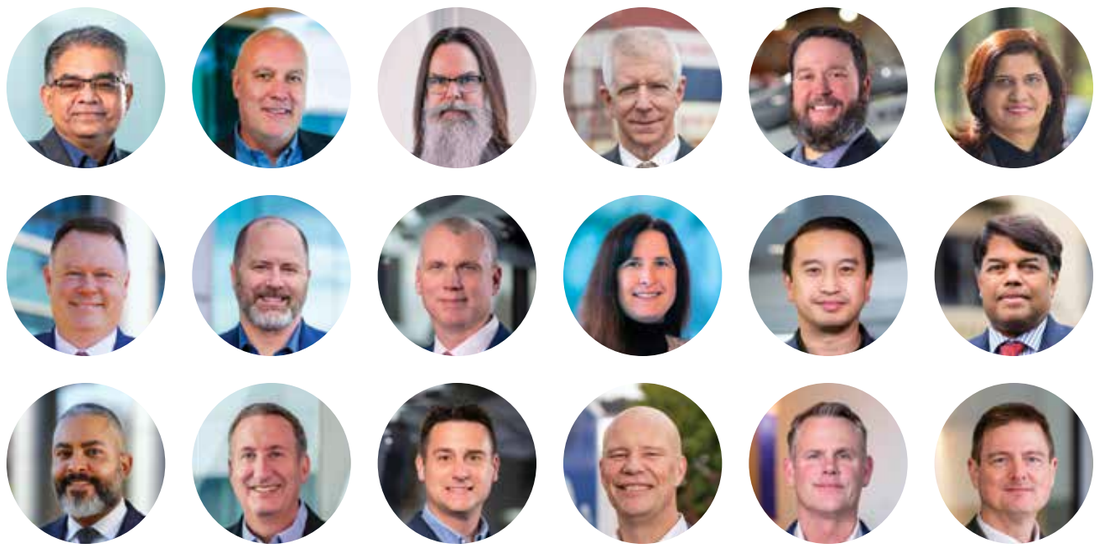
Meet the Experts:

New Executive Technical Fellows



Individuals in the newest class of Boeing Executive Senior Technical Fellows possess expertise in engineering disciplines that profoundly influence the full life cycle of all Boeing products, processes and services.

"A cornerstone of the engineering function, the Boeing Technical Fellowship helps ensure a lasting commitment to engineering excellence," said Howard McKenzie, chief engineer and executive vice president, Engineering, Test & Technology. "This recognition reflects an appreciation of each engineer's technical capabilities and signifies their acceptance of the responsibility to help grow and mentor the next generation of engineering leaders."

Following a comprehensive candidate evaluation process, 18 individuals advanced to the executive levels of the Fellowship in 2023. John Sullivan progressed to Distinguished Senior Technical Fellow.

The executive tier of the Boeing Technical Fellowship represents less than one-tenth of 1% of the company's technical workforce. As trusted consultants, advisers and mentors, Executive Senior Technical Fellows play an important role in the future as they drive design practices and shape the global aerospace industry.

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>
> **HOWARD MCKENZIE,**
> **CHIEF ENGINEER,**
> **EXECUTIVE VICE PRESIDENT,**
> **ENGINEERING, TEST & TECHNOLOGY**

PHOTOS: BOEING

Principal Senior Technical Fellows

IAN FIALHO

MECHANICAL AND STRUCTURAL ENGINEERING

In college, I was drawn to engineering courses that had theoretical and mathematical content. I gravitated toward dynamical systems theory for my doctoral work. My current work in multi-physics modeling and simulation, loads and dynamics, shock and vibration, and probabilistic and stochastic methods draws on that foundation.

The diversity of Boeing products offers continuous learning opportunities as you research and develop solutions to new technical challenges. This never gets boring and makes every day new and exciting. Seeing the first flight of a spacecraft, airplane or missile you helped design is an experience unlike any other. The new products we are working on certainly are exciting. But what I most look forward to is giving back to this company through mentoring, supporting the next generation of engineers and strengthening engineering.

TORBEN SYBERG

STRUCTURAL ENGINEERING

As the son of a Boeing engineer, I had an early focus on math and physics as a child. I loved to build things, but initially I had several unsuccessful outcomes. Eventually, and luckily, the understanding of physics and gravity kicked in, and my woodworking skills produced products that lasted. These early experiences piqued my interest in structures and drove my continuing desire to build everything strong enough.

