25 Years of Innovation: How Türkiye Technology Center is Powering GE Aerospace's Global Future

Aviation Turkey: Looking back at 25 years of TTC's journey, how has the center evolved in terms of its engineering capabilities and its role within GE Aerospace's global strategy - and how is it preparing for what's next?

Dr. Aybike Molbay: At GE Aerospace, our mission is clear: to invent the future of flight, lift people up, and bring them home safely. Over the past 25 years, the Türkiye Technology Center has evolved from an engineering support site to a vital innovation hub with this mission in mind. Today, more than 500 skilled engineers working on advanced aviation technologies, including breakthrough next generation technology programs like CFM RISE*, among others.

The Türkiye Technology Center supports GE Aerospace customers, shops, and suppliers around the world. As one of GE Aerospace's global Technology & Operations centers, the Türkiye site works on advanced analytics, engine performance optimization, and technical problem-solving in compliance with all export control and regulatory requirements.

Aviation Turkey: Looking ahead, what's on the horizon for Türkiye's aerospace sector—and where does GEA see the biggest opportunities and challenges in that landscape?

Dr. Aybike Molbay: Türkiye is emerging as a global aerospace hub due to its strategic location, industrial ambition, and expanding commercial aviation market. It serves as a vital hub with significant opportunities in commercial aviation, defense, and aerospace manufacturing.

GE Aerospace is committed to supporting Türkiye's aerospace ecosystem. Key opportunities include the modernization and expansion of fleets by major international carriers and the development of Türkiye's defense ecosystem. Through strategic partnerships and our manufacturing joint venture with TEI, GE Aerospace is investing in local capabilities, strengthening Türkiye's role in the global supply chain, and fostering innovation in high-tech production.

GE Aerospace is also advancing new technologies for the future of flight to meet our customers' needs.

Aviation Turkey: Over the past few years, GE Aerospace has made substantial technology investments in Türkiye through TTC. Could you share some of the key initiatives and R&D focus areas that are shaping both local capabilities and global innovation – and explain why these technologies matter for the future of flight?

Dr. Aybike Molbay: We recognize that the future of flight depends on bold innovation. In recent years, the Türkiye Technology Center has led key initiatives that enhance local engineering capabilities and significantly to GE Aerospace's global innovation portfolio.

To me, the most exciting technological advancements at GE Aerospace focus on are those driving progress towards more efficient aviation. Our engineers are contributing to next-generation commercial aviation programs, targeting

significant efficiency improvements to improve fuel burn and meet customer expectations for durability.

Additive manufacturing is another critical enabler. The Türkiye Technology Center leads initiatives to design cutting-edge part designs to produce lighter, more durable components with faster manufacturing cycles. This can accelerate delivery timelines and expand design possibilities—key factors for maintaining competitive advantage.

I am incredibly proud that our team at TTC plays a pivotal role in developing technologies across all these fronts.

Aviation Turkey: Türkiye has become one of the key hubs for GE Aerospace. How do these contribute to GE Aerospace's global strategy and growth?

Dr. Aybike Molbay: As mentioned, we are actively engaged in advancing GE Aerospace's strategic priorities and long-term growth, with Türkiye playing a vital role through our support of commercial and defense customers, the Türkiye Technology Center, and our long-standing joint venture with TEI. TEI is both a valued partner and one of our top suppliers. In fact, TEI was recently honored as GE Aerospace's "2025 Supplier of the Year," reflecting the strength of our collaboration. Beyond being a key manufacturing partner, TEI also works closely with our teams at

TTC on critical programs, reinforcing Türkiye's integral role within our global innovation and supply ecosystem.

Together, our commercial and defense footprint, and the Turkiye Technology Center and TEI form a powerful combination that enables GE Aerospace to maintain technological leadership, optimize its supply chain, and respond effectively to evolving market demands.

Aviation Turkey: Your engineering team in Türkiye tackles product development and adaptation every day. What would you say is their secret sauce— that competitive edge nobody else has?

Dr. Aybike Molbay: At the Türkiye Technology Center, our engineers are passionate innovators who are naturally curious, collaborating globally to master complex aerospace technologies. Their continuous learning, teamwork, patience, and persistence enable them to effectively tackle challenging engineering problem.

In essence, the "secret sauce" lies in the unique blend of technical excellence, strong collaboration, and unwavering commitment to quality and innovation that defines our Türkiye team's approach to product development and adaptation.

Aviation Turkey: How do you envision TTC's strategic engineering role evolving both globally and in Türkiye over the next five years?

Dr. Aybike Molbay: he growth of the aviation industry will provide the Turkiye Technology Center the opportunity to continue to expand its contributions across critical technology and innovation programs.

Aviation Turkey: When it comes to career development and talent acquisition, what does TTC offer to its current team and to young professionals aspiring to build a future in the aerospace industry?

Dr. Aybike Molbay: We are proud that our engineers are an integral part of the global GE Aerospace family. Our diverse teams draw from Türkiye's top technical universities and beyond, contributing directly to groundbreaking projects.

For early-career professionals, the Edison Engineering Development Program (EEDP) provides a strong start through a two-year rotational experience across three disciplines complemented by targeted courses from leading universities. EEDP participants build foundational skills in engineering, project management, and collaboration, preparing them to become future aerospace leaders.

Career development remains a priority as our teams grow, with comprehensive technical and soft-skills training programs to support continuous professional growth. Our engineers engage in meaningful projects and benefit from robust mentoring to deepen their expertise.

Reflecting GE Aerospace's dynamic culture, TTC also actively supports Employee Resource Groups (ERGs), including GE Aerospace Volunteers, Women's Network, Pride Alliance, Sustainability Network, and Disability Advocacy Network, all led by passionate employees who volunteer their time to be a part of them. These groups lead impactful community projects in Türkiye.

Aviation Turkey: Are there any recent or upcoming investments or expansions planned at TTC that will further enhance its global capability and influence?

Dr. Aybike Molbay: Over the years, we have worked closely with the Ministry of Industry & Technology and TÜBİTAK through research and development support programs, which have been instrumental in advancing our efforts in Türkiye.

Most recently, we inaugurated our certified R&D facility in Kartal, Istanbul. This expansion strengthens our ability to attract talent, collaborate with leading academic institutions and innovative small and medium enterprises (SMEs), and explore new development opportunities under clear collaboration frameworks.

Aviation Turkey: Could you talk about the role of digitalization and artificial intelligence in TTC's current projects and future strategies?

Dr. Aybike Molbay: Digitalization and artificial intelligence (AI) play a pivotal role in the Türkiye Technology Center's current projects and future strategies. Our engineers support the development and ongoing upgrades of GE Aerospace's in-house physics-based 3D simulation, design, and modeling software, and AI-based solutions deployed worldwide. These activities are integral to enhancing engine performance, optimizing fleet operations, and advancing cutting-edge solutions.

Looking ahead, the center's strategies are deeply rooted in expanding the use of AI and digitalization to develop next-generation technologies.

*RISE, or Revolutionary Innovation for Sustainable Engines, is technology development program CFM International. It is not a product.