

The Cessna 182 single-engine aircraft provided by Wings of Hope for the Build & Soar collaboration [Wings of Hope photo]

## Wings of Hope collaboration helps students soar toward STEM careers

By JESSICA MESZAROS

Wings of Hope, a Chesterfield-based nonprofit, is raising the bar – or the wings – when it comes to engaging students in humanitarian efforts across the globe.

Thanks to a partnership with the non-profit Experience Aviation out of Miami, Florida, students in Texas were afforded the opportunity to rebuild a plane to be used for humanitarian efforts in Central America. Wings of Hope provided an operational plane for students to rebuild as part of a year-long STEM [science, technology, engineering and math] endeavor called Build & Soar.

Designed for middle and high school students, the most recent Build & Soar took place at Lancaster High near Dallas from October 2016 through June 2017. It marked the first collaboration between Experience Aviation and Wings of Hope. Experience Aviation's founder, record-setting professional pilot Barrington Irving, is on Wings of Hope's Honorary Council.

According to Wings of Hope CEO Bret Heinrich, the collaboration is serving as a best practice model to bring similar programs to local school districts and Scout troops.

"Our goal would be to engage students in our own hangar while working with airplanes," Heinrich said. "We think there's really an opportunity to excite kids about STEM-related activities and aviation, and we're going to involve partners like the Girl Scouts who will really be able to encourage young ladies to explore this field," Heinrich said.

For the Texas Build & Soar project, Wings of Hope supplied an operable, 30-year-old Cessna 182 single-engine aircraft. According to Steve Long, director of hangar operations, about 50 students participated, making a dozen modifications to the plane, such as removing and disas-

sembling the engine, equipping the plane with landing and short takeoff gear and broadening the plane's tires to assist with successful landings in areas without paved landing strips.

According to Heinrich, about 90 students applied for the program.

"Some of the students commented that they, 'initially went out for football, but it wasn't right for me, and engineering is where I found that home," Heinrich said.

One goal of the program is to provide students from low-income communities with exposure to STEM and aviation careers.

"A lot of the kids in the district lived in the city, and they don't get a lot of exposure to things outside the city, especially relating to aviation," Long said. "They can see airplanes flying overhead, but the idea of touching one or working with one would be the furthest thing from their minds."

The current, tentative plan is for the plane to fly to Guyana and Nicaragua to support Wings of Hope's partner Adventist World Aviation in providing emergency and medical air transport to people living in remote areas.

"It was chosen that the students would work on an airplane that had a future of helping others," Long said. "So what they did to that airplane wouldn't stop with that particular plane, but would go on. The work they did isn't going to sit in a garage or in a hangar. It's going to go and help others."

Wings of Hope has operated as a global humanitarian charity since 1962. Its goal is to help people and communities around the world strive for health and self-sufficiency. Wings of Hope has over 200 volunteers and receives about 20 donated planes each year, which allows about 90 cents of every dollar donated to go back into programs.