

DEFENSE

HOMELAND SECURITY

SUSTAINMENT & SUPPORT

MEDICAL INSTRUMENTATION

COMMERCIAL AVIATION

1

# AGENDA

- State of Global Security and Threats
- Future Trends and Requirements for Defense Technology
- Outlook for Defense Spending and the Budget
- Trump Administration and Defense
- Key National Security Programs

# STATE OF GLOBAL SECURITY & THREATS

# GLOBAL SECURITY: A FULL SPECTRUM OF THREATS





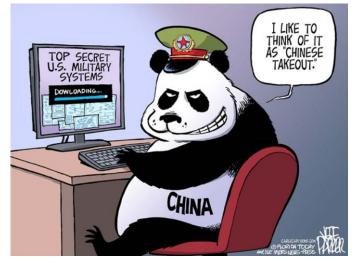
# SEVERAL CONFLICTING MACRO FACTORS ARE IN PLAY...



Commercial technology is advancing faster than military funded technology, and is proliferating across the globe



... cyber threat may be the most impactful to suppliers



An increasingly complex set of security issues requires a diverse portfolio of capabilities and strategies ...



#### Economy is growing, but not enough to ease debt burden



Elbit will face a USG customer with enduring constrained budgets that is seeking cost effective solutions

# NATIONAL SECURITY STRATEGY – 4 +1 FRAMEWORK... IN 5 DOMAINS





# THE AMERICAN WAY OF WAR IS CHANGING....



The "American Way of Winning a War" since 1945 ...



Project
Force from
Secure
Overseas
Bases





Rely on
Technical
Overmatch
in Key Areas

... is being significantly degraded by adversary improvements in:

- Counter low observable capabilities
- Offensive cyber and adaptive EW
- Global terror networks & sleeper cells
- Advanced tactical ballistic missiles

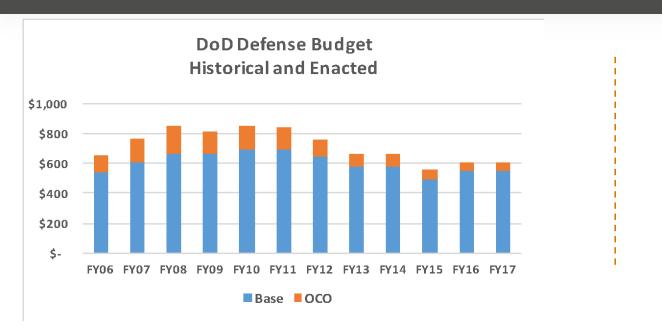
- ISR and space capabilities
- Anti-Access Area Denial (A2AD)
- Navigation warfare/counter GPS
- Advanced SAM

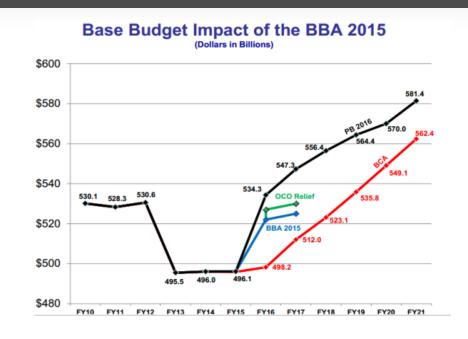
How the U.S. counters these developments will have a major long term impact on the addressable market for suppliers

# FUTURE TRENDS AND REQUIREMENTS FOR DEFENSE TECHNOLOGY

# **Dod Priorities Changed Post-2011**





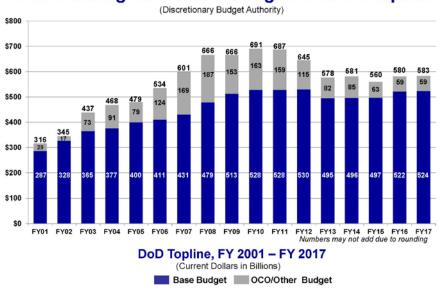


- Buying Power and Buying Habits of our customer changed
- U.S. military priorities changed, procurement requirements changed
- Shift to Asia-Pacific strategy not fully realized...back to Europe?
- Technology advancing rapidly our adversaries are leveraging it, too

