

Transport Canada Update to the ASCENT Advisory Board

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Purpose

Update on the Government of Canada's priorities and Transport Canada's activities related to aviation research.





Transport Canada Activities

- The new umbrella agreement between Transport Canada and the FAA is now in place
 - Memorandum of Cooperation NAT-I-0603
- Each collaborative R&D activity like ASCENT is covered by an Annex and an Appendix that contains details on each activity
- Completed signature of a 5-year MOU starting in 2021-2022 for an annual transfer of \$150k



Transport Canada Activities

- In September 2022, the Minister of Transport Omar Alghabra announced the release of Canada's Aviation Climate Action Plan (2022-2030). The action plan:
 - presents a vision of net zero emissions by 2050 for the Canadian aviation sector;
 - sets a purposefully ambitious goal of 10% for the use of sustainable aviation fuel by 2030;
 - includes key pathways and actions that the Government of Canada and the aviation industry intend to work on to improve efficiency and reduce pollution from aviation activities.



Recent Announcements

- Announced in the Spring of 2022:
 - 2030 Emissions Reduction Plan;
 - New climate target of cutting emissions by 40% below 2005 levels by 2030;
 - Puts us on track toward our goal of achieving net-zero emissions by 2050, including the oil and gas sector.
- Announced in August 2022:
 - Launching the Net-Zero Challenge to recognize and support businesses transitioning to cleaner operations;
 - Voluntary initiative that encourages businesses to develop and implement credible and effective plans to transition their facilities and operations to net-zero emissions by 2050.



Other National Activities

- Harbour Air all electric seaplane:
 - First all-electric point-to-point test flight took place in August 2022
 - 45 miles in 24 minutes
 - Transport Canada certification by 2022
 - Commercial flights



Source: Harbour Air



Other National Activities

- National Research Council of Canada
 - Hybrid Electric Aircraft Testbed (HEAT)
 - Conversion of a Cessna 337 (Skymaster) to hybrid electric power
 - Aft engine replaced by an electrical motor, battery and control system
 - Original 210 hp (157 kW) IO-360 Continental engine replaced by EMRAX 348 motor 282 hp (210 kW) cont. power
 - First flight in February 2022
 - Five flights completed
 - One flight 32 mins



Source: NRC



Other National Activities

- In September, Air Canada announced a purchase agreement for 30 ES-30 electric-hybrid aircraft
- 30 passengers
- All-electric range of 200 km (108 nm)
- 400 km range in hybrid configuration



Source: CNW/Air Canada



Questions ?

