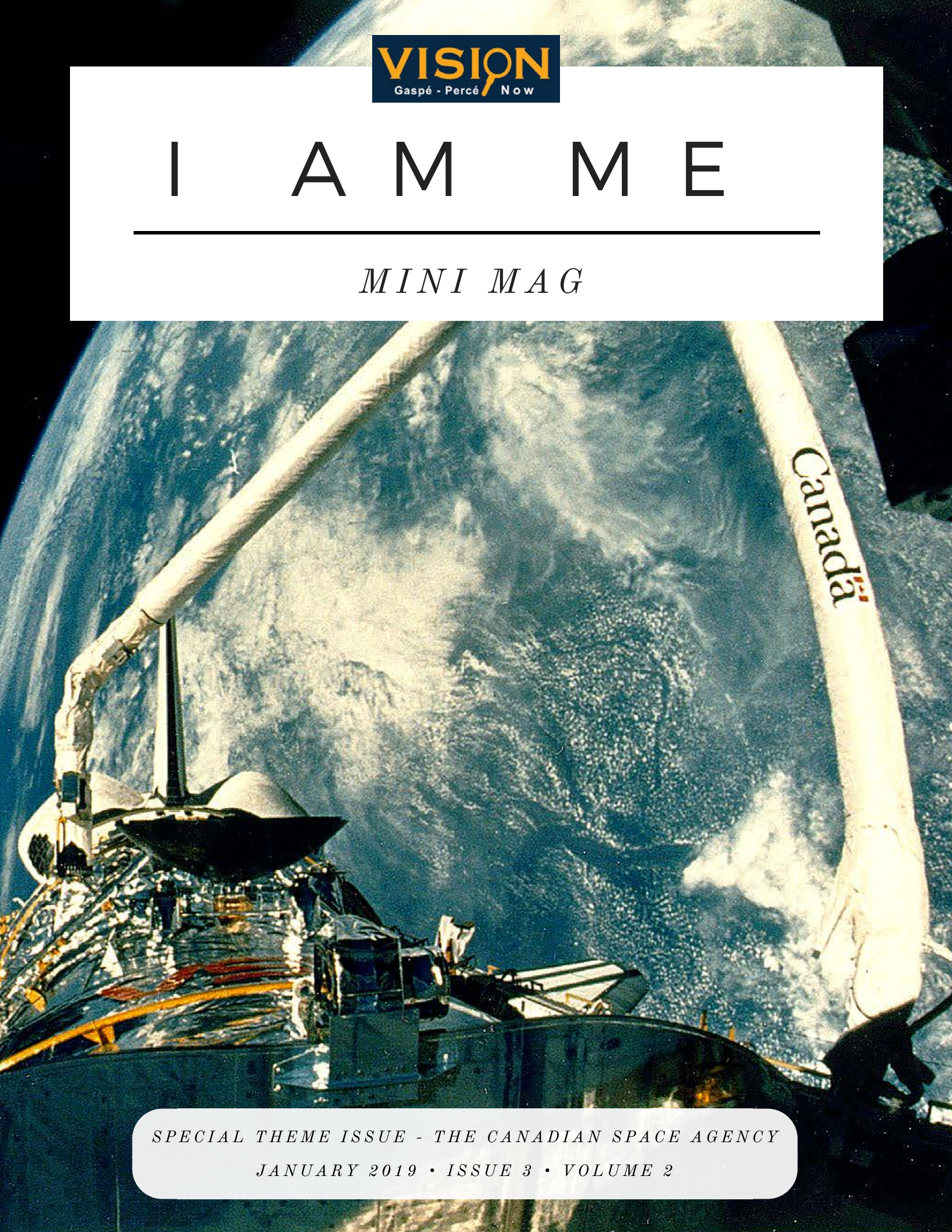


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# I A M M E

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*MINI MAG*



*SPECIAL THEME ISSUE - THE CANADIAN SPACE AGENCY  
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# Become an Astronaut!

**Yes! If you want this, go for it. You've got lots of time to prepare.**

To become an astronaut, there are some non-negotiable requirements.

1. Education - you have to have at least a Bachelor's degree in engineering / science or a doctorate in medicine / dentistry.

2. Relevant work experience - Master's and PhD degrees count toward work experience, so the more school, the better!

3. Physical Requirements - The CSA has pretty strict physical requirements and you need to be in great health.

4. Flexible - you'll need to be able to travel solo, sometimes without much notice.

5. Diversity - it's a hard job to get with lots of competition! The more experience and knowledge you have, the better your chances are.



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## What Do They Look For in Astronauts?

