Facilitating Consensus
# New Heights Reached, Together

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## RTCA Staff, December 2017

- **Margaret Jenny**  
  President

- **Marcelle Forrest**  
  Executive Coordinator

- **Leila Green**  
  Director, Business Operations

- **Andy Cebula**  
  VP, Strategy and Programs

- **Trin Mitra**  
  Program Director

- **Perla Domingo**  
  Membership, Marketing and Publications Director

- **Brandi Teel**  
  Mission Support Manager

- **Al Secen**  
  VP, Aviation Technology and Standards

- **Karan Hofmann**  
  Program Director

- **Rebecca Morrison**  
  Program Director

RTCA's impact is derived through the collaborative consensus process of industry and government professionals.”

—Margaret Jenny, President, RTCA
The Intrinsic Value and Unique Role of RTCA

RTCA is a unique organization, and although our standards and policy recommendations have achieved world-wide adoption, our only authority is derived from the collaborative, consensus process by which we develop our recommendations. Since 1935, RTCA recommendations have provided the foundation for virtually every modern technical advancement in aviation and have helped mold national decisions fostering a healthy air transportation system.

Nearly 1400 aviation industry professionals from more than 600 entities have volunteered valuable time and expertise on more than 20 technical and policy committees. During 2017, operating under the rules of the Federal advisory committee act (FACA), diverse organizations create consensus standards and policy recommendations consistent with US anti-trust regulations.

RTCA committee members recognize that air transportation system modernization requires more than the deployment of new technologies. Government and industry must introduce procedures and policies and overcome political and organizational challenges to modernizing the air transportation system. With constrained budgets, the FAA has routinely turned to RTCA committees to recommend investment priorities. The committees in turn, have committed themselves to tackling these tough issues in collaboration with the FAA.

The Industry and the FAA turned to RTCA because of its long record of providing sound advice and building industry consensus in a public setting that is not controlled by particular vested interests. A critical component of this success is the professional RTCA staff who possess the deep technical, operational and policy aviation knowledge required to steer the committees developing policy recommendations and technical performance standards. Well-versed in the intricacies of operating committees, they continued to ensure the delivery of the committees defined tasks. Long after RTCA standards are published, the staff routinely fields technical questions from practitioners of our standards. They share their comprehensive understanding of FAA regulatory processes, plans, programs and organizational structure with committee leadership. And they also keep the FAA apprised of key issues being addressed by committees. Their advice and counsel are routinely sought by committee leadership.

In summary, RTCA ensures that the output of our committees is independent and objective. Throughout this report, you will see how the work and output are prime examples of the value of RTCA, and how government and industry can work together to solve issues facing our nation.

Margaret Jenny
President, RTCA
governance

RTCA brings together the right technical and operational talent—efficiently and effectively—to work together for the greater good of aviation.

The RTCA Board of Directors is comprised of individuals from over 600 RTCA member companies that provide management and fiduciary oversight.

The Policy Board serves as an important link between the members of RTCA and the organization’s policy development activities by establishing RTCA policies and programs. Individuals from RTCA member organizations are elected to serve on the Policy Board. The Policy Board also includes all members on the Board of Directors.

Board of Directors, 2017

Craig Fuller  
The Fuller Company (Chair)

Mark Baker  
Aircraft Owners and Pilots Association

Edward Bolen  
National Business Aviation Association

Carl Esposito  
Honeywell Aerospace

Margaret Jenny  
RTCA, Inc.

Sharon Pinkerton  
Airlines for America
Policy Board, 2017

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Federal Aviation Administration

Jaz Banga
Airspace Systems, Inc.

Faye Malarkey Black
Regional Airline Association

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Federal Aviation Administration

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General Aviation Manufacturers Association

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Airports Council International - ACI World

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Air Line Pilots Association, International

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Transportation Security Administration

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Airports Council International - North America

Paul Rinaldi
National Air Traffic Controllers Association

Rowayne Schatz
Department of Defense

Jenny Solomon
Federal Aviation Administration

Steve Timm
Rockwell Collins, Inc.

