

Itayi Sande

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Summary

Currently a principal propulsion engineer with Delta Air Lines. I have a strong emphasis on providing excellent customer delivery and business metrics. I have 27 years of combined OEM and MRO engineering expertise. I have 5 years leadership experience managing teams of a Fortune 500 company. I have a passion to drive excellence, good results and enjoy working in a cross functional team environment. I have excellent big data analytical skills and keen on continuous improvement strategies.

Academic Qualifications:

Bachelor of Science. Mechanical Engineering: Georgia Institute of Technology Atlanta Georgia
Bachelor of Science. Business Studies: Embry-Riddle Aeronautical University Daytona Beach Florida
3 minor degrees from Embry Riddle Aeronautical University: Daytona Beach Florida
1) Airport Management 2) Aviation Safety 3) Business Management

FAA issued Airframe and Power plant (A&P) License # 3340664.

ACE Associates Certificate (Raytheon Technologies' Green-Belt Equivalent Qualification)

Work History: 27 Years

Delta Airlines: Propulsion Engineering: June 2021 to present.

Raytheon Technologies' Pratt and Whitney 01/2007 – 06/2021.

MTU Aero Engines: 01/2002 - 12/2006.

Air Zimbabwe: 06/1996 -12/2001.

Aerospace Work Expertise

Delta Air Lines: June 2021 to Present: Manager propulsion.

- Accountable and subject matter expert, and chair work scope meetings with engineers and product managers of various departments.
- Substantiate engineering repairs and document approval decisions with mathematical proof.
- Manage \$100M annual budget allocation for engine maintenance and approve project finances.
- Use Weibull distribution models for fleet analysis and to manage reliability of aircraft fleets and engine components.
- Set annual goals and direction for assigned engine line and manage inductions.
- Apply 27 years of engine technical expertise to approve engine tech data deviations from OEM, since we operate under both FAA 121 and 145
- Develop maintenance strategies that reduce costs, improve reliability, deliver low-cost products and reduced Turn-Around-Time.
- Author engine worksopes and performed engineering substantiation for engine repair documentation.
- Manage engine projects and maintenance visits with respect to maintaining a balance between the level of maintenance and budget allocation.
- Use engineering tools simulation applications to identify technical barriers impacting performance goals, identify solutions and collaborate with other departments such as finance, demand planning, engine maintenance to implement solutions.
- Conduct engine parts reliability and scrap review and coordinate repair development initiatives.
- Submit Salesforce and EagleNet cases to OEMs for deviation approvals and provide technical support to Delta engine shop personnel regarding engines in WIP.

- Author code used to map fan blades for balancing during engine test run for CF34.
- Generate tech data and repair documents for CF34 and coordinate with respective OEMs.
- Support engine demand with removal planning and development of engine cost models.
- Collaborate with Delta Connect partners (SkyWest, Endeavor and Republic Air Lines) to improve Delta Tech Ops profitability and efficiency.
- Comply with and perform engine process audit and Safety Systems Management.
- Perform daily engine pre-induction meeting with shop leads and PLMs.

