



*DEFENSE & SECURITY SOLUTIONS*

**KRATOS**<sup>®</sup>  
FROM STRENGTH TO SUCCESS

Kratos Defense & Security Solutions, Inc.  
(NASDAQ: KTOS)

Annual Shareholder Meeting

May 19, 2016



# Notice Regarding Forward-Looking Statements



Certain statements in this presentation may constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are made on the basis of the current beliefs, expectations and assumptions of the management of Kratos and are subject to significant risks and uncertainty. Investors are cautioned not to place undue reliance on any such forward-looking statements. All such forward-looking statements speak only as of the date they are made, and Kratos undertakes no obligation to update or revise these statements, whether as a result of new information, future events or otherwise. Although Kratos believes that the expectations reflected in these forward-looking statements are reasonable, these statements involve many risks and uncertainties that may cause actual results to differ materially from what may be expressed or implied in these forward-looking statements. For a further discussion of risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to the business of Kratos in general, see the risk disclosures in the Annual Report on Form 10-K of Kratos for the year ended December 27, 2015, and in subsequent reports on Forms 10-Q and 8-K and other filings made with the SEC by Kratos.

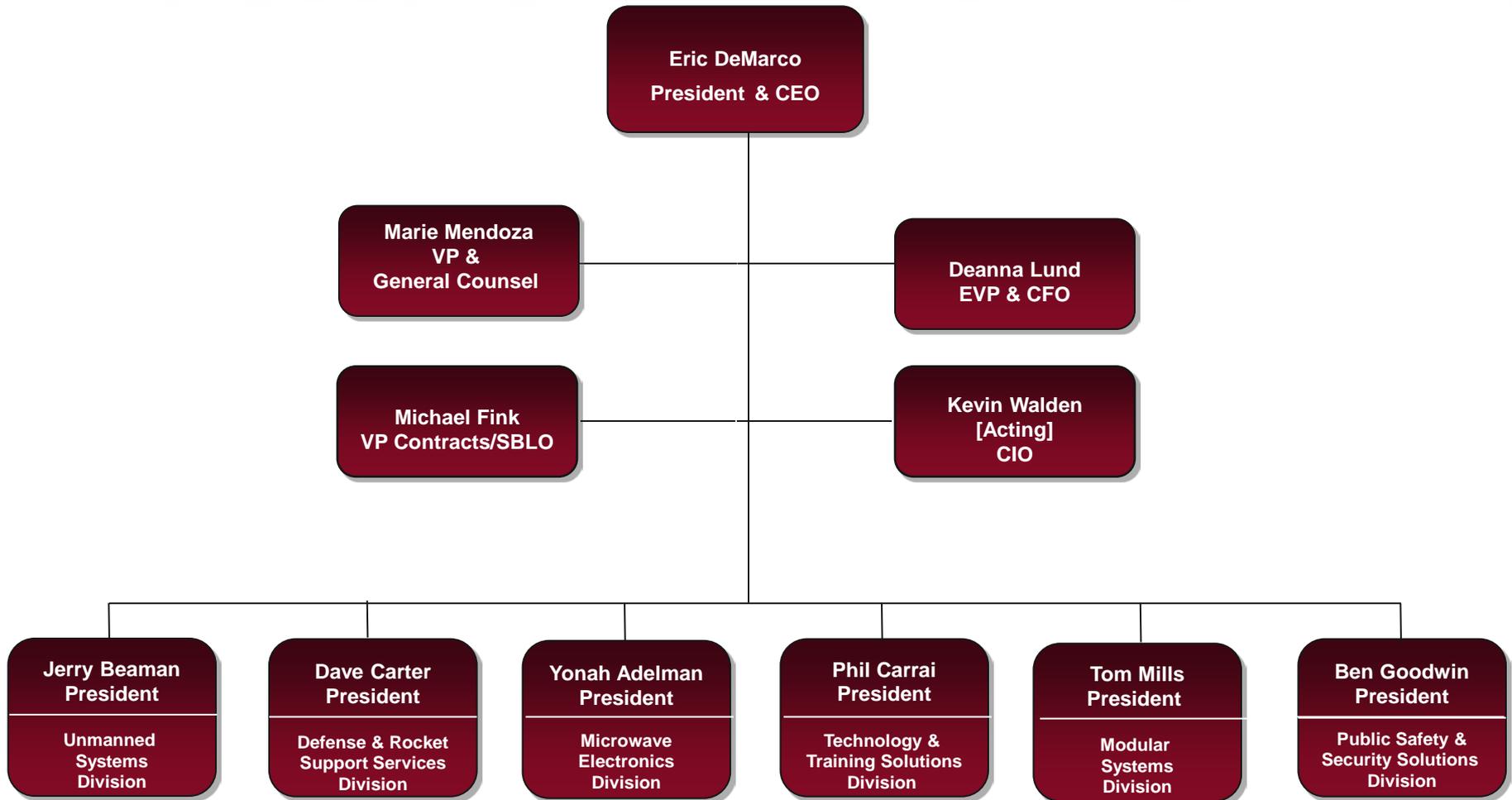


*Kratos is a Mid-Tier Government Contractor at the Forefront of the Third Offset Strategy*

*Board of Directors Include Entrepreneurs and Silicon Valley Based Venture Capitalists Who Are Leading a Disruptive Technology Strategy*



## Corporate Organizational Chart





*Kratos is the World Leader of High Performance Target Drones Used to Train Pilots and Test Weapon Systems*

*Kratos is a New Entrant in High Performance Tactical Combat Drones Used for Force Amplification/  
Multiplication*

## Unmanned Aerial Target Drone Systems



BQM-177



BQM-167



BQM-178

- Kratos is the Leader in Development and Production of High Performance Unmanned Aerial Drone Target Systems
- Kratos' Target Drone Systems Represent the Most Advanced Threats of Our Adversaries
- Kratos' Products Operationally Test U.S. and Allies' Weapon Systems
- Major New Target Drone Program is Under Contract and Expected to Begin Production 2016 – USN SSAT BQM -177
- Major Confidential Program is Under Contract and Expected to Begin Production 2017



## Exclusive Provider – Intellectual Property Protected

**KRATOS IS PROUD TO BE THE SOLE SOURCE PROVIDER OF SUB-SCALE AERIAL TARGETS FOR THE UNITED STATES AIR FORCE AND NAVY**

**KRATOS IS NOW PROVIDING SUBSCALE TARGETS TO THE US ARMY**

**Our exclusive relationships with the U.S. Department of Defense ensure you:**

- Guaranteed supply chain for new targets, component parts, and service
- Reduced unit costs due to improved economies-of-scale
- Industry-leading target design and performance
- Advanced target technology

**Supporting our domestic DoD customers:**

- United State Air Force – **BQM-167A**
- United States Navy – **BQM-177A**
- United States Army – **MQM-178 Firejet**