Pamela Whitley
Federal Aviation Administration

Todd Zarfoss
The Boeing Company
**RTCA Committees**

At the core of RTCA are the thousands of dedicated individuals from the U.S. and around the world who come together to develop comprehensive, industry-vetted and endorsed recommendations. There were over 2500 people who attended committee meetings in 2017.

Leveraging the experience and expertise of RTCA members, recommendations are provided to the government, driving policy and investment priorities to facilitate implementation of air traffic management system improvements. RTCA’s minimum performance standards and guidance documents serve as a means of compliance with FAA regulations. During 2017, RTCA’s 4 Policy Committees and 22 Special Committees (SCs), listed below, produced 26 Documents and Recommendations.

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**Drone Advisory Committee (DAC)**

- **NextGen Advisory Committee (NAC)**
- **Program Management Committee (PMC)**
- **SC-135, Environmental Testing**
- **SC-147, Traffic Alert & Collision Avoidance System (TCAS)**
- **SC-186, Automatic Dependent Surveillance-Broadcast (ADS-B)**
- **SC-206, Aeronautical Information Services (AIS) Data Link**
- **SC-209, ATCRBS & Mode S Transponder**
- **SC-214, Standards for Air Traffic Data Communication Services**
- **SC-216, Aeronautical Systems Security**
- **SC-217, Aeronautical Databases**

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**SC-222, AMS(R)S**

- **SC-223, Internet Protocol Suite (IPS) and Aeronautical Mobile Airport Communication Systems (AeroMACs)**
- **SC-224, Airport Security Access Control Systems**
- **SC-225, Rechargeable Lithium Batteries & Battery Systems**
- **SC-227, Standards of Navigation Performance**
- **SC-228, Minimum Operational Performance Standards for Unmanned Aircraft Systems**
- **SC-229, 406 MHz Emergency Locator Transmitters (ELTs)**
- **SC-230, Airborne Weather Detection Systems**
- **SC-231, Terrain Awareness Warning Systems (TAWS)**
- **SC-233, Addressing Human Factors/Pilot Interface Issues for Avionics**
- **SC-235, Non-Rechargeable Lithium Batteries**
- **SC-236, Standards for Wireless Avionics Intra-Communication System (WAIC) within 4200-4400 MHz**

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**Tactical Operations Committee (TOC)**
Drone Advisory Committee

The DAC was established in 2016 to provide an open venue for the FAA and key decision-makers supporting the safe introduction of Unmanned Aircraft Systems (UAS) into the National Airspace System (NAS). In 2017, the Committee presented two recommendations to the FAA: Funding the Integration of UAS into the National Airspace and Drone Access to Airspace.

