

WinterGreen Research, Inc.

**Law Enforcement Robots: Market Shares, Market Strategies, and Market
Forecasts, 2016 to 2022**

Mountains of Opportunity



Picture by Susan Eustis

WinterGreen Research, Inc.

Lexington, Massachusetts

www.wintergreenresearch.com

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CHECK OUT THESE KEY TOPICS

Law Enforcement Robots Help Protect Against Terrorists, Negotiate in Hostage Situations, and Protect the Human Police Officer

Law Enforcement Robots
Homeland Security Robots
First Responder Robots
Border Patrol Robots
Ground Robots
Bomb Detection Robots
Networks of Military Robots
Unmanned Logistics Vehicles
Robots Market Shares
Unmanned Vehicles
Robots Market Forecasts
Maneuverable Military Robots
Military Embedded Software

Sensor Networks
Search And Rescue
Robot Navigation
Battery for Robots
Robots Drive Control
Robots Electronics
Robots Market Segments
Low Power Robots
Guns Mounted on Robots
Military Robots
Auto Assault-12 (AA-2)
Remote-Controlled Weapons
Neural Robotics

Robotex
Folding Transport Military
Robots
Robotics
Robot
Common Operator Control
Unit
Radio Control Modules
Security
Apps

Law Enforcement, First Responder, and Homeland Security Robots: Systems Combine with Apps and Analytics to Enable Law Enforcement Routine Use of Security Navigation and Communication Robots

Law Enforcement Robots: Market Shares, Market Strategies, and Market Forecasts, 2016 to 2022

Next Generation Law Enforcement Robotic Platforms:

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**Navigation, Cameras, Graspers, Video and Motion Technology Support
Officer Team Security Improvement Through Mitigating Risk to Humans in
Dangerous Situations**

LEXINGTON, Massachusetts (July 20, 2016) – WinterGreen Research announces that it has published a new study *Law Enforcement Robots: Market Shares, Strategy, and Forecasts, Worldwide, 2016 to 2022*. Next generation law enforcement robots are being implemented as platforms. Platforms are useful for accepting a range of components quickly to repurpose units on the fly. Law enforcement robots leverage better materials, more sophisticated designs, software technology, and tablet remote controls. They are communication devices that support high quality data gathering. Communications are implemented in difficult situations. The study has 649 pages and 327 tables and figures.

Law enforcement robotics are slated to increase in value to cities and local communities providing low cost protection and high value capabilities. With the active threat of terrorists attacking civilian populations in every country, law enforcement has become the new military. As terrorists operate outside nationalistic borders and infiltrate into the community, robot systems are needed by local police forces, not just the military. The national priority in every country is to increase the budgets for regional and local law enforcement robotic response.

Response to emergency situations with robots include response to natural disasters, hostage taking, barricaded law breakers, and terrorists. These situations have not been a problem inside local communities, previously dealt with by national authorities.

With the rise of international terrorism, experienced through the news media in most local communities and cities, the threat of local terrorism is becoming more real and unfortunately more common. The robots offer all level of protection to the human by letting the police officers do some of their job remotely.

Law enforcement robots are mobile automated process platforms that are responsive to homeland security needs. They are emerging in the context of globalization and smart phone devices that provide connectedness in every aspect of people and things worldwide. Law enforcement robots are evolving in the context of the smart phone apps that support the systems of engagement. This global aspect of the law enforcement robots means that the devices have a presence in every part of the world.

Law enforcement robots are inherently local, they are used locally, they are needed by security personnel in particularly dangerous local situations. Systems of engagement apps are evolving as specially designed ground robot networks used to address terrorism and local law enforcement and fire department needs to support community and cities safety patrol.

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Bomb squads need robots, they need robot technology, more flexibility, better maneuverability. The robots can be tuned to the specific activity in which they are being used. Modular systems represent platform technology of choice for robots. Modules can be highly targeted to specific situations. Robots make police organizations more functional. Robots improve performance, they work remotely.

According to Susan Eustis, leader of the team that prepared the study, "Robots for law enforcement rely on maneuverability. Security technology is becoming mobile, changing the old security camera approach to allowing a more proactive approach to security. The robot can go out and look around."

The aim of using law enforcement robots is to secure the safety of the officers in the field. Robots are pretty good at this as it turns out. Police are forced to function in dangerous situations. Law enforcement robots make a manned police force able to function more effectively. Robots can carry video cameras. Video facilitates communicating with a dangerous criminal.

Law enforcement robots have become more affordable. Market growth comes from economies of scale that bring the lower costs for more functionality.

Law enforcement robot markets at \$1 billion in 2015 are anticipated to reach \$5.7 billion by 2022. Market growth comes as every law enforcement agency faces the prospect of dealing with terrorists. With technology maturity and economies of scale, price points decline rapidly and affordability continues to drive significant market growth. The companies that have achieved measurable market share early in the evolution of the market are likely to maintain a strong presence in markets.

WinterGreen Research is an independent research organization funded by the sale of market research studies all over the world and by the implementation of ROI models that are used to calculate the total cost of ownership of equipment, services, and software. The company has 35 distributors worldwide, including Global Information Info Shop, Market Research.com, Research and Markets, electronics.ca, and Thompson Financial. WinterGreen Research is positioned to help customers facing challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust wintergreen research to work alongside them to ensure the success of the participation in a particular market segment.

WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range

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of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

Law Enforcement Robots Responsive to Homeland Security Needs as Globalization Makes Terrorism More Local

Key words:, Key Words: Law Enforcement, First Responder, Border Patrol Bomb Detection Robots, CBRNe, Chemical, Biological, Radiological, Nuclear, Explosives (CBRNE), Networks of Law Enforcement, First Responder, Border Patrol Robots, Unmanned Law Enforcement, First Responder, Border Patrol Logistics Vehicles, Law Enforcement, First Responder, Border Patrol Robots Market Shares, Unmanned Vehicles , Law Enforcement, First Responder, Border Patrol Robots Market Forecasts, Maneuverable Law Enforcement, First Responder, Border Patrol Robots s, , Law Enforcement, First Responder, Border Patrol Embedded Software, Sensor Network, Search And Rescue, Robot Navigation, Battery for Law Enforcement, First Responder, Border Patrol Robots , Law Enforcement, First Responder, Border Patrol Robots Drive Control , Law Enforcement, First Responder, Border Patrol Robots Electronics, Law Enforcement, First Responder, Border Patrol Robots Market Segments, Low Power Law Enforcement, First Responder, Border Patrol Robots, Guns Mounted on Robots, Law Enforcement, First Responder, Border Patrol Robots, Auto Assault-12 (AA-2), Remote-Controlled Weapons, Neural Robotics, Robotex, Folding Transport Law Enforcement, First Responder, Border Patrol Robots , Robotics, Robot Common Operator Control Unit, Radio Control Modules, robot lasers, [http://wintergreenresearch.com/reports/Law Enforcement, First Responder, Border Patrol %20Ground%20Robots.htm](http://wintergreenresearch.com/reports/Law%20Enforcement,%20First%20Responder,%20Border%20Patrol%20Ground%20Robots.htm), Apps,

Companies Profiled

Market Leaders

Northrop Grumman

General Dynamics

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Endeavour Robotics
QinetiQ
ReconRobotics
Telerob

Kongsberg
Energid / Mitsubishi
SDR
Lockheed Martin

I

Market Participants

Coroware

DJI

Kairos Autonomi

Google

GoPro

Kairos Autonomi

Kawada Industries

Kuka

Lithos Robotics

Lockheed Martin

Mesa Robotics

Mitsubishi Next-Generation

Robot for Nuclear Power Plant

Heat Exchanger Tube Inspection

Northrop Grumman

Pedsco

Power Hawk Technologies

Robotics

Robosoft

Robotex

TechnoRobot

Transcend Robotics

Yamaha

Law Enforcement Robots: Market Shares, Market Strategies, and Market Forecasts, 2016 to 2022

Report Methodology

This is the 683rd report in a series of primary market research reports that provide forecasts in communications, telecommunications, the Internet, computer, software, telephone equipment, health equipment, and energy. Automated process and significant growth potential are priorities in topic selection. The project leaders take direct responsibility for writing and preparing each report. They have significant experience preparing industry studies. Forecasts are based on primary research and proprietary data bases.

The primary research is conducted by talking to customers, distributors and companies. The survey data is not enough to make accurate assessment of market size, so WinterGreen Research looks at the value of shipments and the average price to achieve market assessments. Our track record in achieving accuracy is

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unsurpassed in the industry. We are known for being able to develop accurate market shares and projections. This is our specialty.

The analyst process is concentrated on getting good market numbers. This process involves looking at the markets from several different perspectives, including vendor shipments. The interview process is an essential aspect as well. We do have a lot of granular analysis of the different shipments by vendor in the study and addenda prepared after the study was published if that is appropriate.

Forecasts reflect analysis of the market trends in the segment and related segments. Unit and dollar shipments are analyzed through consideration of dollar volume of each market participant in the segment. Installed base analysis and unit analysis is based on interviews and an information search. Market share analysis includes conversations with key customers of products, industry segment leaders, marketing directors, distributors, leading market participants, opinion leaders, and companies seeking to develop measurable market share.

Over 200 in depth interviews are conducted for each report with a broad range of key participants and industry leaders in the market segment. We establish accurate market forecasts based on economic and market conditions as a base. Use input/output ratios, flow charts, and other economic methods to quantify data. Use in-house analysts who meet stringent quality standards.

Interviewing key industry participants, experts and end-users is a central part of the study. Our research includes access to large proprietary databases. Literature search includes analysis of trade publications, government reports, and corporate literature.

Findings and conclusions of this report are based on information gathered from industry sources, including manufacturers, distributors, partners, opinion leaders, and users. Interview data was combined with information gathered through an extensive review of internet and printed sources such as trade publications, trade associations, company literature, and online databases. The projections contained in this report are checked from top down and bottom up analysis to be sure there is congruence from that perspective.

