



Serving a world in motion
navcanada.ca



Shaping the ANS

Our critical role within the civil aviation ecosystem is to help guide aircraft safely through Canadian airspace. With more air traffic crossing our skies, new technologies emerging and new types of vehicles sharing that airspace, we're committed to ensuring the country's air navigation system (ANS) remains at the forefront of efficiency and innovation.

The new reality

NAV CANADA and other air navigation service providers (ANSPs) around the world are facing many of the same trends:

GROWING AIR TRAFFIC

Air traffic is expected to rise over the next decade. To keep pace, airlines and airports are expanding their operations, increasing demand for our air navigation services.

NEW NAVIGATION TECHNOLOGIES

Advanced technologies are already starting to change long-established methods for flight planning and tracking – enabling the industry to offer more direct and efficient routes that save time, money and fuel. Space-based ADS-B alone could cut greenhouse gas emissions by more than 1 million metric tonnes over 10 years.

DIFFERENT VEHICLES IN THE SKIES

The popularity of Remotely Piloted Aircraft Systems (RPAS) – also known as drones or Unmanned Aerial Vehicles (UAVs) – has made them a focus for NAV CANADA. RPA operators need authorisation from NAV CANADA to fly in controlled airspace under our jurisdiction. As drones take on even larger roles in the future, they'll need to be integrated into the airspace in a way that does not jeopardize the safety of others.

NAV CANADA is taking a proactive, future-facing approach to these developments, applying innovation and expertise to ensure the long-term safety and efficiency of the air navigation system.

1996

NAV CANADA became the world's first fully privatized air navigation service provider

100+

staffed sites across the country

18 million km²

of airspace managed by NAV CANADA services

The future of air traffic management starts here

Here at home and in collaboration with our peers around the world, we're creating and deploying the tools, technologies and standards that will shape the future ANS:

AIREON

Together with Iridium Satellite Communications and ANSPs from the UK, Ireland, Italy and Denmark, we're deploying space-based air traffic surveillance technology that extends air traffic visibility and surveillance across the entire planet.

FUSION

Our next-generation surveillance data processing system gives air traffic controllers more complete and accurate data on an aircraft's position by merging all available forms of surveillance data directly to controller display screens.

SATVOICE

Our advanced satellite voice communications system gives pilots and controllers a way to speak to each other directly rather than through text-based messages – even when flying over remote or oceanic airspace.

RPAS INDUSTRY

Our role is essential to the development of an operating environment that can enable the RPAS industry's potential with the investment in new technology, while ensuring the safe integration of unmanned operations in Canadian airspace. We are committed to

supporting the creation of an effective RTM environment for Canada.

MODERNIZING AIRSPACE DESIGN

Prompted by the implementation of new aircraft navigation technologies, we are modernising our airspace designs and procedures to optimize opportunities for efficiency as well as reducing controller and pilot workload for added safety.

PERFORMANCE-BASED NAVIGATION

We are a global leader in implementing performance based navigation (PBN), which enables aircraft to employ a modern, more efficient means of navigation from departure point to destination. These efficient routes will result in shorter flight times that get travellers to their destination faster while cutting fuel costs, aircraft noise and environmental impacts.

COLLABORATION IS CRITICAL

We collaborate with airports, airlines and other ANSPs to improve the safety and efficiency of civil air travel. New technology, procedures and other initiatives help improve airport throughput, reduce aircraft noise in nearby communities and further enhance safety.



ABOUT NAV CANADA

Since 1996, NAV CANADA has been responsible for helping civil aircraft safely navigate the 18 million square kilometres of Canadian airspace and the North Atlantic oceanic airspace under Canada's control. We manage a sophisticated network of area control centres, air traffic control towers, flight service stations, flight information centres and navigation aids across the country.

For more information about NAV CANADA and Canada's air navigation system, visit navcanada.ca