**Brian Krzanich**
Intel (Chair)

**Dan Elwell**
Federal Aviation Administration (Designated Federal Officer)

**Greg Agvent**
CNN

**Juan Alonso**
Stanford University

**Mark Baker**
Aircraft Owners and Pilots Association

**Jaz Banga**
Airspace Systems, Inc.

**Linden Blue**
General Atomics Aeronautical Systems, Inc.

**Robert Boyd**
Riley County, Kansas

**James Burgess**
X

**Tim Canoll**
Air Line Pilots Association, International

**Michael Chasen**
PrecisionHawk USA, Inc.

**Nancy Egan**
3D Robotics

**Deborah Flint**
Los Angeles World Airports

**Trish Gilbert**
National Air Traffic Controllers Association

**Martin Gomez**
Facebook

**Todd Graetz**
BNSF Railway

**David Greene**
Wisconsin Department of Transportation, Bureau of Aeronautics

**Rich Hanson**
Academy of Model Aeronautics

**Ryan Hartman**
Insitu Inc.

**Robert Isom**
American Airlines, Inc.

**Gur Kimchi**
Amazon Prime Air

**George Kirov**
Harris Corporation

**Ed Lee**
San Francisco, California

**Nancy Leveson**
Massachusetts Institute of Technology

**Nan Mattai**
Rockwell Collins, Inc.

**Houston Mills**
United Parcel Service

**Marily Mora**
Reno-Tahoe Airport Authority

**Christopher Penrose**
AT&T

**Steven Rush**
Professional Helicopter Pilots Association

**Lillian Ryals**
The MITRE Corporation

**Robie Samanta Roy**
Lockheed Martin Corporation

**Brendan Schulman**
DJI Technology

**Phil Straub**
Garmin, Ltd.

**Brian Wynne**
Association for Unmanned Vehicle Systems International

**Matthew Zuccaro**
Helicopter Association International
NextGen Advisory Committee

The NAC is a Federal advisory committee formed to provide advice on policy-level issues facing the aviation community, jointly implementing NextGen (modernizing the aviation system). 2017 Accomplishments include: Goals and Priorities for Improving Operations in the Northeast Corridor - Phase One; Evaluation and Recommendation for Surveillance in FAA Controlled Oceanic Airspace; Joint Implementation Commitments for Improving Operations in the Northeast Corridor - Phase Two - Interim Report; and an Assessment of Next Gen Implementations by the FAA-Industry Joint Analysis Team (JAT).
Program Management Committee

Established in 1998, the PMC manages the technical committee-related business of RTCA. The PMC establishes Special Committees in response to an identified need by government or industry. Additionally, the PMC oversees the work of the Special Committees, and approves their products for final publication. During 2017, the PMC approved fifteen standards.

Dr. Christopher Hegarty  
The MITRE Corporation  
(Chair)

Lou Volchansky  
Federal Aviation Administration (Designated Federal Officer)

Douglas Arbuckle  
Federal Aviation Administration

Clay Barber  
Garmin Ltd.

Chris Benich  
Honeywell International, Inc.

Steve Brown  
National Business Aviation Association

Lawrence Dibble  
U.S. Army

CDR Joel Doane  
U.S. Navy

Richard Heinrich  
Rockwell Collins, Inc.

Jens Hennig  
General Aviation Manufacturers Association

Robert Ireland  
Airlines for America

Margaret Jenny  
RTCA, Inc.

Dr. George Ligler  
PME, Inc.

Col Thomas Shields  
U.S. Air Force

Randy Kenagy  
Air Line Pilots Association, International

Joe Post  
Federal Aviation Administration

Al Secen  
RTCA, Inc.

Jessie Turner  
The Boeing Company
RTCA Committees

Special Committees

During 2017, RTCA’s 22 SCs continued their work developing 15 comprehensive, industry endorsed standards. These guidance documents are provided to the FAA as a means of compliance with FAA regulations and are referenced in Technical Standard Orders (TSOs) and Advisory Circulars (ACs).

SC-135, Environmental Testing, continues to maintain RTCA DO-160 (current version is DO-160G), Environmental Conditions and Test Procedures for Airborne Equipment. This document is the international de facto standard for environmental testing of commercial avionics and provides standard procedures and environmental test criteria for testing airborne equipment to determine their performance characteristics. DO-160G was published in December 2010, and an update of the Users’ Guide material for this document is in development, with the aim of providing rationales, guidance and background information for the environmental, test procedures and requirements, as well as lessons learned from aircraft and laboratory experience.

In September 2017, the PMC approved the request to have SC-135 write a separate Environmental test standard for Ground Based equipment for use in UAV operations. The new document will be structured in a manner similar to DO-160 and is expected to be released in June 2020.

SC-147, Traffic Alert & Collision Avoidance System (TCAS), is developing the new ACAS X MOPS to specify minimum requirements for a collision avoidance system including surveillance, tracking and threat resolution functionalities. These MOPS will specify the optimized logic methodologies used by the collision avoidance logic and its performance, as well as providing testing of all requirements.

In addition to developing the deliverables stated above, the Committee will provide a venue for industry discussion of other near-term operational performance of TCAS II systems within the NAS.

