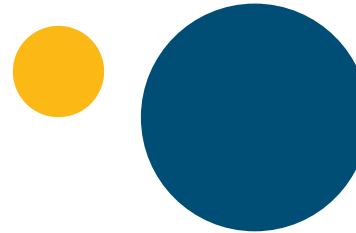


**NRC-CNRC**

# UNLOCKING THE POTENTIAL OF UNMANNED AERIAL SYSTEMS



Integrated Autonomous Mobility program  
is transforming aerial mobility



**The Integrated Autonomous Mobility program draws on the National Research Council of Canada's expertise in aerospace and digital technologies to overcome the technical and regulatory challenges of the next generation of unmanned aerial systems.**

## THE NRC ADVANTAGE

The National Research Council of Canada (NRC) is positioning itself as a leader in unmanned aerial systems (UAS). We have a long track record of successful partnerships in the aerospace industry, and have worked with companies to develop, qualify and demonstrate technologies. The NRC also has expertise in testing and certification. We provide knowledge-based support to aerospace regulators that helps shape Canada's aviation regulation landscape.

## OUR CAPABILITIES

The NRC has expertise in integrated design, remote sensing, detect and avoid, human-machine teaming, and advanced manufacturing. It is home to leading aerospace testing and certification facilities, and is

investing in its capacity in digital twin testing. The NRC has more than 300 aerospace researchers who specialize in propulsion, flight testing, aerodynamics and structures and materials performance. The Integrated Autonomous Mobility (IAM) program will also work with experts from other parts of the NRC to integrate sensors, artificial intelligence (AI) and other advanced materials technologies into UAS.

**"Unmanned aerial systems open new markets in aviation, and our Integrated Autonomous Mobility program positions the NRC at the centre of Canada's UAS industry."**

– Ibrahim Yimer, Director General, Aerospace Research Centre, National Research Council of Canada

## OTHER INFORMATION

IAM positions the NRC to be a leader in establishing a UAS eco-system in Canada, and to enable the safe integration of UAS into urban airspace.

The vertical take-off and landing capability of UAS promises to transform mobility by alleviating congestion in our cities and making operations like disaster relief more efficient. The NRC's seven-year IAM program is already developing the technologies that will make this vision a reality, including hybrid e-propulsion, intelligent robotics, human machine teaming, and more.

## CONTACT

**Wajid Chishty,**  
Senior Research Officer and Technology Leader  
Integrated Autonomous Mobility Program  
613-993-2731 • [wajid.chishty@nrc-cnrc.gc.ca](mailto:wajid.chishty@nrc-cnrc.gc.ca)

[canada.ca/nrc-aerospace](https://canada.ca/nrc-aerospace)

© (2019) Her Majesty the Queen in Right of Canada,  
as represented by the National Research Council of Canada.  
Paper: Cat. No. NR16-285/2019 • ISBN 978-0-660-31183-8  
PDF: Cat. No. NR16-285/2019E-PDF • ISBN 978-0-660-31181-4  
082019 • Également disponible en français