

DANIEL ALAN DENABURG - RESUME

CONSULTING WORK EXPERIENCE:

June 2008 – Present:

Mechanical Engineer
Fire Reconstruction Consultants
Supervisor: Walt Godfrey, Senior Fire and Explosion Expert

Responsibilities: Provide fundamental Mechanical Engineering practices to evaluate, reconstruct, and validate circumstances observed at accident scenes. Generate a detailed protocol to cover all the fundamentals a testing. This includes the research required to validate the testing procedures for fire tests in order to reconstruct the fire and document actual fire test data. Provide the results in a clear concise manner stating the facts from the data findings. Some responsibilities also include video editing of tapes into DVD's in order to help communicate the fire test data.

WORK EXPERIENCE: Over 21 years experience as a Mechanical Engineering building various assemblies for rockets at Kennedy Space Center (KSC).

Jan 2009 – Present:

Project Engineer
ATK (Alliant Techsystems Inc- A premier aerospace and Defense Company)
FL Operations
Supervisor: Jeff Cook, FL Operations Supervisor

Responsibilities:

Lead ATK Project Engineer assigned to KSC ground processing of the Forward Skirt and the Frustum for the ARES 1-X Rocket. This rocket is the first developmental test flight of a rocket at KSC since the Saturn V era. My responsibilities include overall ground processing for the build up of the Forward Skirt and Frustum for Mechanical, Electrical and Logistics Operations at KSC. This includes the technical and operational design reviews, as well as the operational implementation of the drawings into Work Authorization Documents (WAD) for the actual ground processing.

Oct 1999 – Dec 2008:

Engineer Scientist IV

Boeing Space Coast Operations, FL

Supervisor: Jim Daniel, Manager, Hoisting and Handling Group

Responsibilities:

Lead Payload Engineer assigned to numerous flights and first-time accomplishments for NASA by hoisting and handling the program-critical hardware. My responsibilities as a task leader are to prepare the analysis and operation, then use my technical expertise to coordinate and direct unique large-scale projects. I am also the Handling representative responsible for developing Ground Support Equipment, the operations and maintenance instructions (procedure), and for implementing the process for the “Orbital Replacement Unit - Launch On Need (ORU-LON)” scenario. The ORU-LON concept allows removal and replacement of black boxes of many sizes and shapes, and in many different orientations and facilities.

Systems Engineer working with NASA to design MPPF work stands to support CEV, in particular the Orion & Crew Module Pallet. Design efforts include work stand requirements that pertain to the mechanical operations, lifting and handling operations, fluids and air bearing system operations.

Feb to Oct 1999:

Senior Mechanical Engineer

Boeing Company, Cape Canaveral Air Force Station, FL

Supervisor: Dave Micka, Manager, Mechanical Engineering Group

Responsibilities:

Mechanical Engineers assigned to the launch pad processing team. Responsibilities included coordinating and ensuring the accurate incorporation of the design requirements into Launch Preparation Documents, as well as the Assistant Test Conductor to lead the technicians and quality representatives for the assembly process of the Delta II/ III launch vehicles for unmanned space flight.

Jan 1988 to Feb 1999:

Senior Mechanical Engineer

USBI Company,
Kennedy Space Center, FL

Supervisor: Grant Witters, Chief, Mechanical Processing Section - Launch Support Services (LSS)

Responsibilities:

Mechanical Engineer responsible for coordinating and ensuring the accurate incorporation of the design requirements into Operation and Maintenance Instructions (OMI) for the assembly process of the Solid

Rocket Booster (SRB) aft booster assembly. USBI Company third shift engineer on a semi yearly basis with no immediate supervision, responsible for all the aspects of the SRB build, from receiving inspection to launch. Support mechanical, electrical, logistics, hydraulic, thermal protection, and pyrotechnic systems, as well as hardware production surveillance. Perform pre-transfer and pre-rollout inspections of SRB structures on a rotational basis. LSS engineering representative to the Post-flight Assessment Team Board and Anomaly Resolution Panel evaluating as flown hardware performance and determine corrective action for all identified anomalies.

LEADERSHIP:

1999 – Dec 2008:

Lead Payload Handling Engineer assigned to numerous flights for hoisting and handling the program-critical hardware.

