



Amphenol

$$E = mc^2$$

Market Overview



- What is the market?
- Why is it important?
- Who are key customers?
- When will it launch?
- How much is it worth?

Overall Market Size

- Estimate a Big Picture Market Size
 - TAM – Total Addressable Market
 - How much does the DOD spend Annually, what is global spend
 - Roll up Large Primes (Lockheed, Raytheon, GD...) read annual reports new articles. Estimate their production output, and contract sizes

Connector Market Size

- Estimate the connector content in this market
 - SAM – Serviceable Addressable Market Drive down to connector and cable spend.
 - Estimate content of the larger platform (between 1-8%)
 - Evaluated Amsterdam Data, extrapolate one program and estimate the broader market
 - Competitors and what their market share could be?

Competitive Analysis

- List out all connector competitors in the market
- Strengths and Weakness compared to Amphenol
- Identify glaring product or program gaps

Key Contracts and Customers

- Identify key awards and contract
- Understand key prime and design locations
- Estimate potential Amphenol Content (\$ amount)

Platform Dissection

- Take a platform, aircraft, vehicles, radar, etc.
 - Overlay a knowledge of key functioning systems
 - Indicate system component we could possibly have content
 - Identify they type of products needs in each system

Application Marketing Plan

- Which areas of the platform should we target
 - Identify the locations, engineering teams, supply chain
 - Reach out Sales/DSA/RDSM to seek point of opening to the account
 - Research our POS in Amsterdam if we have current activity
 - Seek web leads or trade show leads to penetrate platform targets.

Technology in the Market

- Evaluate the specific technology important to enabling this platform or system to function
 - Extreme temperatures, High Vibrations, Shock
- Key technology we currently find success in this platform
- Key competitor technology being implemented
- What technologies does Amphenol need to develop?

AMAO Product in the Market

- What current products are we the leader in this market?
 - Show examples and success stories of design-in.
- What product we have and are underpenetrated in this market?
- How do we market our product to gain greater appeal?