The base year for analysis and projection is 2010. With 2010 and several years prior to that as a baseline, market projections were developed for 2011 through 2017. These projections are based on a combination of a consensus among the opinion leader contacts interviewed combined with understanding of the key market drivers and their impact from a historical and analytical perspective.

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The analytical methodologies used to generate the market estimates are based on penetration analyses, similar market analyses, and delta calculations to supplement independent and dependent variable analysis. All analyses are displaying selected descriptions of products and services.

This research includes referencde to an ROI model that is part of a series that provides IT systems financial planners access to information that supports analysis of all the numbers that impact management of a product launch or large and complex data center. The methodology used in the models relates to having a sophisticated analytical technique for understanding the impact of workload on processor consumption and cost.

WinterGreen Research has looked at the metrics and independent research to develop assumptions that reflect the actual anticipated usage and cost of systems. Comparative analyses reflect the input of these values into models.

The variables and assumptions provided in the market research study and the ROI models are based on extensive experience in providing research to large enterprise organizations and data centers. The ROI models have lists of servers from different manufacturers, Systems z models from IBM, and labor costs by category around the world. This information has been developed from WinterGreen research proprietary data bases constructed as a result of preparing market research studies that address the software, energy, healthcare, telecommunications, and hardware businesses.

YOU MUST HAVE THIS STUDY

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Table of Contents

Law Enforcement Robots Executive Summary

The study is designed to give a comprehensive overview of the Law Enforcement Robots market segment. Research represents a selection from the mountains of data available of the most relevant and cogent market materials, with selections made by the most senior analysts. Commentary on every aspect of the market from independent analysts creates an independent perspective in the evaluation of the market. In this manner the study presents a comprehensive overview of what is going on in this market, assisting managers with designing market strategies likely to succeed.

| | |
|---|-----------|
| LAW ENFORCEMENT, BORDER PATROL, AND LAW ENFORCEMENT EXECUTIVE SUMMARY | 39 |
| Law Enforcement Robots Leverage High Value | 39 |
| Local Law Enforcement Markets Entering A New Era | 45 |
| Law Enforcement Robot Market Driving Forces | 47 |
| Robot Border Patrol | 48 |
| Northrop Grumman Made The ‘Bomb Robot’ That Dallas Police Used To Kill Sniper Suspect | 50 |
| SWAT Teams Everywhere Need Law Enforcement Robots | 52 |
| Law Enforcement Robot Market Shares | 53 |
| Law Enforcement Robot Market Forecasts | 56 |
| 1. LAW ENFORCEMENT ROBOTS MARKET DESCRIPTION AND MARKET DYNAMICS | 57 |
| 1.1 Law Enforcement Robots | 57 |
| 1.1.1 Law Enforcement Need for Robots When Explosives Are Present | 58 |
| 1.2 Law Enforcement Robot Border Patrol | 60 |
| 1.2.1 Border Patrol and Homeland Security | 62 |
| 1.2.2 Delivering Robotic Capabilities to Law Enforcement Teams | 63 |
| 1.3 Robot Scope | 64 |
| 1.3.1 Law Enforcement Robot Applications | 65 |
| 1.3.2 Types of Law Enforcement Robots | 69 |
| 1.3.3 Telerob Explosive Observation Robot and Ordnance Disposal | 69 |
| 1.3.4 QinetiQ North America Talon® Robots Universal Disrupter Mount | 72 |
| 1.3.5 General Dynamics Next-Generation CROWS II Increases Law Enforcement Safety | 74 |

