Buddy Paul

Resume History

Retired 2010- now Hydrogen energy and other energy Patents and Prototypes. Activity Qualified Final contender in Elon Musk Carbon Capture XPRIZE.

Employee Lockheed Martin Status:

Information Employee/Contractor # 022747
MICHOUD OPERATIONS (NASA)

Experience: Senior Tool Engineer

Michoud Operations 06/05-2010retied

Design ET manufacturing tools that included Cryogen pumping Prevention tools. I designed a portable clean room facility. Other designs are: Bonding tools, test tooling electronic enclosures. I received on July 4, 2006, a US Patent for a rocket launcher docking system. This system is now in production at the Baltimore facility.

Senior Engineer

LM-NESS Baltimore 08/95-06/05 THAAD: current:

Designed Breech and Muzzle Closure for the THAAD Missile Canister. Closures retain leak pressure of 100 PSI, Discharge with 15 PSI pulse (patented). Designed electrical umbilical disconnecting arm (patented). Designed manufacturing canister tooling: Winding mandrel, Oven dolly, Stripper dolly, Bonding tools, Cut off Saw. Designed Missile loaders (THAÅD) & AWLS) with mechanical and hydraulic versions for test validations.

(95-2001) VLS

Designed Motor Control System Enclosures, Motor Drive Amplifier LRU, Lamp Driver LRU, Relay Module, Control Module. Card Cage Assemblies, Backplanes, Mother Boards, Daughters Boards and Reversible Stack PC 104 Cards. Display Panels and Diagrams. Designed fiber optic mother boards, connectors, harness and test enclosure.

Designed EMI circuit card shielding, enclosure and EMI circuit cards. Designed thermal heat dissipaters for processors and enclosures. Designed Test equipment for automated test stations, Teradyne circuit cards and fixtures.

Tactical cam sensors, and other mechanical structures. Fit check Gages and acceptance tooling for the vertical launch system.

Senior Tool Engineer

Martin Marietta 01/91-08/95

Thrust reverser seal design, blocker door, TCC, Pre cooler, engine Rings, and latches using composite and metallic materials. Flow Service modeling and installation manuals.

Reverser tooling: Major Acceptance Fixture, Masters Gages, Major

Assembly Jigs, Main Bond Tools, Robotic Tooling, Router and Drill Fixtures and Composite Tooling

Senior Tool Engineer

McDonnell Douglas 12/90-01/88

Masters Gages, Major Assembly Jigs, Main Bond Tools, Lay-Up: Hand and Tape Laying Machines, Filament Winding Tools, Robotic Tooling, Router and Drill Fixtures, R.E.'s and A.K.'s And Composite Tooling

Tool Design Engineer

Grumman Aircraft 91/87-01/88

Master Gages, Major Assembly Jigs, Router and Drill Fixtures Black Box Designs.

Lead Tool Engineer

General Dynamics

01/87-10/67

Masters Gages, Major Assembly Jigs, Main Bond Tools, Lay-Up: Hand and Tape Laying Machines, Filament Winding Tools, Robotic Tooling, Router and Drill Fixtures, R.E.'s and A.K.'s And Composite Tooling

Electrical Circuits for DC, Single and three-phase machines, Relay Logic and Microprocessor Control Circuits, Explosion Proof Circuits, Automatic and Semi-automatic Control Circuits and Enclosures. Hydraulic systems using both Hi and Low pressure. Hydraulic Circuits Using multi-drive motors and cylinders. Systems using Vane and Piston pumps

Pneumatic circuits using tack valves for multi sequence operation and simple control for cylinders and motors.

Education: Academy of Health Science

BSMT, Hematology 1969

Tarrant County College

Major Tool Design 1967/68

University of Baltimore

Engineering 1970/71

University of Texas

Engineering 1972/73

Awards

Personal: NLOS: 2006 Patent:

#7-070-434 Rocket Launcher Docking System.

2003 Inventor of the Year Award

THAAD Patents:

Launcher Closure with Bearing Retainers and Pressure Pulse

Operation.

Passive Dynamically Disconnecting Arm.

Patents Pending:

NLOS: Self Mate Connector.

Others:

Captive Plume Launcher Linear Motion Power Plunger Blast Compensator and Containment Canister Enhanced Blast and Ballistic Protection Cell Blast, Ballistic and Fire Protection Cell

Member: American Society of Mechanical Engineers.

Other U.S. Patents: Reversible Camber Tooling, Web, and Tool Pads

Clearance: Secret – current

Clearance: Secret – 1990 McDonnell Douglas

Experience: 27 Years in Design with over 40,000 CAD ours with Pro-E.

Cadam/Catia, CADD/Unigraphics and AutoCAD/Intergraph