2013 United States CIEA Report

A Case for Meaningful Aerosport Partnerships to Help Young People to Discover The "Alps" at the End of the Street

In re-reading the report I submitted last year I am struck by the fact that not much has changed in a year's time. Briefly, last year's report highlighted that

- On-line instruction in all fields, especially in those based in technology, enjoy great success
- At the moment, the U.S. seems to be overflowing with government-funded initiatives in science, technology, engineering and math, known best by its acronym "S.T.E.M."
- The pressure to prepare students for state mastery tests continues to dominate the work of regular classroom teachers, seriously limiting the time they have to do projects with students

In addition, in my report last year I expressed the opinion that the biggest impact aerospace education can have in the classroom is in specialty schools created to attract and train students in technical fields, similar to those found in many other countries around the world. I concluded that these schools are by far the best place to offer aerospace education as one of several areas of study to young people for careers in the rapidly changing high-tech world of today.

At the risk of speaking heresy, I sometimes wonder if aerospace education has become passé since it seems to be swallowed up by so many competing activities for the time and attention of young people. Highly organized sports and "electronic pacifiers" such as video games, reality TV shows and action-packed movies seem to dominate every moment of time children have to spend outside of the formal classroom setting. Further, when men and women routinely circle the earth on the international space station, when a human being exceeds Mach 1 during a free-fall from near-space while another flies through mountain valleys on jet-powered bat wings, what aerospace worlds are left to conquer?

I once met a man who had an answer I very much like; he talked of inspiring young people by helping them find and conquer "the 'Alps' at the end of the street." His metaphor was simple: Too often we mislead ourselves into thinking there are no new worlds to conquer, when they exist within easy reach, all around us, even if we do not live anywhere near the mountains.

A case in point: for many young people, the building and successful flight of a model airplane can help them exceed their expectations in such a way that they begin to seek new pathways of discovery. But they cannot do it on their own. As someone once said, they don't know, what they don't know! They need to be mentored and inspired in such a way that they discover what they are missing and, in the process, discovery something

new in themselves. Flying model aircraft is something children can do at very young ages – no deferred gratification necessary.

As I noted in my report last year, there is a huge shift in aviation opportunities for young people because the growth in aeromodeling options, due to the increasing sophistication of new micro technology now makes it possible for young aviators to fly in their own backyard - even inside the house.

Once a child has mastered the basics of a simple free-flight model, he or she can try a variety of new challenges, from park fliers, to control-line models to sailplanes to giant scale models, to helicopters or to multiple-rotor machines. Or, if they want a different kind of design challenge, they can turn to more sophisticated free flight models to explore the technical nuances of how to coax a model to a level of high performance that is only achievable though years of building persistence and flying experience.

Model building can become an end itself because the sport and hobby is endlessly diverse and rapidly changing. However, it is also possible that practice with models can lead some young people to training in full-scale gliders or light sport aircraft where, in most countries, young people can solo early in their teens. Both activities can become pathways to aerospace careers in industry. What is important is this: they can *start now* without having to wait for an opportunity that may never come – such as becoming a military or commercial pilot or an astronaut.

Given the limited resources aerospace educators have and the fierce competition from so many other organizations, how can aerospace education survive? The obvious answer: only by developing strong and meaningful partnerships among aerosport organizations will it be possible to develop the synergy necessary to inspire and attract young people in significant numbers.

And this is where the CIEA has an opportunity to play a meaningful role in aerospace education by encouraging these groups to communicate with each other and, whenever possible, *work together to co-sponsor events for young people.* The CIEA cannot be effective without an active website that promotes and celebrates successful activities among FAI aerosport organizations.

In my view, if aeromodeling clubs become active partners with selected full-scale aviation clubs, the long-term impact will be enormous in sport aviation as well as many of the associated technical careers. These partnerships can create real access to aviation for children at a very young age. And, the synergy of clubs working together will do much to create a very basic message to young people: you can fly *now* and you can learn to improve your piloting and your technical skills *now*. Regardless of how young you are or where you live, you can begin *right now* to climb the “Alps” at the end of the street!