

## NextGen Task Force Submits Final Report to FAA

On September 9, 2009, a short eight months after receiving the request from Hank Krakowski, FAA Air Traffic Organization, COO, and Peggy Gilligan, FAA Associate Administrator for Aviation Safety, the RTCA NextGen Mid-Term Implementation Task Force submitted its final report to FAA. Over 300 aviation

community volunteers from more than 110 organizations participated on the Task Force and forged community-wide consensus on the recommended NextGen operational improvements to be implemented between now and 2018. The Task Force report results and recommendations were the subject of the NowGenNEXT Conference on September 15, 2009, presented by *Avionics* magazine.

For each capability recommended, the Task Force defined “What,” “Where,” “Who,” and “When,” for each operational capability; documented all known challenges to delivering the benefits of the capability; recommended strategies and means to accelerate operational benefits for NextGen (e.g., consensus on means of accommodating mixed-equipage operations); and recommended business strategies to facilitate delivery of benefits and encourage equipage. While the Task Force recognized that the FAA would continue to develop the baseline programs and technologies described in the NextGen Implementation Plan (NGIP), it assumed that as a result of incorporating these recommendations, the FAA might find it necessary to adjust some element of these programs.

The Task Force started by identifying the set of problems that the NextGen program should be designed

solely in new technology, but in leveraging technology already on board many aircraft. Delivering benefits for existing technology will go a long way towards relieving the congestion in the system. It will also lay the foundation for the introduction of the next generation of technology in the cockpit and at the air



NowGenNEXT Conference panelists discuss implementation of Task Force recommendations: (l-r) Task Force Chairman Capt. Steve Dickson, Delta; FAA Associate Administrator for Aviation Safety Peggy Gilligan; FAA Air Traffic Organization COO Hank Krakowski; Sandy Samuels, Lockheed Martin; and Jeff Standerski, Rockwell Collins.

to resolve. The participants agreed that the biggest problems were delays on the airport surface, access to runways at airports with closely-spaced runways, and problems at large metropolitan areas where access and capacity at one airport is often affected by operations at other airports within the metroplex. Further, the Task Force agreed that the answer to these problems lies not

traffic manager’s workstation, by increasing the community’s mutual confidence in the ability to deliver benefits.

Operational capabilities recommendations were grouped into five problem areas (Surface Operations, Runway Access, Metroplex, Cruise, and Access to the NAS) and two cross-cutting capabilities (Data Communications, and Integrated ATM). The resulting list of

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# RTCA Program Highlights

The Program Management Committee (PMC) met on September 9, 2009 and approved one new document. The document, DO-318, *Safety, Performance and Interoperability Requirements Document for Enhanced Air Traffic Services in Radar-Controlled Areas Using ADS-B Surveillance (ADS-B-RAD)*, is described on page 8 of this *Digest*.

Additional topics discussed:

**Integration and Coordination Committee (ICC) Report** – the ICC recommended that SC-218, Future ADS-B / TCAS Relationships, be re-chartered by the PMC, with activity refocused, based on a consensus within

the FAA, to one or more of the following activities:

- Spectrum mitigations involving TCAS, ADS-B, or the interface between the two systems,
- How TCAS and/or a successor Collision Avoidance System can be integrated with Aircraft Surveillance Application Systems (ASAS), and/or
- High level requirements (operational concept and MASPS) for a NextGen Collision Avoidance System.

The ICC recommendation will be further discussed at the next PMC meeting.

**SC-203, Unmanned Aircraft Systems (UAS)** – SC-203 continues to work on their next document, an Operational Services and Environment Definition (OSED) for UAS, expected by March 2010. PMC coordination is progressing to enhance its understanding of the roles and concerns across many SC-203 issues and stakeholders. ❖

**The next PMC meeting is scheduled for December 2, 2009 at RTCA.**

**Chairman:**

Mr. Christopher Hegarty, MITRE Corporation CAASD

**RTCA Program Director:**

Harold Moses, hmoses@rtca.org

## Attitude and Heading Reference Systems (AHRS)

SC-219

SC-219 met on September 22-24, 2009 at RTCA. The committee is tasked to develop Minimum Operational Performance Standard (MOPS) for AHRS. The designs for the majority of the mechanical gyroscopes were created in the 1950s or before, and have significantly different operational, performance, and failure mode properties relative from current technology. The following is a re-cap of the various Working Group (WG) meetings.