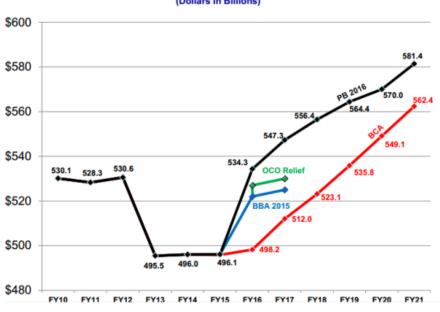
# **DOD BUDGET - SEQUESTRATION RELIEF**







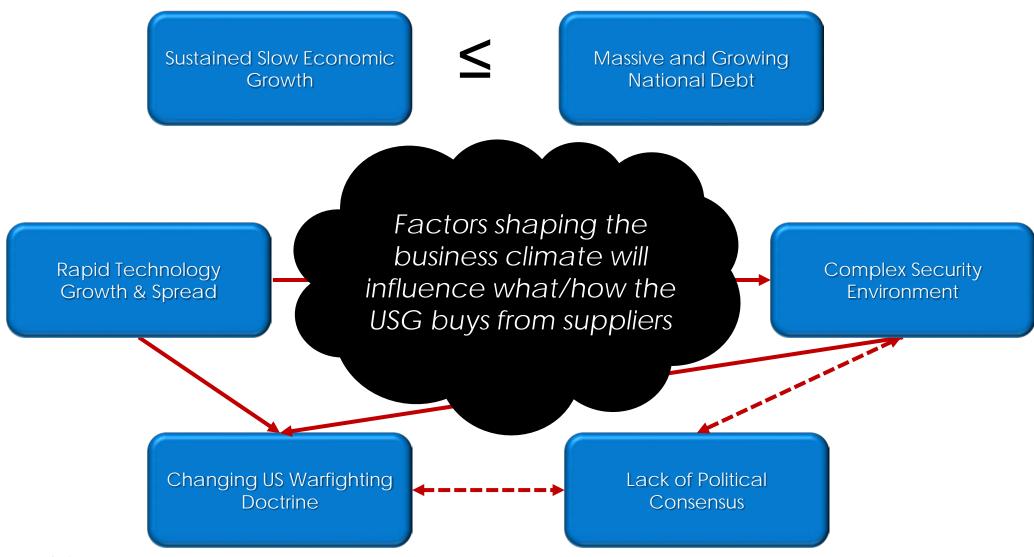
# Base Budget Impact of the BBA 2015 (Dollars in Billions)



- DoD Budget FY16 grows for the first time since 2010
- Budgets > sequester, but < levels needed for key programs</li>
- Budgets for lower-priority programs remain at risk
- Trump Administration signaling an end to sequestration

# CHANGE + DISRUPTION = OPPORTUNITIES TO EXPLOIT





Source: RSAdvisors analysis

# 2017-2021: DOD REQUIREMENTS ARE/WILL BE DIFFERENT



# U.S. Defense Priorities

Counter Chinese, Russian And Iranian A2AD Challenge

Secure battle networks and C3I against cyber/EMS Threat

Mitigate tyranny of distance and time in strike, ISR, mobility

Develop disruptive CONOPS and Strategies for pressuring enemy

Leverage analytics and processing to enhance intelligence fusion

Acquire improved capability more quickly and cheaply

# 2017-2021: DOD REQUIREMENTS ARE/WILL BE DIFFERENT



- Extending lifetimes of major programs via tech refresh and upgrades
- In-sourcing R&D and advanced concept demonstration work
- More reliance on contractor funded early development
- Increased reliance on networking & integration to deliver capability
- Open systems architectures
- Convergence of RF and cyber functionalities, systems and CONOPS
- Increased security requirements (both technical & regulatory)

- U.S. response is central to succeeding in six critical priorities
- Will, in turn, drive increased funding in "fast stream" sectors

# "FAST STREAM" SECTORS



1 Secure Networking and Communications	7 Improved Airborne Capability via New Programs, Upgrades and UAS
2 Non-Kinetic Effects (EW, cyber)	8 Modernization of Naval Strike and Undersea Capabilities
3 Tailorable Precision Kinetic Effects Across Entire Threat Spectrum	9 Develop Space Control Capabilities, Improve Resiliency & Secure GPS
Multi-function Radio Frequency / EMS Systems	10 R&D for Disruptive Technology, Systems and CONOPS
5 Autonomous and Unmanned Systems	Enhanced Border Security and Counter-Terrorism Capabilities
6 Passive Sensors and Multi-Sensor EO/IR and RF Fusion	Programs & Products Supporting Growth of Allied / Partner Capabilities

Source: RSAdvisors

# **Threat Drivers of Fast Streams:**

- Near-Peer's geographic expansion
- Cyber domain
- High-end kinetic and non-kinetic effects
- Transnational terror networks
- Operations in urban "mega centers"
- Space control