## MQM – 178 Aerial Target

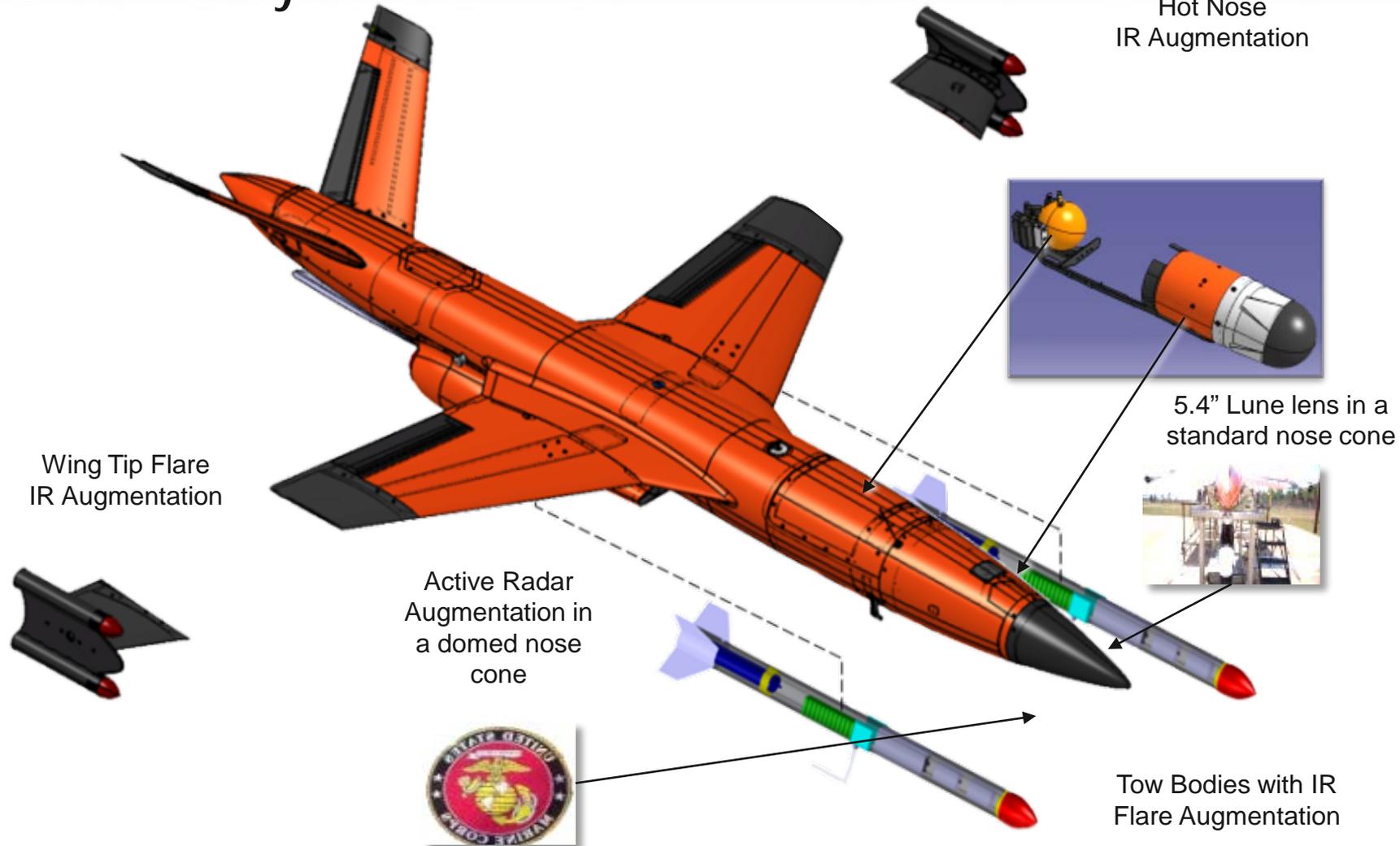


Firejet is an affordable and effective training solution for validating ground-based air-defense systems such as Patriot and HAWK.





## MQM – 178 Payloads



## Pneumatic Launch



Kratos/CEi's MQM-178 provides low recurring mission cost via portable, pneumatic launch solution.

MQM-178 Firejet recovery at Orogrande, New Mexico post Patriot mission.



Rugged Composite Construction

## BQM – 167 Aerial Target



Currently in 11<sup>th</sup> consecutive year of production, Kratos/CEi's BQM-167 is the exclusive subscale aerial target of the US Air Force, and has been the target of greater than 2,300 Raytheon missile firings.

## BQM – 167 Low Altitude Cruise



## BQM-177 Aerial Target



Kratos/CEI's BQM-177 provides the world's most advanced and realistic anti-ship cruise missile threat emulation with Low Altitude Cruise 10 feet above the water at .90 Mach.



## BQM – 177i Shipboard Operations





BQM – 177i Shipboard Operations

## Turn-Key Aerial Target Services

### Custom Missions

- Air-to-air
- Multi-target profiles
- Surface-to-air
- Ship defense



### Realistic Threat Scenarios

- High-G maneuvers
- IR & RF payloads
- Towed targets

## Multi – Platform Operations



Dissimilar threat representation via multiple target platforms.

## Multi – Target Missions



Formation flight and stream raid missions.



## CONFIDENTIAL PROGRAMS



## Unmanned Vehicle Command & Control Systems, Avionics & Electronics Industry Leader





## **TACTICAL UNMANNED COMBAT AERIAL SYSTEM (UCAS) STRATEGY**

- Department of Defense Unmanned Systems Integrated Road Map (2011 and 2013)
- Remotely Piloted Aircraft Systems in Contested Environments – Vulnerability Analysis
- Gaps in Existing DoD Unmanned Aerial System Inventory
  - Anti-Access/Area Denied (A<sup>2</sup>/AD) Environments
  - Survivability
  - High Performance