I consider it a privilege and a responsibility to be a member of the Fellowship. The network of people I meet and work with, internal and external to Boeing, is always growing, and I feel fortunate to work with such talented and knowledgeable people.

These teams are shaping the future by defining not only what Boeing creates but also how we create. I take pride in knowing the products and processes we are developing now are the foundation for future engineers.

Senior Technical Fellows

MATTHEW ANGLIN

PAYLOADS SAFETY, REQUIREMENTS AND COMPLIANCE

Engineering and aviation are in my blood. Both my parents were engineers, and I grew up learning from them. My grandfather was an airman in World War II, and he built and flew his own airplane in his retirement years.

When I began my career at Boeing, among my peers were flammability experts who were Organization Designation Authorization unit members, who are authorized representatives of the U.S. Federal Aviation Administration. Right away, I was drawn to fire safety, and I later expanded my work to other aspects of cabin safety.

Knowing the flying public is safer due to the things I have developed and tested is the most rewarding aspect of my work.

I was fortunate to have amazing mentors throughout my career, and I am excited to see my mentees continue to grow as our technical leaders. As the aerospace industry continues to innovate, it will be exciting to see how we move around the world in the future.

RANDOLPH L. BRADLEY

SUPPLY CHAIN MANAGEMENT

Watching the Apollo 11 moon landing live captured my childhood imagination.

I began my career researching logistics models at McDonnell Douglas, which led to graduate studies at Massachusetts Institute of Technology. Working to create inventory optimization algorithms led to innovating supply chain models.

Shop floor shortages are trending down, and that's rewarding. Now I'm about inspiring the next generation of technical leaders, researching new inventory optimization algorithms to support Boeing production and sustainment. Sponsoring supply chain projects in collaboration with industry and academia provides additional perspectives on problem-solving.

Advances in artificial intelligence will extend algorithmic work in inventory optimization and supply chain simulation. In many ways, my field is again in its infancy, offering opportunities for inventing original approaches, integrating across disciplines with production and sustainment, and mentoring future leaders.

Senior Technical Fellows

STEVE DOSTERT

DIGITAL ARCHITECTURE, AUTOMATION AND NUMERICAL CONTROL

From the age of 10, when I began assisting my grandmother with her computerized loom, my fascination with automation has only grown. This passion has led me to work with various automated technologies, such as composite layup, fastening machines, metal and composite machining, and robotics.

One of the most fulfilling aspects of my job — and a privilege of serving in the Boeing Technical Fellowship — is collaborating with our global sites. This involves sharing best practices and devising strategies to program factory automation equipment. Additionally, I find immense satisfaction in nurturing and mentoring the upcoming generation of factory automation programmers.

The transformative potential of data analytics, machine learning and AI thrills me. These advancements will revolutionize our ability to program, optimize and effectively utilize factory automation equipment.

TIM BROWN

OPERATIONS ANALYSIS

During graduate school, I attended a conference on operations analysis led by a Boeing Technical Fellow. He suggested I apply to his department when I finished my graduate studies. Once with the company, I immediately knew operations analysis was the right choice for me, as it offers a variety of topics, technologies and customer missions.

It's hard to beat a job that allows you to participate in flight testing, field and lab measurements, cutting-edge simulations, advanced technologies, rapid prototyping and direct support to our operational customers. The work is seldom easy, but I couldn't imagine a more rewarding career.

My customers and colleagues across the aerospace industry are outstanding, and it's truly humbling to be a part of the Boeing Technical Fellowship. Harnessing our diverse experiences and skills is the best way to continue to provide solutions to customers. I look forward to empowering engineers to deepen their skills and to extending current capabilities to meet emerging defense threats and commercial demands.

NEIL LICHTY

PRODUCT LIFE CYCLE MANAGEMENT

A lifelong desire to understand and use technology to resolve complex problems led me to pursue a degree in engineering.

Collaborating with people to innovate engineering technology solutions is the most rewarding aspect of my work. The challenge of applying critical thinking to digital transformation is exciting, as it offers opportunities to gain efficiencies in processes, tools and products.

It's a tremendous honor to be recognized as a Senior Technical Fellow, and I'm excited for the digital transformation of product life cycle management as we mature our model-based engineering methods across the Boeing enterprise.

The speed at which digital data is transforming collaboration is exciting. Digital data and digital threads are advancing our design methods across the product life cycle, transforming products and product development in ways we have yet to imagine, and all promising a very exciting Boeing future.

SEEMA CHOPRA

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

As a little girl growing up in Punjab, India, machines intrigued me. When I was in middle school, I took apart a ceiling fan and repaired the motor. That accomplishment fueled my determination to pursue a career in engineering.

