



# DREAMS SOAR WHEN GIRLS PURSUE STEM EDUCATION



Dreams Soar's mission is to partner with strong female role models to share and promote the importance of STEM education so that they can dream big and achieve more. The success of Dreams Soar is attributed to their "dream team", a group of passionate, hard-working student leaders, professionals and partners, who have made an enormous commitment to inspiring the next generation.

✈ When the Wright Flyer first took off from Kitty Hawk, North Carolina on 17 December 1903, the world cheered with amazement as they witnessed the first powered aircraft soar through the sky. Among the crowds of people who watched the Wright Brothers success, was a generation of women who silently longed to experience flight.

Women in aviation date back to 1910, when Blanche Scott was allowed to taxi an aircraft when it mysteriously lifted 40 feet off the ground. Once airborne, Scott gently landed the aircraft safely, making her the first woman to pilot an aircraft solo. Also in 1910, Raymonde de Laroche became the first woman to earn a pilot's license in France, making her the first certified female pilot in the world (Early Aviator, 2003). As women bravely took on the skies during the dawn of aviation, their role changed significantly during World War II, especially in the United States. During the war, women were flying almost every type of military aircraft, ferrying them across the Atlantic Ocean to deliver them in Europe (NPR, 2010).

Today, women make up 7% of the total pilot population, with only 5% of female airline pilots worldwide (Gender Gap Grader, 2014). These figures of women in the aviation industry have remained stagnant in the past decade with little evidence of a fruitful future. Why is there such a shortage of women pilots, engineers, and technicians in the world? This is a question Shaesta Waiz, Founder and President of Dreams Soar, Inc., tackled through her non-profit organization when she made it her mission to change these numbers, globally.

### PERCENTAGE OF FEMALE PILOTS IN VARIOUS COUNTRIES:

FINLAND	12%
SWEDEN	8.20%
FRANCE	7.60%
JAPAN	5.60%
MEXICO	2.30%
BRAZIL	2.20%

SOURCE: Gender Gap Grader, 2014



### PERCENTAGE OF FEMALE STUDENT PILOTS IN VARIOUS COUNTRIES:

JAPAN	12.90%
INDIA	12.50%
UNITED STATES	12%
NIGERIA	8.80%
FRANCE	7%
BRAZIL	6.20%
AUSTRALIA	4.10%
MEXICO	2.90%
EGYPT	1%

SOURCE: Gender Gap Grader, 2014



#### MADRID, SPAIN

A group of elementary students take a selfie during the Madrid outreach event.

In May 2017, Waiz departed from Daytona Beach, Florida in a single-engine Beechcraft Bonanza aircraft, flying solo around the world to inspire the next generation of Science, Technology, Engineering and Math (STEM) and aviation professionals. The Dreams Soar global flight included 30 stops in 20 countries across five continents. The flight route covered approximately 25,000 nautical miles in a single engine aircraft, with the objective to empower the next generation to overcome the barriers inhibiting women and minorities from flying and pursuing careers in STEM.

As Waiz piloted the aircraft solo, the Dreams Soar team was on the ground working around the clock handling matters related to the international outreach events, fundraising, logistics, social media, risk management, and aircraft maintenance/insurance around the world. With this collective teamwork and a strong partnership with the International Civil Aviation Organization (ICAO), and other dedicated partners, Dreams Soar was able to host 32 outreach events along the route, globally inspiring 3,000 children directly, encouraging them to pursue careers in STEM and aviation.

“Inspiring 3,000 children worldwide was a great accomplishment for Dreams Soar, however we still have a long way to go with our efforts.

Working alongside key organizations like ICAO, I feel confident we will make an even greater impact on the next generation,” Waiz shared when the global journey officially came to a conclusion on 4 October 2017. “The biggest lesson I learned is that women need more role models in STEM and aviation to prove that we can be successful in these exciting fields.” When she completed that last flight, Waiz became the youngest woman in history to fly solo around the world in a single-engine aircraft.

With the goal of increasing the number of STEM and aviation professionals, ICAO partnered with Waiz and Dreams Soar in their movement to raise awareness on sustainable development, empowering women and promoting global access to STEM and aviation education for youth. Each stop was unique, focussing on the local environment, opportunities and challenges of STEM/aviation education in that location. ICAO’s support of Dream Soar, along with the support of ground teams and partner organizations, brought together dynamic female STEM and aviation leaders through panel discussions, presentations, school visits and other venues.

No stranger to life’s obstacles, Waiz was born in a refugee camp in Afghanistan. Her family fled to America when she was an infant

**ATHENS, GREECE**

A group of high school students gather for a picture after having a tour of Shaesta's aircraft.



**MONTREAL, CANADA**

Children meeting Charlie the bear, who was Shaesta's "co-pilot" during her journey around the world.

**THE DREAMS SOAR ROUTE**

The Dreams Soar route final count included 30 stops in 22 countries on five continents totaling almost 25,000 nm flown, with 32 outreach events inspiring over 3,000 young girls and boys to reach for the stars with STEM. Each stop was strategically selected based on the need for STEM outreach.

to escape the brutal Soviet-Afghan war. She developed an interest in aviation at the age of 18 that led her to study at Embry-Riddle Aeronautical University. As a student, she founded the Women's Ambassadors Program in 2011 to increase female enrollment at the university. In less than three years, under Waiz's leadership, the program successfully helped increase female enrollment from 13 to 22 percent.

In 2014, Waiz founded Dreams Soar Inc., a non-profit organization, to inspire the next generation of STEM and Aviation professionals. Dreams Soar began with the Dream Team at its core, a group of university students who applied their STEM education and talents towards building the foundation of the Dreams Soar initiative. Shaesta then added support from a Board of Directors and Advisory Council with seasoned professionals with industry experience, and made her dream a reality by partnering with strong female role models along her route so that together, they could promote the importance of STEM and aviation education around the world.

For more information about Dreams Soar or to learn how to become a partner and support this initiative or make an online donation, visit [dreamssoar.org](http://dreamssoar.org). ■



**KABUL, AFGHANISTAN**

The United Nations hosted Shaesta in Kabul where she had the opportunity to speak with young girls about her Dreams Soar global flight.



**HAYWARD, CALIFORNIA**

After crossing the pacific ocean and landing in California, Shaesta visited her middle school in Richmond, California and spoke to students about believing in their dreams and working hard to soar.



**MUMBAI, INDIA**

One of the Mumbai outreach events was held at an all-girls orphanage where the young girls shared their dreams with Shaesta.



**SELETAR, SINGAPORE**

"Say Airplane for the camera", elementary students gather together for a picture at the Singapore outreach event.