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| | | |
|----------|---|-----------|
| 1.3.6 | Law Enforcement Endeavor Robotics | 75 |
| 1.4 | SUGVs | 76 |
| 1.5 | Robots Delivering Protection Capabilities | 77 |
| 1.5.1 | Law Enforcement, Law Enforcement, Border Patrol Robots | 77 |
| 2 | LAW ENFORCEMENT ROBOT MARKET SHARES AND MARKET FORECASTS | 79 |
| 2.1 | Law Enforcement Robots Leverage Civilian Systems of Engagement | 79 |
| 2.1.1 | Local Law Enforcement Markets Entering A New Era | 84 |
| 2.1.2 | Law Enforcement Robot Market Driving Forces | 86 |
| 2.1.3 | Robot Border Patrol | 87 |
| 2.1.4 | Northrop Grumman Made The 'Bomb Robot' That Dallas Police Used To Kill Sniper Suspect | 89 |
| 2.1.5 | SWAT Teams Everywhere Need Law Enforcement Robots | 91 |
| 2.2 | Law Enforcement Robot Market Shares | 92 |
| 2.2.1 | Challenges That Define Modern Civilian Security | 96 |
| 2.2.2 | Northrop Grumman | 97 |
| 2.2.3 | Northrop Grumman | 98 |
| 2.2.4 | Northrop Grumman Cutlass | 99 |
| 2.2.5 | Northrop Grumman Mini-ANDROS II | 100 |
| 2.2.6 | General Dynamics Robotic Sentry – Intruder Detection and Assessment | 100 |
| 2.2.7 | QinetiQ Law Enforcement Robots | 101 |
| 2.2.8 | QinetiQ TALON | 101 |
| 2.2.9 | ReconRobotics | 103 |
| 2.2.10 | SDR LT2 / LT2-F | 103 |
| 2.2.11 | Endeavor Robotics Surveillance Robots | 104 |
| 2.2.12 | Endeavor Robotics Research / Endeavor Robotics Collaborative Systems | 105 |
| 2.2.13 | Endeavor Robotics Packbot | 106 |
| 2.2.14 | Endeavor Robotics PackBot Scout | 107 |
| 2.2.15 | Endeavor Robotics PackBot Explorer | 107 |
| 2.2.16 | Kongsberg | 108 |
| 2.2.17 | Energid / Mitsubishi Next-Generation Robot for Nuclear Power Plant Heat Exchanger Tube Inspection | 108 |
| 2.2.18 | Mesa Systems Development Division | 108 |
| 2.3 | Law Enforcement Robot Market Forecasts | 109 |
| 2.3.1 | Application Scope | 111 |
| 2.3.2 | Law Enforcement Market Industry Segments | 111 |
| 2.3.3 | Law Enforcement Robot Segment Analysis | 114 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | | |
|----------|--|------------|
| 2.3.4 | Law Enforcement Market Metrics | 118 |
| 2.3.5 | Law Enforcement Tactical Robot Segment Analysis | 119 |
| 2.3.6 | Law Enforcement Small SUGV and Small / Mid-Size Robot Segment Analysis | 122 |
| 2.3.7 | Law Enforcement Large Segment Analysis | 126 |
| 2.3.8 | Law Enforcement Teams | 127 |
| 2.3.9 | By 2022 Every Law Enforcement Team in The World Will Need to Have Some Robotic Capability | 128 |
| 2.3.10 | Building a Culture of Preparedness | 128 |
| 2.3.11 | Discussion of Various Size Law Enforcement Robot Market Strengths and Challenges | 129 |
| 2.3.12 | NTIA's Law Enforcement Network Authority ("FirstNet") | 129 |
| 2.3.13 | Civilian Security Robot Systems Roadmap | 130 |
| 2.4 | Law Enforcement Robot Market Analysis | 132 |
| 2.4.1 | Making Exploratory Investigation In Dangerous Or Unfolding Situation | 132 |
| 2.4.2 | Core Anti-Terrorism Technology | 135 |
| 2.4.3 | Small Mobile Robot Market Opportunity: Penetration of Fire and Police Departments | 136 |
| 2.5 | Law Enforcement Robot Prices and Situational Uses | 138 |
| 2.5.1 | Robots Emerge As Part Of Critical Homeland Security and Emergency Response Infrastructure | 143 |
| 2.6 | Law Enforcement Robot Regional Market Segments | 144 |
| 2.6.1 | Innovation a Priority in US | 146 |
| 3 | LAW ENFORCEMENT ROBOT PRODUCT DESCRIPTION | 147 |
| 3.1 | Endeavor Robotics 110 FirstLook | 147 |
| 3.1.1 | Endeavor Robotics ® 110 FirstLook® | 152 |
| 3.4.1 | Endeavor Robotics 510 Packbot | 154 |
| 3.1.2 | Endeavor Robotics ® PackBot® 510 for Law Enforcement | 156 |
| 3.1.3 | Endeavor Robotics ® PackBot® 510 for HazMat Technicians | 158 |
| 3.1.4 | Endeavor Robotics ® 510 PackBot® for EOD Swat Technicians | 160 |
| 3.1.5 | Endeavor Robotics ® PackBot® 510 for Border Patrol | 162 |
| 3.1.6 | Endeavor Robotics ® PackBot® 510 for Law Enforcement Engineers | 163 |
| 3.4.2 | Endeavor Robotics uPoint | 164 |
| 3.4.3 | Endeavor Robotics | 166 |
| 3.1.7 | Endeavor Robotics +CBRN/HazMat Within Industrial Settings | 173 |
| 3.1.8 | Endeavor Robotics Check Point/Vehicle Inspections | 173 |
| 3.1.9 | Endeavor Robotics in Confined Spaces | 173 |
| 3.1.10 | Endeavor Robotics Persistent Observation | 173 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | | |
|----------------------|--|-----|
| 3.1.11 | Endeavor Robotics FirstLook Bomb Disposal/ Explosive Ordnance Disposal (EOD) | 174 |
| 3.1.12 | Endeavor Robotics FirstLook Robots Visual Obscurants | 174 |
| 3.4.4 | Endeavor Robotics 310 SUGV | 175 |
| 3.1.13 | Endeavor Robotics ® 310 SUGV | 177 |
| 3.1.14 | Endeavor Robotics 310 SUGV Missions | 178 |
| 3.1.15 | Endeavor Robotics ® 340 SUGV | 179 |
| 3.1.16 | Endeavor Robotics ® SUGV | 180 |
| 3.1.17 | Endeavor Robotics Check Point / Vehicle Inspections | 182 |
| 3.1.18 | Endeavor Robotics Confined Spaces | 182 |
| 3.1.19 | Endeavor Robotics Persistent Observation | 182 |
| 3.1.20 | Endeavor Robotics Route/Building Clearance | 183 |
| 3.1.21 | Endeavor Robotics Visual Obscurants | 183 |
| 3.1.22 | Endeavor Robotics ® 710 Kobra™ | 184 |
| 3.1.23 | Endeavor Robotics 710 Kobra Missions | 185 |
| 3.4.5 | Endeavor Robotics 710 Kobra | 187 |
| 3.1.24 | Endeavor Robotics Robots Perform Missions On Land And In The Sea | 189 |
| 3.1.25 | Endeavor Robotics 710 Warrior™ | 190 |
| 3.2 Northrop Grumman | | 192 |
| 3.2.1 | Northrop Grumman Remotec Unveils Next-generation Andros(TM) Robot | 192 |
| 3.2.2 | Northrop Grumman Andros F6 Series | 194 |
| 3.2.3 | Northrop Grumman Remotec Robotic Platforms and Sub-Systems | 195 |
| 3.2.4 | Northrop Grumman Andros F6A - Law Enforcement & SWAT | 200 |
| 3.2.5 | Northrop Grumman Andros Robots | 201 |
| 3.2.6 | Northrop Grumman ANDROS Hazmat | 202 |
| 3.2.7 | Northrop Grumman Mark V-A1 - HAZMAT Technicians | 207 |
| 3.2.8 | Northrop Grumman Andros for Law Enforcement | 208 |
| 3.2.9 | Northrop Grumman Mini Andros II Features | 210 |
| 3.3 QinetiQ | | 212 |
| 3.3.1 | QinetiQ Spartacus | 212 |
| 3.3.2 | QinetiQ Minotaur | 213 |
| 3.3.3 | QinetiQ Raider | 215 |
| 3.3.4 | QinetiQ Tactical TALON for Homeland Security and Law Enforcement | 216 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | | |
|--------|---|-----|
| 3.3.5 | QinetiQ Law Enforcement Robots | 217 |
| 3.3.6 | QinetiQ Talon V | 218 |
| 3.3.7 | QinetiQ C-Talon | 220 |
| 3.3.8 | QinetiQ C-Talon Draper Laboratory Expertise in Action | 221 |
| 3.3.9 | QinetiQ TALON | 222 |
| 3.3.10 | QinetiQ TALON Product Line Expansion | 227 |
| 3.3.11 | QinetiQ Laptop Control Unit (LCU) | 228 |
| 3.3.12 | QinetiQ Comprised Of Experts In Defense, Aerospace, And Security | 229 |
| 3.3.13 | QinetiQ North America TALON Detects Deadly IEDs And Saves Lives | 230 |
| 3.3.14 | QinetiQ Dragon Runner | 230 |
| 3.3.15 | QinetiQ Dragon Runner 10 | 232 |
| 3.3.16 | QinetiQ Robotic Appliqué Kit | 233 |
| 3.3.17 | QinetiQ Expertise in Action: | 235 |
| 3.3.18 | QinetiQ MAARS | 236 |
| 3.4 | Kairos Autonomi | 238 |
| 3.4.1 | Kairos Pronto4™ Unmanned Target Systems For Ground Vehicles Or Surface Vessels | 238 |
| 3.4.2 | Kairos RetroReach Manipulator Arm | 239 |
| 3.4.3 | Kairos Autonomi Pronto4 Agnostic Autonomy System for Existing Vehicles or Vessels | 242 |
| 3.4.4 | Kairos Autonomi Pronto4 Benefits | 243 |
| 3.4.5 | Kairos Autonomi Pronto4™ Sub-Systems | 244 |
| 3.4.6 | Kairos Autonomi ProntoMimic Software Suite Functions | 244 |
| 3.5 | RoboteX | 246 |
| 3.5.1 | RoboteX Avatar III Robot | 246 |
| 3.5.2 | RoboteX Avatar III Tactical Robot | 247 |
| 3.5.3 | RoboteX Avatar III EOD Robot | 249 |
| 3.5.4 | RoboteX Avatar III Hazmat Robot | 255 |
| 3.5.5 | RoboteX Avatar Legion System | 257 |
| 3.5.6 | RoboteX Avatar Legion System: Networks of Robots Are Offered | 259 |
| 3.5.7 | RoboteX Avatar I | 261 |
| 3.5.8 | RoboteX Avatar II | 263 |
| 3.5.9 | RoboteX Avatar II EOD Robot | 264 |
| 3.5.10 | RoboteX Avatar III Security Robot | 268 |
| 3.5.11 | RoboteX Avatar | 269 |
| 3.5.12 | RoboteX Avatar® Home & Office, A Personal Security Robot | 270 |
| 3.5.13 | RoboteX Portable Reconnaissance | 274 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | | |
|--------|---|-----|
| 3.5.14 | RoboteX Avatar I Spec List: | 276 |
| 3.5.15 | RoboteX Avatar I Use Cases: | 277 |
| 3.6 | Pedsco | 278 |
| 3.6.1 | Pedsco Remote Mobile Investigator (RMI) | 278 |
| 3.6.2 | Pedsco RMI-9XD | 279 |
| 3.6.3 | Pedsco RMI-9WT | 285 |
| 3.6.4 | Pedsco RMI-10F | 287 |
| 3.7 | ReconRobotics Tactical, Micro-Robot Systems | 290 |
| 3.7.1 | ReconRobotics Recon Scout UVI Robot | 290 |
| 3.7.2 | ReconRobotics Recon Scout Throwbot LE | 293 |
| 3.7.3 | Recon Robotics Recon Scout IR | 296 |
| 3.7.4 | Recon Robotics Recon Scout XL | 298 |
| 3.7.5 | Recon Robotics Throwbot XT | 299 |
| 3.7.6 | Recon Robotics Searchstick | 301 |
| 3.8 | Robosoft | 302 |
| 3.9 | TechnoRobot | 303 |
| 3.9.1 | TechnoRobot RiotBot | 303 |
| 3.9.2 | TechnoRobot VisionBot | 303 |
| 3.9.3 | TechnoRobot Product Set | 304 |
| 3.10 | General Dynamics Homeland Security | 307 |
| 3.10.1 | General Dynamics Cell On Wheels | 307 |
| 3.10.2 | General Dynamics Public Safety FirstNet | 307 |
| 3.10.3 | General Dynamics Public Safety Access to Voice, Video, Data, Text, and Chat | 308 |
| 3.10.4 | General Dynamics Public Safety Communications Module for Large Scale Community Events | 308 |
| 3.10.5 | Robots Randomly Patrol Assigned Industrial Areas | 309 |
| 3.10.6 | General Dynamics Robotic Sentry – Intruder Detection and Assessment | 310 |
| 3.11 | Google / Boston Dynamics ATLAS - The Agile Anthropomorphic Robot | 312 |
| 3.12 | Lockheed Martin | 314 |
| 3.4.6 | Lockheed Martin Man and Machine Teaming | 314 |
| 3.12.1 | Lockheed Martin's Robotic Law Enforcement | 315 |
| 3.13 | Mesa Robotics | 315 |
| 3.13.1 | Mesa Robotics Matilda | 316 |
| 3.13.2 | Mesa Robotics Element | 318 |
| 3.13.3 | Mesa Robotics Scorpion | 319 |
| 3.13.4 | Mesa Robotics Acer | 320 |
| 3.13.5 | Mesa Robotics G2Bot | 324 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | | |
|----------|--|------------|
| 3.13.6 | Mesa Robotics | 325 |
| 3.14 | Boz Robotics Boz I | 325 |
| 3.14.1 | Boz Robotics Boz XL | 328 |
| 3.15 | Power Hawk Technologies | 330 |
| 3.15.1 | Power Hawk N.E.R.A.T. | 330 |
| 3.16 | DJI Innovation | 334 |
| 3.16.1 | DJI Phantom | 335 |
| 3.16.2 | DJI Inspire 1 | 337 |
| 3.16.3 | DJI Ronin | 338 |
| 3.16.4 | DJI Ronin Major Updates: | 338 |
| 3.17 | SDR Tactical Robots | 341 |
| 3.17.1 | SDR Fire and Rescue Robots | 341 |
| 3.17.2 | SDR LT2 / LT2-F - "Bloodhound" | 345 |
| 3.17.3 | SDR HD2-S - "Doberman" | 346 |
| 3.17.4 | SDR SuperDroid Robots in NC USA | 347 |
| 3.17.5 | SDR LT2/F - "Bulldog" | 347 |
| 3.17.6 | SDR HD2 - "Mastiff" | 348 |
| 3.17.7 | SDR MLT - "Jack Russell" | 349 |
| 3.17.8 | SDR UM4 - "Retriever" | 350 |
| 3.18 | Lithos Robotics TacBOT | 351 |
| 3.19 | Transcend Robotics Arti3 Platform | 352 |
| 4 | LAW ENFORCEMENT ROBOT TECHNOLOGY AND RESEARCH | 354 |
| 4.1 | TARDEC's Interoperability Profile (IOP) Testing | 354 |
| 4.2 | National Institute of Standards and Technology (NIST) | 355 |
| 4.2.1 | Emergency Response Robots | 355 |
| 4.3 | Law Enforcement Robot Technology Enablers | 356 |
| 4.3.1 | Military Robot Logistics | 358 |