Graduate studies in AI and machine learning fascinated me, and I have pursued those interests ever since. That's still the most rewarding aspect of my work — using AI and machine learning to develop solutions from predictive alerts for aircraft faults to automation in manufacturing and engineering processes.

Serving in the Boeing Technical Fellowship fills me with excitement and honor. The continuous collaboration motivates me to contribute my vision and technical expertise to develop cutting-edge technologies. I'm excited by the possibilities of bringing AI technology to benefit human systems by combining the best of human knowledge with the capabilities of AI.

CHRIS MADDOX

STRUCTURAL ENGINEERING AND STRUCTURES AIRWORTHINESS

I knew I wanted to be a structural engineer the first time I walked into the McDonnell Douglas plant in St. Louis. Within a single building, I witnessed the development of a fighter aircraft from detailed parts to a complete aircraft. I dedicated the early part of my career to being hands-on and learning every aspect of what it took to design, assemble and test an aircraft.

Being a member of a team that creates products that are essential to national defense is the most fulfilling aspect of my work.

I take great pride in having worked hard to advance to a position in my field where I can speak for and represent the structures community and exercise leadership within Boeing and the aerospace industry.

I am enthusiastic about the future, for both my role in shaping the structural integrity of aircraft and in helping Boeing become a global leader in aircraft development and manufacturing.

Senior Technical Fellows

JAY PATEL

SUSTAINING AND FLEET SUPPORT ENGINEERING

Growing up, our house was on the flight path to the airport. Every day, airplanes flying overhead fascinated me; I could recognize the type of aircraft just by the engine sound. This inspired me to pursue aeronautical engineering and to find answers about why things break and how to fix them.

Solving unique, complex engineering problems in challenging environments with limited resources is one of the most rewarding aspects of my work. I think about the Apollo 13 mission, on which ground controllers designed a solution using only materials available to the astronauts.

I'm honored, humbled and blessed to be part of the Boeing Technical Fellowship. I would not be here without the help and support of my family, managers, mentors and co-workers.

Through the Fellowship, I look forward to my continuous learning and to developing, coaching and mentoring the next generation of Boeing engineers. Together with our partners and customers, I am excited to drive innovations like automation and AI into engineering solutions for our products.

EVELYN MATHESON

ELECTRICAL POWER SYSTEMS AND POWER QUALITY

Growing up, I was interested in science and airplanes and enjoyed solving problems. In college, I worked with new technologies for ground-based, utility industry engineering applications. That led me to Boeing and to integrating similar technologies in the challenging environment of large airplane power systems.

I am constantly learning from customers and finding opportunities to use that knowledge and experience to improve products and processes. Customer feedback is rewarding, helping us understand what worked well and guiding us to deliver an even better product.

I'm honored to be part of the Boeing Technical Fellowship and thankful for the mentors and teammates who have encouraged me to reach across integrated airplane systems to influence system performance and equipment designs. I'm excited to continue working with talented people to create new architectures, designs and capabilities that will have a positive impact for Boeing platforms and services.

CHRISTOPHER R. REID

HUMAN ENGINEERING

I accidentally came across human engineering during my first job after undergraduate school. Working as a computer systems engineer, I was taking graduate classes in usability, human-computer interaction, ergonomics and safety. Those classes opened my eyes to the blending worlds between engineering and human sciences through human factors and ergonomics — human engineering. I was hooked.

Human engineering improves the lives of people and the systems they work with. That's the most rewarding aspect of my work: people.

My position in the Fellowship is an honor and a privilege for my family, myself and the human engineering field. Within the Fellowship, the collaboration compares to the synergy of a sports team. Each teammate brings individual strengths, but moving as one body enables the team to overcome any challenge.

Emerging technologies are prompting new reasons to either leverage technology or intervene for its improvement on behalf of people. Shaping these technologies will improve safety, human performance and accessibility. I can't imagine a more exciting time than now. We're pulling the future into the present.

DANIEL NGUYEN

PRODUCT SECURITY ENGINEERING — CYBER TEST

I enjoy solving technical puzzles and creating real-time strategy scenarios, which challenge me to understand the intricacies of group and environmental compositions.

Cyber test embodies a similar mindset, where continuous learning, tinkering and debugging are essential to identifying the optimal path or solution. Within this field, I'm able to apply this approach to evaluate and enhance the resilience of our products. It's exciting to push boundaries and constantly improve in this domain.

