

# GARY BAILEY

SENIOR ASSOCIATE, DAYTON AEROSPACE, INC.

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## PROFILE

Over 30 years of systems engineering experience in increasingly responsible positions across the US Air Force (USAF) Aeronautical Systems Center Engineering Directorate (ASC/EN)—now the Air Force Life Cycle Management Center (AFLCMC/EN)— with specific expertise in airworthiness certification. Responsible for the airworthiness of the F-35A Low Rate Initial Production Aircraft (LRIP). Served as the Directorate of Engineering (DOE) delegated authority to release flight clearances for new aircraft and release of non-reportable modifications. Former ASC/EN Technical Director for Systems Engineering. GS-15, Department of the Air Force (DAF) (Retired).

## PRINCIPAL AREAS OF EXPERTISE

### Technical Engineering Management

Led systems engineering process implementation for all acquisition programs at Wright Patterson Air Force Base (WPAFB) as the System Engineering Technical Director for the Engineering Directorate. Delegated Technical Airworthiness Authority (TAA) and Chief Engineer for the F-35A. Led numerous Executive Independent Review Teams (EIRTs), notably Global Hawk and F-16, and served as the lead systems engineering representative on the USAF airworthiness board. Led the development of the latest USAF Airworthiness policy/directive and implementation guidance. Led ASC efforts to define and deploy a systems engineering assessment tool designed to examine programs' "systems engineering health" and identify areas that could benefit from improvement.

### Program Management

Program Manager for the development, manufacturing, fielding, and sustainment for the Advanced Signal Intelligence Programs associated with reconnaissance programs across the USAF fleet. Cross-functional integrated product team (IPT) lead for F-35 avionics sensor development and for all radar development and production efforts associated with the F-15 and B-2. Directed all engineering activities for the F-35 field site at WPAFB.

### Integrated Avionics Sensors and Architecture

Led B-2 and F-15 radar development and integration into the aircrafts' fire control system. Responsible for a ten-fold improvement in F-15 radar reliability. Supported all avionics development programs at ASC as the Avionics Technical Director and Fire Control Technical Advisor for the Engineering Directorate. Led the development of the avionics sensor suite for all variants of the F-35.



## DAYTON AEROSPACE

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## EDUCATION

**BA, Systems Engineering (EE option)**  
Wright State University

**MS, Systems Engineering**  
Wright State University

**Air War College**

**Defense Leadership and  
Management Program**

**Advanced Program Manager's  
Course**

Defense Systems Management  
College (DSMC)

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## KEY POSITIONS

**Chief Engineer,**  
F-35A Life Cycle Support Office

**Program Manager**  
Aircraft Structural Integrity  
Program (ASIP) Family of Sensors

**Technical Director/Systems  
Engineering**  
ASC/EN

**Technical Director/Avionics**  
ASC/EN

**Technical Advisor/Offensive  
Sensors**  
ASC/ENA

**Technical Expert for Airborne Radar  
Systems**  
ASC/ENAD

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## CERTIFICATIONS

**APDP Level III**

Systems Planning, Research  
Development and Engineering  
Program Systems Engineering  
Program Management

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## WORK HISTORY

### **Senior Associate | Dayton Aerospace, Inc.**

**2013-present, Dayton, OH**

Provide system engineering, avionics, and program management support across all program phases including development, production, sustainment, and operation—to both industry and government clients. Specific areas of expertise include program execution, design review implementation, test planning, and risk mitigation identification. Airworthiness subject matter expert providing airworthiness certification support and training to multiple customers within and outside the government. Providing Airworthiness support to the USAF Airworthiness Office at AFLCMC, WPAFB.

### **Chief Engineer | F-35A Life Cycle Support Office**

**2010-2013, WPAFB, OH**

Responsible for the continued airworthiness of the F-35A Low Rate Initial Production (LRIP) and production aircraft. Director of Engineering (DOE) level of delegated authority to release flight clearances for new aircraft and the release of non-reportable modifications. Served as the USAF release authority for sustaining engineering products and technical data updates to the field. Developed and gained USAF acceptance of F-35A risk assessments associated with the operational release of the aircraft. As Class Desk Lead Engineer, served as the lead systems engineer for the F-35A aircraft for development, production and sustainment. Responsible for mitigation action implementation and closure for all technical system integration issues.

### **Program Manager | Aircraft Structural Integrity Program (ASIP) Family of Sensors**

**2009-2010, WPAFB, OH**

Responsible for the day-to-day execution of four ACAT 1 ASIP Family of Sensors programs. Sensors were being designed for installation onto the U-2, Global Hawk, Predator, and Reaper weapon systems. Each of the four programs were in different stages of development ranging from pre-fielding decisions to pre-Milestone B design. Responsible for the development of acquisition strategies and program execution decisions, and the development and delivery of program information.

### **Technical Director – Systems Engineering | ASC/EN**

**2006-2009, WPAFB, OH**

Responsible for the creation of all systems engineering policies, training of policies to Wing and Squadron engineers, and assessment of policy implementation for all ASC programs. Led the development of a systems engineering assessment tool for ASC and supported the development of a command level tool. Acted as the System Engineering Plan (SEP) focal point for ASC/EN assisting programs in documenting their processes in the correct format to support approval at the SAF/AQR level. Led implementation of USAF independent airworthiness standards through the update of an Air Force Policy and the development of a new USAF Instruction. Member of the Directors Airworthiness Board, responsible for the evaluation and aircraft certification recommendations to the program executive officer (PEO). Served as the engineering focal point for technology transition, responsible prioritizing ASC technology needs to focus Air Force Research Laboratory (AFRL) efforts on capabilities that will meet warfighter needs and ensure effective technology transition. Served as chairman of First Flight Executive Independent Teams.

### **Technical Director – Avionics | ASC/EN**

**2005-2006, WPAFB, OH**

Responsible for the development processes used in all avionics design activities (hardware and software) at the center. Maintained and updated the avionics section of the airworthiness certification criteria that sets the standard for all USAF aircraft platforms. Provided independent assessments to program office teams that were developing and integrating avionics onto weapon systems. Senior advisor for avionics on the Air Force Fleet Viability Board, providing recommendations for fleet modifications to keep the fleet productive well into the future.

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**Prior to 2005**

- Technical Advisor, Offensive Sensors, ASC/ENA, WPAFB, OH
- Chief Avionics Engineer & Tactical IS IPT Lead, JSF, WPAFB, OH
- Technical Expert for Airborne Radar Systems, ASC/ENAD, WPAFB. OH
- Lead RF Integration Engineer, JSF, ASC/FBJ, WPAFB, OH
- F-15 Radar Integrated Product Team Lead, ASC/FBA, WPAFB, OH
- B-2 Radar System IPT Lead, ASC/YS, WPAFB, OH
- Electronics Engineer, ASC/ENACR, WPAFB, OH

**KEY PROJECTS**

- Provided airworthiness certification technical assistance to various industry clients.
- Provided airworthiness certification execution support for a new tactical foreign military sale (FMS) aircraft.
- Built and delivered comprehensive MIL-HDBK-516-based airworthiness training courseware. Provided training to DoD, defense contractor and foreign military clients.