



Saturn Arch QRC: Contributing to PM Fixed Wing's Strategy for Modernizing while Sustaining Readiness

Continued Operations, Sustainment, and Integration (COSInt) of Saturn Arch (SA) Aircraft

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Key Points

- ▶ **Saturn Arch Program Snapshot (QRC) – Path to Fixed Wing Aircraft Modernization**
 - **2009:** Initial Contract December 2009
 - Beech King Air transition to DHC-8 100 (King Air belly mount to DHC-8 side fuselage mounting)
 - **2011:** Basis for five additional Saturn Arch and Two Desert Owl ISR Aircraft
 - Bombardier DHC 8 200, 300 series (foundation for DHC-7 replacement program - ARL-E)
 - **2017:** Program Hours 38,000+; two new aircraft builds ISO USCENTCOM JUONs completed 3rd Qtr 17 (now deployed with Saturn Arch 3.0 systems)
- ▶ **Proof of Concept (i.e. Bridging technologies to ARL-E Program of Record)**
 - Airworthiness Release and Airframe Lifecycle Analysis; Migration to C of A
 - Steel Sensor Rail/Sidecar System Improvements
 - Avionics, Weight Reduction and Communications Systems Improvements
 - Communications [Vortex], Pilot Guidance, Precision Navigation and Timing Systems, ASE, IFF
- ▶ **Tactics, Techniques and Procedures – Impact on Employment Force Development**
 - Best practices to maximize range/endurance while optimizing C-IED sensor employment
 - Contractor operated capabilities applied quickly as needed; corresponding maturation of USA force
- ▶ **Rapid fielding of ISR upgrades and capabilities – Readiness Available on Demand**
 - Spinoff to Foxhound Development; Colombia proof-of-concept; Long Range Radar?
- ▶ **Lessons learned for agile operations and sustainment – the Total Force Construct**
 - Sustainment of DHC-8 aircraft in austere environments
 - Rapid establishment of affordable infrastructure