

# CORPORATE OVERVIEW



**PTEX**<sup>™</sup> TRUE VISION



# OPTEX OVERVIEW



## Milestones underpinned by successful historical acquisitions/contracts

- Optex Systems Announces a \$1.62 Million Award for Optical Assemblies – March 2018
- Optex Systems Announces \$7.7 Million Contracts for Laser Protected Periscopes – Feb 2018
- Successfully acquired Applied Optics Center in 2014
- Successfully acquired Miller-Holzwarth's assets in 2013

◎ Optex, which was founded in 1987, is a Richardson, Texas based ISO 9001:2015 certified concern, which manufactures optical sighting systems and assemblies, primarily for Department of Defense (DOD) and Commercial applications. Its products are installed on various types of U.S. military land vehicles, such as the **Abrams** and **Bradley** fighting vehicles, Light Armored and Armored Security Vehicles (**LAVs**), Armored Multi-Purpose Vehicles (**AMPV**), and have been selected for installation on the **Stryker** family of vehicles. Optex also manufactures and delivers numerous periscope configurations, rifle and surveillance sights, and night vision optical assemblies. Optex delivers its products directly to the military services, to prime contractors, and to select commercial partners.

◎ 89 employees; 93,000 square foot facility

◎ Patents – Four issued by USPTO

◎ Department of State – ITAR Registered



# BUSINESS DIVISIONS OVERVIEW



## OPTEX HOLDING SYSTEMS

Symbol:  
OPXS



### OPTEX SYSTEMS

- Military Optical Sighting Systems
- Weapon Systems, Optical Subassemblies
- High Definition Imaging Systems
- Thermal and Night Vision Systems
- Video Display Systems



### APPLIED OPTICS CENTER

- Premier Thin Film Coatings
- Precision Optical Assembly Processes
- Stabilized Monoculars and Binoculars  
(Military & Commercial)



# OPTEX PRODUCTS - ABRAMS SUPPORT



Periscope Assembly,  
Commander Front  
(M1A1 Only)



Periscope Assembly,  
Commander Side  
(M1A1 Only)



ICWS Periscope Assembly  
(M1A2 Only)



Mirror Assembly  
Gunners Primary Sight  
(M1A1/M1A2)



M1 Head Assembly  
(M1A1/M1A2)



MRS  
Collimator Assembly  
(M1A1/M1A2)



EMI Defroster  
Window



Periscope Assembly,  
Driver's Unity (Long)  
(M1A1/M1A2)



Laser  
Filter



Unity Mirror  
Assembly  
(M1A1/M1A2)



Periscope Assembly,  
Driver's Unity (Short)  
(M1A1/M1A2)



M1 Head Mirror Assembly  
Gunners Primary Sight  
(M1A1/M1A2)



CWSS  
Commanders Weapon  
Station Sight  
(M1A1 Only)





# OPTEX PRODUCTS - BRADLEY SUPPORT

## Bradley Fighting Vehicle



Back Up Sight  
Periscope Assembly



15 Degree Periscope  
Assembly



M17 Periscope  
Assembly



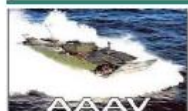
20 Degree Periscope  
Assembly



M27 Periscope  
Assembly



M45 Periscope  
Assembly



AAAV



ASV



HOWITZER



BRADLEY AV



BRADLEY AV



HOWITZER

**Optex Optex Systems Inc.**

Military Artillery Fire Control Systems

ISO 9001:2008

BUREAU VERITAS  
Certification



[www.optexsys.com](http://www.optexsys.com)



**PTEX™** TRUE VISION

Symbol: OPXS



# OPTEX PRODUCTS - STRYKER – LAV SUPPORT

## *Stryker / LAV Family of Vehicles*



M27 Periscope Assembly  
(Turret Version)



M17 Periscope Assembly



Vision Block Assembly



M45 Periscope Assembly



LS Periscope Assembly  
(MGS Version)



LS MRS Collimator Assembly  
(MGS Version)



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# OPTEX PRODUCTS

## Periscopes



### M Series ICWS

Laser & Non-Laser Protected  
Acrylic & Glass Periscopes

**43%**

~Rev %

## Sighting Systems



### CSS, MRS Big Eye, etc.

Digital Day and Night (DDAN)  
Muzzle Reference Systems (MRS)  
Ships Binoculars, Collimators, etc.