Being surrounded by a diverse group of individuals — innovators, technologists, visionaries and talented colleagues — is the most rewarding aspect of my work. My teammates are focused on execution, and that creates a stimulating, dynamic work environment that constantly pushes me to challenge my thoughts and assumptions.

I'm honored and grateful to be part of the Fellowship, and I'm thankful for the guidance and invaluable support of my mentors, advocates and teammates.

DON ROBINSON

PROPULSION PERFORMANCE

Throughout my career, I've based my decisions on doing what I enjoy. I have always been interested in aircraft and how things work, and I studied aeronautical engineering at college.

My focus of study was fluid dynamics, and my early work experiences were in the areas of propulsion and aerodynamics. I have happily been able to integrate and optimize propulsion systems throughout my career.

I have always enjoyed the opportunity to improve or develop aircraft and to help move those products from concept through use in service. I especially enjoy being part of a large collaborative team, developing and producing complex aircraft that customers value highly.

I am thankful to be a part of the Boeing Technical Fellowship, and I look forward to adding value to Boeing's future.

Senior Technical Fellows

THOMAS TAYLOR

ELECTRICAL DESIGN AND ELECTRICAL WIRE INTERCONNECTION SYSTEMS

Since I was a kid, I've been drawn to aerospace and understanding the workings of complex machines. Fortunately, I grew up in a family that exposed me to aircraft at an early age. Engineering was a perfect fit for me, allowing me to apply my love of math and science and to follow my passion for these wonderful flying machines.

For the past 34 years, I've had the privilege of working with skilled, focused individuals to solve difficult engineering problems, whether in new product development or by resolving high-visibility, in-service issues.

I'm honored and humbled to be part of the Fellowship. It's rewarding to pass the knowledge I've gained to the next generation of engineers and to help advance our technical community.

The aerospace industry is at a turning point, as technical advancements in aircraft efficiency, emissions and performance are required to meet increasing transportation needs. Engineers love nothing more than solving difficult problems. These new challenges present learning opportunities for engineers, which excites me about the future.

BRIAN ROYER

KILL CHAIN ANALYSIS AND MISSION SYSTEMS ARCHITECTURES

From as early as I can remember, I have been captivated by aviation. This fascination inspired me to read every book I could find about aviation, to build remote control airplanes and model rockets, and to seek an aircraft mechanic license in high school.

My passions led me to pursue a degree in aerospace engineering. In college, I had the privilege of being taught by several Boeing Technical Fellows who exposed me to the real-world application of academic concepts that engineers encounter.

Kill chain analysis involves understanding the warfighter's needs and appreciating how our products protect people. I am energized by the challenge of finding creative solutions to integrate on our platforms and anticipating and developing future requirements.

Strong mentors throughout my life, particularly at Boeing, have helped me develop and refine my childhood dream of a career in aviation. I am honored to represent Boeing as a Senior Technical Fellow, and I am excited to collaborate with, and learn from, the talented individuals within the Fellowship.

KIRK VINING

FLIGHT TEST OPERATIONS

Aviation inspires us to keep our career aspirations high. I was counseled that if you shoot for the moon, you might at least end up in orbit. And if you shoot for orbit, you might end up being an experimental test pilot.

We count on each other for support and to perform at our best. The most demanding individual test conditions at the edge of the envelope require everyone to work together — planning, preparing, executing, monitoring and analyzing — to be safe, efficient and effective.

I'm honored to be part of the Fellowship, and I feel a strong accountability to ensure my role in the Fellowship provides tangible value to Boeing, our customers and the flying public.

Boeing has a renewed vision for technology that enhances product safety, both for new products and existing aircraft. I'm eager to see new safety enhancements propagated across the fleet.

ANDREW SHEPPARD

ADVANCED AIRPLANE DEVELOPMENT

My father was an electrical engineer. He taught me to be inquisitive, and he inspired my passion for understanding how things work. I became interested in aviation, mathematics and physics at a young age, which naturally led to my aerospace engineering studies at college.

The most rewarding aspect of my work is the opportunity to work with a diverse group of multidisciplined, talented people to develop components and products that I can see take flight. Being at the airfield and seeing the MQ-28 complete its first flight was a career highlight.

As a Senior Technical Fellow, I'm responsible for promoting and ensuring technical excellence in all we do. It's foundational to our success and something I take seriously. Innovating and solving problems by collaborating across the Fellowship is an honor.

I'm excited to expand Boeing's technical community globally, bringing engineering innovation and capability together to maximize product value.

New Executive Technical Fellows