WG-1, Performance and Testing Requirements – discussions addressed accuracy requirements, the definitions of “static” and “dynamic” and aiding sources. Agreement was reached that “static” refers to stationary tests in an unchanging environment while “dynamic” refers to either a moving

test (such as flight test) or a changing environment (such as a quality test), but not both simultaneously. Device marking may be required to identify the fact that an aiding source is needed to achieve the Technical Standard Order (TSO) performance. The WG reworked the heading accuracy / equipment category table. Two tables were created to achieve independence between specifying heading accuracy and free heading drift.

WG-2, Environmental Requirements – determined that some of the DO-160 tests will be required. Identification of all test thresholds is yet to be determined. Acoustic noise susceptibility tests should be considered because it is known that certain sensors can be influenced. Draft text

will be generated prior to the next meeting.

The committee scheduled on-line meetings for WGs only for November 3-4, 2009 and January 20-21, 2010. An online work site is being used to manage revisions to the draft MOPS. Those interested in the SC-219 activity should contact Harold Moses at RTCA. ❖

**The next Plenary meeting is scheduled for April 13-15, 2010 at RTCA.**

**Chairman:**

Keith (Dude) Kerley, Rockwell Collins, Inc.

**RTCA Program Director:**

Harold Moses, hmoses@rtca.org

# NextGen Task Force Report

By J. Randolph Babbitt, Administrator, Federal Aviation Administration

Keynote Address, NowGenNEXT Conference (Hosted by Avionics Magazine and RTCA)  
September 15, 2009 in Washington, DC

**G**ood morning. This has been a unique process. The Task Force should be pleased with what it accomplished. The efforts of this group have resulted in a sharpened focus for the way ahead. No matter how you interpret the report or its recommendations, one message comes through with great clarity: Everyone agrees that NextGen can't come soon enough.

Just about everyone involved — from the Congress to the aviation community — has been struggling to define the future of the National Airspace System. For years, we were criticized for not pinning down requirements. Then the critics focused on an inability to meet schedules. Then the criticism shifted to “I-wasn't-part-of-the-design-team.” Mixed in there was a drumbeat of thinking too small and alternatively, thinking too big.

But even with all of that said, I'm hopeful that the work of the Task Force will put all of this to rest.

We need to keep in mind the need for a sense of urgency. We have to get this launched. We need consensus. We need mutual understanding, trust and commitment. The FAA has to say, “We're going to do X,” and then we have to make good on our word. And the user community has to say, “We're going to do our part,” and then it has to do it — whether that be equip or train or participate in other ways in the rollout of NextGen capabilities.

I think the Task Force report puts us in the place we need to be. But I can't say this strongly enough: This is not a reality TV show. That *really* is the *taxpayer* sitting there 16<sup>th</sup> in line. That *really* is *Congress* waiting there on the tarmac. The reality is — we need to fix that.

I've flown enough to know that NextGen is a success story waiting to happen. We need to advance well beyond the preliminaries. We as a group need to commit together to giving it the juice it needs. Lest there be any doubt, I'm making



(Photo by Mark Cavich, Access Intelligence)

that commitment for the FAA right here, right now. And I have the support of the Secretary and the President. They want this up and running, and they are fully supportive. The green light can't get any greener than that.

As I said a moment ago, I'm confident that the report which brings us here is going to give us the lift we need to get NextGen in the air.

The Task Force has forged a consensus across a wide spectrum of users, and I applaud you for

that. This is an excellent head start. You've given us a short list of recommended operational capabilities. Task Force efforts have provided us with a unique opportunity to align our implementation plan with the desires of the aviation community.

The report contains several important themes. But most importantly, I think the report gives us the traction we need to build confidence in the FAA's ability to deliver early benefits. When we show that we can, will and do deliver the goods, the rest will come naturally.

The report also points to the need for delivering NextGen capabilities where they matter. RNP and RNAV approaches are good. RNP and RNAV approaches in high traffic areas are great. We need to be candid with ourselves. We've got a lot of these approaches, but we've got a lot of them that aren't in the right spots.

For those who worry that the FAA is focusing on near-term expediencies at the expense of longer-term deliverables, let me assure you that is not the case. The focus of the Task Force was maximum benefit from today's tools. NextGen requires us to forge ahead with delivery of tomorrow's capabilities and we have every intention of doing that. ADS-B is a case in point. Lessons learned from implementing the recommendations of this Task Force will help us derive maximum benefit from ADS-B once the supporting infrastructure and standards are in place.

