Application Form

Profile

Ahsan
First Name

Middle Initial

Iqbal
Last Name

███████████████████████
Email Address

Retired
Employer

Job Title

████████████████████████   ████████████
Home Address   Suite or Apt

████████████████████████   ██████████ ██████████
City   State   Postal Code

███████████████
Primary Phone

Which Boards would you like to apply for?

Clark Planetarium Advisory Board: Submitted

Referred by:

██

Qualifications

Please tell us about yourself.

I have 30 years of experience in the aerospace industry with the last 15 years in a senior engineering management position developing aircraft and rockets. I graduated from MIT with a degree in Aeronautics and Astronautics and my passion for this field is undiminished.

Why are you interested in serving on a board or commission?

What education, work experience, or volunteer experience do you have that applies to the board you are applying for?

What unique perspectives could you bring to the board?

Ahsan Iqbal

iqbal_resume_Jun_2021.pdf
Upload a Resume

Demographics

Some boards and commissions require membership to be racially, politically or geographically proportionate to the general public. The following information helps track our recruitment and diversity efforts.

Are you a Salt Lake County employee?

○ Yes ◉ No

Are you a current member of another Salt Lake County board or commission?

○ Yes ◉ No

Race/Ethnicity *

None Selected

District *

☑ District 4

Gender Pronouns *

None Selected

Age Range *

None Selected

Languages *

None Selected

Political Affiliation

None Selected

Ahsan Iqbal

Ahsan Iqbal

██████

Education

Massachusetts Institute of Technology   Cambridge,   MA
Bachelor of Science (SB), Aeronautics and Astronautics 1984

Washington University   St. Louis, MO
Master of Science (MS), Mechanical Engineering 1990

Experience

UTAH CREW (2019-Present)
- Varsity Coach as well as coaching Olympian at the 2021 Tokyo Olympics

CLARK PLANETARIUM (2019-Present)
Member of the Board of Directors

MIT CREW ALUMNI ASSOCIATION (2020-Present)
Member of Board of Directors

BOEING (1997-2019) retired

Boeing Strategic Systems (2015 - 2019)   Ogden, UT
Program Manager Flight Systems for Flight Test, Telemetry, and Termination
- Responsible for $150M contract with US Air Force for upgrading Flight Systems Minuteman III Instrumentation with a waferless design. Manage schedule, cost, risk and opportunities, baseline control.

Boeing Networked Tactical ISR (2011 - 2015)   Philadelphia, PA
Rapid Prototyping and Integration Center Chief
- Chief Engineer for Boeing Networked Tactical Intelligence, Surveillance and Reconnaissance (NTISR) division. Oversight of engineering on programs and proposals to include quantifying tools and processes, development cost, risks and opportunities.
- Chief Engineer for Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS), the newest ISR aircraft in the Army inventory and a Program of Record. Led a multidisciplinary engineering team that includes mechanical structural, electrical, aero/performance, communications, mass properties, systems, and configuration management. Responsible for obtaining certification from Aviation Engineering Directorate(AED) through an Airworthiness Release (AWR) to DD250 of aircraft, Instructor and Key Personnel Training(IKPT) and Limited User Test(LUT).
- Chief Engineer and later Program Manager for RAMIS (Reconfigurable Airborne Multi-Int System), the most advanced multi-intelligence Intelligence, Surveillance and Reconnaissance (ISR) aircraft in the world. Completed design, build, test, calibration and obtained an FAA Supplemental Type Certificate for the aircraft in under 13 months. Responsible for oversight of all contracts, pricing, schedule and supplier management for the program.

Boeing IDS (2009 - 2011)   Philadelphia, PA
Program Manager, Phantom Works

- Program Manager for WRAITH aircraft, an internally funded, optionally manned, fixed wing airplane of the 5000 lb Gross Vehicle Weight Class. Coordinated with suppliers, set up program plan, including schedule and organizational plans. Assisted with business development and marketing and led the

technical team to perform trade studies and develop structures, avionics, power systems, engine integration, payload integration, performance characteristics, systems and comms. Program designed to produce a flying prototype in 6 months.

- Vehicle Integration Manager for Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) proposal. This $350M proposal worth almost $1.5B of potential business for the company was awarded to Boeing in November 2010. Responsible for integration of SIGINT, IMINT sensors and payload with corresponding Size, Weight, Power (SWAPC) allocation to meet performance requirements for the aircraft. Led a multidisciplinary team for the design of the aircraft interior, Environmental Control System (ECS), Aircraft Survivability Equipment (ASE), cockpit integration, Payload Integration, Electrical and Power, Communication, and Mobile Flight Line Operations Vehicle. Coordinated closely with Hawker Beechcraft to maximize performance of the aircraft and reduce weight.

