

Explanatory Addendum for

# Out of This World<sup>25</sup>

– CanHist.ca



## Why is Artemis II important for Canada?

Well, Canada would become the second country in the world to send a human into deep space. That in itself is not important. What is important is recognizing why we're there. Since I took this job, I've had a front-row seat to what is happening in Canada, what our industry and our people are capable of. And I think people are starting to come around to this. If you have a regional problem and you can find a space solution, you've now created a global solution. So it's an opportunity for us to lean into and take advantage of. There will be more space in everybody's future. And if we can send a human around the moon in 2026, imagine what Canada can do next.<sup>1</sup>

<sup>1</sup> Jeremy Hansen. <https://www.theglobeandmail.com/canada/science/article-artemis-ii-mission-moon-nasa-orion-capsule-astronaut-jeremy-hansen/>



Image Credit: The Globe and Mail

## Original Rationale

At its heart, OOTW25 is about 'Science Communication'- how we teach, understand, and talk to one another about science. There has never been a more important time for Canadians to share the stories that shape our scientific history.

Commemorating the 25th Anniversary for Canada's First spacewalk by Col Chris Hadfield was (in many ways) the capstone event culminating two remarkable decades for the Canadian Space program and our first two generations of astronauts.

Designing a robust youth-focused commemorative experience for Canadians affords us the **rare narrative opportunity to connect that defining moment of April 2001 to the February 2026 NASA Artemis II mission** including Canadian astronaut Commander Jeremy Hansen – the first non-American to participate in a deep-space mission.

Artemis II fulfills the latest chapter for Canadians in space, yet could never have happened without the ground-breaking achievements of Canadian space research emergent from that successful mission of Col Hadfield's aboard the NASA Mission STS -100 from 25 years ago.

## ...Communicating this story in Canadian science history is OUR mission!

To make this history resonate with the future of Canada and its youth, **the OOTW25 project will deploy STEAM-based engagements** that highlight the rich history of technological collaboration reflected in the Canadian Space program in the second year of its deployment. In addition, **OOTW25 will work with its partners to expand the awareness of the need to develop the talent pipeline to maintain national competitiveness and innovation in rapidly evolving technology-based marketplace.** Unique to this approach, is to highlight the importance of understanding the history of innovation in order to develop sustainable technologies for the future. We will provide comprehensive learning modules for educators to support the upskilling of young people, with a focus on developing the communication and technical competencies required for future workplace competitiveness.



[www.CanHist.ca](http://www.CanHist.ca)



519.217.0402



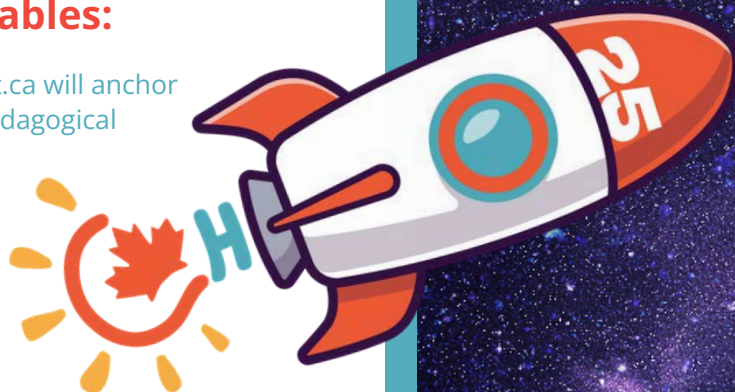
[info@canhist.ca](mailto:info@canhist.ca)



## Design & Deployment of Deliverables:

Critical to effective science communication, CanHist.ca will anchor our commemorative work for OOTW25 in sound pedagogical practice, **grounding the design & deployment of our 'Deliverable' objectives in 10 Enduring Understanding Questions (EUQ's).**

These EUQ's reflect curricular objectives & align with general 'Learning Expectations' from provincial programs nationwide:



- 1** **Why did Canada make a commitment to space** exploration in the years between the 1970's – early 2000's?
- 2** **What were the technological innovations** that enabled the first Extravehicular Activity (EVA) by a Canadian in 2001 as a part of the STS-100 mission?
- 3** **How did those technological innovations contribute** to our understanding of space & space exploration?
- 4** **What are the multi-disciplinary skills necessary** for a successful EVA as demonstrated by Col Chris Hadfield in 2001?
- 5** **How have conditions in space - and conditions experienced on EVA's - impact astronauts** engaged in space exploration?
- 6** **What lessons can we learn from the international collaboration model** that was used to deliver Col Hadfield successfully through his first EVA in 2001?
- 7** **How can Canadians use the story of the first spacewalk** by a Canadian in 2001 to better tell other stories of scientific achievements?
- 8** **How did the 2001 EVA by Col Hadfield make possible the role for Canadian astronaut Jeremy Hansen** 25 years later, as part of the NASA Artemis II mission in 2026?
- 9** With a fuller embrace of traditional Indigenous teachings, what has the **impact of space exploration been on our understanding of society and the environment?**
- 10** How did the first spacewalk by a Canadian in 2001 **contribute to a better understanding of environmental changes on Earth?**