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recommended operational capabilities essentially lays out an airport/metroplex-centric approach to implementing NextGen.

The report makes another critical point: closing the business case for those capabilities requiring substantial investments requires attention to the institutional processes such as certification, procedures development, operational approvals and training, as well as the purchase and installation of new technologies. These challenges are listed in the supporting data that accompanies the report. The Task Force identified four overarching recommendations deemed so critical to the successful implementation of all capabilities that they were documented in the body of the report. These recommendations are: 1) Achieving existing 3- and 5-mile separation, 2) Streamlining the Operations Approval process, 3) Incentivizing equipage, and 4) Establishing a robust post-Task Force collaboration.

The Task Force followed a clearly defined set of guiding principles aimed at transparency and data-driven prioritization. Members first considered candidate operational capabilities that take advantage of existing equipage that could evolve to capabilities using more sophisticated technologies over

time. All capabilities considered had at least one operator committed to invest in its implementation, and all capabilities identified the location and timeframe for

delivery of benefit.

A robust assessment process was established and used to assess the value of all candidate operational capabilities.

Known benefits, costs and risks were captured and enabled the Task Force to look at the relative value of all capabilities. An evaluation matrix was used to capture the benefits, costs, risks, readiness and other assessments of each candidate operational capability. The evaluation matrix was a key tool in the final prioritization and recommendations of this Task Force. All assessment information has been captured in the Task Force knowledge base that was delivered to the FAA along with the recommendations.

Importantly, to maintain the momentum created by the work of the Task Force and to facilitate holding the community consensus intact through the implementation of NextGen, the Task Force recommends that the FAA and industry establish institutional mechanisms to facilitate continued transparency and collaboration in the planning and implementation of future activities.

The complete report of the NextGen Mid-Term Implementation Task Force is available in the RTCA On-Line Store (free download for RTCA members) at [www.rtca.org](http://www.rtca.org). ❖

### Task Force Recommendations Chart a Course to the Successful Implementation of NextGen

- It's not about Technology; it's about Operational Capability
- Each Step Designed to Improve the Performance of the NAS
- Is Specific about **What , Where, Who, and When**
- Focuses on Major Airports in Metropolitan Areas
- Captures Commitments to Invest from Operators
- Priorities are Driven by Financial and Operations Analysis and Data
- Leverages Current Equipage to Provide Early Benefits
- Proposes Financial Incentives for Technology only if Tied to Benefits
- Addresses Institutional Challenges to Enhance Confidence in Outcome
- Establishes Institutional Mechanism to Follow Up

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Essential to Improving the Nation's  
Air Transportation System**

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**Dates: December 2-4, 2009**

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Contact Randy Zmuda at (202) 333-8070 ext. 7125 and mention RTCA

**Location:** RTCA's Offices—1828 L St., NW, Washington, DC 20036. **Time:** Classes start at 9am and run until 5pm.

**Questions? Contact Ray Glennon 202-330-0652 and [rglennon@rtca.org](mailto:rglennon@rtca.org)**



# RTCA Welcomes New Members

## **AeroConnex LLC**

**Mr. Stephen Kong**

AeroConnex, LLC is an aviation satellite communications company specializing in assisting avionics companies, airframe manufacturers and airlines with various efforts in integration, consultancy and software applications development. **Seattle, WA**

## **American Kestrel Company, LLC**

**Mr. David Parkins**

American Kestrel provides consulting services supporting the development and certification of aircraft ice protection technologies. American Kestrel has an FAA Designated Engineering Representative (DER), mechanical systems, specializing in ice protection systems on staff. **Ithaca, NY**

## **Auburn University**

**Mr. Henry Brudg**

Auburn University has been actively involved in aviation education since 1941, and has consistently been a leader in aviation education and research. Auburn's aviation programs are accredited by the Aviation Accreditation Board International (AABI). Auburn University owns and operates the 423-acre Auburn-Ope-likka Robert G. Pitts Airport, providing flight education and fuel, maintenance, and airplane storage. The Auburn University Aviation Department is fully certified by the FAA as an Air Agency with examining authority for private, commercial, instrument, and multi-engine courses. **Auburn, AL**

## **Beacon Management Group**

**Mr. Bill Sears**

Beacon Management Group specializes in organizational transformation management services to the government, private and advocate sectors. Services include partnership management, communications outreach, knowledge management, strategic planning, and

program management. Beacon is proud of our involvement in NextGen since 2003. **Bowie, MD**