| 4.4 | MRAP ATV: Requirements and Contenders | 360 |
| 4.5 | Law Enforcement Intel Integrated Circuit Evidence-Based Innovation | 365 |
| 4.5.1 | Open Robotic Control Software | 366 |
| 4.5.2 | Law Enforcement Robot Key Technology | 367 |
| 4.5..3 | Bots | 370 |
| 4.5.4 | Visual Simultaneous Localization & Mapping | 371 |
| 4.6 | Advanced Robot Technology: Navigation, Mobility, And Manipulation | 371 |
| 4.6.1 | Robot Intelligence Systems | 372 |
| 4.6.2 | Real-World, Dynamic Sensing | 372 |
| 4.7 | User-Friendly Interfaces | 373 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | | |
|--------|--|-----|
| 4.7.1 | Tightly-Integrated, Electromechanical Robot Design | 373 |
| 4.8 | Field Based Robotics Iterative Development | 374 |
| 4.8.1 | Next-Generation Products Leverage Model | 374 |
| 4.8.2 | Modular Robot Structure And Control | 375 |
| 4.8.3 | Lattice Architectures | 375 |
| 4.8.4 | Chain / Tree Architectures | 375 |
| 4.8.5 | Deterministic Reconfiguration | 376 |
| 4.8.6 | Stochastic Reconfiguration | 376 |
| 4.8.7 | Modular Robotic Systems | 376 |
| 4.9 | Intel Military Robot Cultivating Collaborations | 377 |
| 4.10 | Hitachi Configuration Of Robots Using The SuperH Family | 377 |
| 4.10.1 | Hitachi Concept of MMU And Logic Space | 378 |
| 4.10.2 | Robotic Use of Solid State Thin Film Lithium-Ion Batteries | 382 |
| 4.11 | Network Of Robots And Sensors | 382 |
| 4.11.1 | Sensor Networks Part Of Research Agenda | 383 |
| 4.11.2 | Light Sensing | 384 |
| 4.11.2 | Acceleration Sensing | 385 |
| 4.11.3 | Chemical Sensing | 385 |
| 4.12 | Law Enforcement Robot Technology Functions | 385 |
| 4.13 | Carbon Nanotube Radio | 386 |
| 4.14 | UUVMP Vision | 387 |
| 4.14.1 | Alliant | 388 |
| 4.14.2 | Hovering Autonomous Underwater Vehicle (HAUV) | 389 |
| 4.14.3 | ATSP is a Government-Wide Contracting Vehicle | 389 |
| 4.14.4 | Quick, Efficient Contracting Vehicle | 389 |
| 4.14.5 | Facilitates Technology And Insertion Into Fielded Systems | 389 |
| 4.14.6 | Access to all Northrop Grumman Sectors | 390 |
| 4.15 | Endeavor Robotics Technology | 390 |
| 4.15.1 | Endeavor Robotics AWARE Robot Intelligence Systems | 390 |
| 4.15.2 | Endeavor Robotics Real-World, Dynamic Sensing. | 391 |
| 4.15.3 | Endeavor Robotics User-Friendly Interface | 391 |
| 4.15.4 | Endeavor Robotics Tightly-Integrated Electromechanical Design. | 392 |
| 4.16 | Evolution Robotics Technology Solutions | 392 |
| 4.16.1 | Endeavor Robotics / Evolution Robotics Example Applications | 395 |
| 4.16.2 | Homeland Security Robot Technology Trends | 396 |
| 4.17 | Classes of Unmanned Ground Vehicles (UGVs) | 397 |
| 4.17.1 | Armed Robotic Vehicle (ARV) | 397 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | | |
|---------|---|-----|
| 4.17.5 | Efforts to Mitigate The Improvised Explosive Device Threat To Dismounted Operations | 402 |
| 4.17.6 | US Joint Improvised Explosive Device Defeat Organization | 402 |
| 4.17.7 | Route Mapping | 403 |
| 4.17.8 | Man-Packable SUGV | 403 |
| 4.17.9 | Demilitarized Zone Between South and North Korea | 404 |
| 4.17.10 | Chinese Military Robots | 405 |
| 4.17.11 | Western Europe | 406 |
| 4.17.12 | China & the Russian Federation | 406 |
| 4.17.13 | Middle East | 407 |
| 4.17.14 | India & Japan | 407 |
| 4.17.15 | Australia & Canada | 407 |
| 4.18 | Military and Law Enforcement Robot Pricing Notes | 409 |
| 4.18.1 | Endeavor Robotics | 409 |
| 4.18.2 | QinetiQ / Foster-Miller | 411 |
| 4.18.3 | Allen Vanguard | 412 |
| 4.18.4 | Northrop Grumman | 413 |
| 4.18.5 | Telerob | 415 |
| 4.18.6 | AB Precision (Poole) Ltd. | 415 |
| 4.18.7 | Beijing Defense | 415 |
| 4.18.8 | First-Response Robotics | 416 |
| 4.18.9 | Mesa Associates | 417 |
| 4.18.10 | re2 (robotics engineering excellence) | 417 |
| 4.18.11 | ForeRunner RDV | 418 |
| 4.18.12 | ReconRobotics | 419 |
| 4.18.13 | TechnoRobot | 422 |
| 4.19 | Chemical, Biological, Radiological, Nuclear, Explosives (CBRNE) | 423 |
| 4.20 | Robot Enabling Technologies | 426 |
| 4.20.1 | Sensor Processing | 426 |
| 4.20.2 | Machine Autonomy | 427 |
| 4.21 | Law Enforcement Robot Bandwidth | 428 |
| 4.21.1 | UGV Follow-Me Capability | 428 |
| 4.21.2 | Communications Bandwidth | 429 |
| 4.21.3 | Battery Power | 429 |
| 4.21.4 | Combination Of Batteries Linked To Onboard Conventional Diesel | 430 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | | |
|----------|--|------------|
| 5 | LAW ENFORCEMENT ROBOT COMPANY PROFILES | 431 |
| 5.1 | CoroWare | 431 |
| 5.2 | DJI 431 | |
| 5.2.1 | DJI Phantom | 435 |
| 5.2.2 | DJI Inspire 1 | 437 |
| 5.2.3 | DJI Ronin | 438 |
| 5.2.4 | DJI Ronin Major Updates: | 438 |
| 5.2.5 | DJI Industries Phantom 3 Drone | 447 |
| 5.2.6 | DJI Industries Phantom 3 Drone Live HD View | 448 |
| 5.2.7 | DJI Industries Phantom 3 Drone Complete Control | 449 |
| 5.2.8 | DJI Industries Phantom Intelligent Battery | 450 |
| 5.2.9 | DJI Industries Inspire Drone | 452 |
| 5.2.10 | DJI Industries Ronin-M | 454 |
| 5.2.11 | DJI Industries Spreading Wings S1000+ | 456 |
| 5.2.12 | DJI Industries Zenmuse Z15-A7 | 458 |
| 5.2.13 | DJI Flying Platforms | 460 |
| 5.2.14 | DJI Flight Controllers | 462 |
| 5.2.15 | DJI Camera Gimbals | 465 |
| 5.2.16 | DJI HD Video Downlink | 469 |
| 5.2.17 | DJI Ground Stations | 469 |
| 5.2.18 | DJI Guidance | 471 |
| 5.3 | Endeavor Robotics | 471 |
| 5.3.1 | Endeavor Robotics | 471 |
| 5.3.2 | Endeavor Robotics Partners With Persistent Systems | 472 |
| 5.3.3 | RE2 Robotics And Endeavor Robotics Partnership | 473 |
| 5.3.4 | iRobot Defence Unit Relaunches as Endeavor Robotics | 474 |
| 5.3.5 | Endeavor Robotics | 475 |
| 5.3.6 | Endeavor Robotics Defense and Security: Protecting Those in Harm's Way | 476 |
| 5.3.7 | Endeavor Robotics Role In The Robot Industry | 476 |
| 5.3.8 | Endeavor Robotics Strategy | 477 |
| 5.3.9 | Endeavor Robotics Technology | 480 |
| 5.3.10 | Endeavor Robotics Distributors for U.S. Public Safety | 481 |
| 5.4 | General Dynamics | 482 |
| 5.4.1 | General Dynamics Public Safety | 482 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | | |
|--------|---|-----|
| 5.4.2 | General Dynamics | 483 |
| 5.4.3 | General Dynamics Revenue | 484 |
| 5.4.4 | General Dynamics Robotic Systems | 485 |
| 5.4.5 | General Dynamics Robotic Systems (GDRS) Vision | 485 |
| 5.4.6 | General Dynamics Robotic Systems (GDRS) Manufacturing | 486 |
| 5.4.7 | General Dynamics Autonomous Land And Air Vehicle Development | 486 |
| 5.4.8 | General Dynamics / Bluefin Robotics | 487 |
| 5.5 | Google / Boston Dynamics | 488 |
| 5.5.1 | Boston Dynamics Atlas - The Agile Anthropomorphic Robot | 489 |
| 5.5.2 | Boston Dynamics BigDog | 491 |
| 5.5.3 | Boston Dynamics LittleDog - The Legged Locomotion Learning Robot | 492 |
| 5.5.4 | Google Self-Driving Car | 494 |
| 5.5.5 | Google Cars Address Vast Majority Of Vehicle Accidents Due To Human Error | 496 |
| 5.5.6 | Google Business | 496 |
| 5.5.7 | Google Corporate Highlights | 497 |
| 5.5.8 | Google Search | 498 |
| 5.6 | GoPro | 500 |
| 5.6.1 | GoPro Second Quarter 2015 Highlights | 501 |
| 5.6.2 | GoPro Opular Mount | 502 |
| 5.6.3 | GoPro Revenue Surges 54% As It Gains Popularity Abroad | 503 |
| 5.6.4 | GoPro Acquires Kolor, A Virtual Reality Company | 504 |
| 5.7 | Kairos Autonomi | 504 |
| 5.7.1 | Kairos Autonomi upgrades robot conversion kit | 504 |
| 5.7.2 | Kairos Autonomi Autonomy ROI | 505 |
| 5.7.3 | Kairos Autonomi Upgrades Robot Conversion Kit | 505 |
| 5.8 | Kawada Industries | 506 |
| 5.9 | Kongsberg | 507 |
| 5.10 | Kuka | 507 |
| 5.10.1 | KUKA Dominant Customer Segment, Automotive Industry | 508 |
| 5.10.2 | Kuka Competition | 510 |
| 5.10.3 | Kuka Innovative Technology | 512 |
| 5.10.4 | Kuka Well Positioned with A Broad Product Portfolio In | |
| | Markets With Attractive Growth Prospects | 512 |
| 5.10.5 | Kuka Strategy | 513 |
| 5.10.6 | Kuka Corporate Policy | 515 |
| 5.10.7 | Kuka Customers | 521 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | | |
|--------|--|-----|
| 5.10.8 | KUKA Acquires 51% of Reis Robotics | 523 |
| 5.10.9 | Kuka Positioning in Robotics and Systems | 523 |
| 5.11 | Lithos Robotics | 524 |
| 5.12 | Lockheed Martin | 525 |
| 5.12.1 | Lockheed Martin Symphony Improvised Explosive Device Jammer Systems | 529 |
| 5.12.2 | Lockheed Martin Electronic Systems | 533 |
| 5.12.3 | Lockheed Martin | 534 |
| 5.12.4 | Lockheed Martin Mars Atmosphere and Volatile Evolution (MAVEN) | 535 |
| 5.12.5 | Lockheed Martin K-MAX | 538 |
| 5.12.6 | Lockheed Martin Desert Hawk III | 540 |
| 5.12.7 | Lockheed Martin Stalker UAS | 541 |
| 5.12.8 | Lockheed Martin Fury | 543 |
| 5.12.9 | Lockheed Martin VTOL Quad Rotor | 544 |
| 5.13 | Mesa Robotics | 546 |
| 5.13.1 | Systems Development Division of Mesa Associates | 546 |
| 5.13.2 | Mesa Robotics Affordable Robotic Solutions | 548 |
| 5.13.3 | Mesa Robotics Revenue | 549 |
| 5.14 | Mitsubishi Next-Generation Robot for Nuclear Power Plant Heat Exchanger Tube Inspection | 550 |
| 5.14.1 | Mitsubishi | 550 |
| 5.15 | Northrop Grumman | 551 |
| 5.15.1 | Northrop Grumman Made The ‘Bomb Robot’ That Dallas Police Used To Kill Sniper Suspect | 551 |
| 5.15.2 | Northrop Grumman Revenue | 554 |
| 5.15.3 | Northrop Grumman Remotec | 557 |
| 5.15.4 | Northrop Grumman Leading Global Security Company | 557 |
| 5.15.5 | Northrop Grumman Supplies Marine Navigation Equipment | 559 |
| 5.15.6 | Northrop Grumman Recognized by UK Ministry of Defense for Role in Supporting Sentry AWACS Aircraft During Military Operations in Libya | 560 |
| 5.15.7 | Northrop Grumman Corporation subsidiary Remotec Inc. Upgrades the U.S. Air Force Fleet of Andros HD-1 | 561 |
| 5.15.8 | Northrop Grumman NAV CANADA Supplier | 561 |
| 5.16 | Pedsco | 563 |
| 5.17 | Power Hawk Technologies | 563 |
| 5.18 | QinetiQ | 567 |
| 5.18.1 | QinetQ Comprised Of Experts | 572 |
| 5.18.2 | QinetiQ North America TALON Detects Deadly IEDs And Saves Lives | 572 |
| 5.18.3 | QinetiQ World-Leading Products: | 574 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | | |
|---------|---|-----|
| 5.18.4 | QinetiQ Innovation | 575 |
| 5.18.5 | QinetiQ North America | 576 |
| 5.18.6 | QinetiQ Revenue | 577 |
| 5.18.7 | QinetiQ Vision | 579 |
| 5.18.8 | QinetiQ Mission | 579 |
| 5.18.9 | QinetiQ / Foster Miller | 579 |
| 5.18.10 | QinetiQ / Foster Miller Financial Position | 581 |
| 5.18.11 | QinetiQ North America Order for 100 Dragon Runner 10Micro Robots: | 582 |
| 5.18.12 | QinetiQ / Automatika | 584 |
| 5.18.13 | QinetiQ Customer Base | 585 |
| 5.18.14 | QinetiQ Australia | 588 |
| 5.16.15 | QinetiQ Strategic Response to Threats | 588 |
| 5.19 | ReconRobotics | 589 |
| 5.19.1 | ReconRobotics Throwbot | 591 |
| 5.19.2 | ReconRobotics Tactical, Micro-Robot Systems | 592 |
| 5.20 | Robosoft | 593 |
| 5.21 | Robotex | 594 |
| 5.21.1 | Robotex EOD Robot Assessment Results | 594 |
| 5.22 | SDR Tactical Robots | 595 |
| 5.23 | TechnoRobot | 601 |
| 5.24 | Transcend Robotics | 605 |
| 5.24.1 | Transcend Robotics Research | 606 |
| 5.25 | Yamaha | 607 |
| 5.25.1 | Yamaha Robotics | 610 |
| 5.26 | Selected Military Robot Companies | 611 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|--|-----|
| Table ES-1 | 42 |
| Law Enforcement Robotics Market Factors | 42 |