- Program Manager for $200M CounterNarcoTerrorism Technology Program Office proposal to modify twin turboprop aircraft for Intelligence, Surveillance and Reconnaissance (ISR) missions to include Thales Searchwater Radar, EO/IR, WAAS and SIGINT payloads. Responsible for developing proposal, Supplier Management Plan, Tier 5 Integrated Master Schedule, Integrated Master Plan, Bill of Materials, Work Breakdown Structure (WBS), Earned Value Management (EVM) Plan, staffing plans, program metrics, Airworthiness Certification Plans, Technical Performance Measures and Risk, Issues and Opportunities plans. Prepared artifacts for Executability Review and successfully obtained the Engineering, Operations and Management Commitment Letters, and submitted the proposal on schedule.

- Technical Leadership of Proprietary Program proposal. Details cannot be discussed.

- Vehicle Integration Manager in its preliminary phase for Yellow Jacket, a Beechcraft King Air 350 ISR. This was a Quick Reaction Capability (QRC) program. Coordinated Platform Systems Architecture, Systems Engineering, Design, Stress, Aero, Weights, Electrical, and Manufacturing. Successfully completed a rapid design of a composite sensor pod to house a specialized antenna, line of sight communication and an EO/IR sensor.

- Chief Engineer for Multirole Enforcement Aircraft (MEA) Proposal. Led vehicle design including integration of SIGINT, IMINT, Radar, Communications and Mission Systems into the air vehicle for the $600M proposal. This was Boeing's first effort into the tactical ISR field and thus required initiative and motivation to develop Boeing's technical capabilities to be at par or better than our competitors.

Boeing IDS (2006 - 2009)   Philadelphia, PA
Leader, Structural Analysis Process Thread
Functional Manager for Structural Analysis for Philadelphia. Led the Structural Analysis Process Thread (SAPT) team under the MSE Function for IDS. Initiated thread by convincing management of the need to address tools and processes for stress analysts. The team is composed of multi-disciplined IDS, PW, IT and BCA engineers, ATF's, TF's and STF's. Published a Boeing Process Guide that established the "Loads to Notes" Process for the entire Boeing Company and is now a foundation for many decisions on tools, training and technology investment at an enterprise level. Tool selection was standardized by utilizing a consistent process, subject matter experts and Fellowship members and is being implemented by SAPT for all categories of stress analysis tools. Coordinated with IT to implement identified common tools. Prepared a curriculum and training material for all structural analysts. Member of Boeing team setting strategy and engagement with key analysis software vendors, MSC, Dassault Systemes and Altair. Member of Boeing recruiting team at MIT.

Boeing Rotorcraft, (2006 - 2008)   Philadelphia, PA
Capture Team Leader, CH-47D Chinook Accelerated Procurement Strategy
Led marketing effort for CH-47D's in Active Service to qualified International customers. This includes preparation for Gate Reviews, marketing strategy, interface with Washington Office, as well as the CH-47 Program. Proposals included CHAPS aircraft for the Saudi Ministry of Interior, Pakistan and Egypt.

Boeing Rotorcraft, (2004 - 2009)   Philadelphia, PA
Senior Manager, Structures Technology
Manager for Structures Technology. Responsible for providing state of the art structural analysis to Boeing sites around the US in the areas of ballistics, survivability, advanced analysis, optimization, armor

design, impact and crashworthiness. Customers include 787, 747-8, MMA, Space Shuttle and a host of other programs. Led insertion of new technology on production programs to reduce cost and cycle time, including use of topological optimization, global optimization and certification by analysis. Development of strategy for technology insertion, roadmapping and interface with programs to facilitate personnel deployment, training and technology transfer. Responsible for coordination with IT for capital purchases for servers, desktop and laptop images developed specifically for stress, as well as development, deployment and maintenance of software for analysts.

Boeing Rotorcraft, (2004 - 2009)   Philadelphia, PA
Senior Manager, Structural Analysis
Functional Manager for all 150 stress engineers in Philadelphia. Responsible for Tools and Processes, People, and Technical Integrity for Stress Analysts. Responsible for hiring, promotions and placement of stress engineers, including development for Technical Fellowship. Measure of success is five candidates becoming ATF's and three TF's in the last four years. Successfully led the Boeing Company in deploying the newest Structural Analysis Toolset on the Chinook New Build Program.

