ERIC G. BRITSCHOCK

56 FERMIER RD. WEST WILLINGTON, CT 06279-1403

(860-429-8333) OR (860-558-1222)

E-mail engineer56@charter.net or [engineereric56@gmail.com](mailto:engineereric56@gmail.com)

SUMMARY OF BACKGROUND

Work experience offers 40+ years of involvement in most areas of Mechanical Engineering with 4 Patents and 35+ years of CAD experience using, PRO-ENGINEER Wildfire & Creo, SOLIDWORKS 2022, UNIGRAPHICS NX 24, Onshape & CATIA V5. SPECIFIC AREAS OF EXPERIENCE Machine and Tool design, Automation, Medical devices, Robotics, Plastic injection molds and parts, Power transmission, Mechanisms, Strength of materials, CNC, Structural, Weldments, Castings, Sheet metal, Gages, Stampings and E/M packaging. Standards including Commercial and Military J.I.T., T.Q.M., S.P.C., D.F.M., D.F.A., ANSI-Y14.5, GD&T & ISO.

WORK EXPERIENCE

Start LLC - Medical devices (2 times) for suture quick tie incl rapid prototyping, assembly, debugging and testing also gastrointestinal endoscopic noninvasive and minimally invasive laparoscopic implants for weight loss and bladder medication dispensing Test labs incl porcine. surgeries and hand held devices with Plastic injected parts Received patent #61/370,902. (Creo & SOLIDWORKS 2019).

ASML (SVG) LITHOGRAPHY (3 times) - Optical - Mechanical automated robotic machinery and tooling for wafer & chip fabrication equipment in a clean room. Incl E-M packaging & sheet metal (UG NX-24) W/ Teamcenter & Jira. 05/24 to . 05/25 Total of 3 years.

TLD - Design ground support equipment for Air Starters and Aircraft AC units including Manufacturing Engineering Test & Assembly Tooling, Sheet Metal, DFM. DFA, GD&T, FEA Simulation and hands on support (Solidworks 2022 w/ PDM) (10/21 to 8/23)

COLUMBIA MANUFACTURING – Manufacturing and Process engineering for Aircraft components and machined parts including sheet metal, machining routers, welding and fabrication with process sheets and tool design (Solidworks 2019/ 2020) (6/21 to 10/21).

OPTIM – Design of Optical Medical devices and Manufacturing engineering for Vision scopes incl ergonomics, tactile and aesthetics Surfacing, Rapid Prototyping also assembly and test tooling. DFM. DFA, PDM & Teams (Solidworks 2018) (3/21 to 6/21).

AIR- VAC ENGINEERING – Machine design, Automation and Manufacturing engineering for PCB chip removal and replacement machinery. Including Machining, Heating & Vacuum Systems, Rapid Prototyping DFM. DFA, (Solidworks 2017) (9/20 to 3/21).

TEXTRON SYSTEMS - E/M packaging for portable light weight Anti – armored vehicle systems. Optical Systems, Test & Assembly Tooling, Sheet Metal, Plastics and Rapid Prototyping DFM. DFA, & 3D printing GD&T (NX-7.5) (10/19 to 4/20)

AEGIS energy services - (4 times) Product development and Manufacturing engineering for Cogeneration systems incl production lines. And work cells Product development incl E/M packaging, sheet metal, wire runs and Cogeneration installation equipment and full drawing packages (Solidworks 2017 and Onshape) (4/19 to 9/19) Total of 1 years.

ENSIGN BICKFORD - (6 times) Product development, tooling and machine design for the manufacturing, inspection, assembly and testing of Explosives and Optical laser products with complex surfacing for mining and aerospace incl. NASA Orion space vehicle also Tooling Design Group Supervisor / Checker with 3D printing (SOLIDWORKS - 2017 w/PDM). (9/17 to 9/19) Total of 6 years

HOLOGIC – Design of Medical devices and machinery including gear drives mechanisms. Also, conversion of machined parts & weldments to castings with complex surfacing using simulation to verify casting robustness. E/M Packaging, sheet metal, Cost reductions/ Sustaining engineering.3D printing, Plastic Parts and manufacturing /assembly Tooling (Solidworks 2016) (11/15 to 7/17).

