

# WAAS Celebration Pays It Forward With STEM for HER Event

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This year, the FAA marked the 20<sup>th</sup> anniversary of commissioning the satellite-based navigational wide area augmentation system, commonly referred to as [WAAS](#), by hosting a day-long event at FAA headquarters in Washington.



*L-R: PMO Vice President Rebecca Guy, Navigation Programs Group Manager Deborah Lawrence, Deputy Chief Operating Officer Katrina Hall*

Deborah Lawrence, group manager of the agency’s Navigation Programs, set the tone with her public remarks to gather FAA executives and staff, WAAS innovators, and a group of [STEM for Her](#) middle and high school students.

“As we celebrate 20 years of WAAS, we thank the incredible people and partners that made this revolutionary program possible,” Lawrence said. “The most rewarding part of the program for me is just working with such great people. That has been a beautiful part of being part of the WAAS team.”

[Conceived](#) by FAA staff in 1993 and commissioned 10 years later, WAAS was designed to improve the navigational precision and safety of the Global Positioning System, or GPS, for pilots. GPS works very well as a two-dimensional navigational system but does not provide the necessary levels of vertical guidance critical for pilots during landings, especially in bad weather. WAAS significantly boosts safety, by evaluating all GPS signals for accuracy, which allows pilots to know exactly where they are with integrity throughout a flight.



*A member of the PMO WAAS team addresses STEM For Her students prior to the ceremony.*

From the start, the WAAS project was designed to leverage the expertise of those outside the FAA including professionals in the aviation industry, academia, and other navigational experts.

“I want to also highlight how great the WAAS team is,” said ATO DCOO of Programs and Support Katrina Hall during her remarks at the July event. “Especially how you work with internal and external stakeholders, which is a model. It is not the norm. So, thank you for being a leader in aviation and working on products that continue to make people safe,” Hall said.

Earlier in the day, the FAA’s WAAS team and [STEM for Her](#), a non-profit devoted to promoting STEM-related careers among girls and young women, hosted 30 aspiring student engineers and aviation enthusiasts to learn all about WAAS.



*PMO WAAS team member Matthew Boswell (standing) instructs a STEM For Her student at one of the WAAS Learning Stations.*

They were taken through three learning stations, one of which was a flight simulator decked out with a WAAS Localizer Performance with vertical guidance procedure. Students also participated in a panel discussion with FAA senior aviation fellow Pamela Gomez, FAA STEM representative Serap Fern, computer specialist Patricia Morrison, and Lawrence, who summed up the event this way: “We had an opportunity to work with our STEM young ladies earlier. We had a great STEM panel,” said Lawrence. “It was so rewarding with all their questions and curiosity. It’s important because we always want to work towards our future and move WAAS forward.”

PMO Vice President Rebecca Guy also praised the [STEM for Her](#) event, pointing out that it illustrates the continuing positive impact of WAAS.

“For me, that is the other part of the program that is fun,” said Guy. “It’s the ability to bring in young women and say, ‘Look what you can do! Look at where we can go!’ Because what we do today for aviation is also about aviation tomorrow.”