The ACAS X MOPS will be used by the regulators as a basis for new or revised Technical Standard Order(s) and guidance material as appropriate. These MOPS are also envisioned to be used by SC-228 in its Phase II Detect and Avoid standards development effort—the two SCs are working very closely together.
SC-159, Navigation Equipment Using the Global Navigation Satellite System (GNSS), is developing minimum standards that form the basis for FAA approval of equipment using GPS as a primary means of civil aircraft navigation. The Committee published three documents in 2017: DO-246E, GNSS-Based Precision Approach Local Area Augmentation System (LAAS) Signal-In-Space Interface Control Document (ICD); DO-253D, Minimum Operational Performance Standards for GPS Local Area Augmentation System Airborne Equipment; and DO-368, Minimum Operational Performance Standards (MOPS) for GPS/GLONASS (FDMA + antenna) L1-Only Airborne Equipment. The Committee is monitoring GNSS developments for the current activity, and developing a dual frequency MOPS, update L1 and L5 interference environment reports, GNSS-aided internal navigation systems MOPS, GNSS SBAS L1/L5 MOPS, and GNSS GBAS L1/L5 MOPS and ICD.

SC-186, Automatic Dependent Surveillance-Broadcast (ADS-B), is publishing MOPS intended to be used by the FAA and other civil aviation authorities (CAAs) as an acceptable means of certifying ADS-B equipment for civil aircraft. Additional documents from SC-186 may form the basis of advisory material for certification authorities and may inform the operational approval process and safety risk management directives for the FAA and other CAAs.

SC-206, Aeronautical Information Services (AIS) Data Link, completed DO-369, Guidance for the Usage of Data Linked Forecast and Current Wind Information in Air Traffic Management (ATM) Operations, in July 2017, and DO-370, Guidelines for In Situ Eddy Dissipation Rate (EDR) Algorithm Performance, in December 2017. They continue work on a revision to DO-358, Minimum Operational Performance Standards (MOPS) for Flight Information Services Broadcast (FIS-B) with Universal Assess, with an expected publication date in late 2018.

SC-209, ATCRBS & Mode S Transponder, is developing operational requirements based upon the airborne and ground user needs for a Mode S system. They are working closely with ICAO Panels, FAA/CAAs, EUROCAE, AEEC, SAE, and other RTCA Special Committees to ensure a global view of these MOPS.

SC-213, Enhanced Flight Vision Systems and Synthetic Vision Systems (EFVS/SVS), is developing system level documentation for SVS, EFVS, EVS, and combined architectures to identify intended operations and architectures and enable development and certification of vision systems. In 2017, the PMC approved the publication of their latest document, DO-371, Minimum Aviation System Performance Standards (MASPS) for Aircraft State Awareness Synthetic Vision Systems. In addition, the Committee will create a SPR for Vision Systems for Take-off and a MASPS for a Combined Vision Guidance System for Rotorcraft Operations. Both releases are scheduled in 2018. SC-213 works jointly with EUROCAE WG-79.

SC-214, Standards for Air Traffic Data Communication Services, is working jointly with WG-92 to revise DO-224C, Signal-in-Space Minimum Aviation System Performance Standards (MASPS) for Advanced VHF Digital Data Communications Including Compatibility with Digital Voice Techniques, and DO-281B, Minimum Operational Performance Standards (MOPS) for Aircraft VDL Mode 2 Physical Link and Network Layer. Both are being worked to improve air/ground interoperation. SC-214 and WG-92 are collaborating with ARINC Airlines Electronic Engineering Committee (AEEC) Data Link (DLK) Systems Sub Committee to ensure harmony within VDL Mode 2 standards.
SC-216, Aeronautical Systems Security, is revising DO-356, Airworthiness Security Methods and Considerations, for harmonization with ED-203 (same title) jointly with WG-72. The Committee’s recommendations and guidance material will help ensure safe, secure and efficient operations amid the growing use of highly integrated electronic systems and network technologies used on-board aircraft, for CNS/ATM systems, and air carrier operations and maintenance. The joint documents are expected to be published by mid-2018.

