



Aviation Summer School ***by Katie Boland***

On July 2, 2008, John Paul II Secondary School in London, Ontario opened its doors to summer school students. Included in the mix were not just regular high school students but Air Cadets as well, looking forward to learning about aviation and working to restore an Aeronca Chief. Students and cadets came together in one class to learn about both transportation and aviation, and together faced some tough challenges.

Beginnings

The three-week course started off with the basics: shop safety, WHMIS, and how to use both basic and power hand tools. Then practical lessons were added: how to check the air pressure in a car tire, how to change a tire, and how to do an oil change. Pairs of kids who didn't know each other well were asked to work together to take apart a lawn mower engine. There were several steps: the kids observed the parts, learned what they were called and what each part's role was in making the engine run, and then put it back together. The biggest test was seeing if the reconstructed mowers would actually start or not! What a relief it was when they all did (without blowing up!).

The field trip

The class had a field trip to London International Airport (YXU), Air Canada Jazz and Diamond Aircraft. Split into two groups at the airport, each group toured the air traffic control tower and the Flight Service Centre (FSC), where pilots are briefed on weather conditions and other important factors that could affect flight safety. In the tower, the class observed the runways with planes taking off and landing, as well as Air Traffic Controllers telling the pilots when they were clear to land.

The class then walked over to Air Canada Jazz to observe Block Checks "C" and "D", how technicians performed maintenance tasks, and how they marked the places that needed repair. Afterward, the class walked over to Diamond Aircraft, where they learned about aircraft part manufacturing processes and saw how some of the planes were constructed.

The restoration

Then came the project the kids had been waiting for since Day 1 — working on the Aeronca Chief. The first step was to remove the fabric that was still on the plane. When that was



This page, clockwise from top:

The 1947 Aeronca Chief on arrival at the school

The aircraft after phase 1 of the refurbishing process

Members of the Aeronca Aircraft Rebuild Project Committee pose in front of the Chief. From left to right: ACLC representatives Ralph Askw (Aeronca Chairperson) and Chris Redfean Sr. (Area Vice Chairperson for Western Ontario); teacher Danny Galante; ACLC representative Sam Newman (Assigned Squadron Director); and Fundraising Chairpersons Judy Grunwald and Armin Grunwald. Absent: Don Berrill (1st Vice Chairperson, Ontario Provincial Committee); Chris Eves (Aviation Inspector, XU Aviation); and Tom Lawson (Empire Aviation)

Opposite page: Author Katie Boland (far left) and the rest of the summer school class with teacher Danny Galante (far right) with the Aeronca Chief.

completed, an inspector came in to decide whether it was at all possible to restore its airworthiness. It was approved. Finally, the class documented the parts: which were in good condition, which were missing, and which needed repair.

Obviously it's not really possible to complete such a refurbishment project in one short summer-school session; it will be a five-year project. But when it comes to seeing the restored craft in its moment of glory, I think everyone who was there the first year will make a point of returning to see it fly.

Lessons learned

Personally, I learned much more than I expected to learn three weeks ago. I learned some important facts about engines so that I now have a better idea of how lawn mowers and cars work. I learned how aircraft stall and what not to do if I happen to be the pilot. I am very excited about this course, will miss being here, and I guarantee that this is a course that future cadets and regular students alike will love to take. I also guarantee they will take important knowledge from this course into the future, wherever they may go. ■



*Author **Katie Boland** is a Flight Sergeant with 201 Dorchester Air Cadet Squadron. She is in grade 12 and has been in cadets for five years. Her hobbies include writing, photography and editing pictures.*

*The course described in this article, taught by **Danny Galante** at **John Paul II Catholic Secondary School (JP II)** in London, Ontario, had 14 students in its first year, of which 10 were air cadets and three others joined the cadets after the course.*

*The **Aeronca Chief** is a single-engine, two-seat, fixed conventional gear airplane that entered production in the United States in 1945. Designed for flight training and personal use, the Chief was produced in the United States between 1946 and 1950 by the Aeronca Aircraft Corporation. (Source: http://en.wikipedia.org/wiki/Aeronca_11_Chief)*

*The 1947 Aeronca Chief being refurbished through this course was donated by **Mrs. Marie Benedetti** of the London area, in support of the Air Cadet program.*

*The editor thanks **Danny Galante** and **Don Berrill** for providing additional information about the course.*

*More information about the **Air Cadet League of Canada** may be found on-line at www.aircadetleague.com.*

More information about aviation courses offered at JP II may be found on-line at www.ldcsb.on.ca/board/curriculum/specializedcourses.htm.