 [www.CanHist.ca](http://www.CanHist.ca)

 519.217.0402

 [info@canhist.ca](mailto:info@canhist.ca)





## Rationale for a Two-Year Approach to this Partner-Centered Commemoration Project

CanHist.ca has partnered with **MCYU (McMaster Children & Youth University)** which is based on the campus of McMaster University in Hamilton, Ontario to deliver **OOTW25**.

**CanHist.ca anticipates that OOTW25 will require a two-year timeline – 2026-2028 in order to ethically engage with Canadian voices representing a broad range of partners and stakeholders.** The first year will focus on curating and commemorating the April 2001 spacewalk by Col Hadfield and demonstrate the 25 year arc from that event to the Artemis II mission. The second year focus on reinforcing the importance of space exploration in Canada's future, drawing on its rich history of innovation.

### This timeline allows for efficient and targeted execution of:

- ★ Effective consultation with partners to seamlessly deploy each deliverable; We want to be respectful of our partner's needs to carefully consider the collaborations and contribute meaningfully to development of all aspects of this project.
- ★ Unique to the MCYU is the integration of young people's voices in all aspects of our programming. Since developing relationships with young people in various socioeconomic strata is a time-consuming process, we will commit to building these relationships and consulting with our partners on what they found most engaging in Year 1. Year 2 will be critical to long term engagement, as this would allow the OOTW25 project to meaningfully "act on" the feedback from the partners and youth through our in-class learning experiences and public lectures. "Being heard" and acting on those voices are central tenets to effective community engagement. Our team puts these values at the core of our mission.
- ★ Curation and expansion of a broader OOTW25 Network of partners as well as designing and deploying learning modules for Science Communication aligned with the school calendar.
- ★ Construction of an MCYU Digital Commons into a robust 'learning hub' for best practices in Science Communication.
- ★ Collaboration with ESRI Canada for innovative design & deployment of GIS technologies to (a) 'story map' the commemoration of the 25th Anniversary of Canada's First Spacewalk, (b) create STEAM focused learning modules for educators using discrete GIS software (c) augment MCYU learning modules for young learners.
- ★ Commemorative concentration / communication on the 25th Anniversary of Canada's First Spacewalk in Year 1.0 ('OOTW25').
- ★ Commemorative concentration / communication of the story of Canada's achievements in Space Exploration, using OOTW25 as the platform celebrating the 25 year narrative 'arc' in STEAM research that aligns with Canada's international collaboration in space programs through the CSA (Canadian Space Agency) and honoured at CASM – (Canadian Space and Aviation Museum).
- ★ In-Person / Hybrid Learning events to roll-out with regular frequency, building engagement using a target social media campaign, as supported by Canadian History Ehx & other targeted partners.
- ★ Design & delivery of Assessment tools & Reporting documents following year-long & capstone events in support of academic research objectives in 'Curatorial Thinking.'
- ★ Effective, sensitive and fulsome consultation with McMaster University Indigenous communities & leaders.
- ★ Effective and complete translation of all content & learning materials in delivery of the MCYU Learning Hub for OOTW25.





