

# **William A. Galbraith IV**

**Holy Cows, Inc.**

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## **Experience Summary**

- 24+ years experience in Flight Simulation
- Secret security clearance, inactive since May 2008
- Flight dynamics, engines, Automatic Fidelity Testing (AFT) systems, and development tools
- Proficient in C, C++, Ada and Fortran under Windows and Linux
- Proficient in Microsoft tools including Word, Excel, and Project
- CASE tools: Make, RCS, CVS, Lexx/Yacc, Automatic Fidelity Test and debug tools
- Project Engineer for delivery of 5 trainers, customer interface, managing several engineers and two subcontractors, performing under tight schedule deadlines
- Business owner, requiring proposal skills, scheduling, management and performance to contract
- Aero Group leader, organizing and managing very diverse engineers
- Aero background for rotary and fixed wing aircraft, control loading and motion integration, AFT development, flight data reduction and interpretation.
- Proposal Efforts

## **Project Experience**

T-45C RAMP – Modeling, integration, debugging, and testing for aircraft surface reactions and motion seat, under tight schedule requirements. Consultant for aerodynamics and control loading testing.

H60 FAST – Coding for NASMP Data Manager for SH-60F/HH-60H in Fortran on Gould emulator. Gould and Compro LCRS system work including Ethernet protocols, DATAPOOL, SYSGEN work. Fortran on Gould, C on Linux

F-35 JSF Maintenance Trainer - System Engineer for proposal effort.

Beechjet FAA Level C Simulator – C++ coding for aircraft systems, sound, computer systems, input/output. Support for flight and engines. C++ on Windows. Also support for CitationJet and TBM 700 AFT.

DATCOM Predicted Aerodynamic Model – Package designer/supporter for USAF Digital Datcom aircraft design program, with worldwide distribution. Fortran and C coding under Windows/Cygwin and Linux. See [www.holycows.net/dactom](http://www.holycows.net/dactom)

Windows 2000 Network Administration – Responsible for updating and standardizing a small business network with 15 users, configuring new computers, supporting user's changing requirements, and advising on efficiency improvements.

VH-60/VH-3 APT – Developed off-line test environment for several engineers, built initial load on trainer, integrated Automatic Fidelity Test system previously developed on HH-60J, developed Configuration Management tools using RCS. Ada coding on PC and Linux computers.

T-34C FIT SLEP – Various positions with 3 different companies, including Lead Engineer for final integration and test effort, leading team of up to 6 engineers and 3 main subcontractors. Also acted as Lead Flight Dynamics engineer and control loading/motion supervisor, and supervisor for development of all real-time models, computer system administrator, and Configuration Manager. Developed Fortran real-time and Automatic Fidelity Test utilities on Motorola Power PC computers, and corrected problems in Fortran, C, and C++ code for entire trainer,

including flight, propulsion, aircraft systems, IOS, IO, control loading, motion, intercom and aural cue. Acted as Main technical interface with Government representatives.

Citation II Flight Simulator – Developed Automatic Fidelity Test system and scripts for FAA Level B flight simulator. Flight test data reduction and analysis. Developed engine model from manufacturer static engine performance estimation program and flight test data. Interfaced with subcontractor developing flight model and flight test data. C++ code on PC running Windows NT. Matlab, LEX and YACC code development.

STARS (Software Technology for Adaptable, Reliable Systems) - Group leader of 5 Flight Dynamics, Propulsion, and Flight Controls engineers, pursuing adaptable reusable code for Navy Trainer aircraft flight simulators. Ada code on Sun workstations and various UNIX machines.

HH-60J OFT - Automatic Fidelity Test program and associated utilities, initial flight and automatic flight control system code in Ada on Harris NightHawk under UNIX and IBM PC under DOS, using Mil Std 1815 and 2167A. Off-line flight model test driver in Ada. Flight test data reduction routines in Ada and FORTRAN. Work with interface to control loading system and Digital Automatic Flight Control System. Complete generation of documents using WordPerfect on IBM PC. Engineering interface with sub-contractors and customers. Develop and deliver presentations to the customer. Proposal development. Clearing of Discrepancy Reports.

C-5/C-141 Aerial Refueling Part Task Trainer - Final integration and acceptance of all software and hardware/software integration. Automatic Fidelity Tests for Flight and Controls. Flight, Controls, Engines, and unique hardware integration work in FORTRAN on Gould 32/87 (MPX). Experience as Test Director and Project Engineer. Engineering interface with customer. Develop and deliver presentations to the customer.

### **Company Experience**

Holy Cows, Inc., subcontracting to:

- SimStaff, contracted to Symvionics – July 2008 to December 2008
- SimCom Training Academy – Jan 2006 to November 2006, June 2008
- Reimbursement Solutions Corporation – September 2002 to present
- Aero Simulation, Inc., Tampa Florida - March 2000 to September 2002
- SBS Engineering, Albuquerque, New Mexico - July to August 1993
- AAI Corporation, August to Nov 1993.

TechUSA – November 2007 to May 2008. Contracted to Indra Systems for H60 FAST Program

AeroTek – June 2005 to December 2005. Contracted to DEI Services Corp.

SimCom International, Orlando, FL – February 1999 to March 2000.

Future Technologies Inc. (Enzian Technology), Orlando, FL - July 1994 to February 1999

AAI Corporation, Orlando, Florida - June 1990 to June 1993,

Reflectone, Inc., Tampa, Florida - April 1987 to June 1990.

Burtek, Inc., Tulsa, Oklahoma - July 1985 to March 1987.

Appli-Mation, Inc. - May 1984 to May 1985.

### **Education**

Embry-Riddle Aeronautical University, Daytona Beach, Florida. Graduated April 1984 with Bachelor of Science degree in Aeronautical Engineering. 2.96 in major / 2.82 overall GPA. National Dean's List. Cooperative Education student with NASA/Ames Research Center for two terms. University of Kansas, Lawrence, Kansas, June 1991. "Airplane Flight Dynamics : Open and Closed Loop" 3.5 CEU credits, Certificate of Completion.