

Byron Birkedahl

Current Position/ Title: Founder of HyMasa LLC a consulting services and analytics company

Key skills: System Engineering, Engineering Leadership, Advanced Air Mobility, Urban Air Mobility and Unmanned Aircraft Systems (AAM/UAM/UAS), Autonomous flight, Aviation regulations & safety, Customer and regulatory interface, Integrated Modular Avionics (IMA) architecture and platform systems, System modeling/ Mathworks Simulink, Data analytics, and Flight controls.

2022: Establishment of HyMasa LLC for consulting services and analytics for the aviation industry

2016-2022: Senior Chief Engineer of Honeywell's AAM/UAM/ UAS and Next Generation Avionics (Anthem) systems; Lead architect of AAM/UAM/UAS manned and autonomous systems; Developed the strategies for product offering road maps; Assisted in creating numerous RFI's and RFPs for OEMs; Presentations to customers on near-term avionics systems and the vision for future systems; Presentations to FAA, EASA and other certification authorities regarding avionics architectures and certifications means; Advisor and approval of internal safety and certification strategies; Created EVTOL Simulink models for Human Machine Interface development and real time simulator demonstrations.

2014-2016: Led teams of engineers working on Honeywell's 800+M\$/ year revenue Primus Epic avionics system; Chief architect for the next generation avionics; Active involvement in engineering organization transformation; Advisor role on data analytics (big data) projects.

2012-2013: Lead Architect for Honeywell's Electronic Systems Engineering group; Led a trade study team for Epic system architecture evolution; Developed the systems modeling concepts and strategies on a customer aircraft program.

2010-2012: Developed the platform architecture for the Orion Spacecraft Back-up Flight Control System; Performed reviews of Honeywell and OEM spacecraft avionics; Engaged in new pursuits for NASA and commercial space programs.

2008-2009: Developed next generation avionics proposals and RFI responses for two customers.

2006-2007: Led the architecture team for a next generation IMA pursuit of a future air transport narrow body aircraft. The team worked directly with the customer's advanced technology group developing RFI responses and trade studies.

2002-2006: Chief Engineer/ Fellow on the Primus Epic Avionics System. Leader of the technical forums involving all stakeholder groups to ensure common technical issues

were addressed. Resolved numerous certification issues with FAA, European and other regulatory authorities; Advisor to FAA on IMA certification regulatory documents (AC 20-145, TSO C-153); DO-297 committee member and contributing author.

1999 – 2001: Technical Manager leading the Primus Epic architecture systems group.

1996 – 1998: Staff Engineer developing the systems requirements for the Primus Epic avionics architecture.

1988 – 1995: Developer of the Primus 2000 Avionics system and application on various OEM programs.

1985 - 1987: Flight controls engineer on business and regional jet programs.

1981 – 1984: Flight Test Engineer for various business jet programs.

1979 – 1980: Engineering intern at IBM Longmont, Colorado

Other: 11 patents (3 pending); several technical achievement awards

Education: BSEE Electrical Engineering University of Colorado 1980 GPA: 3.96/ 4.0