

**DRAFT**

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**RTCA SC-186/WG-6 (Working Group on DO-242A MASPS)  
Meeting #12, Arlington VA**

**Text Proposal for DO-242A  
To Clarify TCR Material**

Submitted by  
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**Summary**

There has been much debate over the proposals to add TSR and TCR requirements to the MASPS, trying to balance two important objectives. One is a desire to advance the development of free flight using air-to-air deconfliction and related technology. The other objective is to avoid premature requirements that might lead to unnecessary avionics changes and costly future corrections.

WG-6 has done an excellent job bringing together a number of points of view, leading toward a specifically worded proposal for changes to DO-242. This paper proposes text for section 2.4.8.1, intending to create an appropriate balance between these two important objectives. In summary, this text is intended to make it clear that TCR material is not being required, whereas it is being presented in DO-242A specifically and for certain stated reasons.

## **Text Proposal for DO-242A To Clarify TCR Material**

There has been much debate over the proposals to add TSR and TCR requirements to the MASPS, trying to balance two important objectives. One is a desire to advance the development of free flight using air-to-air deconfliction and related technology. The other objective is to avoid premature requirements that might lead to unnecessary avionics changes and costly future corrections.

WG-6 has done an excellent job responding to many proposals to improve the MASPS. Consideration of many proposals has resulted in cleanly worded MASPS changes to present for adoption. For most of these, through your efforts, the members of SC-186 have now had a chance to consider the different points of view and are ready to adopt the standards.

But the intent changes are different. Looking at the background, we realize that the intent standards currently in the MASPS were adopted prematurely. It is widely agreed that they must be changed.

Looking at the new intent proposals, we recognize that it has not been easy for WG-6 to find an acceptable balance between the two main objectives. We realize that you had planned to make the new material informative rather than normative, until receiving a very strong objection using the term “non-concur”. We understand that you are now following the other course, preparing specific wording that would make at least some of the new intent material actual requirements, so that all members of SC-186 will have the specific proposal in hand.

In our view, the newest material, specifically TCR, is not yet mature enough to make it into rigid requirements. To be specific, we are proposing the following wording for section 3.4.8.1.

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### **3.4.8.1 Conditions for Transmitting TCR Information**

TCR communication in ADS-B is intended to provide information about the future trajectory of the broadcasting aircraft, beyond a TSR. It is anticipated that multiple TCRs will be useful in some cases, and ADS-B standards are being developed to support this communication. The specific standards in sections 3.4.8 and its subsections indicate the detailed contents of TCRs and standards for timely communication, according to the best information available at the time of adoption of this version of the ADS-B MASPS. TCR provisions are not requirements at this time, but are documented here in detail for the purpose of providing a specific basis for further development of deconfliction applications, and for the development of FMS and other avionics that will be needed to support deconfliction.

Change in section 3.4.8.3, second paragraph,  
change, “shall (R3.22) contain”  
to  
“contains”

Change in section 3.4.8.4, final paragraph,  
change, “shall (R3.xx) be”  
to  
“is”

Change in section 3.4.8.5, final paragraph,  
change, “shall (R3.xx) reset”  
to  
“resets”

As an editorial matter, several additional changes of this type are needed in the sections that follow.