

RTCA, Incorporated  
1140 Connecticut Avenue, NW, Suite 1020  
Washington, DC 20036-4008 USA

# **GOVERNMENT AND INDUSTRY GUIDELINES AND CONCEPTS FOR NAS ANALYSIS AND REDESIGN**

- Volume I: User Priorities for the National  
Airspace Redesign**
- Volume II: High Altitude Airspace Concept**
- Volume III: Recommendations on Special Use  
Airspace in National Airspace Redesign**

Copies of this document may be obtained from

RTCA, Inc.  
1140 Connecticut Avenue, NW, Suite 1020  
Washington, DC 20036-4008 USA

Telephone: 202-833-9339  
Facsimile: 202-833-9434  
Internet: [www.rtca.org](http://www.rtca.org)

Please call RTCA for price and ordering information.

## FORWARD

This report was prepared by Special Committee 192 (SC-192) and approved by the RTCA Program Management Committee (PMC) on December 14, 2000.

RTCA, Incorporated is a not-for-profit corporation formed to advance the art and science of aviation and aviation electronic systems for the benefit of the public. The organization functions as a federal Advisory Committee and develops consensus based recommendations on contemporary aviation issues. RTCA's objectives include but are not limited to:

- coalescing aviation system user and provider technical requirements in a manner that helps government and industry meet their mutual objectives and responsibilities;
- analyzing and recommending solutions to the system technical issues that aviation faces as it continues to pursue increased safety, system capacity and efficiency;
- developing consensus on the application of pertinent technology to fulfill user and provider requirements, including development of minimum operational performance standards for electronic systems and equipment that support aviation; and
- assisting in developing the appropriate technical material upon which positions for the International Civil Aviation Organization and the International Telecommunications Union and other appropriate international organizations can be based.

The organization's recommendations are often used as the basis for government and private sector decisions as well as the foundation for many Federal Aviation Administration Technical Standard Orders.

Since RTCA is not an official agency of the United States Government, its recommendations may not be regarded as statements of the official policy unless so enunciated by the U.S. government organization or agency having statutory jurisdiction over any matters to which the recommendations relate.

This page intentionally left blank.

## EXECUTIVE SUMMARY

The Air Traffic Services organization of the Federal Aviation Administration (FAA) is conducting a review of the airspace resources in the NAS. The objectives of this review include developing a cohesive plan for managing airspace changes, establishing and directing a financial plan to meet airspace priorities, establishing standards for modeling and analysis, and developing strategies for environmental assessment of airspace changes. Representation from the user community and industry is critical in completing these challenging objectives.

RTCA Special Committee 192, National Airspace Redesign Planning and Analysis was established to continue to provide guidance, direction, and recommendations to the FAA's review, redesign, and management of the national airspace. Airspace issues associated with free flight implementation were to be considered in developing all of the guidance and recommendations.

### BACKGROUND

This document identifies all known types of airspace users and describes how each of the current and future users is affected by special use airspace (SUA). It includes a vision of the future airspace system and the role SUA will play in the future NAS. The document ends with recommendations for making SUA more flexible and efficient. The document should be used in conjunction with the concepts described in the previous RTCA SC-192 report, *Government and Industry Guidelines and Concepts for NAS Analysis and Redesign*, RTCA's *Government/Industry Operational Concept for the Evolution of Free Flight* and RTCA's *Task Force 3 Final Report*.

The Department of Defense (DoD) and other SUA using agencies use various forms of special use airspace to separate non-participating aircraft from both hazardous and non-hazardous training and test activities. In order to conduct the necessary training to maintain readiness, the military requires SUA and will continue to do so for the foreseeable future. However, new, faster aircraft and longer-range weapons are changing the manner and the frequency of SUA use.

### SUMMARY OF COMMITTEE RESULTS

This document contains three volumes and represents the products of two work groups of Special Committee 192: National Airspace Review Planning and Analysis. Volume I, entitled *User Priorities for the National Airspace Redesign*, describes the user priorities for the review and redesign of the airspace resources in the National Airspace System (NAS). Not listed in order of importance, these priorities include concepts for a national airspace assessment and redesign that addresses significant change to matters pertaining to the national airspace by the year 2005. Volume II entitled *High Altitude Airspace Concept*, describes an airspace structure within which the FAA could begin to implement many of the Free Flight concepts. Volume III, entitled *Recommendations on Special Use Airspace in National Airspace Redesign*, identifies needs of current users for access to and/or the use of Special Use Airspace. It recommends steps that the FAA could take improve access for all stakeholders to inactive Special Use Airspace.

### VOLUME I SUMMARY

This document contains the recommendations of Working Group One. It addresses the user priorities for the National Airspace Redesign and assesses these priorities and recommendations against the initial SC-192 recommendations.

#### User Meetings

To expand the scope of user input outside of the committee members, the working group decided to hold a series of user meetings throughout the continental United States. The context of the user