

## LEAD OPERATIONS ENGINEER - GLOBAL HAWK PROJECT Profile

Seasoned aerospace professional with extensive experience in fixed and rotary wing flight testing, test management, systems integration and UAV operations. Background includes greater than 20 years of experience in flight test planning, execution and reporting and more than 6 years of high-altitude, long-endurance Unmanned Aerial Systems (UAS) operations experience and 10 years total UAS operations experience.

### Skills

- Flight test management
- UAS operations
- Flight test engineering
- Systems integration and test
- Aircraft modification management
- Team leadership

### Accomplishments

• NASA Exceptional Service Medal, 2011

• Developed initial Operational Concept for the Global

Hawk UAS for NASA operations and generated testing

roadmap to achieve successful initial operational capability of the

NASA Global Hawk UAS

• Developed syllabus and training materials for NASA Global Hawk Mission directors and UAS ground observers.

• Led the NASA effort (in concert with Northrop Grumman

Corporation and L-3 Communications engineers) to resolve unexpected developmental problems that surfaced during testing and qualification of the Global Hawk command and control system and field a fully functional system.

• Generated requirements for workmanship, functional test and

environmental test for Science payloads planned for installation on the Global Hawk.

• NASA Dryden Directors Safety Award, 2000

• Appointed to NASA "Tiger Team" to fully develop, reclassify and

cause-map X-40A Space Maneuver Vehicle hazards in response to deficiencies uncovered during Flight Readiness Review.

• U.S. Army Commanders Award for Civilian Service, 1996

• Managed a complex engine-airframe integration test program with an integrated test team of Army, airframe contractor and engine contractor personnel.

• Developed new flight test techniques to determine compliance

with a new frequency-domain based handling qualities specification.

• Developed methods of assessing aircraft specification compliance using an engineering flight simulator.

• US Army Commanders Award for General Excellence, 1987.

### Professional Experience

06/2006 to 01/2015

Lead Operations Engineer - Global Hawk Project Company Name 1/4 City, State

Managed all operational aspects of Global Hawk high-altitude, long-endurance UAS, (2 operational air vehicles, 3 ground control stations) and scientific payload integration.

- Overall leader for Global Hawk flight operations team, including maintenance personnel, avionics technicians and operations engineers.
- Primary point-of-contact and liaison to the Federal Aviation Administration and Transport Canada for securing the Certificate of Authorization or Waiver for operation in the US National Airspace and operational certificate for Canadian Airspace.

Global Hawk Mission Director: Responsible for the overall conduct of Global Hawk missions in the Ground Control Station.

- Served as primary functional interface between payload specialists and Global Hawk aircrew.

- Assisted Global Hawk pilot in air vehicle systems operation.
- Performed as Mission Director on more than 150 Global Hawk missions.

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Lead Operations Engineer for Aeronautics Mission Directorate: Supervised eight Operations Engineers â€ directed assignments, work prioritization, generated performance appraisals

01/1997 to 06/2006

Operations Engineer Company Name 1/4 City , State

Project Manager. Missile Defense Agency DC-10 WASP Structural Restoration: Managed \$5M project to investigate structural deficiencies with MDA platform aircraft.

- Drafted the statement of work for the test effort.
- Coordinated and managed the funding.
- Performed all coordination and facilitation to allow the customer's functional test agent (Raytheon Aircraft) to complete the analysis and testing on schedule.

Technical Manager. B-52H Launch Platform Aircraft Research Vehicle pylon construction: Supervised construction activities and schedule and performed as technical liaison between the pylon engineering design contractor and NASA fabrication personnel.

- Developed or reviewed quality assurance specification requirements.
- Primary mechanical designer of installation hardware for the electrical
- power conditioning and instrumentation systems.
- Performed the conceptual design of pylon pneumatic system.