April 1988 to Dec 1998:

Involved in coaching high school football athletes develop the discipline and responsibilities to be successful in their scholastic, social, and athletic skills, while developing the concept of a mission statement and achieving team goals.

June 1998:

Assistant Team Chief for an Anomaly Investigation Team for a suspect condition found during postflight observations of the Space Shuttle Vehicle. Organized and coordinated the investigation effort for multiple organizations (Contractor and Government) as well as maintained and collated the final report.

Aug 1996:

USBI Company primary technical contact for coordinating the effort involved with multiple organizations for the safe de-stack & re-stack of an integrated set of SRB's to an External Tank. Developed a procedure to establish a plan for the re-use of 95 percent of the hardware. Generated a document for future potential processes.

Jun 1995:

The LSS lead engineer on an Integrated Process Improvement Team involved in the re-design of the flight hardware, design of the installation tool and development of the installation procedure to eliminate safety concerns and enhance assembly operations.

Aug 1993:

The LSS lead engineer on an Integrated Process Improvement Team for the processing and installation of the External Attach Ring (ETA) on the aft motor segment of the SRB.

May 1992:

The LSS lead engineer involved in the design and implementation of a new process to transport, inspect, and install the Thermal Curtains used to protect the Thrust Vector Control system for the SRB.

ACADEMIC PREPARATION:

1984 - 1987:

Tennessee Tech University, Cookeville, TN

Major: Mechanical Engineering

Minors: Math and English

Degree: Bachelor of Science

Graduation Date: December 5, 1987

Grade Point Average (4 point scale):

Overall - 3.326

Major - 3.85

Dean's List: Nine out of eleven quarters with at least a 3.1 or higher GPA

Extracurricular Activities:

Varsity Football on Partial Athletic Scholarship

Professional Membership: Pi Tau Sigma - National Honorary Mechanical Engineering Fraternity;

Tau Beta Pi - National Honorary Engineering Fraternity

1983 - 1984:

University of South Florida, Tampa, FL 39327

Major: Mechanical Engineering

Reason for Leaving: Attend a technical and quality academic institution with an adequate football program.

RECOGNITION/AWARDS/HONORS:

Dec 2008:

Space Flight Awareness Team Award for the design and development of the Express Logistics Carrier Rotation Stand.

July 2006:

ULF1.1 Launch Package Team Award

May 2006:

One NASA Peer Award – Express Logistics Carrier Project Team Award

Aug 2004:

Boeing Pride Award - Appreciation for efforts from EMS for process the SGANT P/M.

Oct 2003:

Team Award - Certificate of appreciation for External Carriers Team efforts from NASA.

Aug 2002:

1 of 3 Boeing Employees to receive the Launch Directors Award for involvement in processing the SSRMS Wrist Joint Launch On Need Hardware.

May 2002:

Space Flight Awareness Team Award for involvement in the Launch On Need Orbital Replacement Units Ground Support Equipment Development Team.

Aug 2001:

Awarded 100 shares of stock options because of sustained and superior performance with Boeing.

Jan 1998:

Perfect Attendance Award - 1992, 1993, 1994, 1995, 1996, 1997 & 1998

Aug 1997:

Interviewed and selected as a CORE representative for USBI Company. CORE program provides exposure to different organizations within Pratt & Whitney & USBI Company on a six month rotational basis for a two year period.

Jun 1995:

Process Improvement Team award for EPDM cover re-design

Nov 1995:

13th Recipient of the NASA Flight Safety Award - The 1st & only USBI employee to receive award. Received the award for preventing a potential catastrophic failure. During hardware surveillance on third shift, identified a suspect condition prior to the thermal protection closeout on a SRB integrated cover, which houses the electrical cables used for SRB separation commands of the Space Shuttle Vehicle. Suspended the operation and notified the processing and design element contractor, which resulted in Design Engineering implementing corrective action to preserve the integrity of the system.

Aug 1993:

Process Improvement Team award for ETA ring processing enhancements

May 1992:

Manned Flight Awareness Award for assistance in the design of the thermal curtain box criteria

Dec 1987:

Academic Medal of Honor - Ohio Valley Conference honor roll for the highest GPA of all football athletes in the eight OVC schools.

COMPUTER EXPERIENCE:

MS Office, Adobe Premiere Pro-Encore DVD-Photoshop, Canvas