# Project Timeline

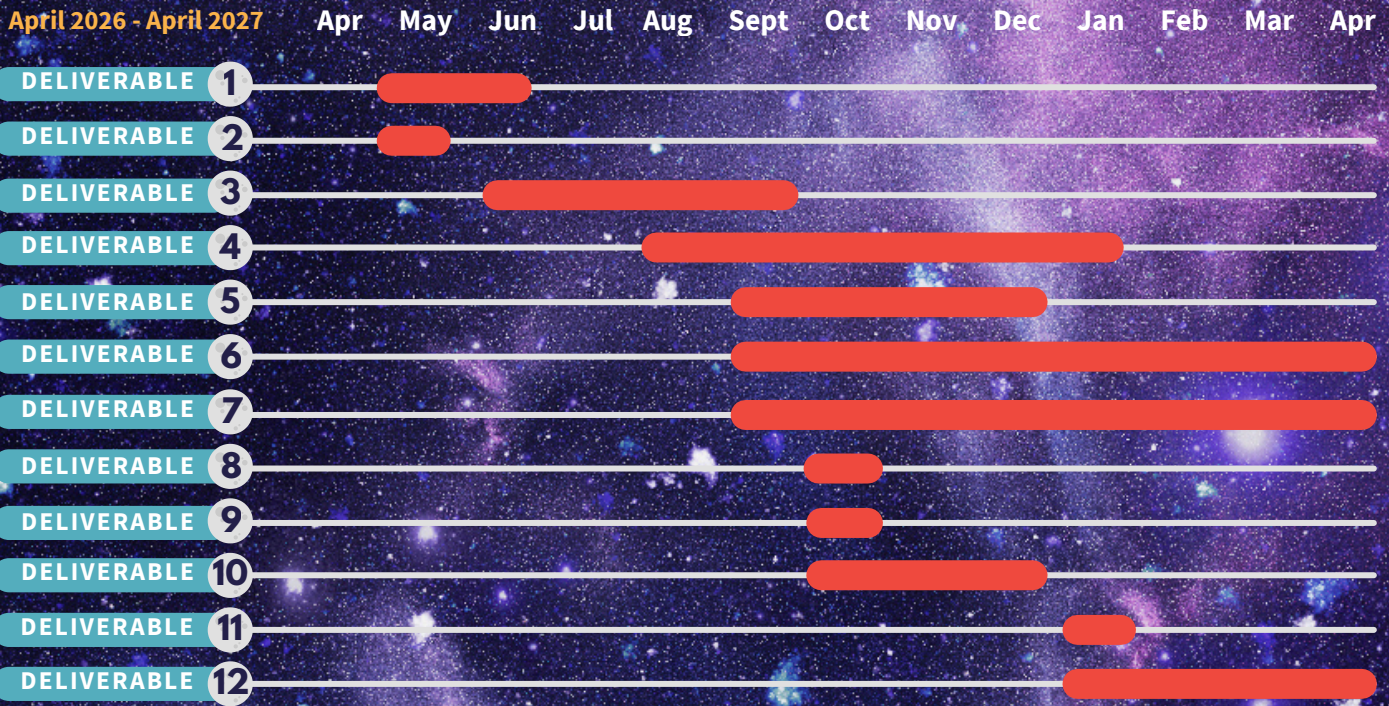


This timeline intends to demonstrate the arc of OOTW25 over a two-year continuum.

Though there is a distinct focus for each year (Y1.0 / Y2.0) for the proposed project, **deployment of most deliverables span the full two years**, with ongoing design elements being **strategically introduced throughout the 24 months**.

## OOTW25 YEAR 1

### Commemoration of Canada's First Spacewalk & Canadian Achievements in Space



#	Timeline	Activity	Target Enduring Understanding Questions (EUQ)
1	May-Jun 2026	Curation of existing scholarly content through partner and stakeholder consultation for design of digital hub	1, 2, 3, 5
2	May 2026	Curation and design of micro-historical content commemorating 2001 Spacewalk - allocation for 5 micro-histories in first tranche	1, 2, 3, 5
3	Jun 2026-Sept 2026	Design of Interactive digital Hub-English wireframe with planned deployment in Sept.	1-10 s
4	Aug 2026-Jan 2027	Design of Interactive digital Hub-French wireframe; with translation and deployment in Jan 2027	1-10 s



www.CanHist.ca



519.217.0402



info@canhist.ca





# Project Timeline

## OOTW25 YEAR 1

## Commemoration of Canada's First Spacewalk & Canadian Achievements in Space

#	Timeline	Activity	Target EUQ
5	Sept 2026-Dec 2026	Consultation with MCYU Indigenous Students Advisory Committee - Development of a plan for partnerships	4-10, with a focus on 9, 10
6	Sept 2026 -Apr 2027	3 x MCYU Family Lectures (in collaboration with partners): Canadian Achievements in Space Exploration – On MCYU campus + in-class interactive learning experiences for elementary school student [~ 75 instances]	1-10
7	Sept 2026-Apr 2027	Design and Development and Deployment of Learning Modules (1-5): History of Canadian Space Exploration applied to Technology, Biology, international collaborations	1, 2, 3, 5, 6, 7, 8
8	Oct 2026	Deployment of virtual exhibition using GIS technologies commemorating the 25th anniversary of Canada's first spacewalk	1-7
9	Oct 2026	First Can Ehx Podcast with Chris Hadfield and associated media campaign	2, 4, 5
10	Oct 2026-Dec 2026	Delivery of Partner Content in the form of Microhistories related to Canada's 1st Spacewalk and Canadian historical achievements in Space Exploration (ie) 'Canadarm' / TelSat / story of the Canadian Space Agency	1-7
11	Jan 2027	Initiate Impact evaluation strategy in association with strategic partners	N/A
12	Jan 2027-Apr 2027	Consultation with MCYU Indigenous Students Advisory Committee - Development plan for partnerships	4-10, with a focus on 9, 10

At its heart, OOTW25 is about 'Science Communication'- how we teach, understand, and talk to one another about science.



