



# **RTCA Role in Developing Minimum Aviation Performance Standards**

***Committee for a Study of  
Electronic Vehicle Controls and Unintended  
Acceleration***

# What is RTCA?

The logo features the letters 'RTCA' in a large, green, serif font. A thin green line with an airplane icon at its end passes through the letters from the bottom left to the top right.

**Celebrating  
75 years**

**1935** First meeting of The Radio Technical Commission for Aeronautics

**1947** RTCA given job of producing performance & safety standards to drive to Technical Standard Orders



**1948** RTCA presented Collier Trophy by Pres. Harry Truman for SC-31 development of a common system of air traffic control

**1958** FAA is created, bringing responsibility for management of the nation's airspace system under a single authority

**1963** EUROCAE formed—international cooperation begins

**1973** William E. Jackson Award established to recognize young engineering students



**1980** SC-147 is established to develop Traffic Alert and Collision Avoidance System (TCAS)

**1994** RTCA receives ICAO Medal of Honour for eminent contribution to civil aviation

RTCA receives Collier Award for ADS-B contributions



**2007**

NextGen Implementation Task Force delivers recommendations to FAA

**2009**



**RTCA Celebrates 75 Years** bringing aviation volunteers together to forge consensus on technical and policy issues

**2010**



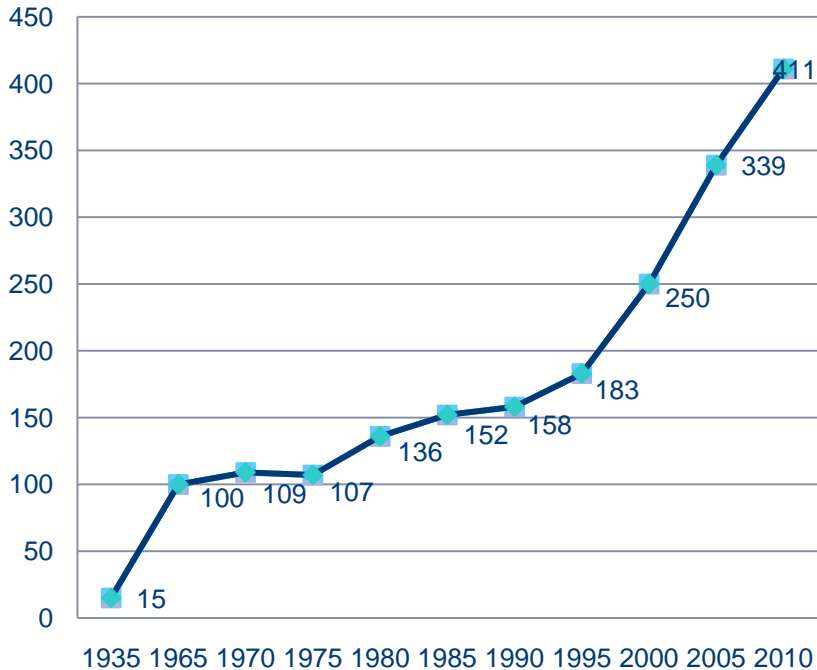
"RTCA has no powers of enforcement...it recommends only, but its recommendations are backed by all interests as a result of their participation...Its recommendations are, in consequence, accepted. I think this type of organization is the ideal one for the handling of complex technical problems in a democracy."