SC-217, Aeronautical Databases, is working jointly with WG-44, Aeronautical Databases, on a revision to DO-201, Standards for Aeronautical Data. The objective is targeted towards data supporting new airborne and ground navigation applications, but it does not aim to standardize the applications themselves. The document will be updated to align with the developments in the navigation domain over the past 15 years in general, with emphasis on the Performance Based Navigation principles. The update will consider the requirements of the new ATM application – with inputs from SESAR and NextGen – (e.g. 4D trajectory, Advanced PBN, SWIM, etc.) as well as changes suggested by industry and derived from authorities’ experience feedback. The update will aim at ensuring consistency with ICAO, ARINC and other related EUROCAE and RTCA standards for data processing, particularly data quality (ED-76A/DO-200B, published in 2015).

SC-222, AMS(R), completed DO-262C, Minimum Operational Performance Standards (MOPS) for Avionics Supporting Next Generation Satellite System (NGSS), providing information and requirements specific for avionics that provide Aeronautical Mobile Satellite (R) Services by means of satellite communications technologies and a Technique Specific Normative Appendix for INMARSAT. This joint Committee also completed DO-343A, Minimum Aviation System Performance Standard (MASPS) for AMS(R) Data and Voice Communications Supporting Required Communications Performance (RCP) and Required Surveillance Performance (RSP), that provides safety communications to aircraft in airspace where 1) procedural separation is applied, or 2) ATS surveillance services are provided. They continue to research further updates required.


SC-225, Rechargeable Lithium Batteries & Battery Systems, completed a revision to DO-311, Minimum Operational Performance Standards for Rechargeable Lithium Battery Systems and Battery Systems, to include certification guidance for small- and medium-sized rechargeable lithium batteries and battery systems. The document identifies battery categories by energy level, as well as sub-categories by venting provisions. It also identifies battery types and includes the requirements
and test procedures to be performed on rechargeable lithium battery systems. They include general, performance and environmental requirements and tests. The document does not contain design requirements but does provide installation considerations that may impact the design of the battery system. It also provides installation considerations for the installer. The Committee was sunset in December 2017.

SC-227, Standards of Navigation Performance, is developing navigation standards intended for designers, manufacturers and installers of avionics equipment; airspace managers and service providers; and the users of these navigation systems for world-wide operations. In September 2017, the Committee was asked to continue after the publication of the update to DO-257A, Minimum Operational Performance Standards for the Depiction of Navigational Information on Electronic Maps, and monitor the work of EUROCAE Working Group 107 which will work on a new DME/DME standard. In 2018, the Committee will continue and complete the revision of DO-257A to be consistent with DO-236C and Change 1, and Revision to DO-283A to ensure its minimum standards for display of navigation information on electronic maps further facilitate the implementation of PBN.

SC-228, Minimum Operational Performance Standards for Unmanned Aircraft Systems, is working to develop the Minimum Operational Performance Standards (MOPS) for Detect and Avoid (DAA) and Air to Air Radar (ATAR) equipment and a Command and Control (C2) Data Link MOPS establishing L-Band and C-Band solutions. Working Group 2 published DO-362 in September of 2016 and Working Group 1 is published DO-365 and DO-366 in May of 2017. The Technical Standards Orders (TSO) referencing these MOPS was published in October of 2017. With the publication of these documents, the special committee is looking forward to Phase II work.

Phase Two activities for Detect and Avoid will be to develop performance standards for a broad range of civil UAS capable of operations Beyond Visual Line of Sight (BVLOS). These operations, at a minimum will take place in Class D, E and G, for the entire duration of a flight (i.e., extended operations). Three development efforts are envisioned for Phase Two: MOPS for a ground-based sensor; MOPS for an airborne sensor; and an update to the DAA MOPS (Rev A and Rev B) to incorporate new technology and operational concepts.

The Phase Two activities of Working Group 2 (C2) will be to develop system architectures / performance allocations to C2 architectures, with focus on how differing DAA allocations may impact required C2 performance. Additionally, the team will look closely at Ka and Ku satellite communications. They will be developing a MASPS for point-to-point and network C2 architectures that must be supported; reduce certification; improve system performance; explore the physical integration of L band and C band into a common radio for SWAP advantage.

