

Academy Provides Hands-On Learning with Cessna



Photos courtesy of Cessna Aircraft Co.

An AMMA participant learns the fine points of wheel cover assembly for a 172 Cessna Skyhawk.

By Mitzi Palmer

One week out of every summer, a rotating group of about 20 Civil Air Patrol cadets can be found hovering over piston- and turbine-driven Cessna aircraft, including Mustang jets, learning just how they work.

On an average day during that week, one cadet can be found assisting with the installation of an oxygen system on a jet, while another is helping install the landing gear on a Cessna 172. At the same time, still another cadet is working on wiring diagrams, riveting, testing fuel line attachments or even helping buff out a

paint error to prepare an aircraft for the paint shop.

This program — the Aircraft Maintenance and Manufacturing Academy — is scheduled for July 24-30 at Cessna Aircraft Co. in Independence, Kan.

The AMMA Experience

AMMA is one of about 30 National Cadet Special Activities sponsored by CAP across the nation.

AMMA activity director Maj. Jerry Jessick said the academy is designed for cadet participants to be able to learn the production process for both single-engine piston and twin-engine turbine-powered jet aircraft.

“At the completion of the academy, each cadet should be able to explain the production process from beginning to end,” Jessick said.

To accomplish this, cadets experience both classroom and hands-on training alongside Cessna employees in sheet metal aircraft construction for single-engine planes and nonsheet metal aircraft construction for jets.

“It’s amazing how much these cadets, some as young as 15 years old, experience in such a short time,” said Jessick, professional development officer for the Wisconsin Wing’s Fox Cities Composite Squadron. “They are able to see how flat sheets of metal are shaped and made into a real airplane just a couple hundred yards down the line. It’s ideal for cadets aspiring to be engineers, or those who want to attend the Air Force Academy.”

Each year, the program begins with a tour of the Cessna facility and an overview of the company. Following staff introductions and safety and health presentations, cadets dive right into applied training with Cessna staff.

For the remainder of the week, participants take part in supervised production activities that entail working on assembly of wings, fuselages, landing gear, electronic components, electric equipment and upholstery as well as paint and predelivery checkout.

The CAP cadets also attend an Experimental Aircraft Association local chapter meeting to participate in discussion of home-built aircraft. Some even receive an introductory lesson in radio-controlled aircraft flight.

Additional activities Jessick and his team of seven staffers have put together include presentations on high-time/high-cycle commercial aircraft maintenance and a Lockheed Martin overview of combat and airlift aircraft and their capabilities, including the F-35 Joint Strike Fighter.

Invaluable Training

For CAP Cadet 2nd Lt. Dan Caron, who attended AMMA in 2009, the time spent working on the Cessna factory floor was the most interesting part of his academy experience.

“I was able to learn about the day-to-day activities of factory workers as I worked alongside them,” he said. “To be able to step into the shoes of these people is invaluable.”

Caron, a member of the Missouri Wing’s Cass County Composite Squadron, will also be attending the 2011 AMMA as cadet commander — which will be his last staff position and activity as a cadet. “I could not pick a better way to finish off my cadet career,” he added.

The partnership between CAP and Cessna is a strong one. In fact, the majority of CAP’s fleet of more than 550 single-engine aircraft consists of Cessna 172 Skyhawks and Cessna 182 Skylanes.

AMMA has been a CAP/Cessna tradition since 2002.

“Cessna is proud to host the annual Civil Air Patrol AMMA at our facility in Independence,” said Doug Oliver, Cessna director for corporate communications. “This weeklong event gives our people the chance to work more closely with CAP, our largest customer of single-engine pistons, and I think it gives the cadets a greater understanding of the airplanes CAP flies on a regular basis.” ▲



A cadet is briefed on one of the Textron Lycoming piston engines that power CAP aircraft.