| Table ES-2 | 46 |
| Law Enforcement Robot Functions | 46 |
| Table ES-3 | 49 |
| Law Enforcement Robots Market Driving Forces | 49 |
| Figure ES-4 | 55 |
| Law Enforcement Robot Market Shares, Dollars, Worldwide, 2015 | 55 |
| Figure ES-5 | 56 |
| Law Enforcement Robot Market Forecasts Dollars, Worldwide, 2016-2022 | 56 |
| Table 1-1 | 66 |
| Law Enforcement Robot Applications | 66 |
| Table 1-2 | 67 |
| Law Enforcement Armed Robotic Applications | 67 |
| Table 1-3 | 68 |
| Law Enforcement Robotic Systems | 68 |
| Figure 1-4 | 70 |
| Telerob Explosive Observation Robot and Ordnance Disposal Unit | 70 |
| Figure 1-5 | 71 |
| Telerob Explosive Ordnance Disposal EOD System For Operation In Confined Areas | 71 |
| Figure 1-6 | 73 |
| QinetiQ North America TALON® Robots | 73 |
| Universal Disruptor Mount (UDM) | 73 |
| Figure 1-7 | 74 |
| Next-Generation General Dynamics CROWS II | 74 |
| Table 2-1 | 81 |
| Law Enforcement Robotics Market Factors | 81 |
| Table 2-2 | 85 |
| Law Enforcement Robot Functions | 85 |
| Table 2-3 | 88 |
| Law Enforcement Robots Market Driving Forces | 88 |
| Figure 2-4 | 94 |
| Law Enforcement Robot Market Shares, Dollars, Worldwide, 2015 | 94 |
| Table 2-5 | 95 |
| Law Enforcement Robot Market Shares, Dollars, Worldwide, 2015 | 95 |
| Figure 2-6 | 102 |
| QinetQ TALON | 102 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|--|------------|
| Figure 2-7 | 103 |
| SDR LT2 / LT2-F - "Bloodhound" | 103 |
| Figure 2-8 | 104 |
| Endeavor Robotics 210 Negotiator | 104 |
| Table 2-9 | 105 |
| Endeavor Robotics 510 Packbot Characteristics | 105 |
| Figure 2-10 | 109 |
| Law Enforcement Robot Market Forecasts Dollars, Worldwide, 2016-2022 | 109 |
| Figure 2-11 | 110 |
| Law Enforcement Robot Market Forecasts, Units, Worldwide, 2016-2022 | 110 |
| Table 2-12 | 112 |
| Law Enforcement Market Industry Segments, Throwable Tactical Micro, Small SUGV, Small / Medium, Large UGV, Forecasts, Dollars, Worldwide, 2016-2022 | 112 112 |
| Table 2-13 | 113 |
| Law Enforcement Robot Market Industry Segments, Throwable Tactical Micro, Small SUGV, Small / Medium, Large UGV, Forecasts, Units, Worldwide, 2016-2022 | 113 |
| Figure 2-14 | 116 |
| SWAT Team Member Readies A Robot To Enter A Home Where A Man Had Barricaded Himself in Trenton, N.J | 116 |
| Table 2-15 | 120 |
| Law Enforcement Throwable Tactical Micro Robot Market Industry Segments, Forecasts, Dollars, Worldwide, 2016-2022 | 120 |
| Table 2-16 | 121 |
| Throwbot Robot Applications | 121 |
| Figure 2-17 | 122 |
| Small / Midsize Law Enforcement Robots Forecasts, Dollars, Worldwide, 2016-2022 | 122 |
| Table 2-18 | 123 |
| Law Enforcement Small / Medium Robot Market Industry Segments, Forecasts, Dollars, Worldwide, 2016-2022 | 123 |
| Table 2-19 | 124 |
| Law Enforcement Small SUGV Robot Market Industry Segments, Forecasts, Dollars, Worldwide, 2016-2022 | 124 |
| Table 2-20 | 127 |
| Law Enforcement Large UGV Robot Market Industry Segments, Forecasts, Dollars, Worldwide, 2016-2022 | 127 |
| Figure 2-21 | 133 |
| Robots for Exploratory Investigation Dangerous Or Unfolding Situation | 133 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|---|-----|
| Figure 2-22 | 134 |
| Law Enforcement Needs Ability to Look Around Situations While Lowering Risk To Officers | 134 |
| Figure 2-23 | 135 |
| Market Growth from Core Anti-Terrorism Technology | 135 |
| Figure 2-24 | 137 |
| Small Mobile Robot Market Opportunity: Penetration of Fire and Police Departments | 137 |
| Figure 2-25 | 140 |
| Types of Events Triggering Need For Law Enforcement Robots | 140 |
| Figure 2-26 | 142 |
| Rifle Mounted Robot for Law Enforcement Situations | 142 |
| Figure 2-27 | 144 |
| Law Enforcement Robot Regional Market Segments, Dollars, 2015 | 144 |
| Table 2-28 | 145 |
| Law Enforcement Robot Regional Market Segments, Dollars, 2015 | 145 |
| Figure 3-1 | 147 |
| Endeavor Robotics 110 FirstLook | 147 |
| Table 3-2 | 148 |
| Endeavor Robotics 110 FirstLook Features | 148 |
| Figure 3-3 | 149 |
| Endeavor Robotics 110 FirstLook® | 149 |
| FIGURE 3-4 | 150 |
| iRobot 110 FirstLook®Missions Route/Building Clearance | 150 |
| Figure 3-5 | 151 |
| Endeavor Robotics FirstLook Used by Tactical Officers | 151 |
| Figure 3-6 | 152 |
| Endeavor Robotics ® 110 FirstLook® | 152 |
| Figure 3-7 | 153 |
| iRobot® 110 Small, Light And Throwable FirstLook® Uses | 153 |
| Figure 3-9 | 154 |
| Endeavor Robotics 510 Packbot | 154 |
| Table 3-10 | 155 |
| Endeavor Robotics 510 PackBot Features | 155 |
| Figure 3-11 | 156 |
| Endeavor Robotics ® PackBot® 510 for Law Enforcement | 156 |
| Table 3-12 | 157 |
| iRobot® PackBot® 510 Target Markets | 157 |
| Figure 3-13 | 158 |
| Endeavor Robotics ® PackBot® 510 for HazMat Technicians | 158 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|---|-----|
| Table 3-14 | 159 |
| iRobot® PackBot® 510 Target Markets for HazMat Technicians | 159 |
| Figure 3-15 | 160 |
| Endeavor Robotics 510PackBot for EOD Swat Technicians | 160 |
| Table 3-16 | 161 |
| iRobot 510 PackBot for EOD Conventional Ordnance and SWAT Missions | 161 |
| Figure 3-17 | 162 |
| Endeavor Robotics ® PackBot® 510 for Border Patrol | 162 |
| Figure 3-18 | 163 |
| Endeavor Robotics ® PackBot® 510 for Law Enforcement Engineers | 163 |
| Table 3-19 | 163 |
| iRobot 510 PackBot for Law Enforcement Engineers Tasks | 163 |
| Figure 3-20 | 164 |
| Endeavor Robotics uPoint | 164 |
| Table 3-21 | 165 |
| Endeavor Robotics uPoint Features | 165 |
| Figure 3-22 | 166 |
| Endeavor Robotics SUGV Carries Canister of Propane Gas | 166 |
| Table 3-23 | 167 |
| Endeavor Robotics Law Enforcement Operations Support Robots | 167 |
| Figure 3-24 | 170 |
| Endeavor Robotics Multi-Robot Tablet Controller For Law Enforcement | 170 |
| Table 3-25 | 171 |
| iRobot uPoint Multi-Robot Tablet Controller Functions | 171 |
| Figure 3-26 | 175 |
| Endeavor Robotics 310 SUGV | 175 |
| Table 3-27 | 176 |
| Endeavor Robotics 310 SUGV Features | 176 |
| Figure 3-28 | 177 |
| Robot® 310 SUGV | 177 |
| Figure 3-29 | 178 |
| Endeavor Robotics Bomb Disposal/ Explosive Ordnance Disposal (EOD) | 178 |
| Figure 3-30 | 179 |
| Robot® 340 SUGV | 179 |
| Figure 3-31 | 180 |
| Endeavor Robotics ® SUGV | 180 |
| Figure 3-32 | 181 |
| iRobot® SUGV Uses | 181 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|--|-----|
| Figure 3-33 | 184 |
| Endeavor Robotics ® 710 Kobra™ | 184 |
| Figure 3-34 | 186 |
| Endeavor Robotics 710 Kobra Bomb Disposal/ Explosive Ordnance Disposal (EOD) | 186 |
| Figure 3-35 | 187 |
| Endeavor Robotics 710 Kobra | 187 |
| Table 3-36 | 188 |
| Endeavor Robotics 710 Kobra Features | 188 |
| Figure 3-37 | 190 |
| Endeavor Robotics ® 710 Warrior™ | 190 |
| Table 3-38 | 191 |
| Endeavor Robotics 710 Warrior Functions | 191 |
| Table 3-39 | 191 |
| iRobot® 710 Warrior™ Uses | 191 |
| Figure 3-40 | 194 |
| Northrop Grumman Andros F6 Series | 194 |
| Table 3-41 | 195 |
| Northrop Grumman Andros F6 Series Features | 195 |
| Figure 3-42 | 196 |
| Northrop Grumman Remotec | 196 |
| Table 3-43 | 198 |
| Northrop Grumman Remotec ANDROS Law Enforcement Robots Features | 198 |
| Figure 3-44 | 200 |
| Northrop Grumman Andros F6A | 200 |
| Table 3-45 | 201 |
| Northrop Grumman Andros Robots Functions | 201 |
| Table 3-45a | 202 |
| Northrop Grumman Andros Robots Applications | 202 |
| Figure 3-46 | 203 |
| Northrop Grumman ANDROS Hazmat | 203 |
| Figure 3-47 | 204 |
| Northrop Grumman F6A with Window Breaker and Dual PAN Disrupter Mount. | 204 |
| Figure 3-48 | 205 |
| Northrop Grumman ANDROS F6A | 205 |
| Table 3-49 | 206 |
| Northrop Grumman F6A Features | 206 |
| Figure 3-50 | 207 |
| Northrop Grumman Mark V-A1 | 207 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|---|-----|
| Table 3-51 | 208 |
| Northrop Grumman V-A1 Features | 208 |
| Figure 3-52 | 209 |
| Northrop Grumman Andros for Law Enforcement | 209 |
| Table 3-53 | 210 |
| Northrop Grumman Mini Andros II Features | 210 |
| Figure 3-54 | 211 |
| Northrop Grumman Mini Andros II | 211 |
| Figure 3-55 | 212 |
| QinetiQ Spartacus | 212 |
| Figure 3-56 | 213 |
| QinetiQ Minotaur | 213 |
| Figure 3-57 | 215 |
| QinetiQ Raider | 215 |
| Figure 3-58 | 218 |
| QinetiQ TALON V | 218 |
| Table 3-59 | 219 |
| QinetiQ TALON V Law Enforcement Robot Features: | 219 |
| Figure 3-60 | 220 |
| QinetiQ C-Talon | 220 |
| Figure 3-61 | 222 |
| QinetiQ TALON | 222 |
| Table 3-62 | 223 |
| QinetiQ North America's TALON® Family Of Robots Features | 223 |
| Table 3-63 | 223 |
| QinetiQ North America's TALON® Family Of Robots Target Markets | 223 |
| Table 3-64 | 224 |
| QinetiQ North America's TALON® Family Of Robots Mission Positioning | 224 |
| Table 3-65 | 225 |
| QinetiQ TALON Product Line | 225 |
| Table 3-66 | 226 |
| QinetiQ TALON Expertise in Action | 226 |
| Table 3-67 | 227 |
| QinetiQ TALON Product Line Specific Task Expansion | 227 |
| Figure 3-68 | 228 |
| QinetiQ Laptop Control Unit (LCU) | 228 |
| Table 3-69 | 229 |
| QinetiQ's LCU features | 229 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|--|-----|
| Figure 3-70 | 230 |
| QinetQ Dragon Runner | 230 |
| Figure 3-71 | 232 |
| QinetQ Dragon Runner 10 | 232 |
| Figure 3-72 | 233 |
| QinetQ Robotic Appliqué Kit Transforms Bobcats into Remotely-Operated Robots | 233 |
| Figure 3-73 | 236 |
| QinetQ Modular Advanced Armed Robotic System | 236 |
| Figure 3-74 | 238 |
| Kairos Pronto4 | 238 |
| Table 3-75 | 240 |
| Kairos Autonomi RetroReach Manipulator Arm: | 240 |
| Table 3-76 | 240 |
| Kairos Autonomi RetroReach Manipulator Arm Features: | 240 |
| Table 3-77 | 241 |
| Kairos Autonomi RetroReach Manipulator Arm Specifications | 241 |
| Figure 3-78 | 242 |
| Kairos Pronto4 Agnostic Autonomy System for Existing Vehicles or Vessels | 242 |
| Figure 3-79 | 243 |
| Kairos Autonomi Pronto4 zSOLution For Truck | 243 |
| Table 3-80 | 245 |
| Kairos Autonomi Software Features: | 245 |
| Figure 3-81 | 246 |
| RoboteX Avatar III Robot | 246 |
| Figure 3-82 | 247 |
| RoboteX Avatar III Tactical Robot | 247 |
| Table 3-83 | 248 |
| RoboteX AVATAR® III Features | 248 |
| Figure 3-84 | 249 |
| RoboteX Avatar III EOD Robot | 249 |
| Figure 3-85 | 251 |
| CarbonFire 10 PAN Disrupter, Laser Sight And Disrupter | 251 |
| Table 3-86 | 252 |
| RoboteX Avatar III EOD Robot Scenarios: | 252 |
| Table 3-87 | 253 |
| RoboteX Avatar III EOD Robot Responses | 253 |
| Table 3-88 | 254 |
| RoboteX Avatar III EOD Robot Benefits | 254 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|---|-----|
| Figure 3-89 | 255 |
| RoboteX Avatar III Hazmat Robot | 255 |
| Table 3-90 | 256 |
| RoboteX Avatar Gas And Radiation Detector Functions | 256 |
| Figure 3-91 | 257 |
| RoboteX Avatar Legion System | 257 |
| Table 3-92 | 260 |
| RoboteX Avatar LEGION System Functions | 260 |
| Figure 3-93 | 261 |
| RoboteX Avatar I | 261 |
| Table 3-94 | 262 |
| RoboteX Avatar I Functions | 262 |
| Figure 3-95 | 263 |
| RoboteX Avatar II | 263 |
| Figure 3-96 | 264 |
| RoboteX Avatar II EOD Robot | 264 |
| Table 3-97 | 265 |
| RoboteX Avatar II EOD Robot Tactical Capabilities And Benefits | 265 |
| Table 3-98 | 266 |
| RoboteX Avatar II EOD Robot Support Capabilities | 266 |
| Table 3-99 | 267 |
| RoboteX Avatar II EOD Robot Benefits | 267 |