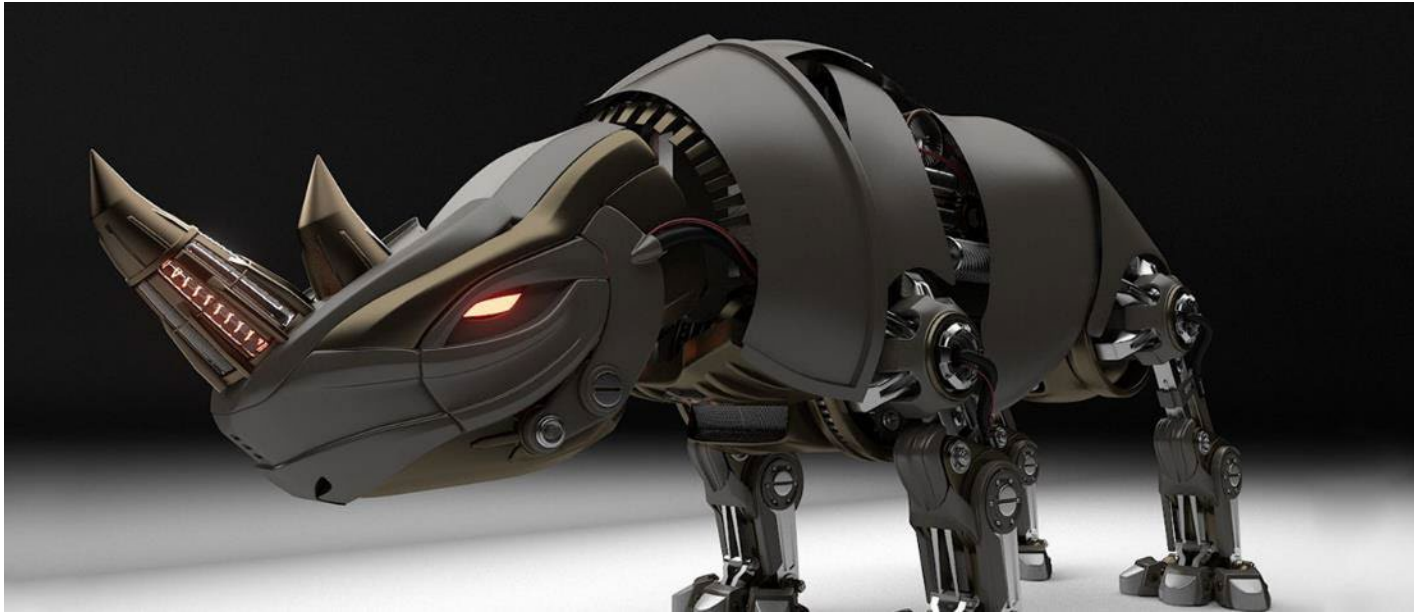
Future AMAO Product

- Propose Future AMAO derivative or new product development that could support this market
- What new specifications VITA, SOSA, MOSA, Mil-Spec is missing from the Amphenol Portfolio
- Hint: See competition

Strategic Plan

- Develop forward looking strategic plan based on your research to gain market share.
 - Propose 2 short term goals (3-9 months)
 - Propose 2 long term goals (18-36 months)

Military Ground Rhino Market



2035 World War IV breaks out on the African continent over the newly discovered resource of Teslium, a highly power dense material. Teslium is the base material for batteries and can hold 25,000X the capacity of Lithium-ion batteries. 10 AA Teslium battery can power an entire house for 1 month.

Militarize African like animal vehicles is the latest emerging defense trend to the one land battle taking place on the Sahara desert. The Military Ground Rhino Market is set to grow by 200% over the next 5 years.

DOD Spend

BY 2040 Spend
\$15.4B

Total SAM Estimated

\$450-480M

Key Technologies

Horn Array Technology
Rotary Rhino Joints
Teslium Sand resistant

Overall Market Size

DOD Spend

2040 Spend \$15.4B
 2041 Spend \$17.2B
 2042 Spend \$18.5B

Expecting building fleeting
 12,000 MGRs

Run rate of 3,800 MGRs per
 year

Expecting FMS sales to South
 Africa, UAE, Brazil another
 7,600 MGRs

Key Primes

AFX Technologies
 \$67B total revenue
 7.38B in Rhino Technologies

Horn Dynamics
 \$39.4B Total Revenue
 4.7B in Rhino Technologies

Y3Huffins
 \$18B Total Revenue
 1.5B in Rhino Technologies

Key Defense Suppliers

Amphenol
 \$4.8 B

TE Connectivity
 \$3.6 B

Glenair
 \$2.1B

Airborne
 \$150M

Others – \$500M

Connector Market Size

DOD Spend

2030 Spend \$15.4B
3% Connector Cable Content

\$462M SAM

Total SAM Estimated

\$450-480M

Key Primes

AFX Technologies
7.38B in Rhino Technologies
\$220M est SAM

Horn Dynamics
4.7B in Rhino Technologies
\$150M est SAM

Y3Huffis
1.5B in Rhino Technologies
\$80M est SAM

\$450M + 50M (est) others

\$500M SAM

Key Defense Suppliers

Amphenol
\$4.8 B - \$65-78M Rhinos

TE Connectivity
\$3.6 B – \$160-180M in Rhinos

Glenair
\$2.1 B - \$82-90M In Rhinos

Airborne
\$150M - \$20-25M in Rhinos

Others – \$500M - \$45-65M in Rhinos

\$372-\$438M SAM

Competitive Analysis

<u>Company</u>	<u>Price</u>	<u>Leadtime</u>	<u>Temperature Range</u>	<u>Hemetic Sealing</u>	<u>Rotating Joints</u>	<u>Rubber Molded</u>	<u>High Speed Data</u>	<u>RF</u>
Amphenol	✓	✓	✓	✓			✓	✓
TE Connectivity	✓		✓	✓	✓	✓		✓
Airborne			✓				✓	
Glenair		✓	✓	✓	✓			
Carlisle	✓					✓	✓	✓
Fischer		✓		✓		✓		

