

# AstroNuts brings the wonder of space to kids on Earth



## ««« By Ray Bielecki

Ray Bielecki graduated from the University of Guelph with a BSc. In 1985, he took a year off work and backpacked around the world. His most memorable moment of that journey was late at night, after completing a two-week high altitude trek to the 18 000 foot level of Mt. Machhapuchhrein Nepal. High above the clouds, there in the Himalayas, he gazed for hours at an incredible view of the cosmos. Ray will never forget the intensity of the star systems and the constant dynamic movements of stars and comets.

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*Curriculum Connection: Grade 6: Understanding Earth and Space Systems; Grade 9 Earth and Space Systems.*

The “AstroNuts kids space club” was created in May 2010 by my 11 year-old-son Brett and I.

By the age of 5, Brett was a “systems kid,” always building light and water systems in and around the house, and was very curious about space. We created a mini spaceship cockpit in a storage space under the recreation room stairs where we would meet and read about space adventures and set up some “mission protocols.” That mini-space was expanded with many cardboard boxes and we named it “Space ship Mercury One.” Local kids were always coming over and creating space adventures. It was at that point we created the AstroNuts Kids Space Club.

The mission of the club was to engage the kids’ imaginations with space-related activities in a fun, safe and imagination-based environment. Once a month the “crew” of 20 – both boys and girls, ages 9 to 12 – would meet at our home in Newmarket and be inspired by amazing volunteer space-educators presenting demonstrations on astronomy, rocketry, STEM and all things space. We also have a mystery Skype guest per “mission” as well as field trips to observatories, rocket launch sites and educational science facilities like UTIAS. These kids love science!

The AstroNuts kids space club is not a business, not a for-profit, not a not-for-profit and not a charity...it is just an amazing kids space club.

Space science is not introduced into the Ontario elementary curriculum until Grade 6. In Brett’s school however, there were dozens of kids in grades 3 and 4 coming to our club with a huge interest in the space sciences, so we welcomed their participation and ideas. I especially enjoyed going to some elementary schools and giving short volunteer presentations to students with the hope that they also form space and science clubs and spread the message that space and science are fun!

I am a BSc. graduate from the University of Guelph and have always loved space. My father had the opportunity to work on the Canadarm as an electrical technician when NASA came up to Canada and presented SPAR aerospace with this amazing technological project. Like many others, I was inspired as a teenager when “the Eagle” had landed on the moon and from then on I followed the adventures of astronauts, scientists and engineers.



Our recreation room has been transformed into a fun, grass-roots space education learning area... It's "theatre-of-the-mind" and the most exciting part of it is our rocket ship called "Spaceship Mercury Two" (SSM-2). SSM-2 is created completely of what we call "space junk" – in actuality, it is parts taken from blue bins and donated discards that are outdated. But, when installed onto SSM-2, these discards make our missions to other planets exciting...Space ship Mercury Two really excites the AstroNuts' imaginations.

In order to expose more elementary school kids to space-education and the sciences I have created two events. The second annual "Whats up in Space" event last spring, brought together hundreds of elementary school kids with some very enthusiastic space educators. Along with our keynote speaker Canadian astronaut Dr. Dave Williams, 12 volunteer space-educators engaged the students' imaginations with great presentations and activities. The other event was the "AstroNuts STEM contest" where students were invited to pick a STEM subject and create a project relative to the theme of our event "What's up in Space." The winners were then invited to present their winning projects on stage at the event, to astronaut Dr. Dave Williams and an auditorium full of enthusiastic cosmic kids.



A very busy "mission #40" ...creating comets out of dry-ice!

Both events will be held again this coming April and all elementary school students are invited to attend! Details may be found on our website, [www.astronutskidsspaceclub.com](http://www.astronutskidsspaceclub.com) .

The AstroNut kids also entered a rocketship float into the 2013 Newmarket Santa Claus Parade and we were surprised to win the Mayor's Trophy for best overall float. Then one week later, in the midst of a blizzard, we entered our float into the 2013 Aurora "Santa Under the Stars" night- time parade. Once again we were surprised and happy to receive the "Best original Theme" award.



Left: Our rocketship entry into the 2013 Newmarket Santa Claus parade...the rocket is a duplicate of the Soyuz rocket that took Chris Hadfield to the ISS. We won the "Mayor's Trophy" for this float (right)



The rocket was a 16-foot duplicate of the Soyuz rocket that took Chris Hadfield to the ISS. It was built and donated by Robert Matte of Giantscape.com (see previous page, left).

Please visit our website

[www.astronautskidsspaceclub.com](http://www.astronautskidsspaceclub.com) . From

there you may access our past and future missions, our volunteer Skype and in-house space science educators, view our AstroNuts "Space Heroes Wall of Fame" (includes photo dedications by astronauts as well as

Tom Hanks aka Commander Jim Lovell in "Apollo 13" and William Shatner aka Captain Kirk in "Star Trek") and you can read up on all our endorsements and wonderful sponsors.

In the 2013 Aurora "Santa Under the Stars" parade. It was blizzard conditions and were awarded the "Best Original theme" trophy.



My biggest reward is seeing the smiles and enthusiasm from the many kids that are exposed to this fun and worthwhile volunteer space-science-education initiative. I am also very appreciative of everyone's ideas and input. Please contact me anytime at [ray@astronautskidsspaceclub.com](mailto:ray@astronautskidsspaceclub.com) and let me know if you have an interest in space, if you have a space or science club and if you and your students are interested in participating and attending the "AstroNuts STEM contest" or the "What's Up in Space" event this spring.



The exterior of Spaceship Mercury Two.