# UCAS Solution → UTAP-22



50,000 feet

0.7 Mach



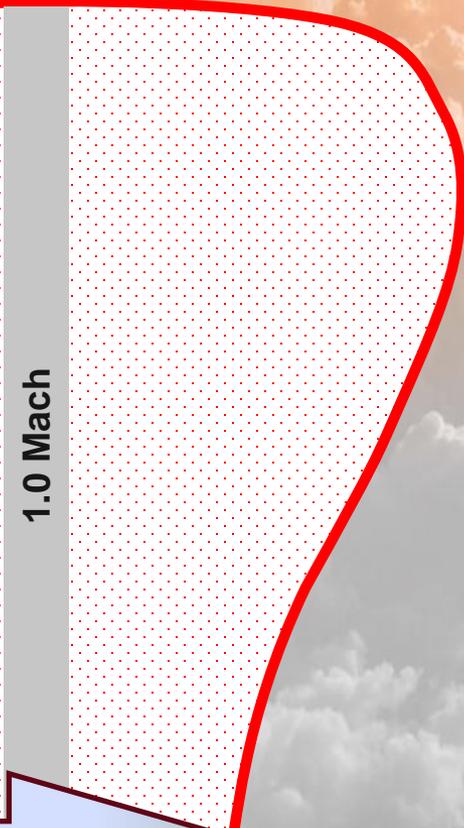
30,000 feet

0.45 Mach



Modified UCAS-167A / UTAP-22

## Kratos UCAS Solution



1.0 Mach



Altitude

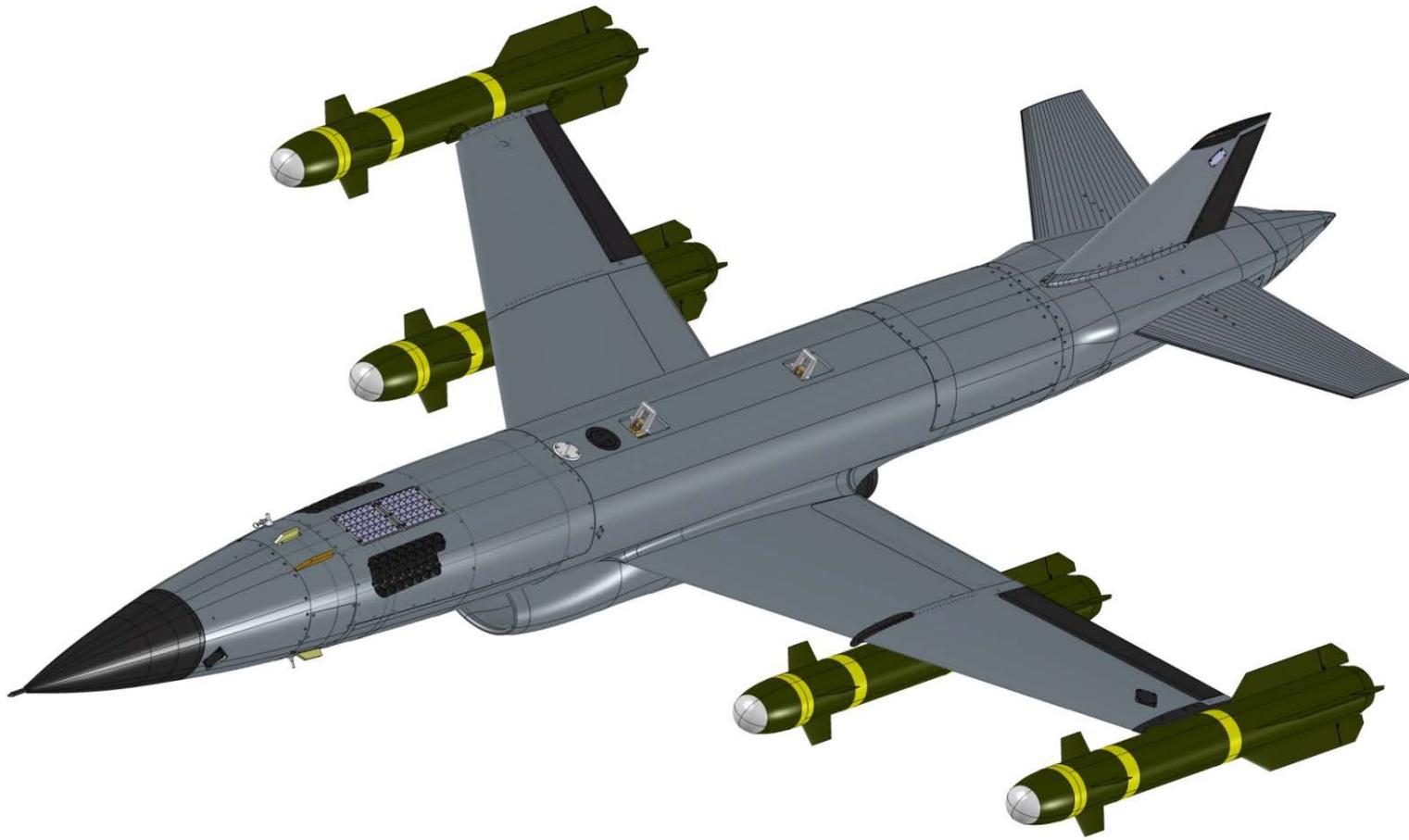


VARIOUS



Airspeed

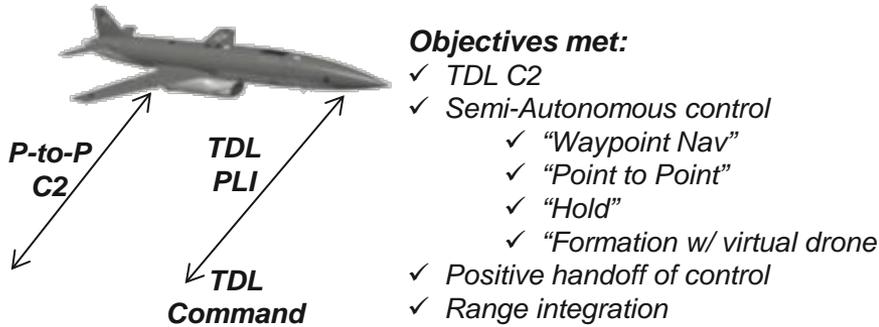
## UCAV “Tornado”





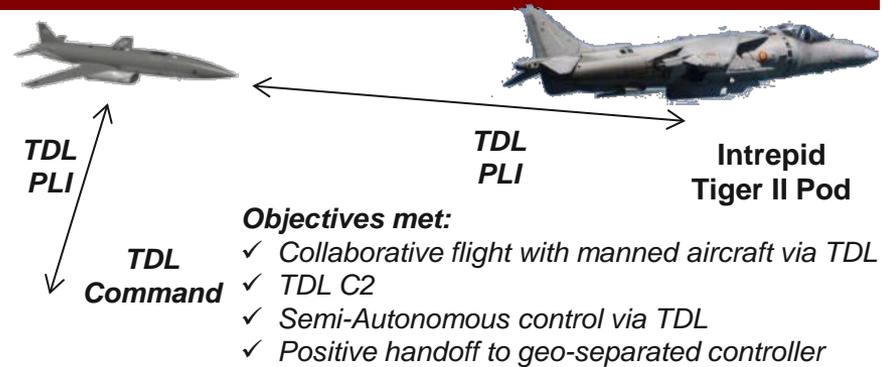
## UTAP-22 Oct-Dec 2015 Flight Demonstration Summary

### Demonstration #1 – Network Control; Semi-Autonomous Flight – *Flight 24 Oct 2015*



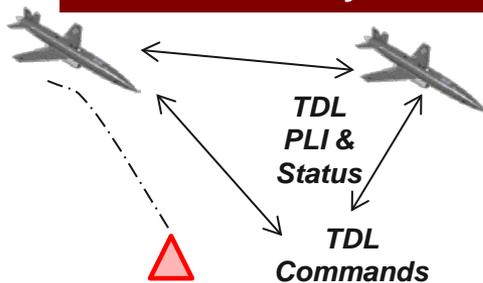
Point-to-Point UHF & Tactical Network Control

### Demonstration #2 – Manned-Unmanned Teaming – *Flight 23 Nov 2015*



Collaborative Tactical Network Participant

### Demonstration #3 – Multi-Aircraft Collaborative Ops; Semi-Auto Payload Deployment – *Flight 11 Dec 2015*



- Objectives met:**
- ✓ Collaborative ops between two UTAP-22s via TDL
  - ✓ Command a payload deployment via TDL
  - ✓ TDL C2
  - ✓ Semi-Autonomous control via TDL
  - ✓ Multiple vehicle C2 by one controller

Multiple Tactical Network Participants

Navy Identified Key Performance and Capability Features  
We demonstrated these in Q4 2015





## New Tactical UAS Opportunity – DARPA “Gremlins” Program Background

**A DARPA based initiative to demonstrate the ability to launch and recover a swarm of UAS from/to airborne platforms**

- 3 phase BAA over 4 years; \$4M, \$20M, \$33M awards; 4-2-1 downselect

### Program Goals

- Airborne launch/recovery of UAS “group” – 20 aircraft ideally
- UAS mission 300 NM out, 300 NM back, plus 1 hour on station
  - 60-120 lb payload
- Heavy Systems Engineering effort with 3 “Segments”
  - Launch Segment – C-130 System
  - Gremlin Air Vehicle plus support equipment
  - Recovery Segment – C-130 System



## New Tactical UAS Opportunity – LCASD Low Cost Attributable (UAS) Strike Demonstration

The AFRL LCASD program was conceived to demonstrate an extremely affordable, high performance, mission configurable UAV with the following important attributes:

- Under \$3M Unit Acquisition Price (\$2M for qty 100 buy)
- Scalable Manufacturing (ability to ramp up production quickly)
- Long Range Capability (~3000 miles minimum)
- Survivable (as opposed to current UAV's being utilized today)
- Flexible Payloads inclusive of 2 SDB's, deployable UAVs, EO/IR etc.
- Forward Deployable preferably without ties to runways
- Womb to Tomb in 30 months
- Leads to 5 follow on spirals with anticipated funding of \$100M



Provides a “game changing” and rare leapfrog opportunity over traditional UAV manufacturers and Tier 1 companies



*Kratos is the Industry Leader of  
Low Cost, High Performance  
Ballistic Missile Targets and  
Hypersonic Boost Vehicles*

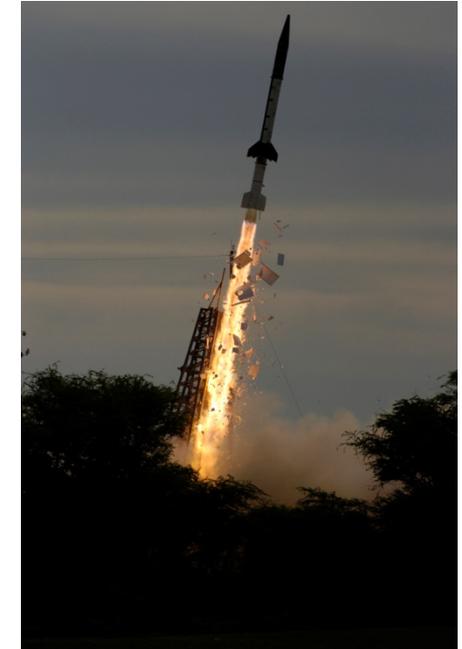
## Ballistic Missile Defense Target Systems



ARAV-A



ARAV-B



ARAV-C

- Kratos is a Leading Provider of Ballistic Missile Defense Target Systems
- Kratos' BMD Target Systems Represent the Most Advanced Ballistic Missile Threats of Our Adversaries