SC-229, 406 MHz Emergency Locator Transmitters (ELTs), is working to update DO-204A, the MOPS for Emergency Locator Transmitters (ETLs) addressing the latest design, performance, installation and operational issues for 406 MHz emergency beacons. This standard should be useful to users, designers, manufacturers, and installers of ELTs and will help ensure a more standardized approach in these systems and the installations approval process. The Committee is working jointly with EUROCAE Working Group 98. The new vision will include information related to Cospas-Sarsat upgrading its
satellite ELT detection system, analysis of recent aircraft accidents has created a call from air safety investigators as well as the National Search and Rescue Committee to develop standards for pre-accident automatic ELT activation and including GPS technology to allow ELTs to provide accurate accident positioning to first responders. SC-229 is joining with EUROCAE WG-98, which is updating ED-62A. DO-204B and ED-62B will be issued jointly as technically equivalent documents.


**SC-231, Terrain Awareness Warning Systems (TAWS)**, completed its work on a new document, DO-367, *Minimum Operational Performance Standards (MOPS) for Terrain Awareness and Warning Systems (TAWS) Airborne Equipment*, in early 2017. The document was approved by the Program Management Committee for publication in May 2017. The Committee sunset after the release of TSO-C151d in September. The new MOPS incorporates the revised GPWS requirements (from DO-161A) and will be useful to designers, equipment manufacturers, aircraft manufacturers, airlines, and aircraft operators, installers, and aviation authorities.

**SC-233, Addressing Human Factors/Pilot Interface Issues for Avionics**, completed its work to create DO-372, *Addressing Human Factors/Pilot Interface Issues for Avionics* in December 2017. The document provides best practices and lessons learn for certification issues that arise from Human Factors’ issues. The intent is to raise the level of awareness about human factors, to facilitate the identification and resolution of human factors issues by the individuals who are responsible for design and evaluation of avionics, specifically FAA Flight Test Pilots, Engineers and Human Factors Specialists within the FAA Aircraft Certification Offices as part of their review and approval process. SC-233 was sunset in December 2017.

**SC-235, Non-Rechargeable Lithium Batteries**, completed DO-227A, *Minimum Operational Performance Standard for Lithium Batteries*, to incorporate new technology and lessons learned covering non-rechargeable lithium battery technology and the use of non-rechargeable lithium batteries. The revised guidance addresses the design, testing and validation of these batteries and systems. SC-235 was sunset in December 2017.

**SC-236, Standards for Wireless Avionics Intra-Communication System (WAIC) within 4200-4400 MHz**, is working to develop the Minimum Operational Performance Standards (MOPS) for Wireless Equipment to allow a WAIC system to share the band with Radio Altimeters and other WAIC systems. The Committee will operate in coordination with EUROCAE WG-96, “Wireless On Board Avionics Network,” and the new standard will be issued jointly as a technically equivalent document. The goal is for the new MOPS to be incorporated into a Technical Standard Order providing the basis for the FAA and user community to accomplish procedural planning, investment analysis and architectural decision making. The new MOPS is being coordinated with the ICAO SARPS Annex 10 which will address the shared usage of the 4200-4400 MHz band between radio altimeters and WAIC equipment.
Tactical Operations Committee

Established January 2013, the TOC provides an open venue for the FAA and those who operate in the National Airspace System (NAS) to work in partnership to identify and resolve operational issues affecting the efficiency of the NAS. In 2017, the TOC published recommendations for Performance Based Navigation Route System, Airspace Information Management Modernization Segment 3, Common Support Services – Flight Data, and Intentional GPS Interference.

Bart Roberts  
JetBlue Airways (Co-Chair)

Jeff Woods  
National Air Traffic Controllers Association (Co-Chair)

Jodi McCarthy  
Federal Aviation Administration (Designated Federal Officer)

Mike Artist  
Federal Aviation Administration

Stacy Bechdolt  
Regional Airline Association

Mark Hopkins  
Delta Air Lines, Inc.

Margaret Jenny  
RTCA, Inc.

