

## ***Homeland Security Unmanned Aircraft Systems (UAS) -- Markets Reach \$2.3 Billion By 2017***

LEXINGTON, Massachusetts (February 24, 2011) – WinterGreen Research announces that it has a new study on homeland security unmanned aircraft systems (UAS). Homeland security unmanned aircraft systems (UAS) markets grow as the governments worldwide realize these affordable airplanes provide a less expensive way to provide defense of a nation’s borders and deterrent to intruders. These markets are poised to grow based on the creation of new services efficiencies that accrue from improved technologies. New composite materials systems are achieving consistent price declines throughout the forecast period.

The 2011 study has 672 pages and 216 tables and figures. Worldwide markets are poised to achieve significant growth as governments worldwide move to implement more cost efficient military systems and weapons delivery modalities. Vendors are building out localized distribution networks that support a UAS system in a local environment, providing remote control of airplanes.

The military UAS technology is migrating to new markets; commercial drone technology is increasingly available beyond military circles. Commercial applications are spreading fast. An unmanned aircraft that can fly a predetermined route costs a few hundred bucks to build and can be operated by iPhone.

Homeland security and commercial unmanned aircraft system (UAS) are used by countries to protect their borders and get aerial views of commercial projects. Complex systems include ground stations and other elements in addition to the aircraft. UAS are used by the International Civil Aviation Organization (ICAO) and other government aviation regulatory organizations.

The requirement for rapid responses to complicated contingencies and the enduring need for ever more persistent surveillance to meet each of the contingencies requires development of extended persistence, pre-positioning, maritime air take-off and landing and aerial refueling. Thin film batteries become significant.



Copyright 2011 WinterGreen Research, Inc.

-Page 1-

Enhanced strike capability and payloads are evolving: UASs are required to carry out an increasing number of strike missions on the battlefield. These missions mandate UASs be able to be equipped with flexible payloads and advanced autonomous target recognition capabilities. More UASs with strike capabilities will be required.

Commercial UAS may include air cargo planes flown from a remote location using a video controller. This significantly reduces the cost of logistics for moving anything. The ability to reduce the cost of transport of goods, by reducing the labor component is a significant advance in commercial activity.

Unmanned aircraft systems (UAS) are achieving a level of relatively early maturity. Fleets of unmanned aircraft systems have begun to evolve. The U.S. Army has achieved one million flight hours for its unmanned aircraft systems fleet. This market maturity is anticipated to extend the usefulness of the technologies into homeland security and commercial markets. Unmanned aerial systems have good handling characteristics. Units are designed to perform high-speed, long-endurance, more covert, multi-mission intelligence, surveillance, and reconnaissance (ISR) and precision-strike missions over land or sea.

Units feature a variety of internal weapons loads, including 2,000 lb Joint Direct Attack Munition (JDAM), an Electro-optical/Infrared (EO/IR) sensor, and an all-weather GA-ASI Lynx® Synthetic Aperture Radar/Ground Moving Target Indicator (SAR/GMTI), maximizing both long loiter ISR and weapons carriage capabilities.

UAS offers the war fighter persistent situational awareness and strike mission affordability. For the cost of one manned fighter aircraft, multiple-swarm configured units can cover an area of interest, providing 24/7 ISR coverage, target identification, neutralization, mission flexibility, and attrition tolerance. Some UAS have the capability to perform manned aircraft missions.



Copyright 2011 WinterGreen Research, Inc.

-Page 2-

According to Susan Eustis, primary author of the study, “growth is spurred by increasing interest from homeland security planning departments. The governments worldwide are moving toward embracing unmanned aircraft systems (UAS) because of the increased intelligence capability and deterrent efficiency combined. The versatility of single aircraft, and the ability to use multiple inexpensive aircraft for different purposes is a formidable and compelling market driver.”

Unmanned aerial systems (UAS) markets at \$84 million in 2010 are forecast to reach \$2.3 billion dollars, worldwide by 2017. US UAS aircraft have flown one million miles over the last four years and are set to fly one million more in the next year. The pace of homeland security and commercial utilization is picking up as planners realize that UAS are significantly more efficient than manned aircraft in every way.

Market growth of unmanned aircraft systems (UAS) markets is a result of the ability to fly longer, see better, provide more useful imaging, put better sensor packages in place, achieve better maneuverability, and implement new technology. The improved control units that permit handlers to work remotely improves systems capability.

Units more easily portable, more battery technology permits the ability for systems to stay in the air longer. New systems permit refueling in the air.

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 and Thompson Financial.



**Copyright 2011 WinterGreen Research, Inc.**

**-Page 3-**

Keywords: Unmanned aircraft systems (UAS), Unmanned aircraft vehicles (UAV), Networks of Military Unmanned airplanes, Unmanned Military Logistics airplanes, Military Unmanned Aircraft Market Shares, Unmanned Aerial Vehicles , Military Robots Market Forecasts, Maneuverable Military Airplanes, Military Embedded remote control Software, Sensor Network, Unmanned aerial systems platform, Launching Laser Defensive Weapons, Support Logistics Missions, Recharge Batteries, Search And Rescue, Robot Navigation, Battery for Military UAS, Battery for Military UAV, Military airplanes Drive Control, Military airplanes Electronics, Military Unmanned aircraft systems (UAS) Market Segments, Large and Mid Size Military Unmanned aircraft, Guns Mounted on Unmanned airplanes, Remote-Controlled Weapons, Common Operator Control Unit, Radio Control Modules,  
<http://wintergreenresearch.com/reports/UAS.htm>

*Contact:*

**Susan Eustis, President and Co-Author**  
WinterGreen Research  
6 Raymond St.  
Lexington, MA 02421

(781) 863-5078 (Work)  
(617) 852-7876 (Cell)  
[susan@wintergreenresearch.com](mailto:susan@wintergreenresearch.com)  
[www.wintergreenresearch.com](http://www.wintergreenresearch.com)

