

# Battlefield UAS

## Market Analysis and Outlook

August, 2009

Executive Summary



# Executive Briefing

## Market Findings

- Although a “value offering” when compared to other major weapons systems, militaries must have a demand pull in order to embrace battlefield UAS.
- As is often the case, commercial applications for this market segment will lag behind military use. Price points from \$10,000 to \$20,000 or more for the UAV alone are very difficult for first-responder and other commercial budgets.
- The U.S. Department of Defense has a huge impact on this market with regard to cyclical and rapid market footprint.

## Key Figures

- Early and active fulfillment phases for U.S. DoD battlefield UAS, when combined with market cyclical will result in a 2009-2019 revenue compound annual growth rate of -3%, with a UAV delivery CAGR of 1%
- It is vital to note that this market has been in existence for less than 10 years, and an anchor client’s behavior (e.g. U.S. DoD) will have a substantial effect on market dynamics
- More than 27,000 UAVs are forecasted for delivery between 2009-2019

## Near Term Outlook

- U.S. DoD remains in an active and in many cases initial fulfillment and entry-into service (EIS) phase on several programs of record. Cyclical in this market segment will be accelerated given limited expectations of long-term survivability on a UAV by UAV basis.
- DoD deliveries on programs of record will ebb after 2011, with the exception of the RQ-16 MAV.

# Definitions

- Preliminary look at more than 950 acknowledged UAS in varying development stages
- Of these, 258 UAS “fit” G2’s parameters for inclusion. These included UAS from the Nano, Micro, Mini and Close-range categories
- A total of 98 UAS are included in either the installed base or forward forecast; these are deemed to have a degree of government or private backing, capabilities enabling them to execute the “over the hill” surveillance mission, and a technical readiness level (TRL) allowing them in theory to enter service prior to 2019.
  - *The forecast includes rotary wing, fixed wing and ducted fan UAS. It does not include lighter than air vehicles.*
- The downselect process took into account expected variables such as: support from host governments, performance parameters such as endurance, range and MTOW, domestic and international sales potential, perceived technological risk, payload modularity, assumed system status, confirmed and pending orders, overall system growth potential and finally the system’s perceived ability to immediately contribute to Platoon or Company level situational awareness

# Definitions

- Not all 98 UAS included in this report are expected to move forward; however it is important to count investment in these systems as well as noting their collective contribution to installed base revenues and numbers of UAVs.
- If included in this forecast, G2 Solutions believes the UAS could be fielded with adequate funding and support. This does not mean, however that all systems will be profitable from a purely business standpoint, as battlefield and tactical UAS are fertile ground for host-government investment, even with little prospect of viable foreign customers.



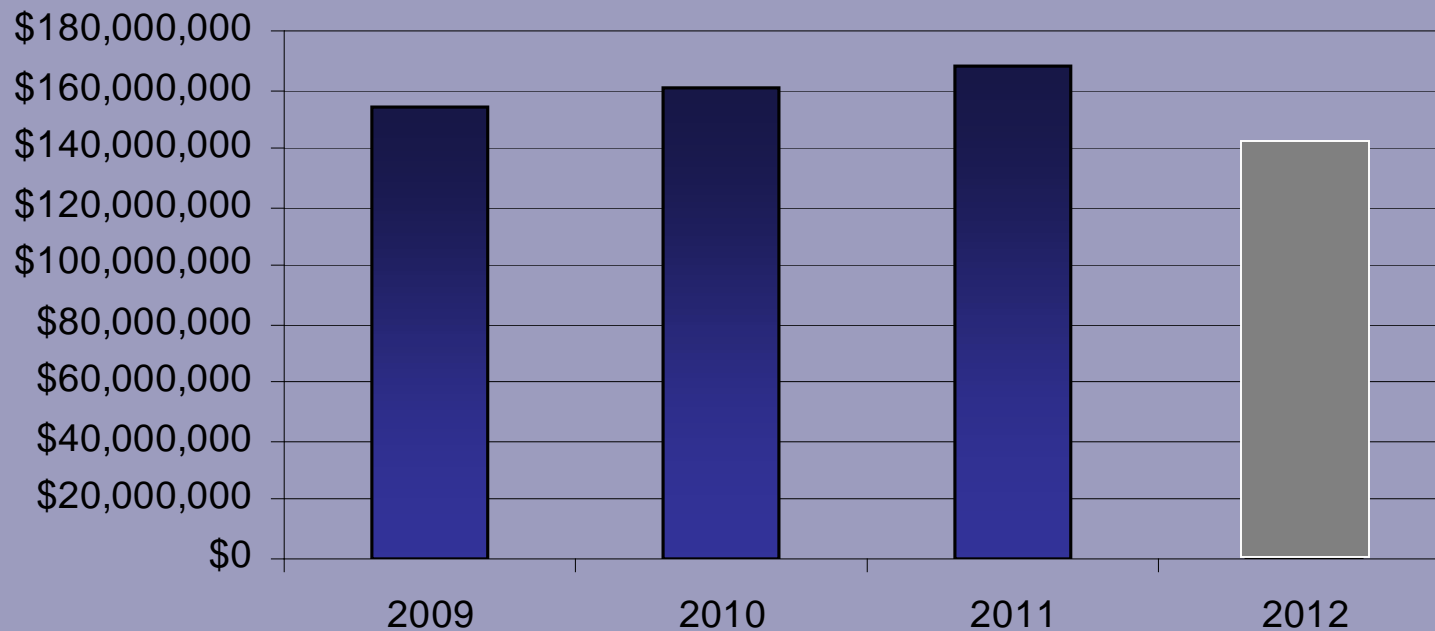
# Methodology

- Examined available contract and pricing data on a UAS by UAS basis, and conducted primary research to validate and/or alter the cost assumptions
- Revenues represent assumed internal or contracted investment in UAV and ground control stations, and can also represent revenues flowing as a result of order and delivery of UAS.
- Forecast revenues are counted at assumed delivery dates
- The 11-year forecast is intended to better capture the unique cyclicity of this UAS niche, with a new wave of DoD deliveries beginning in 2017
- On a system-by-system basis, both the UAV and GCS are forecasted separately, as UAS differ widely in the number of UAV (and GCS) that make up the entire system

# Battlefield UAS Market Forecasts (2009-2012)

# Battlefield UAS

## Total Market Revenues in Millions of USD (2009-2012)



**Total revenues in excess of \$540 million from 2009-2012**



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