## **BeneChill, Inc.**

**Ms. Nevine Erian**

BeneChill, Inc. is a start-up medical device company that is developing a medical device for cardiac arrest and stroke patients for use in ambulances and emergency helicopters. **San Diego, CA**

## **Integrity Engineering, Inc.**

**Mr. Durward Rutledge**

Integrity Engineering®, Inc. is a Texas-based, registered professional engineering firm with a particular emphasis on fixed and rotary wing aircraft, airworthiness, crashworthiness, environmental and EME compliance, and integrity program "integrity engineering" -- a registered mark by Integrity Engineering®, Inc. **Richardson, TX**

## **LSP, Incorporated**

**Ms. Yasuyo Yoshinaga**

LSP, Incorporated is a certification consulting company for Part 23 & Part 25 Aircraft. LSP is the first company to conduct FAA DO-178B S/W training in Japan. Their services for FAA Certification specialize in Boeing, Airbus, corporate jets and rotorcrafts. **Saitama City, JAPAN**

## **Overseas Aircraft Support, Inc.**

**Mr. John Boucher**

Overseas Aircraft Support, Inc. re-manufactures Bell Medium Helicopters for increased performance in the airframe, dynamic components and avionics. They develop modifications based on their STC (H7SO) and install, configure and train on state-of-the-art avionics and NVG capabilities. **Lakeside, AZ**

## **RTD Embedded Technologies, Inc.**

**Mr. James Blazer**

RTD Embedded Technologies, Inc. specializes in the design and manufacture of embedded computer hardware, software and systems. Their mission is to create innovative, quality computer, data acquisition and control products for industrial, military, transportation, and aerospace applications. **State College, PA**

## **Scire Consultants LLC**

**Mr. Mark Contarino**

Scire Consultants LLC is a small research-oriented consulting firm that was recently awarded a contract through ONR to work together with DoD, FAA and DHS to build and advocate an all-weather sense and avoid platform for unmanned aircraft. **Philadelphia, PA**

## **The Institute of Image and Graphics, Sichuan University**

**Professor Feng Zi-Liang**

The Institute of Image and Graphics, Sichuan University, specializes in researching computer graphics and images processing, concentrating in the fields of air traffic control systems, intelligent transportation, 3D simulation, machine vision, synthetic vision and enhanced systems. **Sichuan, P.R. China**

## **Tri-Angle-Group, Inc.**

**Mr. Thomas Kerr**

Tri-Angle-Group, Inc. is a startup company owned by Mr. Thomas Kerr, who designed an Emergency Locator Transmitter (ELT). Mr. Kerr formerly was the Engineering Project Manager for Artex Aircraft Supplies. **Canby, OR**

## **XMobots Robotics Systems**

**Mr. Giovanni Amianti**

XMobots is a company specialized in developing, manufacturing, training, maintaining and operating unmanned systems, including UAVs, AUVs, ROVs, USVs, UGVs and Ground Control Stations. **São Paulo, BRAZIL**

SC-221 met on September 15-16, 2009 at RTCA. The committee is tasked to develop guidance recommendations concerning compliance to FAR 121.584. This document is expected to contain design characteristics, performance criteria, and installation and certification guidance. Recommended procedures for use of the physical secondary barrier will also be included. The committee will review the existing procedures of various carriers in order to develop a set of standards and to determine compliance with FAR 121.584. The

expected completion date is December 2010.

The Alternate Means Working Group of the committee reported on their recent meeting to collect data and evaluate the bi-fold flight deck door hosted by American Airlines. While a bi-fold door is more complex than a solid door, when properly maintained and operating normally, there is little difference between it and a solid door. Several test runs were completed to determine the average velocity of a person rushing the flight deck. The evaluation documented the variables

included in the time to close and secure the door in response to commands and cabin events. Additional evaluations are planned. ❖

**The next meeting is scheduled for December 9-10, 2009 at RTCA.**

**Co-Chairmen:**

Edwin Folsom, United Airlines  
Richard (Rick) Schiefelbein,  
The Boeing Company

**RTCA Program Director:**

Harold Moses, hmoses@rtca.org

*Babbitt continued from Page 3*

We're also focusing on the human element. Across the country already, we're putting people in place throughout our Aviation Safety organization — NextGen specialists, whose job it is to facilitate understanding of the big picture. They're going to make sure that the approval aspects of NextGen are in gear. They're going to make sure that our workforce sees and knows and understands where we're headed with

NextGen. Let's face it: equipment and procedures aren't going to amount to much if the players don't know where it all fits and how it all works. I'm going to make sure that when NextGen shows up at the door that our safety workforce knows exactly what's in the box.