[www.CanHist.ca](http://www.CanHist.ca)



519.217.0402



[info@canhist.ca](mailto:info@canhist.ca)





# Project Timeline



**OOTW25 YEAR 2**

Communicating the Importance of the role of Canada in the Future of Space Exploration

April 2027 - April 2028

Apr May Jun Jul Aug Sept Oct Nov Dec Jan Feb Mar Apr



#	Timeline	Activity	Target Enduring Understanding Questions (EUQ)
1	Apr 2027-Jan 2028	Learning Modules 6-7: Seeing the Earth with New Eyes-Learning from the Space experience (Focused on Indigenous perspectives in collaboration with Indigenous student committee)	9, 10, 4, 7
2	Apr 2027	Review and Update Digital Hub content in consultation with strategic partners and review plans to expand strategic partnerships	1-10
3	Apr 2027	2nd Canadian History Ehx Podcast (with Canadian Space Agency) & social media campaign	1, 2, 3, 5, 6, 7, 8
4	Apr 2027-Mar 2028	Projected In-kind contributions from CSA / CASM to commence	1, 2, 3, 5, 6, 7, 8
5	Apr 2027-Aug 2027	Design and Development of Science Communication Module for Educators x 3: Building interactive experiences for science and history fairs, as well as digital storybooks [in partnership with teachers]	1-10



www.CanHist.ca



519.217.0402



info@canhist.ca





# Project Timeline



## OOTW25 YEAR 2

Communicating the Importance of the role of Canada in the Future of Space Exploration

#	Timeline	Activity	Target EUQ
6	Jun 2027-Jan 2028	Implementation of evaluation plans in collaboration with strategic partners	N/A
7	Sept 2027-Apr 2028	Design and deployment of portable STEAM focused learning modules, public events for national audiences – with youth focus: Applying our knowledge of the past to advance Canadian contributions to space exploration in the future [4-5 modules]	1-10
8	Sept 2027	Deployment of Science Communication Module for educators	1, 2, 3, 5, 6, 7, 8
9	Sept 2027-Oct 2027	Projected ESRI Educator GIS Mapping Skills Webinar PD Training	4, 7, 8, 9, 10
10	Sept 2027-Apr 2028	3 x MCYU Family Lectures (in collaboration with strategic partners: The future of Canadian Space Exploration + in-class interactive learning experiences for elementary school student [~ 75 instances])	1-10
11	Sept 2027-Apr 2028	Delivery of programming based on indigenous in First Nations Schools in collaboration with the McMaster Indigenous Institute (Alliances will be formed during the first year of the project)	4-10, with a focus on 9, 10
12	Sept 2027-Apr 2028	Final Report: will integrate plans for sustainable science communication	N/A



In Year 1, OOTW25 highlights the historic first Canadian spacewalk and the many accomplishments Canadians have made in space.

In its second year, OOTW25 will showcase the critical role Canada plays in shaping the future of space exploration.



[www.CanHist.ca](http://www.CanHist.ca)



519.217.0402



[info@canhist.ca](mailto:info@canhist.ca)



## Expected Results

With so many partners/contractors involved delivering different aspects of the project components, is there/will there be a framework in place to track the reach and engagement for reporting purposes?

**CanHist.ca & MCYU intend to deliver a unique Reporting & Assessment Tool to gather relevant data and track engagement with each of our partners at the conclusion of Y1.0 & Y2.0.**

This tool will be developed in conversation with partners so its implementation will not be too invasive in the partner's daily activities and result in maximal engagement. **This tool will be finalized through a collaboration with Commemorate Canada to ensure the critical reporting objectives are met.** The MCYU team has experience in developing qualitative and quantitative reporting tools for program assessment.



# Out of This World <sup>25</sup>



[www.CanHist.ca](http://www.CanHist.ca)



519.217.0402



[info@canhist.ca](mailto:info@canhist.ca)