

William A. Galbraith IV

Holy Cows, Inc.

billg@holycows.net

3757 Lake Drawdy Drive, Orlando, FL 32820

(407) 568-8711

Experience Summary

- **Secret Security Clearance** – inactive as of 8/17/15
- 30+ years of experience in Flight Simulation
- Flight dynamics, engines, Automatic Fidelity Testing (AFT) systems, and development tools
- Proficient in C, C++, Ada and Fortran under Windows and Linux
- Skilled in Microsoft tools including Word, Excel, and Project, including Qualification Test Guide (QTG)/Acceptance Test Procedure (ATP) generation
- Moodle Learning Management System set up and implementation
- CASE tools: Make, RCS, CVS, Lexx/Yacc, SubVersion, Automatic Fidelity Test and debug tools
- Scripting under Windows, sh, csh, and bash
- 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 (multiple)
- Pilot training courseware, Learning Management System (LMS), online web presence

Project Experience

ProActive Technologies, Inc. – System Engineer for B-52 DMO MPU, BSB05 projects, and MRTS programs. Jan-Aug 2015

Pilot Recurrent Online Training, Inc. – President. May 2014 to present. Started this company to complete the work started by Independent Training Alliance (see below). Now responsible for everything.

Independent Training Alliance, Inc. – Director of Technology. Feb 2013-April 2014. Responsible for development of training courseware for Mitsubishi MU-2 SFAR 108 compliant courseware (under Holy Cows, Inc.) covering complete airplane operation, Moodle Learning Management System (LMS) implementation, iPad forms and other instructor tools. Partner died in April 2014, widow shut the company down.

SimCom - MU-2B flight and engines modeling, control loading modifications, and Automatic Fidelity Test system scripts for FAA Part 60 Level 5 FTD qualification. QTG generation.

Produced and supported **Datcom+ Pro**, which is a commercially available airplane design software for modeling aircraft and executing flight tests. 300+ users worldwide, including the U.S. Naval Academy. This involves Fortran, C, C++, and several scripting languages, all under Windows, as well as marketing and distribution. See www.holycow.net/datcom for details.

Project Engineer for three proposal efforts for flight simulators, two written and one verbal presentation to customer: F-35 maintenance trainer, #1 technical, #2 price; CH-53D CFTD, one of three finalist before contract was cancelled; Navy TSC III, selected for both Lot I and Lot II (1 of 4 companies to qualify for both). Microsoft Office Word and PowerPoint. Performed under very tight schedules.

Symvionics, Inc. - T-45C RAMP – Modeling, integration, debugging, and testing for aircraft surface reactions, companion aircraft and motion seat, under tight schedule requirements. Consultant for aerodynamics and control loading testing. Coding in C++ under Linux.

INDRA - 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

SimCom- 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.(QTG)

DEI Corporation - Autopilot design and code for T-44 Operational Flight Trainer. C++ on Linux.

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 and implementing 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 Windows 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 (a.k.a. QTG). 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.

Company Experience

Independent Training Alliance – Director of Technology – Jan 2012 to April 2014

Holy Cows, Inc., (1992 to present), subcontracting to:

- ProActive Technologies, Inc. – Dec 2013 through Aug 2015 (non-contiguous) – Proposal work, B-52 and MRTS System Engineering. Secret security clearance
- Pilot Recurrent Online Training, Inc. – May 2014 to present
- Independent Training Alliance, Inc. – February 2013 to April 2014
- Proposals – December 2013, July-August 2010, December 2010, June-July 2011
- SimStaff, contracted to Symvionics – July 2008 to December 2009
- SimCom Training Academy – Jan 2006 to November 2006, June 2008, Oct 2011 to Feb 2013
- Reimbursement Solutions Corporation – September 2002 to April 2003

- 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.