

gizmo

THE TETRA SOCIETY OF NORTH AMERICA: CUSTOM ASSISTIVE DEVICES



TRAILER PARTS BOYS: TETRA VOLUNTEER RUBEN UGARTE (LEFT IN INSET PICTURE) CREATED THIS BIKE TRAILER SO DAVID AND NADIA OSBOURNE COULD ENJOY FAMILY OUTINGS.

Trailer means inclusion for cycling sisters

VANCOUVER: A Tetra project to build a better bike trailer means inclusion for a Vancouver teen.

David Osbourne, of North Vancouver, approached the Tetra Society of North America to ask for help after his daughter Nadia, 15, outgrew her bike trailer.

Nadia, who has cerebral palsy, developmental delay and epilepsy, requires a trailer for family bicycle outings. David, and Nadia's 12-year-old sister Sophia, are keen cyclists and want to include Nadia.

"She loves movement—she loved being towed in the original trailer," said David. "After she outgrew it, a friend recommended Tetra."

Tetra volunteer engineer Ruben Ugarte took up the challenge. He needed to design a bike trailer that could accommodate an older child—they are manufactured for toddlers—and still be foldable, to fit into the family car for outings beyond their neighbourhood.

His first step was to investigate a Tetra project from Regina, featured in the Fall 2009

Gizmo, which converts between a stroller, trailer and sled—but this turned out to be for a smaller child.

"But the idea was there," said Ruben, a professional engineer who's been a volunteer since 2008. "The idea was to put a seat in a regular bike trailer. I found a trailer for bigger kids on Craig's List.

"Next I had to find a seat. At one of the Tetra meetings, someone suggested I use a seat from a wheelchair."

Tetra volunteer Rob Richards, head technician for the Red Cross children's medical equipment loans service in Burnaby, BC, located a child's wheelchair. Ruben removed the wheels and fabricated a frame within the trailer, with crossbars to hold the chair.

"During construction I had to add a castor to the front of the trailer, because it's now a bit heavier, and the bike would not support the weight. I had to make the attachment to the bike longer, as the trailer was not designed to have a wheelchair in it."

VOLUNTEERS GET THEIR OWN WORKSHOP

VANCOUVER: Tetra volunteers will be able to share expertise at a fully equipped workshop which opened in June.

The Vancouver chapter created the 620-sq-ft workshop as a shared resource for their 35 volunteers, who completed 112 devices for people with disabilities last year. It will be a collaborative environment for volunteers, explained Tetra Society national program coordinator Pat Tweedie.

"A few of our volunteers have their own workshops, and others may go to their place to work," she explained. "Having a Tetra workshop means that volunteers without their own facilities can go there to work, of course, but volunteers that have their own are very happy to enter a place with brilliant new machinery."

Equipment so far includes a radial saw, band saw, lathes, drill press and a variety of hand tools—more equipment is being sourced as required.

"It's a common place for the volunteers to go and collaborate on projects, talk to new volunteers and mentor students. It's fully accessible, so they can meet clients there."

It was made possible by a generous grant from the Tzu Chi Foundation, with assistance from Vancouver Coastal Health. The space has been provided by ICORD – International Collaboration on Repair Discoveries, and is located at the new Blusson Spinal Cord Centre, home of the Rick Hansen Institute and ICORD.

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PUCK LUCK: THE INNOVATIVE RED DEER HOCKEY ARENA BED CREATED BY TETRA VOLUNTEERS JIM STONE AND DOUG STEINKE.

It's a dream come true for a young hockey fan

CYCLING SISTERS, cont. from page 1

With the chair clamped into place, and Nadia strapped in with a safety harness, it's secure—but the seat can be removed and folded, and the trailer itself can collapse and it all fits into the trunk of David's '86 Volvo.

Adding the wheelchair seat was a stroke of genius as far as David and Nadia are concerned.

"She used to sit down inside the old trailer, but with this, she sits up like she's on a throne, and sees everything," said David. "She sits up like she's Cleopatra riding in a chariot. It's quite a sight to see her as we go through the neighbourhood.

