



ICAO NACC Regional Office  
UNITING AVIATION in the NAM/CAR Regions since 1957



Oficina Regional NACC de la OACI  
UNIENDO LA AVIACIÓN en las Regiones NAM/CAR desde 1957

"Enhancement of State's Air Transport System and Regional Collaboration"

"Mejora del Sistema de Transporte Aéreo de los Estados y Colaboración Regional"

NACC/DCA/7 – P/05



## Panel 5.4: Emerging technologies and challenges

Seventh Meeting of the North American, Central American and Caribbean Directors of Civil Aviation  
**NACC/DCA/7**

Washington, D. C., United States, 19 – 21 September 2017



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## Objective of Safety Panel

✈ Discuss on how ICAO Member States pursue safety and air navigation implementation strategies in alignment with the GASP and the GANP, as well as what future performance improvements and challenges should be considered to ensure the sustainability and enhancement of the global aviation system.



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## Panel 5.4 Emerging technologies and challenges

- ✈ RPAS and Space Transportation
- ✈ Future of CNS and avionics
- ✈ Incorporation of ADS-B satellite data in surveillance process



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## Emerging technologies and challenges

- ✈ Automated decision support tools
- ✈ Weather automated information
- ✈ New generation of communication systems





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## RPAS and Space Transportation

- ✈ RPAS are a new component of the aviation system, one which ICAO, States, international organizations and industry are working to understand, define and ultimately integrate into non-segregated airspace.
- ✈ The goal of ICAO in addressing RPAS is to provide an international regulatory framework through Standards and Recommended Practices (SARPs), procedures and guidance material, keeping in mind that introduction of remotely piloted aircraft into non-segregated airspace and at aerodromes should in no way increase safety risks to manned aircraft.



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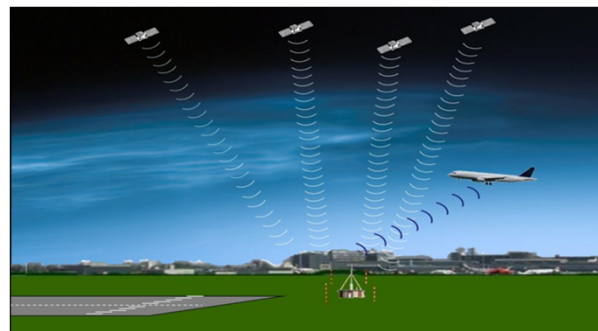
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## Future of CNS and avionics

- ✈ Communications, navigation, and surveillance systems, employing digital technologies, including satellite systems together with various levels of automation, applied in support of a seamless global air traffic management system





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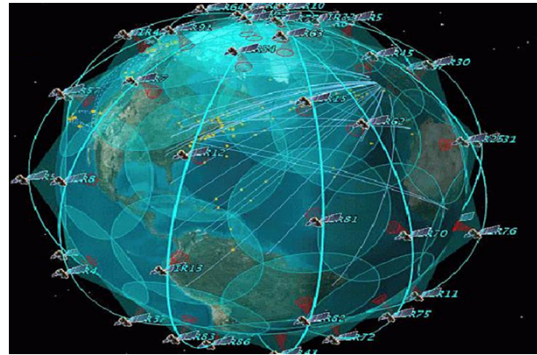
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## Incorporation of ADS-B satellite data in surveillance process

- ✈ ADS-B provides real time aircraft surveillance.
- ✈ Improves ... access to ADS-B data that could support traffic flow management



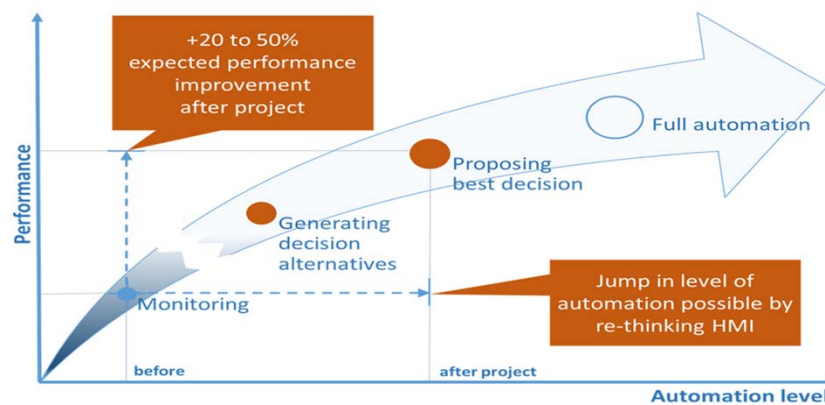
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## Automated decision support tools





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## New generation of communication systems



### Data Communications

Data Comm is a program aimed at transitioning from an analog voice system of communication between controllers and pilots, to digital communication system.



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