SIKORSKY - (3 times) Blade Assembly and Cart tooling, also jig and fixture tooling for the assembly & manufacturing of Helicopter. Airframe and engine components (Catia-V5-R21 & Cadra) (Wayne, Highland mfg. & CV Tool) Total of 2 years.

BAUER - Design of E/M packaging for portable jet engine monitoring systems including drop testing. Also fuel nozzle testing systems including sheet metal enclosures and structural weldments and jig and fixture tooling. Solidworks 2015) (3/15 to5/15).

TERADYNE - Design of large structural rack and frames made from fabricated sheet metal also packaging of electronic components. with design of tooling for assembly and shipping fixtures. DFM. DFA, & 3D printing (Solidworks 2013) (5/14 to x 2/15) Total of 9 mo.

PRATT & WHITNEY - (7 times) Tooling for Assembly, manufacturing, and repair of jet engines (UG NX-23) (NX Nastran) 2022) (Cyient) 08-23-5-24)

Processing and Tooling for overhaul and repair of military jet engines to military standards. (UG NX-9) (CV- Tool) 06/15- 01/16

Engine externals (Instrumentation & Probe design) both with the emphasis on size and weight (MRJ) (UG NX-4) (Belcan) 08/08-5/09

Baffle sheet metal forming, welding and inspection tooling also tube bending machine, (UG NX-4) (Whitcraft) 07/07- 02/08. Engine

externals (sheet metal and tubes) both with the emphasis on size and weight (PW6000 & GTF) (UG NX-4) (CDI) 02/05-11/06 Engine

externals (sheet metal and tubes) both with emphasis on size and weight (Ink & Mylar) (C&D) 12/85-07/86

UTAS (HAMILTON SUNDSTRAND) - (Collins) - (9 times) Optical mounting and E/M packaging for telescopes with manufacturing support (Pro-e WF4 & “Creo”) (Adecco) (3/13 to 1/14)

787 & Pure Power Manufacturing, Test equipment & Tooling (Team Lead) (UG NX-7.5 & Solidworks 2012) (Belcan) (07/11 to 1/13)

Life support systems for NASA Orion space vehicle (Team Lead) heat exchangers & pumps (Pro-E) (Belcan) 11/09 to 01/11

Assembly machines for AMS Ground Support 787 heat exchangers 16 & 20 ft long (Team Lead) (UG NX-4) (Wayne) 12/06-07/07

787galley chiller unit (Team Lead) (UG NX-4) (CDI) 07/06-12/06

Tool design for JSF Jet fuel controls reduced STD 27 tools to 23 tools, (UG NX-4 & Cadra) (Belcan) 05/04-09/06

Manufacturing Process engineering sheets for jet fuel controls (Apollo) 10/86-04/87 Jet fuel controls Drafting and tolerance studies (cadam) 01/83-01/84.

Machine design for high-Speed sub-zero temperature 300 hp propeller test cells, (Apollo) 01/82-06/82

GE (UNISON) & Spartan- Manufacturing Engineering including Process sheets & Tool design for the manufacturing of Sheet metal parts. For P&W Aircraft, Rolls-Royce & GE. (SOLIDWORKS 2012 & UNIGRAPHICS NX8.0). (02/12 to 05/12).

SURGIQUEST - Product Development and Manufacturing Engineering for Medical Devices including Optical endoscopic Trocars and Cannula systems for minimally invasive laparoscopic surgical procedures. Components include Plastic injected & sheet metal parts. GD&T tolerance stack-ups, mechanisms test and assembly tooling and full drawing packages. (SOLIDWORKS 2008) 6/08-09/08).