## Product Focus – ARAV Target Series

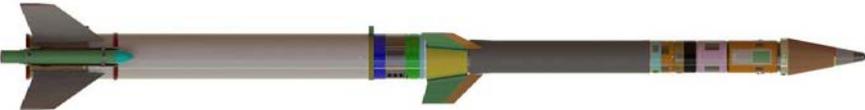
*The ARAV target series provides the US Navy and the MDA with highly responsive and reliable, low cost targets.*

	Vehicle	Attempted/ Success	Range Capability (km)
	ARAV B Terrier Oriole	25/24	800-1000
	ARAV G Talos Oriole TVC	IOC 2017	800-1000
	ARAV C Talos Castor I	4/4	500-700
	ARAV TTO Terrier Terrier Oriole	3/3	900-1200



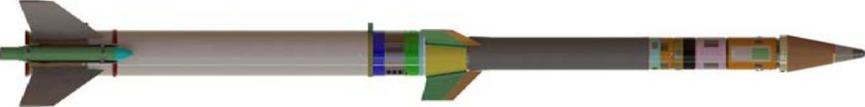
## Product Focus – AMDR Target Series

*The AMDR target series expands the utility of low cost targets with expanded countermeasures and at-sea launch capabilities.*

	Vehicle	IOC	Range Capability (km)
	ARAV B Mod Terrier Oriole	2016	500-800
	ARAV C Mod Talos Castor I	2016	500-700
	Type M Castor I Oriole	2017	1500-2000
	Type Z Castor I C4TS	2017	> 1000



# Rocket Support Services: Low Cost Sea Launched Targets Under Development

	Vehicle	IOC	Range Capability (km)
	AMDR B Terrier Oriole	Q1CY17 CDR Complete	500-800
	AMDR C Talos Castor I	Q1CY17 CDR Complete	500-700
	AMDR M Castor I Oriole	Q2CY17 PDR Complete	1500-2000
	AMDR Z Castor I C4TS	Q2CY17 PDR Complete	> 1000



## Low Cost Solutions for Complex Problems

*Our strength lies in our ability to adapt proven technologies and provide affordable solutions to meet complex mission requirements.*

- Kratos is a leading member of NSWC PHD's Packard Award winning Aegis Readiness Assessment Vehicle (ARAV) target team
- Making maximum use of surplus assets and mature technologies to build short and medium range ballistic missile targets at minimum cost
- Enhancing radar signatures on sub-scale launch vehicles to meet mission requirements while reducing cost, complexity and infrastructure requirements

“...85% less costly than the targets they replaced...”





*Kratos is a Worldwide Leader for a  
Broad Range of Microwave  
Components, Assemblies and  
Subsystems Using State-Of-The-Art  
Technology*

## MICROWAVE ELECTRONICS – PRODUCT LINES



SSPAs AND  
AMPLIFIERS



FREQUENCY  
CONVERTERS



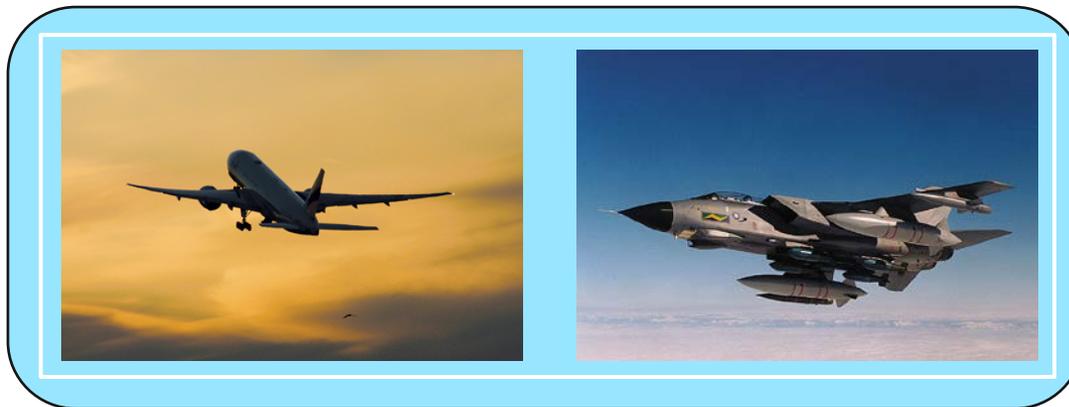
SHR - RECEIVERS



TRANSCIVERS/  
DATA LINKS



SOURCES



GPS IMMUNE



CONTROL  
COMPONENTS



INTEGRATED  
MICROWAVE  
ASSEMBLIES



MILLIMETER  
WAVE



BEAM  
FORMING  
MODULES



RF FRONT  
ENDS AND  
DLVAs

## RECEIVERS, TRANSCEIVERS & DATA LINKS

Guided Munitions



UAVs



Network Centric Warfare



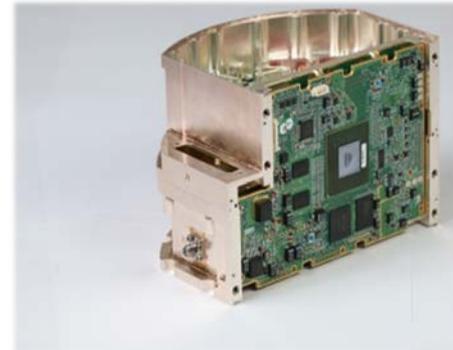
Smart Mortar Shell



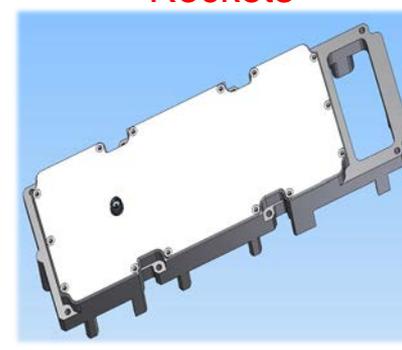
Missiles



Missiles



Rockets



## Microwave Electronics Representative Systems Supported



Iron Dome



Arrow II



Arrow III



Sling of David



Barak



Spyder



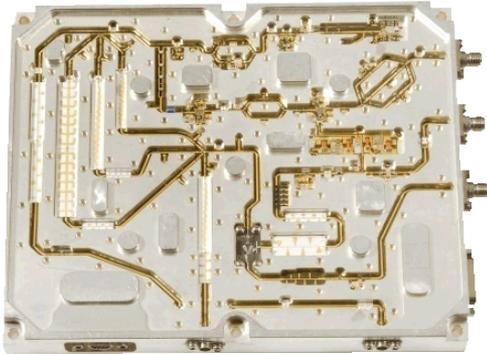
## MISSILE PLATFORMS

### DEVELOPMENT OF DIVERSE MODULES FOR BROAD RANGE OF MISSILE PROGRAMS

- SURFACE-TO-AIR MISSILES (SAM)
- AIR-TO-AIR MISSILES (AAM)
- SEA-TO-AIR MISSILES
- SEA-TO-SEA MISSILES
- BALLISTIC ROCKETS AND MUNITION



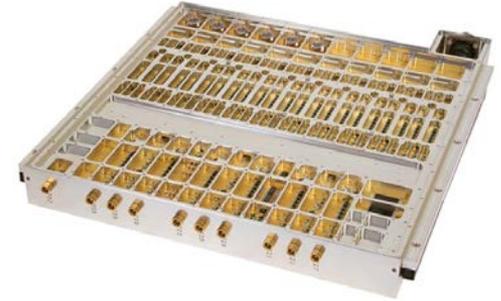
## INTEGRATED ASSEMBLIES AND SUB-SYSTEMS