# Technological Drivers of Fast Streams:

- Convergence across EMS and cyber domain
- Commercial IT and networking advances
- Advanced microelectronics
- Autonomy
- Disaggregation
- Biological enhancement and modification

# FUTURE WAY OF WAR - C2 FUSION



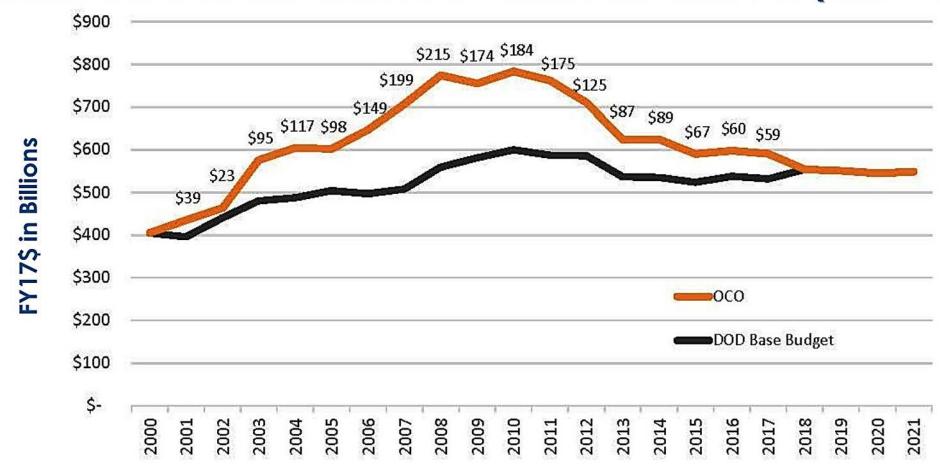


# OUTLOOK FOR DEFENSE SPENDING & THE BUDGET

# HISTORICAL LOOK AT THE DOD BUDGET



# BASE AND OCO ENACTED AND PROJECTED FUNDING (FY00 - FY21)

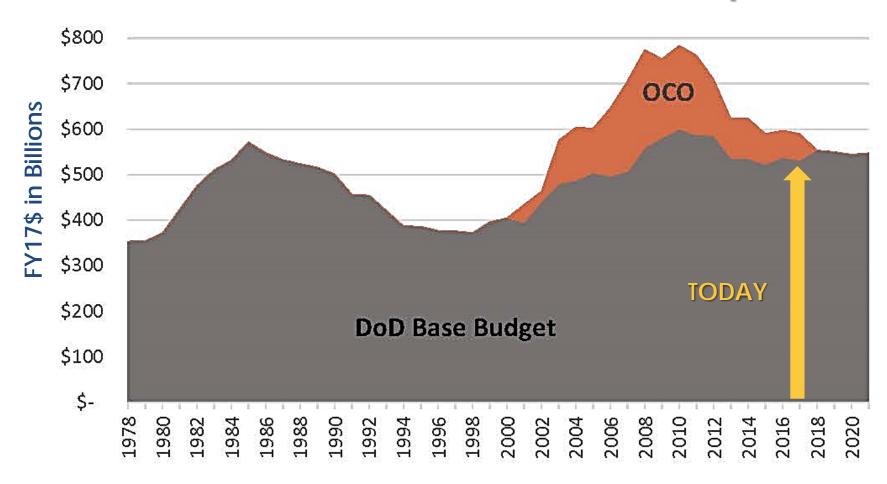


OUSD Comptroller: FY17 Greenbook, Tables 1-2, 2-1, 6-8

OR...



# **DoD BASE BUDGET AUTHORITY AND WAR FUNDING (FY78 – FY21)**



OUSD Comptroller: FY17 Greenbook, Tables 6-8, 2-1

# THE OVERALL OUTLOOK FOR A&D BUSINESS IS POSITIVE



We expect investment funding (Proc + R&D) to exceed FY17 levels once OCO funds are allocated and Congressional plus-ups are made