"You have to think what the trailer means to her and see the joy that it brings to her."

More importantly, it means Nadia is included on bike rides, which so far have included jaunts around the neighbourhood along with ventures further afield, including the Steveston dyke trails and North Vancouver's Seymour Watershed. He's going to take the trailer along for a week-long summer camp, run by the United Church at Naramata, near Penticton, BC.

"It's win-win for everybody. Nadia loves movement and the feeling of wind in her face. Sophia benefits, because she can do what she likes. For me, I love bicycling, and to do it with both of my daughters, rather than excluding them, is wonderful."

Ruben's project was featured at the chapter's 2010 Gizmo Awards, held at the Blusson Spinal Cord Centre Vancouver on Wednesday, June 23.



TETRA VOLUNTEER RUBEN UGARTE DEMONSTRATES NADIA OSBOURNE'S BIKE TRAILER.

RED DEER: Every time he drifts off to sleep, he's at centre ice – surrounded by hockey stadium boards, protective screens and star players.

Tetra volunteers in Red Deer have been coming up with a slew of ingenious projects for children in recent months, but their hockey arena crib is like no bed seen before.

It was an unusual challenge: to create an oversize crib for an emotionally disturbed, 10-year-old boy that would make him feel secure in order that he would be able to sleep through the night. It needed to be enclosed, but not so much that he'd feel trapped.

Chapter coordinator Jim Stone and volunteer Doug Steinke, of Rocky Mountain House, visited the client's house, in Sylvan Lake, seeking inspiration.

"They'd tried a crib with a top on it, but he needed a full-sized bed with some kind of surround," explained Stone. "It had to be appealing to him so he felt secure.

"Doug started measuring, and we were trying to figure out what would work in the room. There were no pictures in the room, as the young fellow would tear them up. We asked if he had any interest in sports, and it turned out he liked hockey.

"Doug was picking up on this, asking 'Who's your favourite player?' We found out the kid liked the Zamboni, also."

The two volunteers now had the theme for their design. Doug, a stainless steel welder, went to work on creating a frame to go around a single mattress, creating a metal skeleton that holds the wood and Kevlar sides. Construction took about a month.

"The greatest part is that when you look through the glass, it's like looking into a hockey arena," explained Stone. "There's silhouettes of hockey players in the background.

"There's the boards around the bed, and glass like the glass at the arena. It's totally the feeling of being at a hockey arena. The entrance to the bed is like the Zamboni doors.

"The boy loves it. The first night he went straight to sleep in it, and he slept the whole night. It gave him the comfort to sleep without fear."

Stone currently manages six volunteers with a range of skills, and of late, the group has produced a number of projects for children with disabilities in their community.

Another recent project of Stone's, aided by volunteers Gilbert Neilson and Danny Toews, was a light table built for children using the Red Deer Children's Services Centre. Essentially it's a desk with a florescent light underneath a plastic tabletop.



LIGHT TABLE: HELPING CHILDREN LEARN.

Occupational therapist Jan Gervais said the light table is essentially for children with visual impairments, who participate together as a group. Being height-adjustable, the table can also be used to motivate children with multiple disabilities to stand or kneel.

"It works really, really well," he said. "Sometimes we use it with translucent objects – a circle, a triangle or a square – and we ask the children to put translucent shapes in the correct place. Sometimes we match colours."

Towes previously made a sleigh for the centre, specifically built to make it easier to move children with disabilities – the design brief was to create a lightweight, folding item that offers support to a seated child. It has handles front and back, a seatbelt and skis.

During winter months the centre takes children out every Friday for "activities to get children involved in the community," with the sled being "beyond anything I would have expected," he said.

Stone is currently building a wagon, which will enable the centre's 57 children, aged under six, to interact together.

"A family just wanted someone to be their child's friend that was not paid to be with them," added Gervais. "A cart would bring all the children over together to play."



Move on up with a Tetra transition

Groups of students across Canada are taking Tetra's message of hope to campuses and high schools in a bid to enable young people with disabilities achieve their full potential.