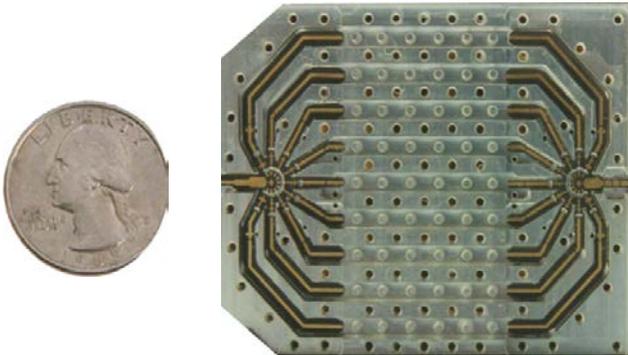
DOWNCONVERTER



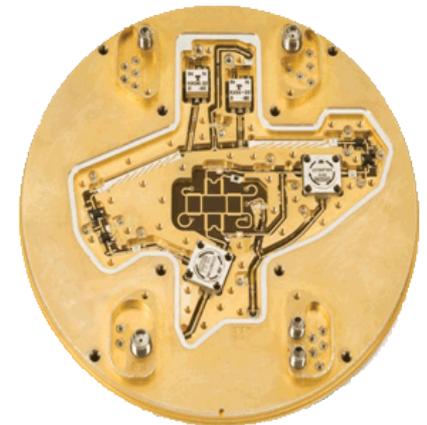
XCVR - Transceiver



MULTI-BEAM MODULE

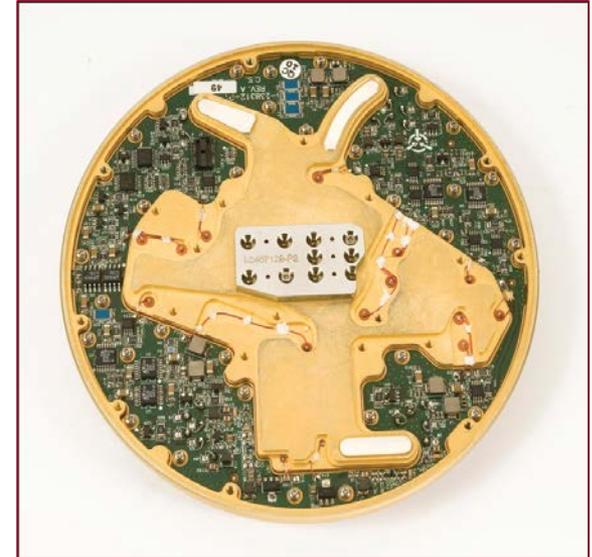
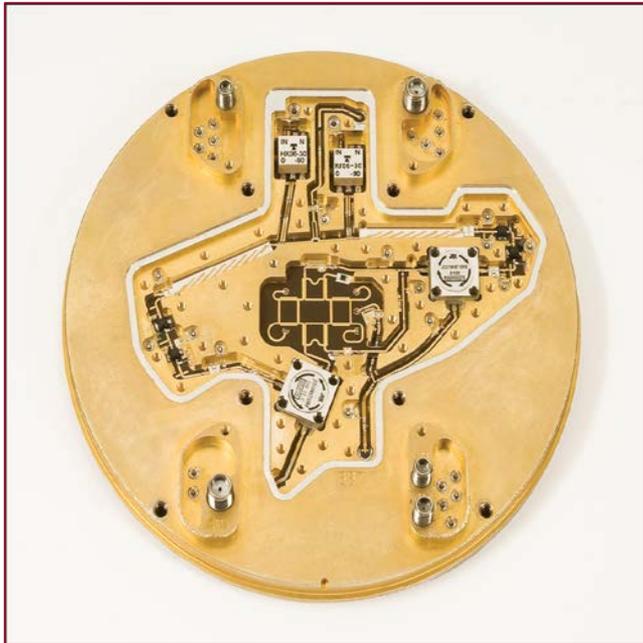
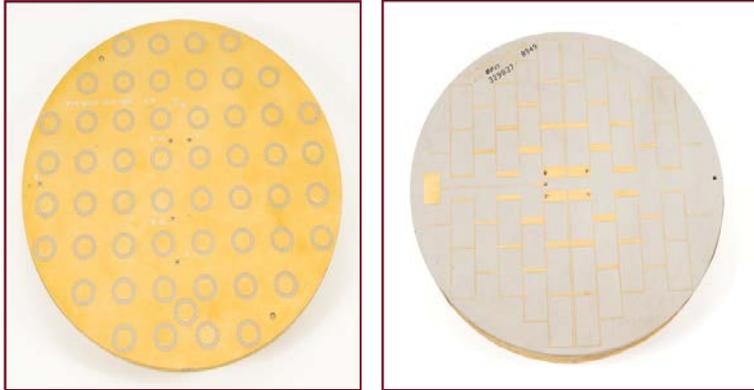


