

Emerging Markets: Unmanned Aircraft Systems (UAS)

Opportunities and Challenges

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Growth Projections



- **Worldwide Estimates Predict UAS Market at Close to \$55B by 2017**
- **UAS Represent Largest Area of Growth for Aerospace Industry**
- **Significant US Military Market**
 - **73% of Worldwide RDT&E Spending**
 - **59% of Total Procurement Dollars**



Source: Teal Group 2008 UAV Market Study

Environment



- **FAA Projecting Significant Growth in Air Traffic**
- **With Growth comes Complexity & Challenges**
- **New Industry Segments Require Rethinking Today's Way of Doing Business**
 - **VLJ's, UAS**



What about the Civil Market?



- **Strong Industry Interest in This Growth Segment**
- **Civil Government Spending on UAS Solutions Represents Largest Growth Area**
 - **Border Surveillance**
 - **Maritime Support**
 - **Environmental**
- **Commercial Opportunities Not as Apparent**



NAS Integration Issues Remain



- **Goal: Routine, Standard Operations with other Airspace Users**
- **Industry Committed to Timely and Safe Integration**
 - **No Midnight Phone Calls from Mike O'Shea!**
- **Global Harmonization of Standards is Critical**
 - **ICAO, FAA, EASA Efforts to Unify Standards is Commendable**
- **Technical/Procedural Issues**
 - **DSA, Spectrum**
 - **Airmanship, Airworthiness**



We Will Collaborate to Find Solutions



- **FAA Resources**
- **Government/Industry Data Collection**
- **RTCA Standards Engagement**
- **Aeronautics Research**
- **Small UAS ARC**
- **Global Harmonization**