Raytheon Technologies: January 2007-May 2021: Production Engineer

- Production engineering on F100/GTF1100/GTF1500 propulsion systems for military aircraft F15 and Airbus A321 and A220 respectively.
- Use Matlab/Simulink programs to design and test airflow on airfoils.
- Project management of Boeing 757 and Airbus A321/A220 propulsion systems, PW2000/GTF1100 /1500 entry into service in 2010 and 2016 respectively.
- Participated in setting up new engine shop areas and procurement of required tooling.
- Performed inspection of parts using (CMM) Coordinate Measuring Machines and modified code used to measure engine parts.
- Worked on a Pratt and Whitney MRO projects using proprietary Monte Carlo simulations on high performance computing platform generating forecasts which reflected details of each contract to support sales campaigns and contract management.
- Managed programs across cross functional teams, building processes and coordinating release schedules for engines.
- Managed engines on lease contracts for engines leased to and returning from customers.
- Deep LLP (Life Limit Part) maintenance expertise including FAA/EASA certification. Identified and implemented opportunities for continuous improvement enabling meeting delivery of goals and commitments.
- Provided technical expertise on assembling and disassembling of GTF PW1100/1500, engines to piece part level.
- Participated and contributed with CORE (Customer Oriented Results and Excellence) Quality initiatives.
- Provide technical support and SME on first engines during final assembly and modular assembly of PW1100 and GTF PW1500 engines.
- Provided SME and technical support during bench inspections on externals and electrical harnesses using approved technical data.
- Provided technical support to inspectors on repairs processes and limits on fan case, harnesses, airfoils and inserts and brackets in accordance with approved technical data.
- Completed First Article Inspections (FAI) on new (first time) repairs procedures in shop.
- Performed engineering One-Time-Concession (OTC) special repair requests on individual engine parts with damages out of limit in engine manual.
- Answered engineering In-Process-Findings and submitted EagleNet cases (IPFs) from mechanics.
- Performed process validation on new procedures aimed at increasing efficiency.
- Completed PFMEAs for Columbus Engine Center Engineering department for the years 2015 and 2016 for V2500 and F117 engine lines. Applied and worked with process certification, value stream mapping, standard work, QCPC/Root cause analysis and set-up reduction/Mistake-Proofing tools.
- Managed and updated Engineering control tower for projects using PFMEAs.
- Worked on engineering projects tailored with emphasis on reducing engine turn-around- time.
- Substantiated a Safety Hazard Job Lifting Analysis Report to validate an assembly process with an ergonomic issue. The job analysis based on the National Institute of Occupational Safety and

Health (NIOSH) Lifting Index formula. The operation involved PW2000 HPT (High Pressure Turbine) installation with an emphasis on the 45lb weight tooling used during the process.

- SME V2500 engine a launch customer. Used black belt tools to streamline processes
- Trained field maintenance personnel on how to perform various SB 79-0088 and Oil-in-turbine (OIT) Airworthiness Directive on V2500-A5.
- Installed all EBUs, Quick Engine Change (QEC) components and Line Replaceable Units (LRUs)
- Created a PowerPoint presentation to customers on how to perform field maintenance OIT AD (Airworthiness Directive) on V2500 engines. Designed the SIL190 OIT kit currently used on V2500 engines.

MTU Maintenance Germany: January 2002 to December 2006

- Performed line maintenance operations on aircraft power plants V2500/PW2037/CF6-80.
- Assembled first ever production engine PW6000 for launch customer.
- Performed trouble shooting on engines with oil-smell/ oil-smoke in cabin, high vibration, high EGT margins and IIT problems.
- Assembled and disassembled V2500 engines into modules and split modules into piece parts.
- Performed bore scope inspection on induction and post -test engines.
- Performed incoming inspection on inducted V2500 and PW2000 engines to determine level of disassembly. Selected to be member of team in charge of a new engine line PW6000.
- Train new and inexperienced mechanics and coordinate QCPC and ACE metrics in the cell.
- Prepared and modified Job Instruction Cards and required 8130s and engine paperwork needed to make engine serviceable.
- Consult with other engineering department on discrepancies found on work in progress.
- Assist in trouble shooting and resolving problems encountered during assembly.

Air Zimbabwe Corporation Engineering Maintenance: 06/01/1996 to 12/31/2001

- Performed A, B, and C checks on Boeing 737, 767, Bae146, Fokker 100 aircraft.
- Five years airline fleet and engine maintenance and planning.
- Performed engine test cell runs and troubleshooting on JT8Ds and LRUs replacement.
- Line Maintenance and shop experience on Boeing 737 and Boeing 767 on A, B and C –checks.
- Assembled and disassembled JT3Ds, JT8Ds ALF Lycoming 502 and PW4056 engines in the shop.
- Inspected fan blades, tubes, electrical harnesses, and all life limited parts (LLPs).
- Performed full bore scope inspections on PW4056 engines.
- Performed static and dynamic balance of disks and modules on JT8Ds.
- Performed repairs on PW4056 on wing.

Other Skills

ACE Associates and Six Sigma tools working knowledge.

Proficiency in SAP, MS Word, Excel, Project management, PowerPoint, and Outlook.

Certificate in Computer Science (AutoCAD/SolidWorks, MATLAB/SIMULINK, Python & Java).

Familiar with Export Controls, Business Area Export Representatives (BAERs) duties and Export Administration Regulations (EARs).

Received Special Recognition Award for meeting engineering production goals and objectives.

Received Raytheon Technologies highest site Safety Award in 2010 for contributions and new projects execution.

References 07/25/2023

Available upon request