MINIATURE SWITCHED FILTER BANK



RF FRONT END

## RF FRONT END (RFFE)

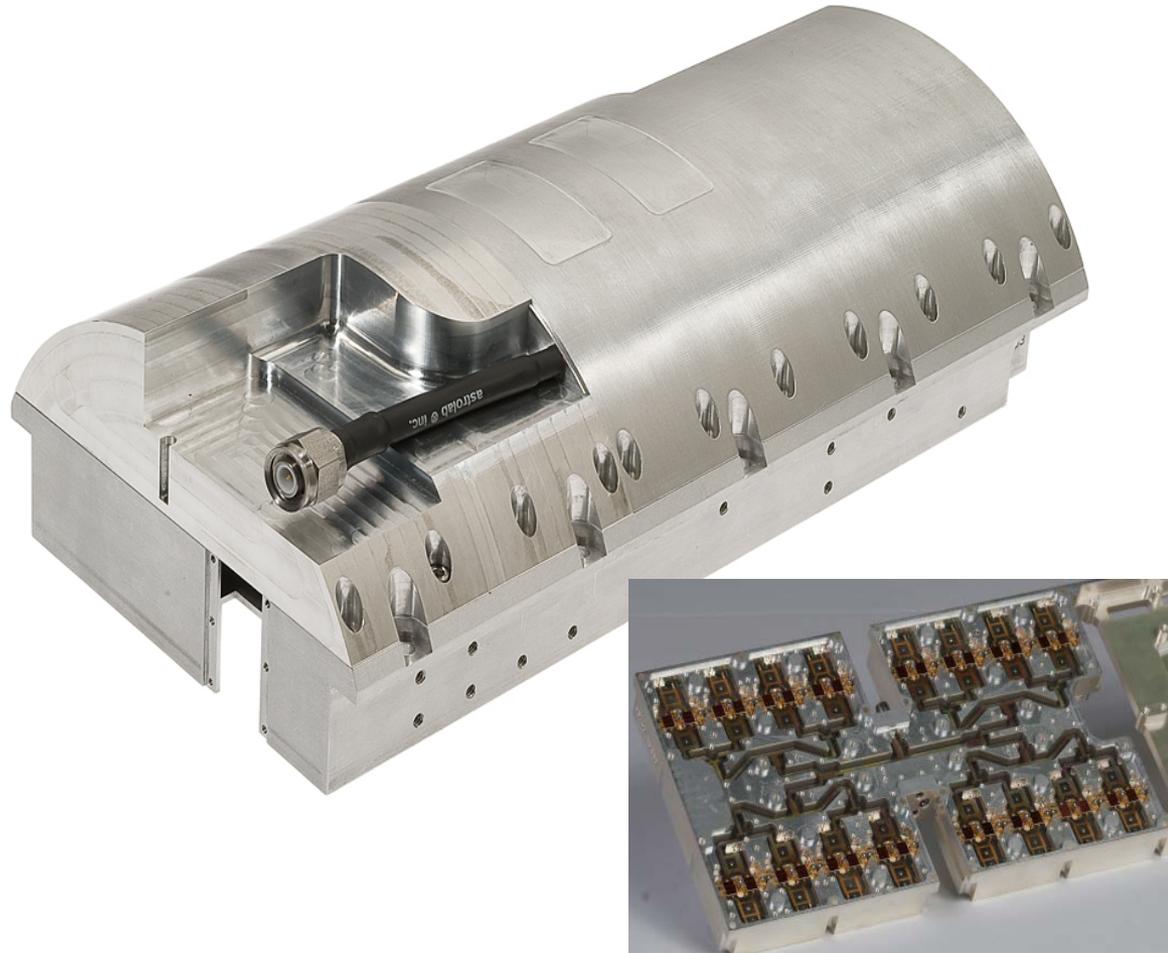


## VARIOUS SIZES

From 100 mm to 300 mm in diameter



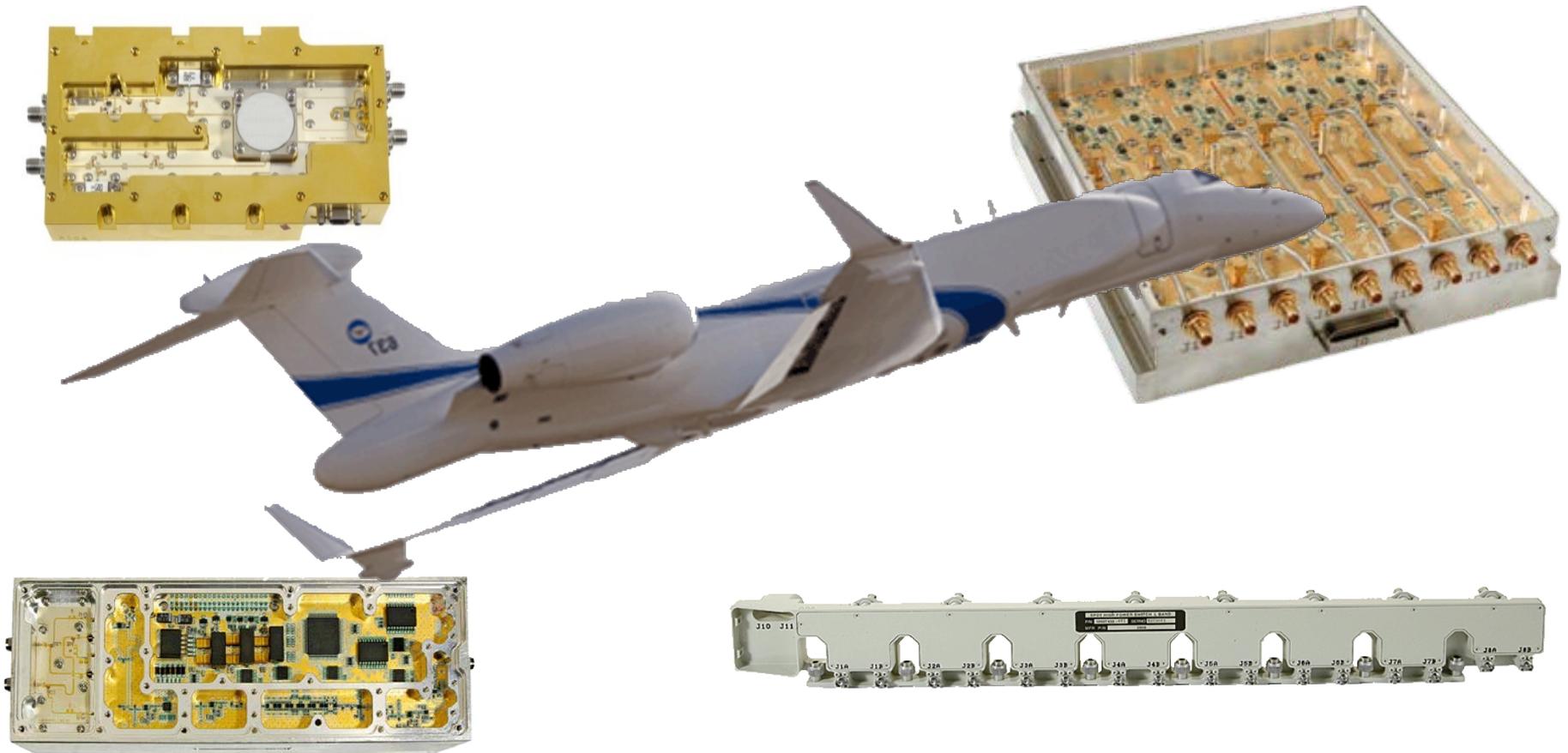
## X-BAND 400W SOLID STATE POWER AMPLIFIER (SSPA)



## IRON DOME RADAR

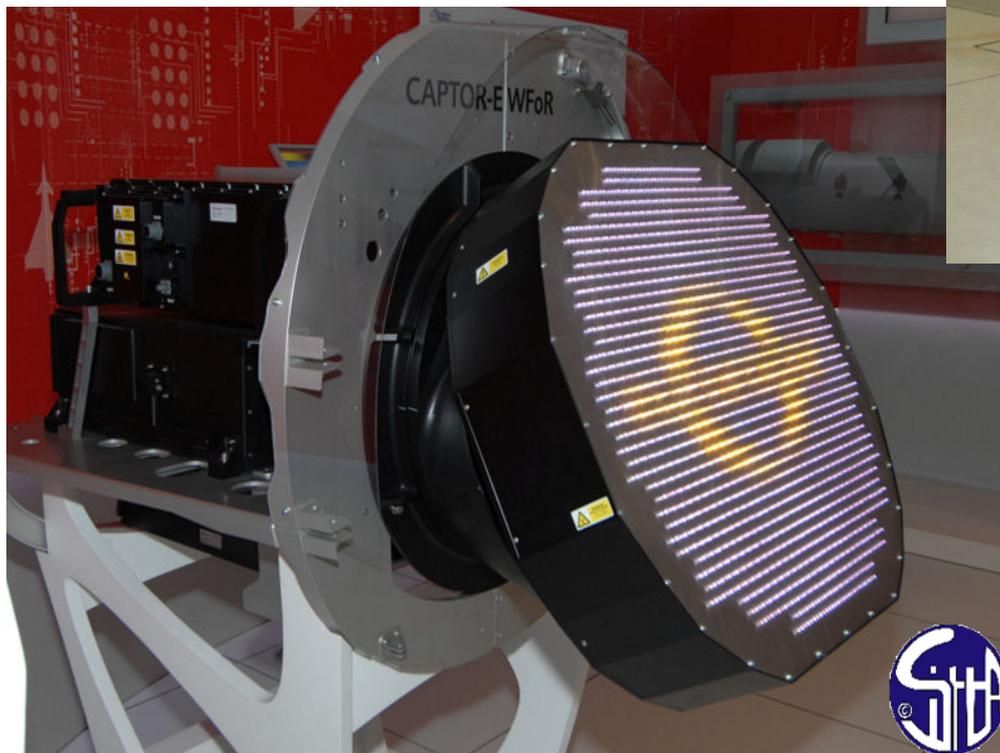


## AIRBORNE EARLY WARNING RADARS



## EUROFIGHTER (AESA)

### Active Electronically Scanned Array



## SMALL RADARS FOR HOMELAND SECURITY



## PRECISION GUIDED MUNITIONS, DATA LINKS & NAVIGATION WARFARE

### MAIN APPLICATIONS

- MISSILES, ROCKETS
- SMART/PRECISION GUIDED MUNITIONS
- JDAM – **J**oint **D**irect **A**ttack **M**unition, BDI – BOMB DAMAGE IDENTIFICATION
- **N**ETWORK **C**ENTRIC **W**ARFARE
- UAVs



### MODULES WE PROVIDE:

- STATE-OF-THE-ART TRANSCEIVERS INCORPORATING INTEGRATED MIXED SIGNAL (SOC) ASSEMBLIES AND COTS/CUSTOM RF COMPONENTS/MMICs
- GPS IMMUNE MODULES



FROM SIMPLE, SMALL AND LOW POWER TO COMPLEX, HIGH END,  
HIGH POWER



## COMMERCIAL APPLICATIONS

*Aircraft Broadband Satellite Communications  
for Commercial & Military Applications*



### APPLICATIONS



Mobile Phone  
VoIP



Internet



Video



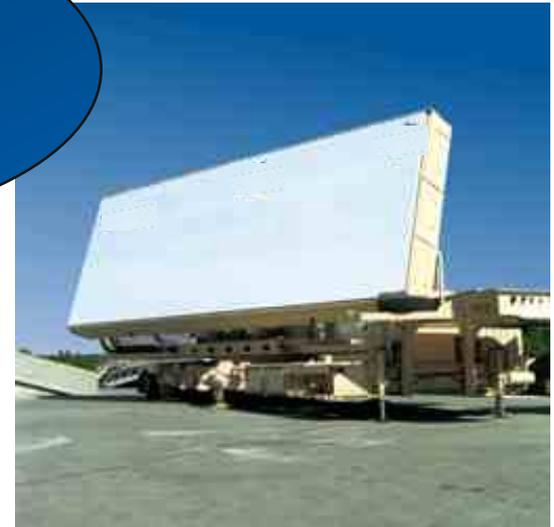
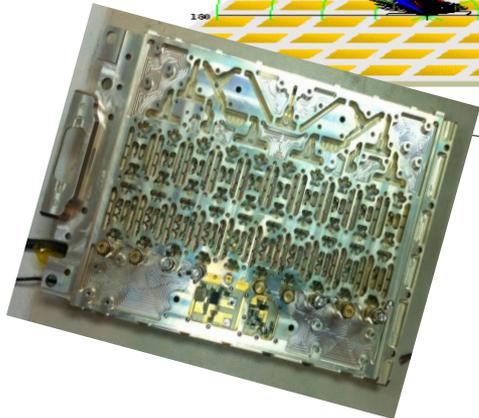
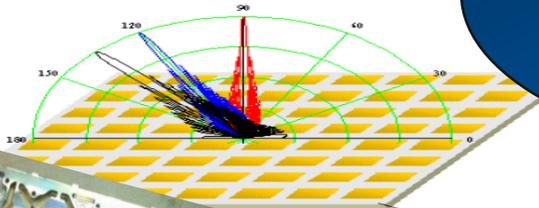
Heavy data  
files

