

CAMC's High School Program Invaluable to Students and to Industry

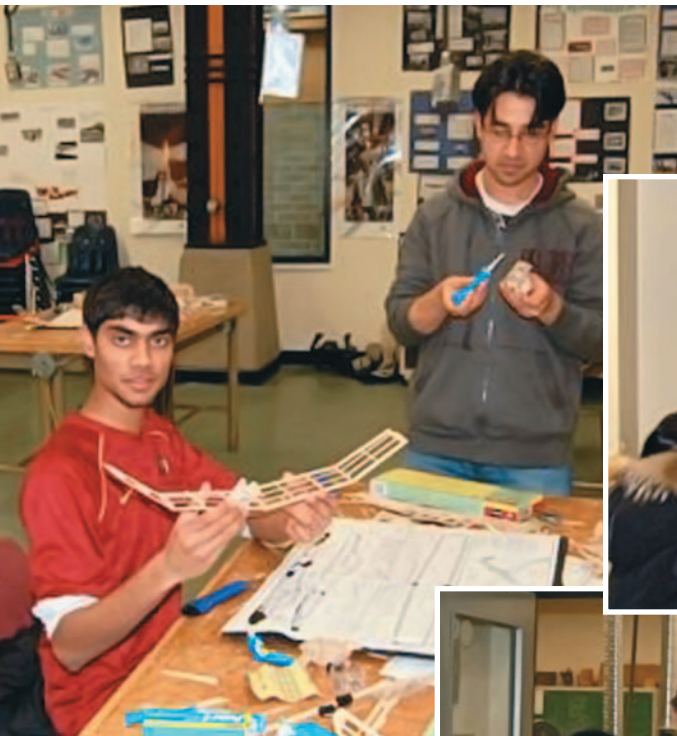
by D. V. (Dan) Stewart, Director, Aeronautical Studies

Charles E. London Secondary School

C.E. London Secondary School in Richmond, BC has an aviation program in two grades (Aviation Technology 11 and Aviation Technology 12) that has been operating for 11 years. By all accounts — including a recent, as yet unreleased, survey commissioned by HRSDC and completed by R.A. Malatest & Associates Ltd. — the program has both met and exceeded expectations. Funding and support for the program comes from three main sources: the Richmond School Board, CAMC, and the aviation community, both locally and nationally.

Proximity to Vancouver International Airport inspired the Richmond School Board to expand the educational experience of its students to include aviation and aerospace by forming educational partnerships with a number of local aviation companies. C.E. London was chosen as the host school in partnership with CAMC, which provided the curriculum, the Aviation Maintenance Orientation Program (AMOP) within its larger program, the Youth Internship Program (YIP).

YIP gives C.E. London instructors the opportunity to exchange industry training information, teaching methods, and technical projects with instructors from other schools and jurisdictions across Canada. As the program's subject matter is aviation specific and the number of resources limited, the exchange of information between schools is vital.



Clockwise from above:

Building balsa wood models — the delicate construction needed teaches precision and workmanship.

Using a giant model they made of the E6B Flight Computer — the circular slide rule ("Whiz Wheel") used in aviation — students teach others how to use it.

Students remove parts for measurement from a Lycoming 0320 engine.



The Program

Aviation Technology 11/12 is a series of introductory, academic, and applied skills courses on aviation in general, with major focuses on maintenance and manufacturing. The courses are delivered with a number of different teaching methods, including lectures, computer-based training, and "hands-on" training (called Aviation Work Experience). The work experience component is sponsored by Air Canada

Technical Services (ACTS) and is conducted at the Air Canada facilities at Vancouver International Airport. Depending on current economic and security concerns, students spend between 40 and 80 (and occasionally as many as 120) hours being treated as full-time employees, working and assisting where safe and practical throughout the hangar.

The program draws a very wide spectrum of students from across the school district, ranging from the academically gifted to the “at risk” or challenged. With this program, the school is able to offer students, who might otherwise leave school early, an opportunity to find a technical area of interest to pursue. It seems the norm for graduates of the program to enter a post-secondary aerospace program within two years. In addition, a noticeable percentage of the more academically inclined students return to an aviation-related occupation or training program after other studies. The recent survey quoted above corroborates this finding.

Expansion

In September 2007, C. E. London Secondary will merge with Steveston Secondary School to form a new school. As London is the newer school, the Steveston student body will be moved to the London location. While planning the new school, the School Board decided to designate and totally remodel a former gym into an Aviation building or “hangar”. These new facilities will quadruple the present space, allowing the program to grow not only in size but also in scope.

With this growth, the school hopes to offer more in-depth coverage of areas such as “sheet metal” and “airframe”. Currently, it is working with Air Canada to train Low Incidence Special Needs students in the operation of drill-bit sharpening tools. It is hoped the students will be able to re-sharpen drill bits that might otherwise be discarded, incorporating a re-use component to the training.

The Graduates

Over the years many students have succeeded and stood out for a number of reasons. Two memorable students are sisters who enrolled in our program having just emigrated from India. They completed the program and entered the Aircraft Maintenance Program at the British Columbia Institute of Technology (BCIT). I am pleased to say that, at last report, both sisters had found full-time employment in aviation, one in Alberta, the other in Manitoba.



We strongly believe that this program benefits the aviation industry as it exposes students to career paths that they may not have thought of in planning their post-secondary options. The experience also pre-screens students: career retention is better than average as they have a greater knowledge of the field they plan to pursue. As an instructor of the Youth Internship Program, I have seen it proven over and over again that the program helps fulfill the needs both of the students and of the aerospace and aviation industry. ■

Dan Stewart is this year's winner of CAMC's Special Acknowledgement Award for work in the YIP program (photo and description on page 36).

Left: Students learn about the “Drill Doctor”, a tool used to sharpen drill bits
 Right: Students learn maintenance manual techniques using a rotor head from a Bell 206 helicopter.