

# Third Annual Michigan Girls Future Flight Challenge

*Hosted by Women of Aerospace Industry Association of Michigan (WAIAM)*

Here at WAIAM, we see the importance of encouraging young girls' interest in STEM. One way to drive girls' desire and passion for STEM is to introduce them to female mentors, which provides them with a connection to the industry and helps give the girls a sense of belonging to STEM.

We feel it is our responsibility as the Women of AIAM (WAIAM) to foster the next generation of creative girls who will lead and innovate the aerospace industry in the state of Michigan.

WAIAM is a committee within AIAM that actively works to create advocacy, education, and visibility for women and girls in aerospace across Michigan. WAIAM is still growing with Karen Arondoski from I.F. Metalworks and Rachel Plowman from Woodward acting as Co-Chairs. WAIAM strives to support all platforms and promote advancement for women within the industry through outreach, mentorship, and representation.

The Third Annual Michigan Girls Future Flight Challenge was a virtual, state-wide aerospace competition for girls in 4th-8th grade. This event involved a Kick-Off on October 12th, 4 weeks of group work, with final presentations taking place November 9th. The mission was to create a unique, sustainable way of flight to solve one of three challenge statements about Earth, Space, or the Future.

This project involved critical thinking in the areas of engineering, marketing & design, and business planning & sales. Female professional industry mentors in these areas were available to have meetings with the groups assigned to them to answer questions, provide feedback, and teach them about their job in the aerospace industry. We had about 24 teams of girls and 27 female industry mentors from around the state participating in this competition.

On November 9th, 14 teams presented their projects in front of a panel of judges. The girls' projects were truly outstanding and showed how much an event like this can influence their interest in aerospace! Take a look below to see what the winning teams came up with!

## **1st Place, \$1000 Prize: Team The Flying 5**

Team The Flying 5 created The F5 EcoMonitor. They chose to tackle both the Earth and Future challenge statements by creating a drone capable of detecting fires and air pollution. The F5 EcoMonitor scans forests for potential fires and communicates with

local fire stations. It is also able to filter polluted air and sample those pollutants to create a map of pollution distribution.

**2nd Place, \$600 Prize: Team Aspiring Scientists**

Team Aspiring Scientists tackled the Future challenge statement by designing the Doctor Drone! Inspired by the COVID pandemic, the Doctor Drone is capable of performing emergency blood draws and distributing oximeters, pulse meters, BP monitors, etc. It's autonomous GPS makes it able to provide emergency medical assistance at every doorstep.

**3rd Place, \$400 Prize: Team Wings That Fly**

Team Wings That Fly created a drone that combats rising greenhouse gas levels. Tackling the Earth challenge statement, their drone Candied Carbon uses it's filtration system to capture and separate greenhouse gases from the atmosphere. The captured gasses are then repurposed, using the CO2 to promote plant growth and collected gasses used for algae cultivation and biofuel production.

**Most Creative Honorable Mention, \$200 Prize: Team Mindful Engineering**

Team Mindful Engineering solved the Earth challenge by creating the HurriHelp, a drone that provides post-hurricane support. This team recognized the increase in frequency of hurricanes and created the HurriHelp to deliver supplies to stranded individuals. This drone also collects plastic waste, which are then turned into sunglasses as a part of their fundraising efforts.

Throughout this competition, multiple in-person and online connections between students and female industry mentors were made. The girls and their mentors will continue to foster these relationships to learn more about the aerospace industry and how they can continue to be a part of it in the future!