J. GORDON SEAMAN

3566 E CANTER RD ♦ TUCSON, AZ 85739 ♦ H: (575) 602-2222 ♦ C: (806)662-5800 ♦ JGSEAMAN3@YAHOO.COM

SUMMARY

A highly motivated, goal-oriented pilot/engineer/I&C-PLC technician gaining significant flying experience in a wide variety of aircraft with experience in design, layout, test, product engineering, programming, CAD, circuits, failure analysis, and troubleshooting. Broad knowledge of semiconductor physics and building active devices in different technologies as well as industrial and residential power systems. Strong understanding of general physics/ mathematics. Enthusiastic, results-oriented team player who enjoys developing new strategies to maximize product, efficiency, and business potential. Creative contributor who drives continuous improvement and long-term success.

EXPERIENCE

PROFESSIONAL PILOT, Texas, New Mexico, Arizona 2003-2022
Chief Pilot / Corporate Pilot / Freight Pilot/Mechanic Apprentice

Developed competent piloting skills with the ability to apply them in a variety of aircraft ranging from smaller single engine planes to the larger multi engine jets. Obtained a solid knowledge of aircraft systems, power plant and airframe, through maintenance management, study, and application.

- ➔ Accumulated 8244hrs total flight time; 6732hrs Pilot in Command; 7024hrs multi engine; 5380hrs turbine; 4951hrs jet.
- ➔ Airline Transport Pilot – AME (multi engine) with C525S and C560XL jet type ratings and BE300 turbo prop type rating.
- ➔ Certificated Flight Instructor – ASE, AME, IA, AGI, and IGI (single/multi engine, instrument, and advanced ground instructor)
- ➔ Programming in HTML, PHP, and SQL on a linux system using a home built LAMP server. Enrolled in Linux/Python classes online.
- ➔ **Currently working as a CJ3 captain for Alante Air Charter LLC in Tucson, AZ. Completed I&C/PLC certificates at NMJC.**

TEXAS INSTRUMENTS INC., Dallas, Texas 1995-2003
Test Engineer 2000-2003

Composed final test programs on TI VSERIES tester for USB chip sets. Composed probe programs for same chips on TI VLCLT tester. Made probe/final test programs for audio amp chip sets on Teradyne Catalyst tester. Designed final test boards and probe cards for above testers. Fulfilled responsibility for USB chip characterization by PERL programming.

Design Files: Created PERL programs to make design files compatible with test program generators.

Chip Improvement: Utilized programming code to apply clock signals on appropriate inputs and made necessary timing adjustments to produce the required voltage (H/L) on corresponding outputs. Routinely used oscilloscopes to back up the tester tools during this process.

Characterization Modification: Wrote a characterization data collection program in PERL for statistical process control. The program was used to filter through tester output data log files and calculate the mean, standard deviation, Cp, and Cpk for each current and voltage parameter.

Failure Analysis: Adjusted generic design files to fit the specific product which put an end to excessive drain to source leakage (ICCQ) and analog current flow. This leakage was caused when the generic files would force input static values on output pins, input lows on input high pins, input highs on input low pins, and when input pins were being read as outputs.

Timing/Frequency Testing: Improved inaccurate and time expensive timing and frequency tests. Shortened design files and worked with designers to find the best place in time to take measurements. Fixed frequency data skew by finding where timing edges needed to be placed.

Pin Testing: Made sure that all pins were accounted for during scan and functional tests. Worked with design to assure the correct data was assigned to the corresponding pins and wrote PERL programs to automate the process.

Training Acquisition: Attended training for Teradyne Catalyst and LTX Fusion. Learned the CAD type software used to design the test boards and probe cards. Studied IC layout (more CAD type software) to get a better understanding of the circuits to be tested.

Professional Coursework: Attended many TI classes covering analog and digital circuitry and testing. Took an IC layout class at a community college. Gained access to the design database to study the circuits being tested. Prepared simple layouts in different technologies.

Product/Test Engineer, Midland and Sherman, Texas 1995-2000

Composed probe and final test programs through the automatic test program generation software package for the TI built tester VSERIES. The products tested were Military Application Specific Integrated Circuits (ASICs). Conducted specification writing and editing. Held responsibility for product and test engineering. Defined product schedule through all phases of design and test. Performed prototype and production probe test, as well as prototype final test. Also served to prepare our group for the ISO9000 audit.

Probe Program Automation: Wrote a program in cshell and later in PERL that automated the process of generating probe programs and converting them to final test programs. This program reduced everything down to typing in a one-liner on a command line with a few switches. The automatic test program generator was invoked, necessary directories were created, and file edits were completed.

Major Product Conversion: During acquisition of Harris Semiconductor, converted products over to the TI IMPACT test platform. All products were basic single digital functions on a chip having a small pincount. Created programs and provided troubleshooting on the Impact tester.

NEW MEXICO STATE UNIVERSITY, Las Cruces, New Mexico 1993-1995
Teaching Assistant/Math Tutor

Worked as teaching assistant for the electrical engineering department teaching electronics labs. Served as math tutor for the math department covering pre-calculus and trigonometry. Consistently went beyond the scope of the text and developed more logical detail so that the students obtained a better understanding.

EDUCATION

NEW MEXICO STATE UNIVERSITY, Las Cruces
B.S., Electrical Engineering, 1992.
Completed Coursework for M.S.E.E. in Microelectronics/Integrated Circuit Design, 1994.

PROFESSIONAL LICENSES/APPLICATIONS

Airline Transport Pilot Certificate, 2005
Certificated Flight Instructor ASE AME IA, 2004
Advanced Ground Instructor/Instrument Instructor, 2004
Commercial Certificate, 2002
Instrument Rating, 2001; Multiengine Rating, 2003
Private Pilot, 1999
Restricted Radiotelephone Operator Permit
CompTIA Certified A+, Network+, Linux+ 2010, I&C/PLC tech 2017