## PB18 Assumptions

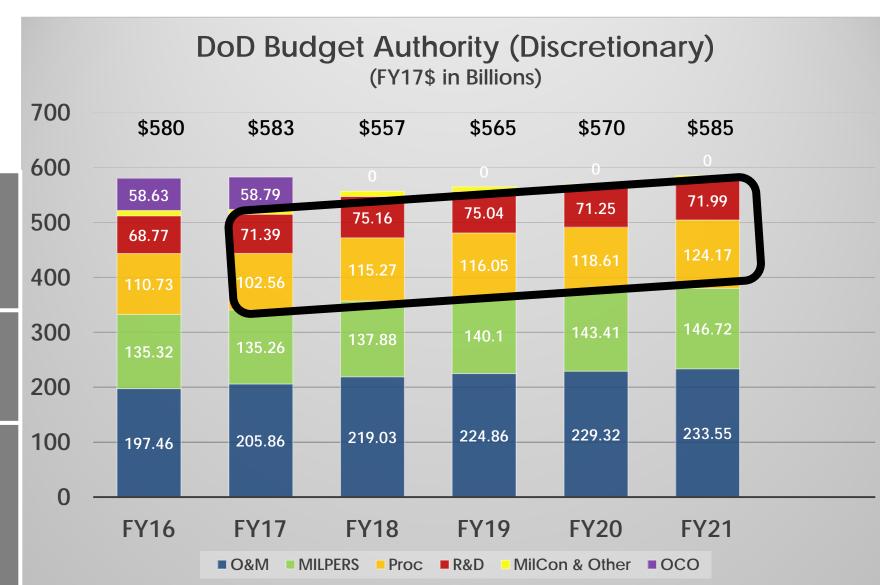
- No Sequestration/BCA
- DoD increase partially offset by reductions in domestic spending
  - Except DHS ("the Wall")

### **Note**

\$54B increase above BCA caps for FY18 is <u>just \$18B above</u> President Obama's plans for the same year

## Variables

- Debt ceiling increase?
- SASC/HASC to offer larger base budget
  - \$640B vs \$603B
- OCO to supplement base?



# TRUMP ADMINISTRATION AND AEROSPACE & DEFENSE SECTOR



# DoD resource focus for next 6 months: counter-ISIS and increasing readiness

Administration position	Implication for 2017-2021
Focus on U.S. Jobs	<ul> <li>Strengthen organic US-technology/manufacturing</li> <li>Re-examination of global supply chains (?)</li> </ul>
"America First" posture	<ul> <li>Increased difficulty accessing sensitive data</li> <li>Increased cyber/data protection requirements</li> <li>Need stronger solutions for FOCI mitigation</li> <li>CFIUS more challenging (?)</li> </ul>
Emphasis on new/existing platforms and fleets	<ul> <li>Legacy/existing platform capability upgrades</li> <li>New platform spiral/incremental upgrades</li> <li>Compatibility between legacy/5<sup>th</sup> Gen platforms</li> </ul>
DoD ATL reorganization	<ul> <li>Increased local capabilities (e.g., rapid prototyping)</li> </ul>
Acquisition agility/flexibility	Proximity of design to customer

# IMPROVING SENTIMENT IN DEFENSE SPENDING IS INCREASING FORECASTED PRODUCTION OF ATTRACTIVE AIRCRAFT PROGRAMS

# Key National Security AEROSPACE PROGRAMS

# LARGE DEFENSE PROGRAMS DRIVE GROWTH

- Early "TrumpBump" will be onexisting programs
- Top 100 programsconsume > \$400Bover FYDP w/Top30 consuming 75%
- Key = be on existing and leverage to future programs

























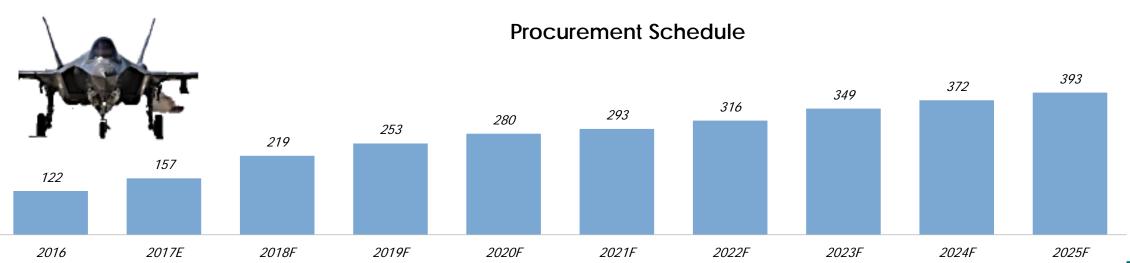


# F-35 LIGHTNING II



- F-35 build rate is projected to grow dramatically over the next decade as the program ramps up
- Cost per aircraft decreasing increased production per year will continue to drive down cost
- Trump negotiations with Lockheed Martin on the heels of DoD negotiations
- International sales projected to increase

