5%</i>
<b>SG&amp;A Expense (\$M)</b>	<b>51.5</b>	<b>55.7</b>	<b>55.8</b>	Core - 8%-10% R&D range, with incremental Commercial UAS investment. More steady quarterly expense
<i>SG&amp;A % of Revenue</i>	<i>21%</i>	<i>22%</i>	<i>21%</i>	
<b>R&amp;D Expense (\$M)</b>	<b>37.2</b>	<b>25.5</b>	<b>46.5</b>	
<i>R&amp;D % of Revenue</i>	<i>15%</i>	<i>10%</i>	<i>18%</i>	
<b>Operating Profit (\$M)</b>	<b>3.8</b>	<b>12.4</b>	<b>2.0</b>	As low a 0% with Commercial UAS investments
<i>Op Profit % of Revenue</i>	<i>2%</i>	<i>5%</i>	<i>1%</i>	

**Anticipated share count: 23.4 million to 23.6 million**

# Flight Demonstration

# Agenda

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# Lunch & Customer Panel

# Customer Panel

- **Commander Chris Dunn**, Ventura County Sheriff Department, manages the Bomb Squad and Small Unmanned Aviation Systems Unit
- **William Nichols**, Deputy Product Director, Lethal Miniature Aerial Missile Systems, U.S. Army Close Combat Weapons Systems

# Solution Expo

# Summary

# **Steven Gitlin**

*Vice President Investor Relations*

# Business Model – Growth Portfolio Builds On Profitable Core Business

## Core Business

- Market-leading positions
- Growth opportunities
- Expanding customer base
- Expanding geographic scope

## Growth Portfolio

- Several multi-billion dollar addressable markets
- Leading positions in emerging opportunities
- Investing in fiscal 2015 and 2016 for long-term value creation

# AeroVironment Investment Thesis

## Profitable Growth through Technology Based Innovation

- Investing into growth portfolio for long-term stockholder value
- Prepared to invest to secure large, high ROIC growth opportunities

## Differentiated Solutions with Leading Market Positions

- Pioneer & market leader in Small UAS and EV solutions
- Next-generation technology for electric UAS, autonomy and decision-support solutions

## Multiple High-Value Market Opportunities

- Market leader in core business
- Large UAS: significant unmet needs
- Tactical Missile Systems: potentially high volume
- Commercial UAS: large emerging opportunity

## Strong Financial Performance

- Growing, profitable core business
- Strong balance sheet
- Consistent gross profit margin

***Thank You  
for Your Interest***

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# Optional Factory Tour