I must emphasize that you, the industry, have spoken. You have provided a set of recommendations that is clear, actionable, and achievable. While this might require us to modify our cur-

rent plans and processes, we are ready to commit appropriate resources and get to work on implementation of Task Force recommendations.

Let me close by thanking the Task Force for your personal time, commitment and effort in making this happen. When we look back a few years from now, we're going to see this report as a turning point — not just for technology but for the whole of aviation as well. Thank you for your service to the flying public. ❖



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**Register online • [www.rtca.org](http://www.rtca.org)**

Questions? Contact: Ray Glennon 202-330-0652 and [rglennon@rtca.org](mailto:rglennon@rtca.org)

SC-206/WG-76 met in Geneva, Switzerland on September 14 – 18, 2009.

The development of performance standards for data linked meteorological (MET) and aeronautical information services (AIS) is a task of RTCA and EUROCAE, its European counterpart.

SC-206 deliverables include an overall Concept of Operations (Con-Ops) document (*Operational Services and Environment Definition (OSED) for Aeronautical Information Services (AIS) and Meteorological (MET) Data Link Services*, published as DO-308 in December 2007), a systems safety / requirements document (SPR document) scheduled to be adopted in fall 2010, and link independent MASPS & MOPS that will likely reference the various Link-MOPS.

The joint committee SC-206/WG-76 is leading the effort to develop standards for data linking MET & AIS information to the flight deck. Overall, the SC-206/WG-76 philosophy embraces the notion that users need no longer rely only on voice and text communications, as graphical products are likely to communicate more effectively in many situations, especially during high stress situations and during the most critical phases of flight. Equally important, data-linked up-to-the-minute information is better than old weather data. In addition, ground and

airborne users — pilots, dispatchers, and controllers — all need to have access to much of the same information at the same time, so as to achieve common shared situational awareness. It should be noted that there are some situations where voice may still be more reliable and effective, e.g., a microburst warning on a 3-mile final.

The September meeting made substantial progress in paving the way to the completion of the SPR for FRAC by June 2010 and in supporting SC-214 as it is nearing completion of their work related to SC-206.

The scope of SC-206 / WG-76's on-going activities includes ground-to-air, air-to-ground, and air-to-air MET data link (DL). The AIS-DL portion of their effort differs slightly in that it has primarily a ground-to-air focus.

Coordination with other RTCA, EUROCAE, SAE G-10 and AEEC activities is on-going. For example, while SC-206 is working on the overall effort, RTCA's SC-214 is working on developing standards for data linking selected AIS & MET textual messages. SC-186 is exploring additions to both the 1090 MHz and UAT ADS-B data links to report MET information that could be useful for wake vortex avoidance and optimizing arrival traffic flows. As a newly approved Special Committee, SC-223's Terms of Reference focuses on developing a protocol for high-

speed airport surface communications, using the IEEE 802.16e data link that, someday, may enable on-board AIS data bases to be replaced with updated versions, prior to departure. (SC-206 hopes to leverage this and other "Link MOPS" already developed or that currently are in development in its planned standards work, especially since the SC-206 documents are link-agnostic.)

SC-206 is also working with SC-217 to harmonize terrain, obstacle and aerodrome mapping requirements with data link capabilities. For example, an early AIS data link application is data linking aerodrome Notices to Airmen (NOTAM) "overlays" to the cockpit. This application is targeted at improving airport safety by providing better information to crews while taxiing. In a similar fashion, SC-206 is teaming with SAE G-10 to develop the necessary human factors guidance for both AIS & MET products. ❖

**The next meeting is scheduled for December 7 – 11, 2009 at the NASA Space Center in Houston, Texas.**

#### Chairmen:

Steve Henely, Rockwell Collins, Inc.  
Jim Terpstra, Jeppesen Consultant  
Stephane Dubet, SIA

#### RTCA Program Director:

Rudy Ruana, rruana@rtca.org

## The Quincy Offers Negotiated Hotel Rate to RTCA

The Quincy, located directly across the street from RTCA at 1823 L Street, NW has agreed to extend the prevailing Government per diem rate to travelers participating in RTCA meetings for 2009 and 2010.

To receive the special rate, guests must mention RTCA, Inc. and make reservations directly with the **Reservations Manager Ethiopia Mekonnen** at 202-833-8639 ext. 7050, or by email at [reservations@thequincy.com](mailto:reservations@thequincy.com).