Christian Kast  
Airlines for America/UPS

Bill Murphy  
International Air Transport Association

Chris Oswald  
Airports Council International-North America

Darrell Pennington  
Air Line Pilots Association, International

Melissa Rudinger  
Aircraft Owners and Pilots Association

Edwin Solley  
Southwest Airlines, Co.

Mark Steinbicker  
Federal Aviation Administration

Greg Tenille  
The MITRE Corporation

Brian Will  
American Airlines, Inc.

Heidi Williams  
National Business Aviation Association
2017 RTCA Documents

AERONAUTICAL DATA
DO-369, Guidance for the Usage of Data Linked Forecast and Current Wind Information in Air Traffic Management (ATM) Operations
Issued 07-13-2017 | Prepared by SC-206

BATTERIES
DO-227A, Minimum Operational Performance Standards (MOPS) for Non-Rechargeable Lithium Batteries
Issued 09-21-2017 | Prepared by SC-235

COMMUNICATIONS
Issued 05-31-2017 | Prepared by SC-222

GLOBAL POSITIONING SYSTEM (GPS)
DO-368, Minimum Operational Performance Standards (MOPS) for GPS/GLONASS (FDMA + antenna) L1-only Airborne Equipment
Issued 07-13-2017 | Prepared by SC-159

DO-253D, Minimum Operational Performance Standards for GPS Local Area Augmentation System Airborne Equipment
Issued 07-13-2017 | Prepared by SC-159

DO-246E, GNSS-Based Precision Approach Local Area Augmentation System (LAAS) Signal-in-Space Interface Control Document (ICD)
Issued 07-13-2017 | Prepared by SC-159

SATELLITE SERVICES
DO-343A, Minimum Aviation System Performance Standard for AMS(R)S Data and Voice Communications Supporting Required Communications Performance (RCP) and Required Surveillance Performance (RSP)
Issued 05-31-2017 | Prepared by SC-222
New Site, New Style, Enhanced Experience.
Check out our new Website!

In early May, RTCA launched a new and improved website. This was the result of many months of work starting with a brand makeover—a wholesale replacement of RTCA’s entire back office tools that culminated in the launch of the new website, with enhanced capabilities aimed at improving the experience for RTCA users.
Globally Shared Values

The mission of RTCA is respected in the aviation industry. Whether through participation in ICAO groups, recurring coordination with our European standards partner, EUROCAE, or in articles and speeches, RTCA’s message is globally valued. And what we say is respected by the global leaders in aviation. A few examples of our 2017 outreach follow:

Controllers Recognize RTCA for Collaborative Work

The National Air Traffic Controllers Association (NATCA) presented its James L. Oberstar Sentinel of Safety Award to RTCA President Margaret Jenny for the organization’s outstanding achievement in the advancement of aviation safety and dedication to improving the U.S. air traffic control system.

Advancing STEM Efforts

RTCA Staff addressed a group of students of the TransSTEM Academy at the Cardozo Education Campus in Washington, DC. Supported by the AeroClub Foundation, the program brings aviation professionals into the classroom on a monthly basis, enabling students to learn first-hand about the many aspects of aviation and aerospace.

RTCA and SESAR

Single European Sky’s ATM Research (SESAR) Deployment Manager (SDM) representatives met with RTCA Staff to discuss technological solutions needed to increase the performance of Europe’s ATM System. SDM is responsible for the coordination of the implementation of the EU’s Common Projects.
RTCA Outreach

RTCA on NASAO Air Space Panel

RTCA participated on National Association of State Aviation Officials (NASAO’s) Western Regional Partnership (WRP) panel and discussed current airspace initiatives and predictions for changes in the national airspace over the next decade. This included commercial and general aviation, the mission needs of the Department of Defense, airspace over tribal lands and the growth of unmanned aerial systems.

RTCA and ICAO Agree to Share Standards

In support of ICAO’s mission to facilitate safe, orderly, and economic air transport, and the promotion of flight safety and efficiency in international air navigation, and RTCA’s mission of producing consensus-driven performance standards that form the basis of regulatory requirements, ICAO and RTCA signed an agreement to share standards in several areas of aviation, including communication, navigation, surveillance and air traffic management.