Key Contracts and Customers

Primes	Contract Amount	Description	Current APH	Estimate Annual SAM	Target Locations
AFX Technologies	\$21 B	IDIQ for 8,500 system over a 5 year period	YES	\$120M	Yellowstone, WY
Horn Dynamics	\$3.8 B	Subcontract for EW and Internal Central Intelligence hub	YES	\$35M	Boise, ID
Y3Huffins	\$700M	Power Management Joint dynamic range	No	\$25M	Denver, CO
Ivory Systems	\$250M	Horn Sensor Array	YES	\$8M	Death Valley, CA

Platform Dissection

Battery and Power System



Central Intelligence Hub

EAR Comms



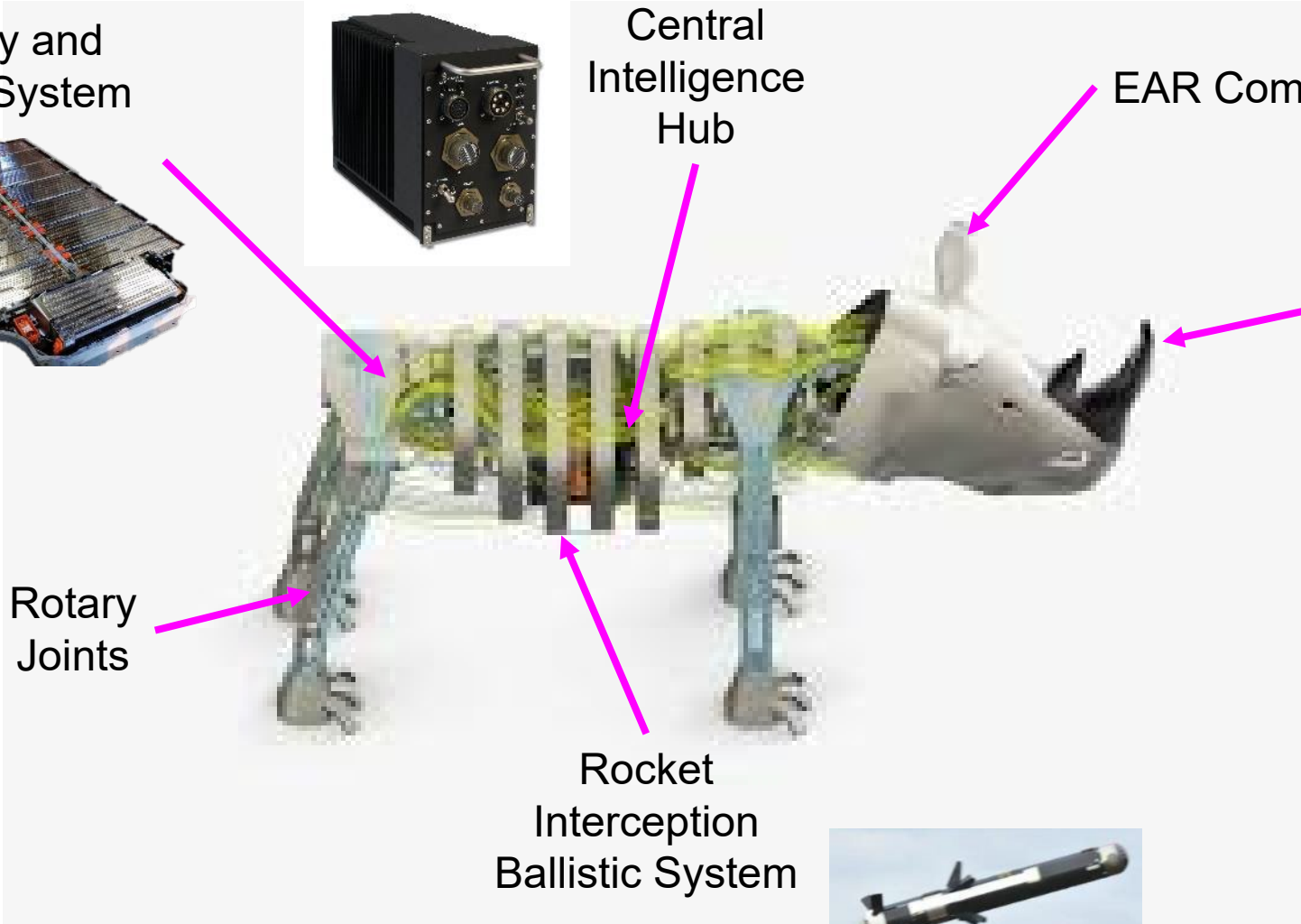
Horn Sensor Array



Rotary Joints



Rocket Interception Ballistic System



Application Marketing Plan

Primes	Targeted Products	Key Prime	Who to Engage
Horn Array	APC- RF Boards AQMI, SV – RF Assemblies	Ivory Systems	Work through APC and Q Microwave on current SCD
Central Intelligence Hub	AMHS – Fiber Switches AFSI – Fiber Backbone AAO- BL Connectors TMS – Phase Matched RF Cables ACC – Filtered ARhINoC	Horn Dynamics AFX Tech	DSA Brad has key contact, expand relationship with Giraffe team Discuss with GM Jared on FO switches to get more Harness opportunities
Rotary Joints	ANEX – Ranger APCD- R-CLAMPS ABT – Knee Assemblies	Y3 Huffins AFX Tech	Apps team Scott working on power development use relationships to grow Ranger and R Clamps
Batley and Power	ACAD – HVD38999 POSI - Scorpion	AFX Tech	BDM Dave creating tradeshaw schedule at Africa Tech Expos to get contacts

Technology in the Market



Rotating Joints

Deliver power and data to the leg which provide the mobility in X, Y, Z direction that allow the platform to traverse over African terrain

- Custom harness with high flex
- Integrated joints
- Light weight high power copper






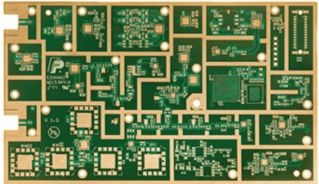


Horn Array