**15%**

~Rev %



## AOC (Applied Optics Center)



### Optical cell Eyepiece

**Objective lens sets**  
Optically aligned metal  
and glass lens sets

**13%**

~Rev %



### Laser Interference Filters

Optical Coatings

**23%**

~Rev %

## Other



**Components**  
Misc. Repair  
parts  
Howitzer

**6%**

~Rev %



**PTEX**™ TRUE VISION

Symbol: OPXS



# OPTEX PRODUCTS – cont.

## DDAN / M36 Sights



## Laser Protected Periscopes



## M17 Day/Thermal Periscope



## Naval Binoculars



## Back Up Sight



## Red Tail – Digital Spotting Scope



## Howitzer Products



## Commercial Optical Assembly





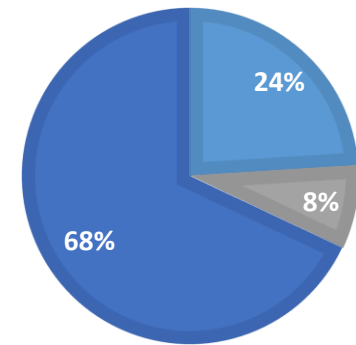


# SALES MIX SHIFTS – GROWING COMMERCIAL & FOREIGN MILITARY SALES

- Growing Commercial Sales Diversify the Sales Mix.
- Increased Military Spending Aligned with Optex's Product Portfolio

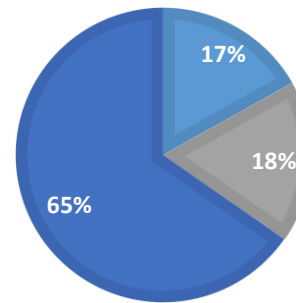
2017 REVENUE = \$18.5M

Commercial Foreign Other



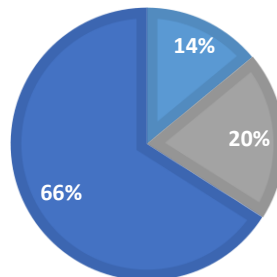
2016 REVENUE = \$17M

Commercial Foreign Other



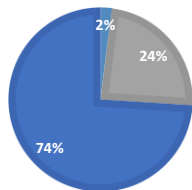
2015 REVENUE = \$13M

Commercial Foreign Other



2014 REVENUE = \$10M

Commercial Foreign Other





# OPTEX BUSINESS STRATEGY

## PRODUCTS

|         |         | PRESENT   | NEW   |
|---------|---------|---|---|
| MARKETS | PRESENT | <p><b>Market Retention</b></p> <ul style="list-style-type: none"><li>● Optical engineering</li><li>● Mechanical sighting systems</li><li>● Assembly Processes</li></ul> | <p><b>Product Development</b></p> <ul style="list-style-type: none"><li>● New periscope technology enhancement</li><li>● New night vision systems</li></ul> |
|         | NEW     | <p><b>Market Development</b></p> <ul style="list-style-type: none"><li>● Commercial markets breakthrough</li><li>● Foreign military sales expansion</li></ul>           | <p><b>Diversification</b></p> <ul style="list-style-type: none"><li>● Opportunistic commercial product development</li></ul>                                |

Optex has established core competencies by proving its **product reliability** and **product quality** and by maintaining deep **product and sector knowledge** in an overall **supply chain control** environment



# SELECT MAJOR CUSTOMERS

## DEFENSE CUSTOMERS



**TEXTRON**

**NORTHROP GRUMMAN**



**BAE SYSTEMS**



GOBIERNO DE  
**CHILE**

**Raytheon**

## COMMERCIAL CUSTOMERS

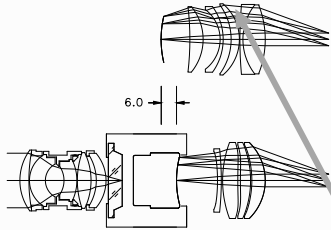


**Cabela's**  
WORLD'S FOREMOST OUTFITTER



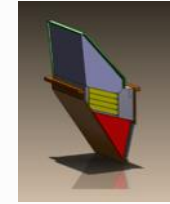
# KEYS TO PRODUCT DEVELOPMENT

- Glass Properties
- Glass Shape
- Color / Distortion Control



**MECHANICAL  
DESIGN  
TOOLS**

- 2D/3D Capability
- Thermal / Strength Analysis



**OPTICAL  
DESIGN  
TOOLS**



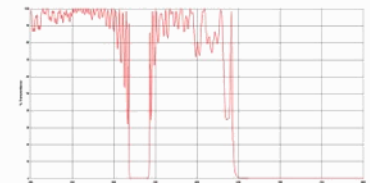
**THIN FILM  
DESIGN  
TOOLS**

- Thin Films
- Anti-Reflective coatings
- Optical Assembly
- EMI Thin Films
- CNC Machining
- CARC Painting
- Optical/Mechanical Alignment
- Electronic Assembly
- Environmental Testing



**VERTICAL  
INTEGRATION  
OF KEY  
EQUIPMENT &  
PROCESSES**

- Wavelength notching
- Transmissivity Analysis
- Absorption Analysis





# SUMMARY

## Market Opportunity

- \$1 Billion worldwide
- Increasing market share (commercial and foreign)

## Proven Acquisition Strategy

- Identify targets' critical capabilities
- Seek vertical integration
- Bargain purchase price

## Product Portfolio

- Highest quality
- Innovative product development
- New product launches

## Customer Base

- International foothold
- Major defense customers
- Top commercial customers
- Government & contractor's