**Being an astronaut isn't just about being in shape and having a good education. It takes a lot of other skills too! Like:**



- Good judgement
- Integrity
- Reason through problems
- Teamwork
- Use plain language
- Public speaking
- Motivated
- Resourcefulness



# DID YOU KNOW...

## **WOMEN REPRESENTED**

The CSA has had four recruitment campaigns to find Canadian astronauts. Three out of four of those campaigns had a woman astronaut. Within the CSA, the majority of current employees are women.

## **LOCAL ROLE MODELS**

Three out of Canada's fourteen astronauts were or are from Quebec! David Saint Jacques is currently at the International Space Station, where he will stay until June 2019.

## **CANADARM2**

A piece of Canadian technology that maintains the International Space Station, moves objects and astronauts in space, and helps visiting vehicles dock.

## **IN SPACE**

Canadian astronauts have participated in 17 missions to space over the past 34 years. Each mission has its own special badge! David Saint Jacques's mission can be followed online on the CSA's website.





# meet Jennifer Sidey

ONE OF CANADA'S NEWEST  
ASTRONAUTS!

In June 2017, Dr. Jennifer Sidey was one of two candidates chosen out of 3,772 people who applied from all over Canada.

A graduate from McGill University in mechanical engineering, Jennifer got a PhD from the University of Cambridge (U.K.) in engineering, with a focus on combustion - the science of how things burn.

She then went from studying flames to teaching about them. As a university professor, Jenni Sidey also took the time to inspire young women to study science and engineering.

# "I like to figure out how useful things work"



## **FAVOURITE MOTTO: FORTUNE FAVOURS THE BRAVE.**

One of the reasons that Jennifer wanted to be an astronaut was to keep inspiring young people to study science and engineering, if that's what they love. She likes the challenge of working out complicated things - this is what drew her to engineering, combustion, and space!

Jenni Sidey is from Calgary, Alberta. Her role models are women who have pioneered engineering and science - and now, she's that role model for younger women!

Jennifer Sidey is all the things that make a great role model, and a great astronaut - dedicated, persistent, motivated, and creative.

She is now completing her training with NASA in Houston, Texas. The training lasts about two years, which means Jennifer may be ready to participate in active missions this summer.

Does that mean she'll be going into space soon? We'll have to keep tabs on her to see!



# jobs at the CSA

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What can you study?

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How can you prepare?

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STEM stands for Science, Technology, Engineering, and Mathematics. STEM education is the door into jobs in the space sector! Here are some tips from the CSA on what to do if you want to work for them some day:

- Take as many STEM classes as you can
- Find a subject that you're passionate about and pursue it
- Be prepared to study!
- Become a space buff
- Tell people about your ambition and ask how they can help you - participate in as many projects as you can
- Volunteer!
- When you're ready, choose a work-study program
- Be a good communicator - great English skills are super important
- Read science fiction - what was science fiction yesterday is reality today!
- Hold onto your dream - like Jennifer Sidey, don't sweat the small stuff and keep focused on your goals. Don't get discouraged by setbacks!



# RE-USE YOUR ALTOIDS TIN

## Make your own pocket-sized survival kit for everyday exploring!

It may not do you much good in space, but a healthy appetite for exploring is a huge drive for many astronauts. Why not start in your backyard? With this survival kit, you'll be ready for anything. Get your parents to help you put this together, though - It will be a challenge! Check the sources for more details. Here's what's inside:

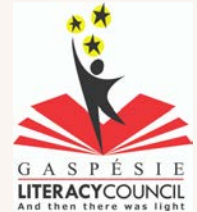
- Waterproof, windproof matches and striker in a mini bag, rolled up and taped
- Fire starter that works even when wet



- Small candle
- LED flashlight
- Water bag - use a Reynolds oven bag, cut to fit the tin
- Water purification tablets, put in a mini glass vial
- 50 feet of braided fishing line wound around a sewing machine bobbin
- Plastic tube with fishing hooks, tackle, and weights
- Compass
- Band-Aids
- Antibiotic ointment
- Safety pins
- Aluminum foil

## OUR SPONSORS

This Mini Mag would not be possible without the partnership of these groups



## SOURCES

This issue used the following sources of information

- Canadian Space Agency. Explore it all at: <http://www.asc-csa.gc.ca/eng/default.asp>
- "Make a Survival Kit out of an Altoids Tin" by Field and Stream. Find it here: <https://www.fieldandstream.com/photos/gallery/survival/food/2006/08/make-survival-kit-out-altoids-tin-and-two-more-life-saving-diy-#page-6>

