
**Airport Map database arguments in
support of ADS-B MASPS Revision A,
Issue Paper 18 - Heading at VStop**

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**Presentation from SC-193 WG-3 to SC-186 Ad Hoc
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Objectives

- **Heading at VStop - What is it?**
- **Demonstrate why it is important to envisioned Airport Map Database Applications**
- **Review of ADS-B MASPS Rev. A. Criteria for Issue Papers. Restate why IP18 - Heading at VStop - is consistent with criteria, and therefore should be included in DO-242 MASPS.**

Definition

➤ Heading at VStop - What is it?

Heading at VStop refers to the reporting of aircraft heading information when the aircraft is stopped (queueing, holding short, waiting for ground clearance, taxi stopped, parked at gate, etc.) Currently, there is no firm requirement (in the ADS-B MASPS) guaranteeing that this data will be available when the aircraft is at VStop.

Limitations of Reporting

What are the limitations of reporting this information:

➔ **For a complete technical description, see RTCA SC-186**

➔ **Current understanding:**

Because GPS velocity is computed from a differencing function, there are technical issues with reporting this velocity below a minimum threshold, which impacts data assurance [of heading information] in the ADS-B message.

Why envisioned AMDB applications are impacted?

What Airport map applications, as defined in the RTCA SC-193/EUROCAE WG44 Appendix list of applications, are impacted by the [lack of] this information element?

☞ surveillance and conflict/runway incursion detection/alerting

☞ Route/hold-short depiction and deviation detection/alerting