| Table 3-100 | 268 |
| RoboteX Avatar III Security Robot | 268 |
| Table 3-101 | 271 |
| RoboteX Avatar® Home & Office, A Personal Security Robot Features | 271 |
| Figure 3-102 | 272 |
| Robotex Avatar I Tactical Robot Unmanned Ground Robots | 272 |
| Figure 3-103 | 273 |
| Robotex Unmanned Ground Robots | 273 |
| Figure 3-104 | 274 |
| Robotex Avatar II Tactical Robot | 274 |
| Table 3-105 | 275 |
| RoboteX Portable Reconnaissance Controls | 275 |
| Table 3-106 | 276 |
| RoboteX Avatar I Spec List: | 276 |
| Table 3-107 | 277 |
| RoboteX Avatar I Use Cases: | 277 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|--|-----|
| Figure 3-108 | 279 |
| Pedsco RMI-9XD | 279 |
| Table 3-109 | 280 |
| Pedsco RMI-9XD Claw and Disrupter Features: | 280 |
| Table 3-110 | 281 |
| Pedsco RMI-9XD Camera Features: | 281 |
| Table 3-111 | 282 |
| Pedsco RMI-9XD Video Features: | 282 |
| Table 3-112 | 283 |
| Pedsco RMI-9XD Applications Features: | 283 |
| Table 3-113 | 284 |
| Pedsco RMI-9XD Security Features: | 284 |
| Figure 3-114 | 285 |
| Pedsco RMI-9WT | 285 |
| Table 3-115 | 286 |
| Pedsco RMI-9WT Features: | 286 |
| Figure 3-116 | 287 |
| Pedsco RMI-10F | 287 |
| Table 3-117 | 288 |
| Pedsco RMI-10F Features: | 288 |
| Table 3-118 | 291 |
| ReconRobotics Recon Scout® Applications | 291 |
| Table 3-119 | 292 |
| ReconRobotics Recon Scout® Short Term Applications | 292 |
| Figure 3-120 | 293 |
| ReconRobotics Recon Scout Throwbot LE | 293 |
| Table 3-121 | 294 |
| Recon Scout® Throwbot® LE Applications | 294 |
| Table 3-122 | 295 |
| Recon Scout® Throwbot® LE Features | 295 |
| Figure 3-123 | 297 |
| Recon Robotics Recon Scout IR | 297 |
| Figure 3-124 | 298 |
| Recon Robotics Recon Scout XL | 298 |
| Figure 3-125 | 299 |
| Recon Robotics Throwbot XT | 299 |
| Figure 3-126 | 304 |
| TechnoRobot Product Set | 304 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|---|-----|
| Figure 3-127 | 305 |
| Technorobot | 305 |
| Figure 3-128 | 306 |
| Technorobot Collaborations | 306 |
| Table 3-129 | 311 |
| General Dynamics Mobile Detection Assessment And Response System Benefits of a Robotic Sentry | 311 |
| Figure 3-130 | 312 |
| Google / Boston Dynamics ATLAS - The Agile Anthropomorphic Robot | 312 |
| Figure 3-131 | 314 |
| Lockheed Martin Man and Machine Teaming | 314 |
| Figure 3-132 | 316 |
| Mesa Robotics Matilda | 316 |
| Figure 3-133 | 317 |
| Mesa Robotics Mesa Robotics Matilda II | 317 |
| Figure 3-134 | 318 |
| Mesa Robotics Element | 318 |
| Figure 3-135 | 319 |
| Mesa Robotics Scorpion | 319 |
| Table 3-136 | 320 |
| Mesa Robotics Scorpion Specifications | 320 |
| Table 3-137 | 321 |
| Mesa Robotics Acer Specifications | 321 |
| Figure 3-138 | 322 |
| Mesa Robotics Acer Multi-Purpose Armored Robotic Platform | 322 |
| Figure 3-139 | 323 |
| Mesa Robotics Acer Multi-Purpose Armored Robotic Platform | 323 |
| Figure 3-140 | 324 |
| Mesa Robotics G2Bot | 324 |
| Table 3-141 | 326 |
| Boz Robotics Boz Functions | 326 |
| Table 3-142 | 326 |
| Boz Robotics Boz Applications | 326 |
| Table 3-143 | 327 |
| Boz Robotics Boz Specifications | 327 |
| Figure 3-144 | 328 |
| Boz Robotics Boz XL | 328 |
| Table 3-145 | 329 |
| BOZ XL All Terrain Heavy Duty EOD Capabilities | 329 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|---|-----|
| Figure 3-146 | 330 |
| Power Hawk® P-16 Rescue System | 330 |
| Table 3-147 | 331 |
| Power Hawk Car Bomb, Or Truck Bomb, Also Known As A Vehicle-Borne Improvised Explosive Device (VBIED) Response Capabilities | 331 |
| Table 3-148 | 332 |
| Power Hawk Terrorist Attacks Using Person-Borne Improvised Explosive Devices (PBIED) Response | 332 |
| Table 3-149 | 334 |
| DJI Products | 334 |
| Figure 3-150 | 335 |
| DJI Phantom | 335 |
| Figure 3-151 | 336 |
| DJI Phantom Series | 336 |
| Figure 3-152 | 337 |
| DJI Inspire 1 | 337 |
| Figure 3-153 | 338 |
| DJI Ronin | 338 |
| Table 3-154 | 339 |
| DJI Ronin Features | 339 |
| Figure 3-155 | 340 |
| DJI Inspire 1 | 340 |
| Table 3-156 | 341 |
| SDR Fire and Rescue Robot Camera and Operator Control Units Applications | 341 |
| Table 3-157 | 342 |
| SDR Fire and Rescue Robot Cameras | 342 |
| Table 3-158 | 343 |
| SDR Fire and Rescue Robot Operator Control Unit | 343 |
| Table 3-159 | 344 |
| SDR Fire and Rescue Robot Applications | 344 |
| Figure 3-160 | 345 |
| SDR LT2 / LT2-F - "Bloodhound" | 345 |
| Figure 3-161 | 346 |
| SDR HD2-S | 346 |
| Figure 3-162 | 348 |
| SDR HD2 | 348 |
| Figure 3-163 | 349 |
| SDR MLT - "Jack Russell" | 349 |
| Figure 3-164 | 350 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|---|-----|
| SDR UM4 - "Retriever" | 350 |
| Figure 3-165 | 351 |
| Lithos Robotics TacBOT | 351 |
| Figure 3-166 | 352 |
| Transcend Robotics ARTI3 Platform | 352 |
| Figure 4-1 | 356 |
| Law Enforcement Robot Technology Enablers | 356 |
| Table 4-2 | 357 |
| Law Enforcement Robot Technology Characteristics | 357 |
| Figure 4-3 | 358 |
| Homeland Security Robot Technology Enablers | 358 |
| Table 4-4 | 359 |
| US Army Military Robot Logistics Positioning | 359 |
| Figure 4-5 | 363 |
| Robot Systems Associated with Force Application Description | 363 |
| Figure 4-6 | 364 |
| Robotic Performance Characteristics | 364 |
| Table 4-7 | 365 |
| Law Enforcement Robot Integrated Circuit-Based Innovation Functions | 365 |
| Table 4-8 | 367 |
| Law Enforcement Robot Key Technology | 367 |
| Table 4-9 | 368 |
| Robot Communications Key Technology | 368 |
| Table 4-10 | 369 |
| Military Robot Key Navigation Technologies | 369 |
| Table 4-11 | 370 |
| Human-Robot Interaction | 370 |
| Table 4-12 | 371 |
| Visual Simultaneous Localization & Mapping Functions Relevant to Robotics | 371 |
| Figure 4-13 | 379 |
| Hitachi Modular Robot Configuration | 379 |
| Table 4-14 | 381 |
| Military Robot Key Product Technology Factors | 381 |
| Table 4-15 | 385 |
| Law Enforcement Robot Technology Functions | 385 |
| Figure 4-16 | 387 |
| UUVMP Vision | 387 |
| Table 4-17 | 388 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|--|-----|
| Alliant Features: | 388 |
| Figure 4-18 | 393 |
| Endeavor Robotics / Evolution Robotics Technology Solutions | 393 |
| Figure 4-19 | 394 |
| Endeavor Robotics / Evolution Robotics Object Recognition | 394 |
| Table 4-20 | 395 |
| Endeavor Robotics / Evolution Robotics Applications | 395 |
| Figure 2-21 | 399 |
| US Protection Modernization Strategy | 399 |
| Table 2-22 | 400 |
| US Army Revised Military Robotics Vision | 400 |
| Figure 4-23 | 409 |
| Taser, Endeavor Robotics to Build Military Robot With Stun Gun | 409 |
| Figure 4-24 | 411 |
| Foster Miller Talon Robot | 411 |
| Figure 5-1 | 433 |
| DJI Phantom | 433 |
| Table 5-2 | 434 |
| DJI Products | 434 |
| Figure 5-3 | 435 |
| DJI Phantom | 435 |
| Figure 5-4 | 436 |
| DJI Phantom Series | 436 |
| Figure 5-5 | 437 |
| DJI Inspire 1 | 437 |
| Figure 5-6 | 438 |
| DJI Ronin | 438 |
| Table 5-7 | 439 |
| DJI Ronin Features | 439 |
| Figure 5-8 | 440 |
| DJI Inspire 1 | 440 |
| Figure 5-9 | 441 |
| DJI Ronin-M | 441 |
| Figure 5-10 | 442 |
| Spreading Wings S800 EVO | 442 |
| Figure 5-11 | 443 |
| Zenmuse H3-3D | 443 |
| Figure 5-12 | 444 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|--|-----|
| DJI Flame Wheel Landing Gear and Propulsion System | 444 |
| Figure 5-13 | 445 |
| Fine-Tuned Electronic Propulsion Inspire 1 | 445 |
| Figure 5-14 | 446 |
| Phantom 3 Professional & Advanced | 446 |
| Figure 5-15 | 447 |
| DJI Industries Phantom 3 Drone | 447 |
| Table 5-16 | 449 |
| DJI Industries Phantom 3 Drone Powerful Mobile App | 449 |
| Table 5-17 | 450 |
| DJI Industries Phantom Functions | 450 |
| Table 5-18 | 451 |
| DJI Industries Phantom SKEYE Nano Drone Open Platform Apps Programming Functions | 451 |
| Figure 5-19 | 452 |
| DJI Industries Inspire Drone | 452 |
| Table 5-20 | 453 |
| DJI Industries Inspire Drone Features | 453 |
| Figure 5-21 | 454 |
| DJI Industries Ronin-M | 454 |
| Table 5-22 | 455 |
| DJI Industries Ronin-M Functions | 455 |
| Figure 5-23 | 456 |
| DJI Industries Spreading Wings S1000+ | 456 |
| Table 5-24 | 457 |
| DJI Industries Spreading Wings S1000+ Features | 457 |
| Figure 5-25 | 458 |
| DJI Industries Zenmuse Z15-A7 | 458 |
| Table 5-26 | 459 |
| DJI Industries Zenmuse Z15-A7 Features | 459 |
| Figure 5-27 | 460 |
| DJI Advanced Octocopter Spreading Wings S1000+ | 460 |
| Figure 5-28 | 461 |
| Spreading Wings S1000 | 461 |
| Figure 5-29 | 462 |
| DJI Flight Controllers For Multi-Rotors | 462 |
| Figure 5-30 | 463 |
| WooKong-M | 463 |
| Figure 5-31 | 464 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|---|-----|
| Figure 5-32 | 464 |
| Figure 5-33 | 465 |
| DJI Handheld Gimbals | 465 |
| Figure 5-34 | 465 |
| Aerial Gimbals | 465 |
| Figure 5-35 | 466 |
| Figure 5-36 | 467 |
| Zenmuse Z15-A7 | 467 |
| Figure 5-37 | 468 |
| Zenmuse Z15-A7 | 468 |
| Figure 5-38 | 469 |
| Figure 5-39 | 469 |
| Figure 5-40 | 470 |
| Figure 5-41 | 471 |
| Endeavor Robotics Target Markets | 471 |
| Figure 5-42 | 475 |
| Endeavor Robotics Worldwide Presence with Law Enforcement Robotics | 475 |
| Table 5-43 | 478 |
| Endeavor Robotics Strategy Key elements | 478 |
| Table 5-44 | 479 |
| Endeavor Robotics Strategy Key Common Platforms and Software Elements | 479 |
| Table 5-45 | 482 |
| Endeavor Robotics Distributors for U.S. Public Safety | 482 |
| Figure 5-46 | 489 |
| Boston Dynamic Atlas | 489 |
| Figure 5-47 | 491 |
| Boston Dynamic BigDog | 491 |
| Figure 5-48 | 493 |
| Boston Dynamics LittleDog - | 493 |
| Table 5-49 | 495 |
| Google Autonomous Vehicles Technology | 495 |
| Figure 5-50 | 502 |
| GoPro Cameras | 502 |
| Figure 5-51 | 514 |
| Kuka Vision for Expansion of Robotic Markets | 514 |
| Figure 5-52 | 516 |
| Kuka Customers | 516 |
| Figure 5-53 | 518 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | |
|---|-----|
| Kuka Regional (10) and Segment (7) Focus | 518 |
| Figure 5-54 | 520 |
| Kuka Positioning with Smart Tools | 520 |
| Figure 5-55 | 523 |
| Kuka Positioning in Robotics and Systems | 523 |
| Figure 5-56 | 527 |
| Lockheed Martin Segment Positioning | 527 |
| Table 5-57 | 528 |
| Lockheed Martin's operating units | 528 |
| Figure 5-58 | 529 |
| Lockheed Martin Aeronautics Segment Positioning | 529 |
| Figure 5-59 | 530 |
| Lockheed Martin Aeronautics Segment Portfolio | 530 |
| Figure 5-60 | 531 |
| Lockheed Martin Aeronautics C130 Worldwide Airlift | 531 |
| Figure 5-61 | 532 |
| Lockheed Martin Aeronautics Falcon Fighter | 532 |
| Figure 5-62 | 533 |
| Lockheed Martin Electronic Systems Portfolio | 533 |
| Figure 5-63 | 535 |
| Lockheed Martin Mars Atmosphere and Volatile Evolution (MAVEN) | 535 |
| Table 5-64 | 536 |
| Lockheed Martin Mars Atmosphere And Volatile Evolution Objectives | 536 |
| Figure 5-65 | 538 |
| Lockheed Martin K-MAX | 538 |
| Figure 5-66 | 540 |
| Lockheed Martin Desert Hawk III | 540 |
| Figure 5-67 | 541 |
| Lockheed Martin Stalker UAS | 541 |
| Figure 5-68 | 543 |
| Lockheed Martin Fury | 543 |
| Figure 5-69 | 544 |
| Lockheed Martin VTOL Quad Rotor | 544 |
| Table 5-70 | 547 |
| Mesa Robotics Technical Experience | 547 |
| Table 5-71 | 556 |
| Northrop Grumman Partner Positioning | 556 |
| Figure 5-72 | 558 |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