—RTCA Chairman J. H. Dellinger, 1948

# RTCA Membership

## *“Unique Public-Private Partnership”*

**RTCA Membership**  
1935 -- 2010



### Includes:

- **Government – US & Intl**
- **Corporations**
- **Non-profit Associations**
- **Academic Institutions**

# RTCA as a Federal Advisory Committee

- **Public Law 92-463**
- **Chartered by the FAA;  
Order 1110.77S**
- **Most of the RTCA initiatives are conducted under provisions of act**



# Board of Directors

**Five members – the “business of RTCA”**



**Chairman –  
Agam Sinha, Senior VP  
& General  
Manager, MITRE**

**Vice Chairman-  
Craig Fuller, AOPA**

**Ed Bolen, NBAA  
Sherry Carbary, Boeing**

# RTCA Mission

*“Volunteer Driven – Volunteer Lead”*

- **Consensus Based**
- **Expands marketplace of solutions**
- **Anti-trust protections for sharing information**



# RTCA Mission

*“Volunteer Driven – Volunteer Lead”*

- **Policy & Investment Recommendations**
- **Technical Standards:**

**Basis for Certification – assurance to meet the minimum operational, safety & performance requirements**



# Policy Advisory Committees

- Air Traffic Management Advisory Committee
- NextGen Advisory Committee



# Program Management Committee

- **Manages Special Committees**
- **Project Plans**
- **Monitor Progress**
- **Peer Review**



# RTCA Guidelines

**Responds to external requests - government or industry**

**Cornerstone is the Terms of Reference (TOR)**

**→ Approved by a governing body - Policy Board, PMC or NAC**

**→ Changes go back to the governing body for ratification**

RTCA Paper No. 181-10/PMC-822  
September 15, 2010

**TERMS OF REFERENCE**  
**Special Committee (SC) 224**  
**Airport Security Access Control Systems**

REQUESTORS:

Organization	Person
Airport Consultants Council 908 King Street, Suite 100 Alexandria, VA 22314 Phone: 703-683-5900 Email: paulah@ACOnline.org	Paula P. Hochstetler President

SC LEADERSHIP:

Position	Name	Affiliation	Telephone	email	Change
Co-Chairs	Christopher Runde	DHS/TSA	571-227-3704	christopher.runde@dhs.gov	<i>(link to changes in names)</i>
	Christer Wilkinson	AECOM System Solutions	602-653-8140	christer.wilkinson@aecom.com	
DFO	Joe Hebert	FAA	202-267-8375	joe.hebert@faa.gov	
Secretary	Art Kosatka	Transecure	301-570-5800	akosatka@transecure.us	

BACKGROUND:

- *Support for the Activity* - The American Association of Airport Executives (AAAE) and Airports Council International - North American (ACI-NA) agree with the need to update DO-230B and support the creation of this RTCA special committee to accomplish the task. Many of the ACC member firms, including manufacturers, supplier and consultants also fully support this initiative.

# RTCA Standards

- **Represent Industry Consensus – not one company or view point**
- **Scope determines timeframe**
- **Two forms:**
  - **Minimum Aviation System Performance Standard**
  - **Minimum Operational Performance Standard**

# Developing Standards within a Context

## Operational Services and Environment Definition

*Understand environment in which equipment will operate*

## Operational, Safety, & Performance Requirements

*Safety Assessment; Ops Performance Assessment (Comm, Nav, Surv)*

## Interoperability Requirements

*Ensure compatibility among system elements*

## Minimum Aviation System Performance Standards

*Assuring **system** will perform its intended functions*

## Minimum Operational Performance Standards

*Assuring **equipment** will perform its intended functions*

# Minimum Aviation System Performance Standard (MASP)

“... specifies characteristics that should be useful to designers, installers, manufacturers, service providers and users of systems intended for operational use within a defined airspace.”

**Example: ADS-B  
Architecture for new  
technology to  
replace radar  
MASP 289/242**



# Minimum Operational Performance Standard (MOPS)

“... provides standards for specific equipment(s) useful to designers, manufacturers, installers and users of the equipment...”

**Example: Specific requirements for ADS-B aircraft avionics DO 260B/282B**



# Minimum Operational Performance Standard (MOPS)

**RTCA Documents as  
crucial standard with  
ancillary uses:  
DO 160G  
Environmental  
Conditions and Test  
Procedures**



***RTCA*** 

**WWW.RTCA.ORG**

***RTCA*** 