Flight Test Project Manager. B-52H Cooperative Launch Platform Aircraft Qualification: Managed overall ground and flight test effort to achieve initial operational capability of NASA B-52H Cooperative Launch Platform Aircraft

- Generated or reviewed and approved all Launch Platform system integration ground checks.
- Drafted and coordinated Flight Test Plans, generated flight profiles, flight cards and pre-flight briefings.
- Performed as Test Director for qualification ground testing and all test flights and as Flight Test Engineer onboard aircraft to perform system qualification checks.
- Generated and managed System Requirements Verification Document

06/1996 to 01/1997

Senior Engineer Company Name 1/4 City , State

- Planned test programs to evaluate operability, suitability, and engine/airframe integration and compatibility of F-16 propulsion systems.
- Served as Government test monitor for contractor test programs.
- Interfaced with engine manufacture technical representatives and maintenance technicians on engine technical and maintenance issues.
- Served as customer propulsion system consultant. Monitored propulsion system data real-time during flight tests.
- Analyzed flight test data.

10/1986 to 06/1996

Project Manager / Senior Flight Test Engineer Company Name 1/4 City , State

Project Manager/Test Director: Project manager on 18 test programs. Prepared detailed cost estimates for all phases of program utilizing test requirements documents. Coordinated funding requirements with program sponsor. Coordinated test scheduling and special equipment requirements with test sponsor and airframe contractor. Established test milestones and schedule. Coordinated with aircraft maintenance and test instrumentation personnel to ensure required resources were available to meet program goals. Led diverse team composed of test pilots, flight test and test instrumentation engineers, aircraft mechanics, test instrumentation and data reduction technicians and contractor personnel. Directed daily test operations. Directed preparation of test program final report. Briefed test results and recommendations to program sponsor, headquarters and contractors.

Senior Flight Test Engineer: Flight test engineer on 36 programs. Performed detailed test planning to efficiently evaluate the performance, handling qualities, mission suitability, specification compliance and airframe icing characteristics (where applicable). Drafted flight test plans. Established test instrumentation requirements. Devised innovative test techniques to evaluate state-of-the-art systems. Planned individual test flights to accomplish test goals in a minimum of flight time. Generated flight profiles, flight test cards and conducted pre-flight briefings. Generated control room display formats using Data Views. Monitored and directed tests as Flight Test Engineer onboard test aircraft. Monitored and directed tests as Flight Test Director via telemetry from ground control room. Established data reduction methods. Wrote data-reduction subroutines in FORTRAN. Processed and reduced flight test data. Evaluated and interpreted test data to determine test article deficiencies, shortcomings and compliance with applicable specifications. Drafted final test report using Microsoft Word, Excel and specialized VMS data plotting programs. Acted as member of flight safety and data review boards. Trained junior flight test engineers in flight test planning and flight test and data reduction techniques as well as

data interpretation and report preparation. Acted as flight test consultant to headquarters and contractors. Acted as organization pitot-statics authority. Responsible for calibration and maintenance oversight of flight test pitot-static reference equipment (air speed pacer aircraft and trailing airspeed devices).

01/1983 to 09/1987

Flight Test Engineer Company Name i¼ City , State

Education and Training

1994

Defining System Requirements, NASA, 2004 Advanced System Safety Practices, NASA, 2001 Personnel Management for Executives (Resident Course), US Army, 1994 Test and Evaluation Management US Air Force Institute of Technology University of Kansas Hazards of High-Intensity Electromagnetic Radiation to Flight, CKC Laboratories, 1991

1982

Bachelor of Science : Aeronautical Engineering California Polytechnic State University i¼ City , State Aeronautical Engineering

Skills

Army, art, Agency, calibration, hardware, Concept, conceptual design, consultant, DC, Engineer, FORTRAN, functional, Government, interpretation, Director, mechanical, Excel, 2000, Microsoft Word, performance appraisals, personnel, Personnel Management, quality assurance, real-time, Research, Safety, scheduling, scientific, specification, system integration, telemetry, Test Director, training materials, VMS