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**Minimum Operational Characteristics for
Vertical Guidance Equipment
Used in Airborne Volumetric Navigation Systems**

RTCA DO-152
March 17, 1972
Includes Appendix D

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FOREWORD

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PART ONE

CONCEPTS, PHILOSOPHY, AND DEVELOPMENT
OF MINIMUM OPERATIONAL CHARACTERISTICS (MOC's)
FOR AIRBORNE SYSTEMS

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SECTION I

THE NEED FOR BASIC CHARACTERISTICS FOR NAVIGATION AND COMMUNICATION SYSTEMS USED IN AIR TRAFFIC CONTROL (ATC)

Many devices carried aboard aircraft to fulfill navigation, communication and ATC requirements are important not only to the aircraft itself and its occupants, but can have an effect on other aircraft sharing the airspace. The latter is particularly true when the airborne devices are used to transmit, receive or share intelligence in communication or navigation media in common usage. Agreement must exist on the minimum operational characteristics necessary not only to assure satisfactory performance for each aircraft but also to prevent derogation of the service being provided to other users or recipients of communication or navigation services.

Promulgation of basic characteristics of these systems, or System Characteristics, upon which the minimum operational characteristics for the airborne element must be based, has in the past often lagged implementation of systems by unacceptable periods of time; yet their timely issuance is necessary so that participants in the systems will know how properly to equip themselves.

If a satisfactory air navigation, communication and traffic control service is to be provided, a clear statement of minimum operational characteristics for airborne systems must be agreed upon and must be adhered to by all participants in the system. For example, where separation between aircraft is achieved based on assumptions of certain characteristics of the individual aircraft devices, minimum requirements for these devices are needed, in order to assure adequate separation of one aircraft from another.