# NEW DOCUMENTS

To order documents, visit RTCA's online store at [www.rtca.org](http://www.rtca.org). RTCA Members and Associates may download documents at no cost and also receive a 60% discount for hardcopy orders.

## RTCA Task Force 5 - NextGen Mid-Term Implementation Task Force Report

This report documents the community-wide consensus on the recommended NextGen operational capabilities to be implemented during the transition between now and 2018. Over 300 stakeholders participated in the development of this report. Each operational capability recommended defines the associated "What," "Where," "Who," and "When." The report further recommends strategies for accelerating benefits and strategies for encouraging equipage. Several overarching recommendations aimed at facilitating the transition to NextGen are also documented in this report, including streamlining the operations approval process, and establishing effective institutional mechanisms for post-Task Force government and industry collaboration.

Issued 09-09-09 Prepared by RTCA Task Force 5

## RTCA Task Force 5 - NextGen Mid-Term Implementation Task Force Report- Data Files

The Data Files are the supporting information for the NextGen Mid-Term Implementation Task Force Report. The Data

Files are only available as an electronic download.

Issued 09-09-09 • Prepared by RTCA Task Force 5

## DO-318, Safety, Performance and Interoperability Requirements Document for Enhanced Air Traffic Services in Radar-Controlled Areas Using ADS-B Surveillance (ADS-B-RAD)

This document defines and allocates a set of minimum requirements for the end-to-end operational, safety, performance and interoperability aspects for the implementations of the ADS-B-RAD application. These requirements are necessary to provide adequate assurance that the elements of the relevant Communication, Navigation, and Surveillance and Air Traffic Management (CNS/ATM) system, when operating together, will perform their intended function in an acceptably safe manner for the operations defined in the Operational Services and Environment Definition (OSED). This system includes ground and airborne elements. In addition, the document defines ADS-B requirements applicable to dense airspaces such as those found in Europe and the USA.

Issued 09-09-09 • Prepared by SC-186

# Calendar of Events

The Most Up-To-Date Calendar is at [www.rtca.org](http://www.rtca.org)

## October 09

- 1 SC-159/WG-4 GPS LAAS
- 2 SC-159 Plenary GPS
- 5 - 9 SC-186 ADS-B Week
- 5 - 6 SC-186/WG-3 1090 MHz MOPS
- 6 - 8 SC-186/WG-1 ATSA SURF 1A
- 7 SC-186/WG-3 1090 MHz MOPS
- 7-8 SC-186/WG-3 & WG-5 1090 MHz MOPS and UAT MOPS
- 9 SC-186 Plenary Joint with EUROCAE WG-51
- 12 SC-203 LDS
- 13 SC-203 Plenary/WGs
- 14-15 SC-203 WGs
- 14-16 SC-220 Wichita, KS

## October 09

- 26-30 SC-205/WG-71 Paris, France
- 26 SC-135 - Working Group Environmental Test
- 27 SC-135- Working Groups Environmental Test
- 28-30 SC-135 - Plenary Environmental Test
- 28-30 SC-217/WG-44 Seattle, WA

## November 09

- 3 - 4 SC-223 Plenary
- 3 - 5 SC-213/WG-79 Dassault Aviation Paris, France, tentatively
- 16-19 SC-216 Plenary
- 17-18 SC-222

## December 09

- 1 SC-186 / WG-1 SURF 1A
- 2-3 SC-186 / WG-1 SURF 1A
- 2 PMC
- 2-4 DO-254 Training Course (Fee to Attend)
- 7-11 SC-214 (tentative)
- 7-11 SC-206/WG-76 Houston, NASA Space Center
- 9-10 SC-221 Secondary Barriers
- 9-11 DO-178B Training Course (Fee to Attend)
- 17 SC-186

Unless otherwise specified, all meetings will be held at RTCA, Inc., 1828 L Street NW, Suite 805, Washington, DC 20036 USA. Phone: (202) 833-9339. Fax: (202) 833-9434. The information in this calendar is deemed to be reliable as of the date of publication, but is not guaranteed and is subject to change. Please contact RTCA for updates. All RTCA Federal advisory committee meetings are open to the public and are free of charge. Visit our Web site at [www.rtca.org](http://www.rtca.org) for current schedules of SC meetings, WG meetings and other upcoming events. If you have questions, contact RTCA ([info@rtca.org](mailto:info@rtca.org)).

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