# TERMS OF REFERENCE (Initial)

# **Special Committee 218**

# FUTURE ADS-B / TCAS RELATIONSHIPS

#### 1. SPECIAL COMMITTEE VOLUNTEER LEADERSHIP

	Co-Chairman	Co-Chairman	Designated Federal Official
Person	Paul Fontaine	Larry Newman	Mike Frank
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#### 2. DELIVERABLES

PRODUCT DUE DATE

1. Report: Assessment, Operational Concept, and Recommendations on the Future Relationship Between ADS-B and TCAS

Dec 2009

### 3. TERMINATION OF COMMITTEE

The activities of Special Committee 218 will terminate with approval by the PMC of the committee's final document. Any change/extension of a committee's work program requires prior PMC approval.

#### 4. NAS ARCHITECTURE LINKAGE

# 5. REQUIREMENTS ASSESSMENT

# 6. TERMS OF REFERENCE

a. Special Committee 218 shall assess the needed relationship in the National
Airspace System (NAS) between TCAS and ADS-B in 2020-2025, taking into
consideration anticipated air traffic density in that time frame. The Special
Committee shall further develop concepts for how TCAS and ADS-B

interoperate, with emphasis on operational concepts and technical strategy. The Special Committee shall formulate recommendations for FAA and industry actions to further develop and implement the concepts and strategy proposed by the Special Committee. The Special Committee shall develop a timeline for recommended actions, with special emphasis on the formulation and scheduling of key decision points.

- b. Topics to be considered by the Special Committee shall include the following:
  - 1. The degree to which TCAS or another future collision avoidance system should remain relatively independent of separation assurance mechanisms in the NAS:
  - 2. The use of ADS-B data by TCAS;
  - 3. The use of ADS-B messages to communicate TCAS-related status and events, including to support TCAS monitoring by FAA ground systems;
  - 4. Additional ADS-B message parameters or additional information in responses to TCAS interrogations which may further support the collision avoidance function;
  - 5. How the collision avoidance function should be implemented to support future high density terminal operations;
  - 6. The degree to which airspace users will need to retain Mode A/C/S transponders to support TCAS interrogations and potential time frames for equipage changes.
- c. Special Committee 218 shall develop a Report on its assessment, concepts and strategy, and recommendations.

#### 7. GUIDANCE

- a. Special Committee 218 will present an Interim Report on its progress to the PMC by December 2008.
- b. Special Committee 218 should coordinate as necessary with ICAO, EUROCONTROL, EUROCAE, IATA, the FAA TCAS and SBS Program Offices, and any other interested parties.