The idea is to direct students to act as community representatives – reaching out to a whole new generation of clients to empower young people with disabilities to progress to, and then through higher education, and into paid employment.

Under the Youth In Transition program, representatives have been established in six cities across Canada – Victoria, BC; Vancouver, BC; Calgary, AB; Hamilton, ON; Toronto, ON and St John's, NL – with a further two more to be announced as the program rolls out.

They will be doing outreach to people with disabilities from high school age upwards, explained Tetra Society national program coordinator Pat Tweedie. The program builds on a

2007 pilot project and a first stage in 2008 that covered fewer cities and was focused on universities.

This time around, the attention is on transition: people with disabilities moving from high school on to university or employment, and then from university to employment.

“Our thinking is that if we can reach out to the kids and parents early on, and talk about how Tetra volunteers can overcome physical barriers and challenges, then they will have more choices,” she explained. “With this information they will know that post-secondary education, and eventually employment, is a realistic goal.

“We’re finding that parents want to know what services are out there for their children. You want to bring your kids up to be as independent as possible. Even if a child has a disability, they will still want to make informed choices about their life.”

This allows for young people choosing to not continue their education, and instead focus on employment. Either way, the individual is weighing up all options and possibilities and focusing on what they want to do, explained Tweedie.

“It’s about giving people choices and options – our position is to ask what we can do to make their journey easier.”

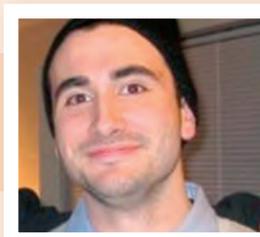
How to contact your community representative:



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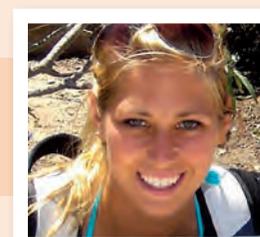
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WANTED:

COORDINATOR IN TORONTO

Our Toronto representative recently accepted a fulltime job that didn't allow her to fulfill the duties of the position. So, we're recruiting for a Toronto coordinator. It's a position that would suit a student or recent graduate. There is a stipend available. Please contact Tetra for more information, and a job description, at:

Pat Tweedie | 1-877-688-8762 | ptweedie@tetrasociety.org

TETRA CALLED IN TO HELP WITH CELL PHONE PROBLEM



CASE CLOSED: TETRA VOLUNTEER RICHARD SIRCOM'S CELL PHONE CASE, SHOWING THE BLACK RECTANGULAR RUBBER BAR THAT ENABLES A CLIENT WITH LIMITED DEXTERITY TO KEEP IN CONTACT WITH HER HUSBAND.

HALIFAX: High-tech devices are becoming smaller and smaller – with controls that often frustrate people with impaired hand function.

Tetra's Halifax chapter was contacted by a Cape Breton lady who relies on her cell phone to stay in contact with her trucker husband, but was finding it increasingly difficult to operate the switch required to activate the phone.

Volunteer Richard Sircom explained that the client, Beth, suffers weakness and joint problems relating to steroid use for asthma. The button, on the side of the phone, is the type you would push in with a thumbnail.

"She's at home, and her husband spends a lot of time down in the States," he explained. "She has his number on speed dial. He might be in Denver, Colorado, that day.

"We typically don't like to modify the device itself. We don't like to go drilling holes into things that clients own, so I made a case the cell phone slips into. This gets around the problem of voiding the warrantee.

"It's a PVC case, which holds an external button in place over the original button, so she can get a better grip."

Sircom is currently working on a project for a man with a related – but quite different – issue relating to finger grip. He's a target shooter who "has just enough strength to support a gun" on a rifle range shooting table, but cannot pull the trigger.

The project is to come up with a mouth-operated trigger. The client currently pulls on a strap with his teeth to fire, which knocks his aim off target.

The solution will be a device that clamps onto this client's firearms, again without any drilling or modification to the item.

"It will have to be seen by a firearm inspector before he can use it," said Sircom. "Shooting ranges have quite strict rules."

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