### SERVICE PROVIDER

## BEAM FORMING MODULES FOR SURFACE AND AIRBORNE PHASED ARRAY RADARS



# BEAM FORMING



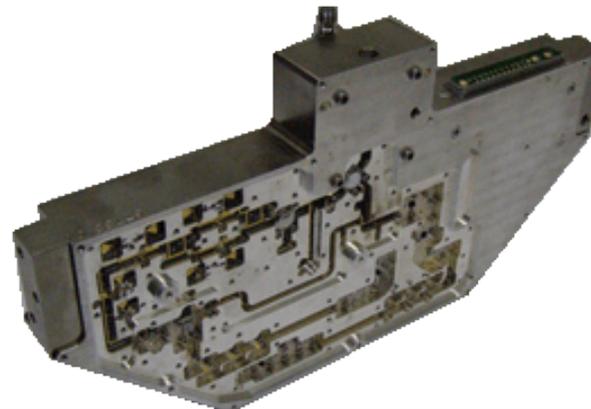
## SOLID STATE POWER AMPLIFIERS (SSPAs)

- C, X, AND Ku BANDS
- 15W, 20W, 50W, 100W, 200W AND 400W
- MISSILE SEEKER AND RADAR APPLICATIONS
- GaAs AND GaN
- CUSTOM AND COTS
- IN SERIAL PRODUCTION

100W X-BAND GaAs



50W GaN X BAND TRANSCIEVER



400W X-BAND GaAs

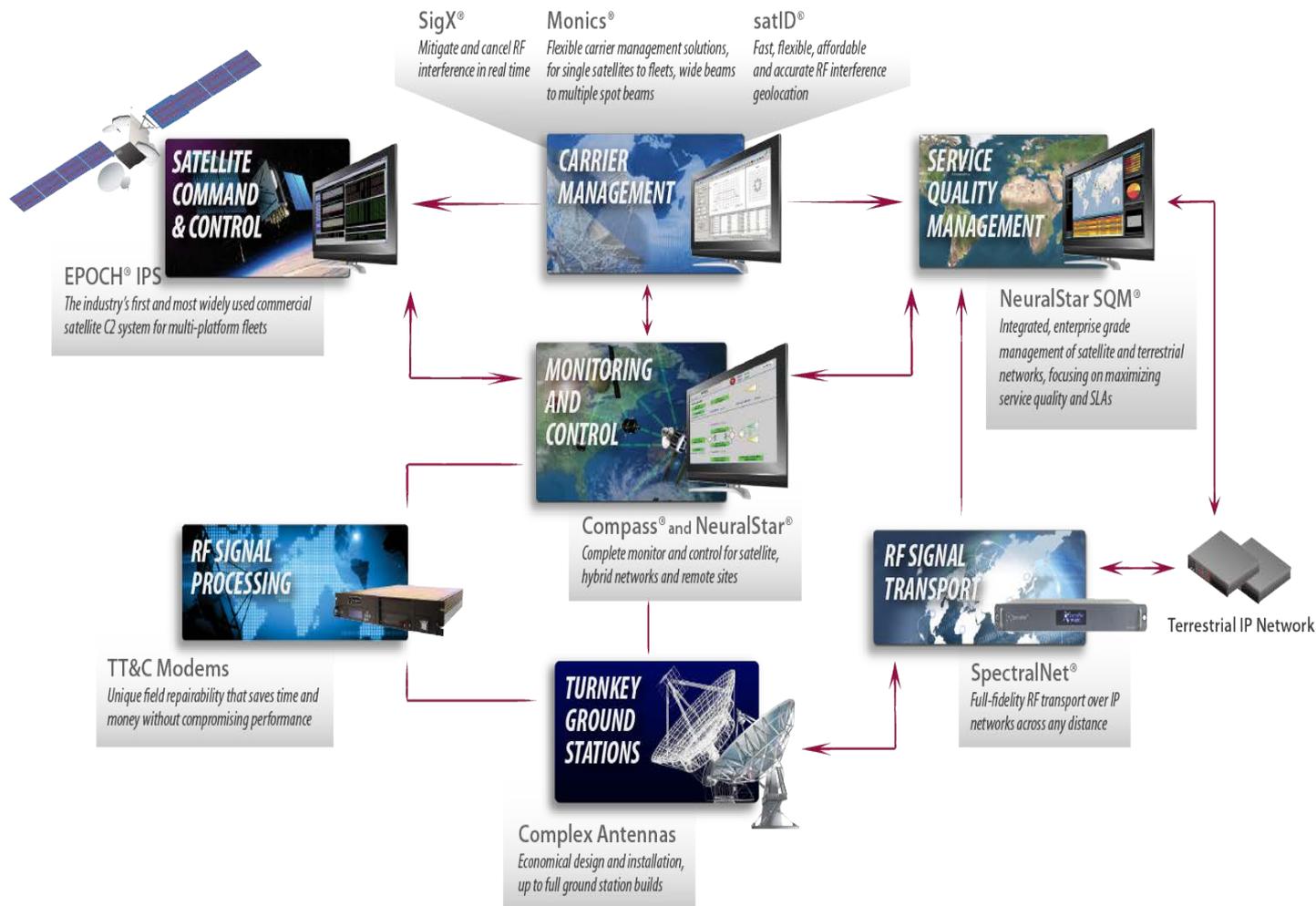




*Kratos is a World Leader in  
Satellite System Command &  
Control and Radio Frequency  
Interference (RFI) Detection  
and Defeat Products*



