THE AUTHORITY OF AGREEMENT

A History of RTCA

by William G. Osmun

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To the engineers, technicians, pilots, and others who have spent endless hours around the conference table forging agreement out of conflicting desires—so that we might enjoy the benefits of technological progress in air transportation.

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FOREWORD

William Osmun, a professional writer of note and a longtime observer of RTCA activity, researched and wrote this volume under contract with RTCA. He was given unfettered access to RTCA historical records; he was also given complete freedom to interpret events as he saw them. The views expressed in this narrative, therefore, are his and do not necessarily represent those of RTCA.



William C. Fuchs
Acting Chairman

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This work is the product of many people, for whose help I am truly grateful. While the writing is mine, as is the responsibility for its imperfections, I have depended on many people for the help that has made this work possible.

For example, there is nothing unusual about the fact that this manuscript has been produced using a computer with word processing software. Nor should it be surprising to some that a relational data base was most helpful in organizing the research covering fifty years of minutes and committee reports. Yet the fact that I had none of these and knew next to nothing about them when I began this history underscores how much I had to learn before I could produce the final manuscript. For his generous help and support throughout that entire learning process, I am deeply grateful to George Bonina, member and former president of my computer users group.

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INTRODUCTION

The Radio Technical Commission for Aeronautics is a unique organization. Although its recommendations have achieved world-wide acceptance, their only authority is the process by which they are developed. This authority of agreement[1] was aptly described by RTCA Chairman J. H. Dellinger at Indianapolis in November, 1948. In a briefing for representatives of the aviation community invited to a demonstration of the transition elements of the RTCA-recommended Common System of Air Traffic Control, Dellinger said:

> "The RTCA has no powers of enforcement; incidentally, I hope it never will. It recommends only, but its recommendations are backed by all interests as a result of their participation in the formulation of the recommendations. 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."

Throughout the past 50 years, RTCA has enjoyed successes and suffered setbacks. It has had to change its organization and its way of doing business, to cope with the ever-changing needs, goals, authority and attitudes of the government agencies and industry it serves. While the RTCA of 1985 is vastly

different from the informal group that met in Commerce Undersecretary Rex Martin's office June 19, 1935, the basic need it serves has not changed. A guiding agency is still necessary for efficient coordination of effort. To trace how this need has been met, to mark the major milestones along the way, and to identify RTCA's contributions to the aviation community is the goal of this history.

The subjects dealt with in RTCA recommendations, as well as the areas where RTCA's expertise has helped mold national decisions even without published recommendations, are numerous and varied. They range from system concepts for air traffic control or for a new approach and landing system, to the performance characteristics of specific types of airborne equipment; from a projection of future radio frequency requirements to studies of interference to aircraft navigation and communication equipment—whether from ground-based TV or FM broadcast stations, or from tape recorders, calculators or computers carried aboard civil aircraft.

It is not possible, within the scope of this history, to do justice to each of these efforts. In the appendices, the reader desiring a more complete view of the scope of RTCA's work will find a detailed list of RTCA committees, their areas of technical interest, the reports they have published, and the chairmen who led their efforts.