



CACHE MAKERS Girls' Confidence

Soars While Successfully **FLYING** an Airplane

Nothing is quite as nerve-wracking as boarding a small airplane with a 12-year-old girl as your pilot. But nothing builds a young girl's confidence in quite the same way as successfully flying a Diamond DA40 airplane.

Over a six-week period, a group of girls between ages 11 and 15 in Cache School District had the opportunity to learn about aviation through an afterschool program called Cache Makers.

Cache Makers was established in 2013 with the intent to provide programming in Cache County for underprivileged youth between the ages of eight and 18. Their main objective is to engage more students in STEM through hands-on learning experiences.



“Our whole goal is to get kids thinking about STEM, so they’ll do well in school, and when the time comes we hope that they’ll consider choosing a STEM career,” said Kevin Reeve, co-founder and volunteer mentor with Cache Makers.

When Reeve discovered that Utah State University’s Aviation Department was establishing a Women in Aviation Society chapter at their school he decided that Cache Makers should offer a course in aviation.

“The whole goal of this aviation program was to further engage girls in STEM, to get them thinking about engineering, mechanics and science, since that is what aviation is,” Reeve said.

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“It was a bit nerve racking,” Ames said. “I’ve never been in a plane that small, let alone a tiny plane with a 12-year-old girl in the pilot seat.”

Students from the Women in Aviation Chapter volunteered time during the six-week aviation program to mentor the young girls who learned instrumentation, weather and how planes fly. They also engaged in several hands-on experiences including using a riveting gun in a shop for airplanes and learning to fly with a flight simulator.

All of this culminated in the girls flying a real airplane.

“It was fun to watch,” Reeve said. “At first the girls were nervous, but when they landed there were big smiles on their faces. It was like they were thinking ‘I can do this.’ And that’s a success right there. It’s about building confidence in young women, helping them to see that they can do these kind of things.”

The Utah STEM Action Center funded the six-week aviation program through their organization grant. Clarence Ames, a program specialist with the Utah STEM Action Center, visited the airfield in Logan to see the aviation program in action, and had the unexpected opportunity to be a passenger on one of the flights.

“It was a bit nerve racking,” Ames said. “I’ve never been in a plane that small, let alone a tiny plane with a 12-year-old girl in the pilot seat. She seemed excited, nervous and hesitant all at the same time until she took the controls. It was amazing to see how much taking the controls of that plane and flying in a loop around Cache Valley boosted her confidence.”



Aviation Course Schedule:

Feb 21st: Intro to flight: how airplanes fly, parts of an airplane, and make FPG-9s (STEM) [activity: foam plate gliders, paper airplanes, hands on aircraft parts]

Feb 28th: Aviation weather and National Airspace (SCIENCE) [activity: online resources, weather maps, call for actual weather brief on speaker phone, hazards, performance]

Mar 7th: REDBIRD & CRJ Simulator Flights (in IS 113) [activity: fly simulators, and while not in simulator: instruments & how to read them, review flight controls]

Mar 14th: Aircraft Maintenance hands on in the lab (ENGINEERING) [hands-on riveting, bending, drilling, bracelets, etc.]

Mar 21st: Aircraft instruments and how to use them (TECHNOLOGY) [cockpit posters, IFR charts, flight planning, GPS, national airspace]

Mar 28th: Cross Country Flight Planning (MATH); Flight prep (Flights 14-15 Apr) [Visual flight rules flight planning, sectionals, plan a course, DA-40 airplane checklists, flight prep]

Mar 30th: EVENING SPEAKER: JESSICA COX
7:00 p.m. at Taggart Student Center

Apr 14-15: DA-40 Flights!



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