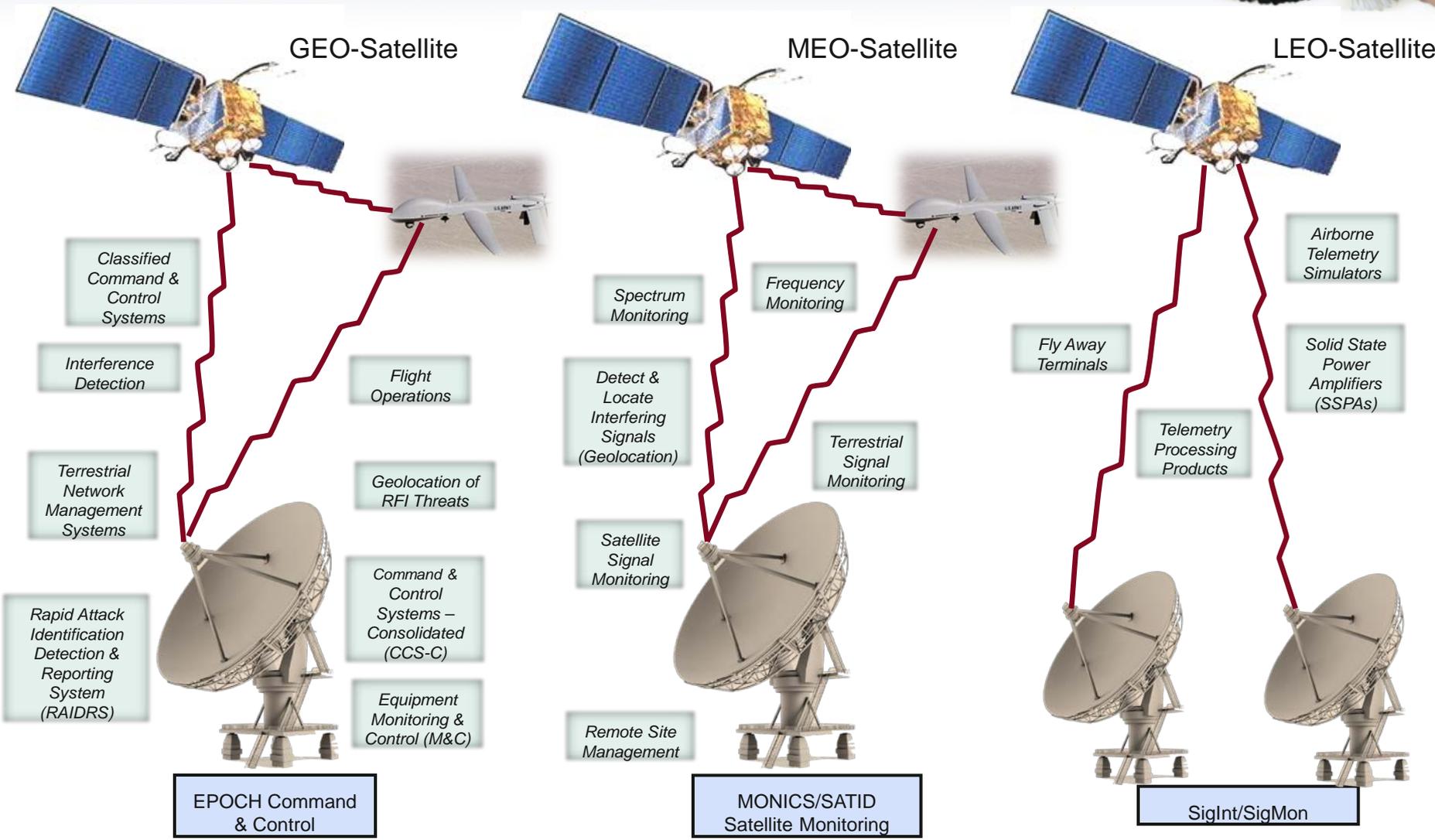
## Satellite System Ground Infrastructure Products



# Kratos – Satellite Command & Control, Signal Monitoring, Communications and Signal Interference Detection Systems



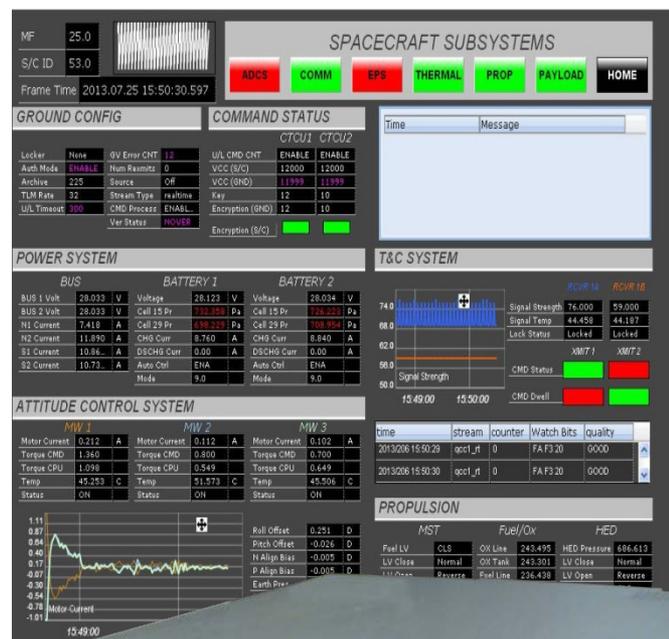
Maintaining, Sustaining and Protecting ~80% of U.S. Satellite Systems Today





## quantum<sup>®</sup>GND

- Turnkey Small Satellite “Ground System in a Box”
- Specifically Built for Unique Needs and Economics of the Growing Small Satellite/ Cubesat Industry
- Includes Hardware and Software Components: Radio, Front End Processor, C2
- Provides Full Satellite Awareness and Control





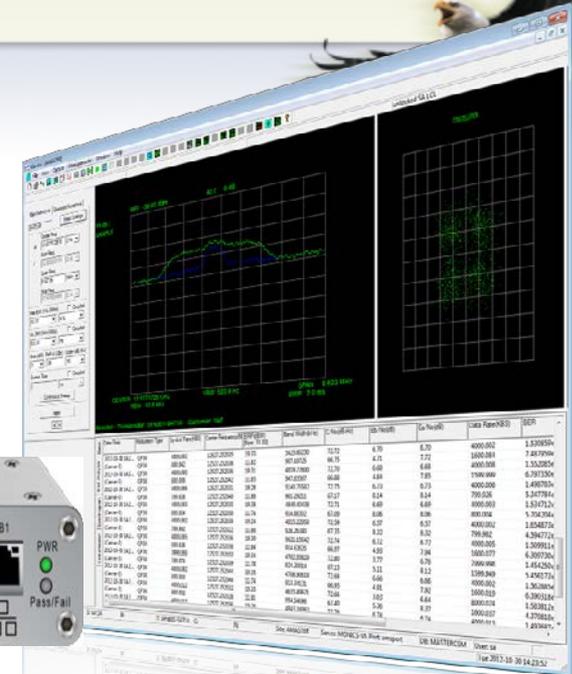
## Signal Processing

- Narrowband Signal Processing for Both Government and Commercial Satellite TT&C
- Wideband Signal Processing Including Systems Downlink, Pre-Process and Distributing High Rate Sensor Data
- Record-Breaking Throughput in ISR SATCOM Data Rates
- Extensive Mission Support for Imagery, Terrestrial and Space Weather, Earth and Space Science



## Monics®

- Industry Leading Family of Carrier Management and RF Interference Monitoring Products
- Complete Scalable Line from Single Beams to Enterprise, Multi-Site Management
- New Monics 200 Unit to Support Monitoring of Growing High Throughput Satellites (HTS)





## SigX<sup>®</sup> Protect

- Eliminates Common Types of Satellite RF Interference in Real-Time
- Dedicated Signal Protection with No Impact on Operations
- Preserves Current Infrastructure Investments
- Requires No Additional Bandwidth





## SpectralNet®

- RF-Over-IP Transport
- Eliminates the Distance Barriers that have Limited Ground Station Architectures
- Maintains Integrity of the RF Signal When Transporting Across an IP Network
- Enables Use Cases Such as Centralizing or Decentralizing Ground Operations, Virtualizing the Ground Segment, Rain Fade Mitigation, Etc.



## Satellite Communications Representative Systems Supported



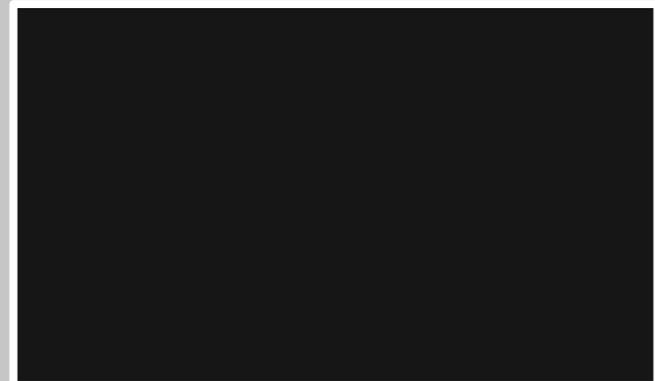
AEHF



SBIRS



WGS



Classified



- 2015 Bipartisan Spending Bill Signed by the President has Brought Funding Clarity for Federal Fiscal 2016 & 2017
- Though Not Great, This is the Best DoD Environment Since Budget Control Act of 2011
- Kratos “Core” Satellite Communications, Microwave Electronics and Unmanned Systems Business are Expected to Begin “Growth Trajectory” in 2016
- Kratos has One of the Best Growth Paths of Small and Mid-Tier Defense Companies
- Potential “Game Changing” Opportunities with Tactical Unmanned Aerial System Market Entry
- Began Debt Reduction Plan in 2015 that We Will Be Continuing
- Hope for Significant Valuation Increase Over the Next Three Years