RTCA at ATCA Annual

RTCA President Margaret Jenny participated on a panel during the Air Traffic Control Association’s Annual Conference focused on US aviation leadership and operational excellence. The panel, titled “ATC: Be All That You Can Be”, focused on the increasing demand and diversity in the National Airspace System.

RTCA-EUROCAE Coordination Meeting

RTCA and EUROCAE officials met in Paris, France, hosted by EUROCAE, to exchange information on activities during 2017, and plans for 2018. The annual meeting allows the two organizations to identify areas of mutual cooperation to advance the cause of global aviation interoperability and standards development.
Three hundred experts and leaders from around the world gathered at the 2017 RTCA Global Aviation Symposium to explore and discuss current and emerging issues throughout aviation. The Symposium offered 12 information-packed sessions ranging from the collaborative efforts by the aviation industry and the FAA to modernize the U.S. air traffic control system, to the latest initiative on the Northeast Corridor.
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JEPPESSEN  leidos  Southwest

AIRBUS  Aireon  Airlines for America  Alaska Airlines

AOPA  your freedom to fly

The Cargo Airline Association
The Voice of the Air Cargo Industry

CSSI, INC.  Deloitte  GARMIN

Honeywell  IATA  jetBlue  NBAA

MTRON AVIATION  MITRE

Raytheon  Rockwell Collins  SAIC

THALES UNITED
RTCA’s Annual Recognition of Excellence Awards Luncheon:

RTCA honors its volunteers yearly during its Annual Symposium for their achievements that span the aviation spectrum, from policy to procedure and technology. The work of these individuals and their respective committees has helped to cement RTCA’s place as a key driver of collaboration between the public sector and the aviation industry.

Achievement Award

The RTCA Achievement Award is the organization’s highest annual honor, recognizing those who have made the most significant contributions to RTCA’s mission and the aviation community over the last year.

- Rick Heinrich, Rockwell Collins, Inc.
- Jim Crites, Insitu, Inc.
- Dr. George T. Ligler, Project Management Enterprise Inc.
- Paul McDuffee, Insitu, Inc.
- Dr. Nicholas P. Hanlon, Awardee

William E. Jackson Award

The William E. Jackson Award is given to an outstanding graduate student in the field of aviation electronics and telecommunications as a memorial to William E. Jackson, an enthusiastic supporter of student engineers. Awardee, Dr. Nicholas P. Hanlon, graduated from the University of Cincinnati, and completed his dissertation on *Simulation Research Framework with Embedded Intelligent Algorithms for Analysis of Multi-Target, Multi-Sensor, High-Cluttered Environments*. Dr. Hanlon is currently an Aerospace Engineer for Air Force Research Laboratories at Wright-Patterson Air Force Base.

- Jim Crites, Jim Crites, LLC (formerly of Dallas Fort-Worth International Airport) and Brian Townsend, American Airlines
Outstanding Leader Award

The RTCA Outstanding Leader Award recognizes the added demands placed on the RTCA Committee Chairs and participants who serve in leadership roles, to ensure their respective committees publish high-quality documents.

Congratulations to RTCA’s Outstanding Leaders!

Daniel Allen  
FedEx Express

Laurent Azoulai  
Airbus

Randy Bone  
The MITRE Corporation

Bill Carson  
The MITRE Corporation

Jerome Condis  
Airbus

Jim Crites  
James M. Crites LLC  
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Panasonic Avionics Corporation

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Aircraft Owners Pilots Association

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Sandel Avionics

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Cape Air  
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Dji  
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Electronics Test Centre  
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EMBRAER  
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Jeppesen
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Financial Report

2017 Operating Revenue

- 72% Membership Dues
- 12% Document Sales
- 6% Symposium
- 9% Training Seminars
- 1% Other Income

2017 Operating Expenses

- 63% Committees and Task Forces
- 20% Management and General
- 4% Symposium
- 4% Training Seminars
- 2% Publications
- 2% Public Education
- 2% Membership Services
- 2% Membership Development
- 1% Program Development

72% Membership Dues