Key sensor array for intelligence, moveability systems, and deterrence. Combination of AESA, Infrared, and LIDAR to help the platform evaluate the terrain and target threats.

- RF Board with HDI and RF
- RF Filtering at the array
- High temperature sand resistant shells

AMAO Product in the Market

PRODUCT

<p>ACC – Filtered ARhINoC Inside Central Intelligence Hub For Jamming Vulture Systems Annual Revenue: \$3M Location: Boise, ID</p>		<p>AMHS – Fiber Switches Inside Central Intelligence Hub For Fiber optic backbone communications Annual Revenue \$6.4 M Location: Boise, ID, Yellowstone, WY</p>	
<p>APCD- R-CLAMPS Rhino Rotary Joint For securing cables to the joint motors Annual Revenue: \$1.6M Locations: Denver, CO</p>		<p>APC- RF Boards Micro RF RESA Attenuate Array For EW threat detection and defense Annual revenue \$3.5 M Location; Death Valley, CA</p>	
<p>ABT – Knee Assemblies Rear hind subassembly Wire harness inside knee hinge Annual revenue \$12M Denver, CO</p>		<p>POSI - Scorpion Power Distributions System Backplane for central power hub Annual Revenue \$890K Location: Denver, CO, Austin, TX</p>	

Future AMAO Product



Rotating Rhino Joints

Integrated Motor joints for fast maneuverability
 Developing high usage high temperature harness assemblies
 2nd source activity
 \$82M Market between TE and Gleanir



Intelligent Rhino Skins

Next Generation cloaking skins technology
 High density, low cost hair brush contacts
 In Development with DEVCOM
 Future FRP - \$28M program



Rocket Inerception Ballistic System

Resuasble rocket system that uses sand and dirt to create propellants
 \$13M market for Connectors

Strategic Plan

Short Term Goal

- Attend 2 Trade shows - Africa Technologies and Ground Tough Symposium
- Arrange Tech Day at AFX technologies
- Win Horn Array Systems with RF technologies

Long Term Goal

- Develop Rotary Joint to Compete with TE and Glenair
- Win MOSA downselect of backplane connector