Boeing Rotorcraft, (2004- 2005)   Philadelphia, PA
Manager, CH-47 F New Build Structural Analysis
Successfully completed a special assignment to lead Chinook build through a successful CDR after significant issues were identified in the Stress area. Interfaced with Aviation Engineering Directorate (AED) and St. Louis 46 section team, and led the Affordable airframe stress team. Aircraft was certified with limited flight test without a need to undergo full structural test based on analytical data. Recognized for accomplishment with Boeing Award, and specific mention by Army Customer. Led development and deployment of Lean Analysis tools on Chinook and briefed LEAT Scoring Panel which resulted in 0.2 shift in score for CH-47 program. Frequent interface with suppliers and assembly facility in Macon, GA, to keep the aircraft on schedule and developed a process for including MRD data in the Product Data Manager.

Boeing Rotorcraft, (2001- 2004)   Philadelphia, PA
Manager, Structural Technology & Prototyping
Led team of 26 people to develop and implement new technology on Boeing products including rotorcraft, fixed wing aircraft and spacecraft. The multidisciplinary, structural technology team was funded by Rotorcraft Lean Enterprise, Phantom Works, CR&D and Enterprise money. This group has come to be recognized as a leader in advanced analysis, optimization, survivability as well as composite technology including RTM for the entire Boeing Company. Member of Leadership Team under Phantom Works VP for Structural Technology, Prototyping and Quality. Led Rotorcraft Lean Analysis team which has brought Philadelphia recognition as the leading site for Lean Implementation, including developing and implementing an integrated analysis tool suite with an integrated IT/Engineering team.

Boeing Aircraft and Missiles, (1997 – 2001)   St. Louis, MO
F-18 E/F Advanced Structural Analysis
Developed advanced non-linear FEA techniques to analyze fuel tank for the F-18 E/F forward fuselage redesign. Utilized ABAQUS to simulate fuel and structure under catapult loads.

Unmanned Combat Air Vehicle (UCAV)
Developed Finite Element model for UCAV and designed wing. Utilized a novel construction method for the wing using Foam Matrix Technology. Performed non-linear analysis on the bomb bay doors.

X-32 Joint Strike Fighter
Part of development team for X-32 Forebody. Trained engineers in use of new tools developed in DMAPS for X-32 analysis. Part was built on schedule and under cost due to the new tools deployed.

MCDONNELL DOUGLAS AEROSPACE (1989-1997)
Design, Producibility and Manufacturing Simulation (DMAPS)
Team leader in charge of training, tool development as well as deployment and support on key projects for Rapid Modeling. Responsibilities included developing integrated tools to go from UG preliminary design through FE models and sizing with optimization routines. Developed training program to teach MD-XX and Apache Helicopter team DMAPS Integrated Analysis including UG, PATRAN, NASTRAN and Proprietary Codes.

Advanced Analysis
Leadership of a group to deploy advanced methods to other McDonnell programs to understand problems that were difficult to solve using traditional methods. Tools deployed included ADVISOR Structural Optimization Code, PATRAN3, ABAQUS Standard and Explicit Finite Element Solver, NASTRAN, Optistruct , and Mechanica (a p-element FE Solver) . Numerous deployments conducted by my team and myself included:
- Bird Strike Analysis using ABAQUS Explicit on a Proprietary Program
- MDXX Wing Sizing and Optimization
- Dual Fuel Hypersonic Vehicle Preliminary Design and Optimization
- JAST Aft-center Fuselage Rapid Modeling
- C-17 Cargo Door Redesign Non-Linear Buckling Analysis
- F-18 E/F Landing Gear Door Contact and Material Plasticity Analysis

X-30 National Aerospaceplane
Developed actively cooled panels for classified hypersonic vehicle, including design, analysis, build and test. Optimization of fuselage and tanks utilizing proprietary computer codes developed on the program. Developed Scramjet and fuselage integration for common design.

General Motors Corporation (1984-1987)
Recruited for the College Graduate in Training(CGIT) program. Performed 3-6 month assignments at the Technical Center, Truck & Bus Design Engineering, and Milford and Desert Proving Grounds.

Technology Laboratory for Advanced Composites (1983-1984)
Conducted undergraduate research on single and double overlap composite bonded joints

Personal

US Citizenship. Given Quality Achievement Award and numerous Quality Pride Awards. Active in Coaching International, National, Masters and Junior Crews. Enjoy rowing, trekking and bicycling. Married for 36 years and have two children. Son is 34 years old and with undergraduate and graduate degrees from MIT in Aeronautics and Astronautics and presently working in Boeing Research and Technology and is the Boys' Head Rowing Coach at Lakeside School in Seattle, WA. Daughter is 23 years old and graduated from Yale University. She starts Medical School at Emory University in Summer 2021.