

# CUSTOM AUTOMATED TEST SYSTEMS



## Aerospace / Defense

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|-----------------------------|-------------------------------|
| Test System Integration     | LabVIEW                       |
| TPS Development             | LabWindows CVI                |
| Data Acquisition            | TestStand                     |
| High Speed Control          | C, C#, C++                    |
| Safety Systems              | Python                        |
| Custom Designed Fixtures    | Electrical Circuit Design     |
| Mechanical Design           | Fatigue Testing               |
| Automatic Test Equipment    | Avionic Systems               |
| RF and Radar Testing        | ARINC 429                     |
| Record and Playback Systems | MIL-STD-1553                  |
| HIL Real-Time Systems       | Mass Interconnects with ITA's |
| FPGA development            | Simulation Systems            |
| Obsolete System Updates     | System Verification           |

## Successful Deployments

Avionics Testing and Simulation  
Simulation of electronic signals used throughout aircraft  
Designed a rack for PXI system with 1500 I/O signals  
Mass interconnect system with custom PCB's in ITA's  
Automated fault detection program  
Wrote automated test scripts for validation

Fatigue Testing  
Real-Time and FPGA development  
Open-loop and closed-loop control algorithms  
ID algorithms to support models for different test fixtures

RF Test Product  
Architected OOP LabVIEW to easily add new features  
Developed LabVIEW alongside client's team  
Integrated UI and data processing from other languages  
Processing RF data and FPGA Network Analyzer

Custom Automated Test Fixture  
Developed custom Test Executive software for multiple parts  
Designed and built custom test fixture with part detection  
Adds new test configurations by database without recompile