WinterGreen Research, Inc.

| | | |
|--|-----|-----|
| Northrop Grumman Systems Segments | 558 | |
| Figure 5-73 | 559 | |
| Northrop Grumman Portfolio | 559 | |
| Figure 5-74 | 565 | |
| Power Hawk Rescue System | 565 | |
| Table 5-75 | 579 | |
| QinetiQ Vision | 579 | |
| Figure 5-76 | 583 | |
| QinetiQ Dragon Runner Urban Operations Rugged Ultra-Compact, Lightweight And Portable Reconnaissance Robot | | 583 |
| Table 5-77 | 585 | |
| QinetiQ Customer Base | 585 | |
| Figure 5-78 | 595 | |
| SDR Tactical Robots Compact Surveillance Robot | 595 | |
| Figure 5-79 | 596 | |
| SDR Tactical Robots Surveillance Robot With Arm | 596 | |
| Figure 5-80 | 602 | |
| Technorobot | 602 | |
| Figure 5-81 | 604 | |
| Technorobot Collaborations | 604 | |
| Figure 5-82 | 605 | |
| ARTI 3D Scanning Law Enforcement Robot | 605 | |
| Figure 5-83 | 606 | |
| TechnoRobot ARTI Law Enforcement Robotic Platform | 606 | |
| Figure 5-84 | 607 | |
| UC Davis Using Yamaha Helicopter Drones For Crop Dusting | 607 | |
| Figure 5-85 | 608 | |
| Yamaha Crop Dusting Initiatives | 608 | |