HARCO LABS - Product Development and Manufacturing Engineering for Aircraft sensors & Cables including E/M packaging castings, sheet metal, plastics and assembly, machining and test tooling (AUTOCAD 2005) (SOLIDWORKS 2005) (07/04/-01/05) Total of 6 mo.

DANAHER TOOL - Machine automation, tool and die design for the manufacturing of Holo-Krome fasteners & Craftsman tools also improved robustness and reliability of automated work cells, design and Procurement of machined & purchased components with assembly and debugging (SOLIDWORKS) (03/04-07/04)

COOPER-CROUSE-HINDS - Product development and manufacturing tooling for Airport lighting and signs including E/M packaging castings, sheet metal, and cost reductions also resolved thermodynamic, material, seal, assembly and optical lighting issues (SOLIDWORKS / simulation) (2/02-7/02)

TISSUE LINK - Product development and test tooling for RF and saline cauterizing medical instruments. Including FDA, design, build and manufacturing of plastic and sheet metal parts. Procurement of rapid prototypes and achieved a cost reduction of 25% (SOLIDWORKS).2/01-12/01) Total of 9 mo.

COVIDIEN-POWER MEDICAL - (3 times) Product development for manual and robotic surgical staplers including design and build of gear drives stapling mechanisms and vendor liaison in a concurrent engineering and think tank environment also drawing package checker. (Pro-E, AUTOCAD). (5/00-2/01) Total of 3 years

JOHNSON & JOHNSON - Machine automation and tooling for vascular access products including pick and place, rotary and cam style machinery also updating and retrofitting older machinery with latest technology. Component selection, shop liaison and clean room environment (A-CAD 2&3D) (12/99-5/00) Total of 6 mo.

1998 thru 1978

SIEMENS- BAYER DIAGNOSTICS - E/M packaging for Clinical Bio-Medical Instrument Systems (SDRC) STANADYNE AUTOMOTIVE – (2 times) Tool & product design for fuel injection systems (AUTO-CAD).

LACEY CORP. – Product development and manufact. for medical and sports products (PRO-E, & SDRC).

SARGENT MFG. – (2 times) Electrical-mechanical locks and hardware (SDRC - I-DEAS M.S.).

EATON CORP. – E/M packaging for flat panel displays (SDRC - I-DEAS M.S.)

POLAROID CORP. – Machine design and automation for robotic cells including E.O.A.T. (CADRA). U.S.

REPEATING ARMS - SPC. - JIT. Tool and machine design, CNC also systems manager (AUTOCAD).

GERBER SCIENTIFIC / GARMENT - (7 times) X-Y-Z Optical Machine development and tooling (AUTOCAD). ALSTOM- ABB-COMBUSTION ENGINEERING - (3 times) Fossil fuels, Nuclear and Marine (AUTOCAD).

SOFTWARE SKILLS Solidworks 2022 w/PDM & EPDM w/surfacing and simulation(40,000+ hrs.) Unigraphics w/ Teamcenter NX 2- NX 24 (18,000 hrs.) Pro-Engineer wildfire 4, Creo 4.0 w/Intralink, Windchill, PDM & Mechanica (8,000 hrs.) w/surfacing Catia V5 R15 – R22 (2000 hrs.)

FEA - Nastran, Cosmos, Simulation Xpress, ANSYS, Mechanica & Hand Calculations MS Word, MS

Project, MS Excel, MS PowerPoint, DOORS & Teams. Visual MRP System

ORGANIZATIONAL AND CREATIVE SKILLS

Helped organize and participated in various fundraisers to offset costs at little league and cub scouts, also charity breakfast and auto shows and a chef for a 100 people at Wednesday night suppers at the church we attend. Soccer and Baseball coach

EDUCATION

Graduate of Porter and Chester Institute with an A.S. Degree in Mechanical Design. With additional courses in Advanced Mathematics and Computer Aided Design. Incurred all educational costs