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**Minimum Operational Performance Standards
(MOPS) for Surveillance Transmit
Processing (STP)**

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FOREWORD

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1 PURPOSE AND SCOPE

1.1 Introduction

This document contains Minimum Operational Performance Standards (MOPS) for *Surveillance Transmit Processing (STP)*.¹ These standards specify system characteristics that should be useful to designers, manufacturers, installers and users of the equipment.

These MOPS for STP contain requirements for interfacing ADS-B avionics to on-board position sources such as GPS and Flight Management Systems. Proper integration and installation of ADS-B equipment into aircraft is essential to successful implementation of ADS-B air-to-ground and air-to-air applications.

Compliance with these standards is recommended as one means of assuring that the equipment will perform its intended function(s) satisfactorily under all conditions normally encountered in routine aeronautical operation. Any regulatory application of this document is the sole responsibility of appropriate governmental agencies.

Section 1 of this document provides information needed to understand the rationale for equipment characteristics and requirements stated in the remaining sections. It describes typical equipment operations and operation goals, as envisioned by the members of RTCA Special Committee **186**, and establishes the basis for the standards stated in sections 2 through 3. Definitions and assumptions essential to proper understanding of this document are also provided in this section.

Section 2 contains the Minimum Performance Standards for the equipment. These standards specify the required performance under standard environmental conditions. Also included are recommended bench test procedures necessary to demonstrate equipment compliance with the stated minimum requirements.

Section 3 describes the performance required of installed equipment. Tests for the installed equipment are included when performance cannot be adequately determined through bench testing.

Section 4 describes the operational performance characteristics for equipment installations and defines conditions that will assure the equipment user that operations can be conducted safely and reliably in the expected operational environment.

These MOPS specify functional requirements for Surveillance Transmit Processing (STP). Operational performance standards for functions or components that refer to equipment capabilities that exceed the stated minimum requirements are identified as optional features.

The word “function” as used in this document includes all components and units necessary for the system to properly perform its intended function(s). For example, the “function” may be implemented in hardware or software, as appropriate, and the function

¹ Bold-italic text in this Guide pertains to the specific equipment described in the MOPS and provides guidance on what type of text needs to be developed.