## F-35 Lightning II Production

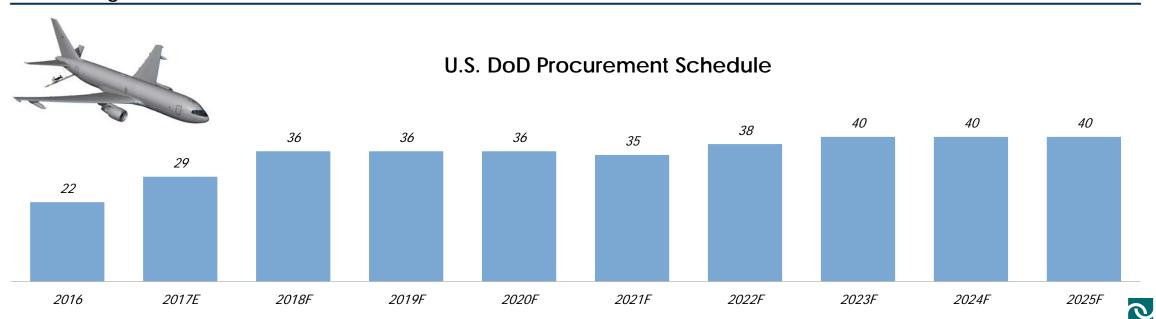


# **KC-46 PEGASUS**



- KC-46 program is currently transitioning from development to production and is scheduled to replace ~40% of existing tankers
- Successfully completed boom envelope testing in Q4 2016 with 5 aircraft undergoing flight testing
- □ KC-Y and KC-Z follow-ons TBD KC-135s remain in force

### **KC-46A Pegasus Production**

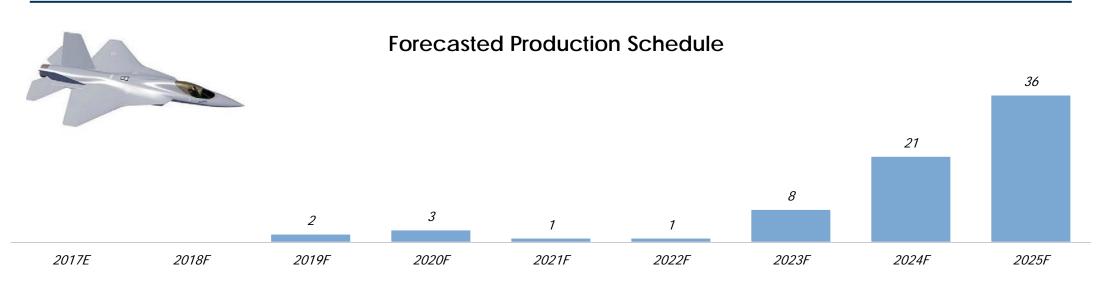


# T-X TRAINER



- The T-X Trainer is the premier next generation training system, designed to meet evolving requirements and technologies
- □ 350 aircraft initially forecasted by the USAF 1000+ possible
- Long-term program
- Winner could play in the USAF Light Attack Aircraft program

#### **T-X Trainer Production**



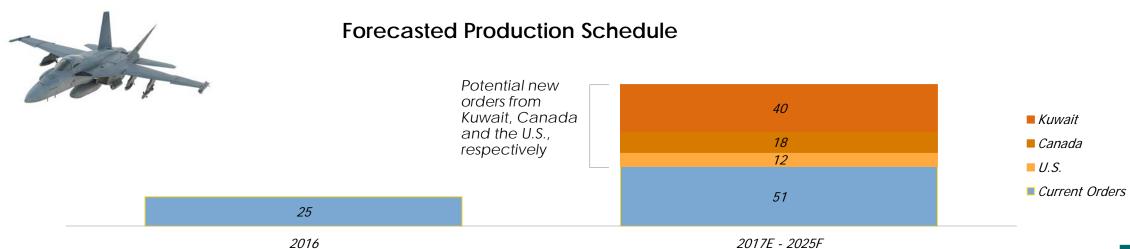


# F/A-18 Super Hornet



- F/A-18 Super Hornet is receiving rejuvenated interest both domestically and internationally
- Relatively attractive cost and still strong performance profile
- USN has been successful in getting "adds" to DoD's budget
- Trump negotiations with Boeing will be a factor

### F/A - 18 Super Hornet Production



# QUESTIONS AND DISCUSSION