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

\$4,100 SINGLE COPY -- \$8,200 WEB SITE POSTING

ABOUT THE COMPANY

WinterGreen Research, founded in 1985, provides strategic market assessments in telecommunications, communications equipment, health care, Software, Internet, Energy Generation, Energy Storage, Renewable energy, and advanced computer technology.

Industry reports focus on opportunities that expand existing markets or develop major new markets. The reports access new product and service positioning strategies, new and evolving technologies, and technological impact on products, services, and markets. Innovation that drives markets is explored. Market shares are provided. Leading market participants are profiled, and their marketing strategies, acquisitions, and strategic alliances are discussed. The principals of WinterGreen Research have been involved in analysis and forecasting of international business opportunities in telecommunications and advanced computer technology markets for over 30 years.

The studies provide primary analytical insight about the market participants. By publishing material relevant to the positioning of each company, readers can look at the basis for analysis. By providing descriptions of each major participant in the market, the reader is not dependent on analyst assumptions, the information backing the assumptions is provided, permitting readers to examine the basis for the conclusions.

WinterGreen Research is positioned to help customers facing challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust wintergreen research to work alongside them to ensure the success of the participation in a particular market segment.

WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

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ABOUT THE PRINCIPAL AUTHORS

Ellen T. Curtiss, Technical Director, co-founder of WinterGreen Research, conducts strategic and market assessments in technology-based industries. Previously she was a member of the staff of Arthur D. Little, Inc., for 23 years, most recently as Vice President of Arthur D. Little Decision Resources, specializing in strategic planning and market development services. She is a graduate of Boston University and the Program for Management Development at Harvard Graduate School of Business Administration. She is the author of recent studies on worldwide telecommunications markets, the top ten internet equipment companies, the top ten contract manufacturing companies, and the Top Ten Telecommunications market analysis and forecasts.

Susan Eustis, President, co-founder of WinterGreen Research, is a senior analyst. She has done research in communications, healthcare equipment, and computer markets and applications. She holds several patents in microcomputing and parallel processing. She has the original patents in electronic voting machines. She has new patent applications in format varying, multiprocessing, and electronic voting. She is the author of recent studies of the Internet, Cloud Computing marketing strategies, Internet equipment, biometrics, a study of Healthcare Equipment, Worldwide Telecommunications Equipment, Top Ten Telecommunications, Digital Loop Carrier, Web Hosting, Web Services, and Application Integration markets. Ms. Eustis is a graduate of Barnard College. Ms. Eustis was named Top Woman CEO in 2012 by Who's Who Worldwide. She was named Top Woman Market Research Analyst the same year.

Women of distinction magazine has put Susan Eustis on the front cover and Who's Who has given me several awards recently, some of which are not announced, but including the following. , Susan Eustis, President and Chief Executive Officer of WinterGreen Research, Inc., has been named a Worldwide Branding Professional of the Year in Market Research & Analysis. While inclusion in Worldwide Branding is an honor, only small selections of members in each discipline are chosen for this distinction. These special honorees are distinguished based on their professional accomplishments, academic achievements, leadership abilities, years of service, and the credentials they have provided.

REPORT # SH26831914

649 PAGES

357 TABLES AND FIGURES

2016

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