

<i>Last Updated</i>	<i>Total Count</i>	<i>Open Items</i>	<i>Closed Items</i>	<i>Deferred</i>
5/31/2006	20	20	0	0

Open Items:

<b>No.</b>	<b>Issue Item</b>	<b>Resolution</b>	<b>Status Open/ Closed</b>
1	Which applications are included in this version of ASSAP?	<p>The ASSAP MOPS will be compliant with the ASA MASPS. Regarding which applications are going to be included, we have to follow the direction of the SC186 Program Management Committee. According to the Terms of Reference from the RTCA Program Management Committee (Revision 9), we have to:</p> <p>"1. Develop MASPS for Airborne Surveillance Applications (ASA), including detailed application descriptions and end-to-end requirements analysis, initially for the following applications, enabling codification of these applications:</p> <ul style="list-style-type: none"> <li>a) Conflict Detection</li> <li>b) Enhanced visual acquisition</li> <li>c) Enhanced visual approaches</li> <li>d) Runway and Final Approach Occupancy Awareness</li> <li>e) Airport Surface Situational Awareness</li> </ul> <p>... and:</p> <p>7. Develop MOPS for Airborne Separation Assistance Systems (ASAS) processing. Develop recommended definitions of Required Surveillance Performance (RSP). ASAS MOPS will specify</p>	

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		requirements for airborne surveillance processing, alerting and guidance algorithms, performance, cockpit display of traffic information (CDTI), and avionics interfaces ***in support of the applications specified in the ASA MASPS***. [My emphasis here.] The ASAS MOPS defines how TCAS, ADS-B, and TIS-B traffic is integrated on a CDTI display."	
2	Is TQL required in ASSAP?	For UAT MOPS DO-282 and 1090 MOPS DO-260, bits are reserved but the transmit equipment will not support these bits. However, basic and intermediate applications can use actual data quality parameters and current DO-242A requirements. (Reference: ASA MASPS, Table AE-2)	
3	Is ACL required in ASSAP?	For UAT MOPS DO-282 and 1090 MOPS DO-260 spare bits are available bur the transmit equipment will not support these bits. However, basic and intermediate applications need no knowledge of ACL to operate. (Reference: ASA MASPS, Table AE-2)	
4	Are control panel / pilot input sent via CDTI to ASSAP?	Yes, see ASA MASPS Figure 2-6 which illustrates the ASA system with emphasis on external interfaces..	
5	Should database inputs such as surface maps be defined in ASSAP?	No. According to ASA MASPS section 3.4.5: "The airport surface map is necessary to support the ASSA and FAROA applications for each airport where these applications are used. The subsystem that provides the airport surface maps is external to ASA system boundaries defined in this MASPS. Airport maps are assumed to be encoded into an electronic database." Database requirements are covered in other documents, e.g., DO-272, DO-257A. Is SC 206 providing requirements for the map??	
6	How do we define the minimum requirements for Application Processing?	There are two options: (1) Provide performance requirements, i.e. determine performance metrics with thresholds and tolerances that can be tested. This provides greater flexibility to the vendor. (2) Provide the algorithm along with test cases for design verification to be conducted on the real-time system. This is more desirable for	

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		coupled applications.  We have not made a decision yet how to proceed.	
7	Is the selection of an application external to the ASSAP?	This is not clear to me from the ASA MASPS:  1.3.7.1: Background applications are those applications that apply to all surveilled traffic of operational interest. These applications may be in use in some or all airspace (or on the ground), but without flight crew input or automated inout to select specific traffic. Background applications include EVacq, CD, ASSA, and FAROA. 1.3.7.2: Coupled applications are those applications that operate only on specifically- chosen (either by the flight crew or automation) traffic. They generally operate only for a specific flight operation.	
8	Is the ICAO address received via 1090 MHz unique?	ACSS argued that the ICAO address received on 1090 MHz is assumed to be unique per DO-260A, DO-181C, ED 73B, and ICAO Annex 10 Volume IV. Currently, DO-260 A relies on the reception of unambiguous addresses to assemble state reports received on multiple squitter messages. But there have been cases where duplicate addresses were observed. Find out where. What is the consequence?	
9	What is the tracking capacity (i.e., minimum number of tracks to be supported)?		
10	(1)What is the minimum number of tracks sent to the CDTI? (2) Should the prioritization/filtering take place in the ASSAP or CDTI? (3) What is the priority selection logic of tracks shown on the CDTI?	The ASA MASPS specifies that a minimum of 30 traffic symbols (R3.270) be supported by the CDTI. What is this number based on?  Should the filtering take place in the CDTI or ASSAP?  ACSS will provide paper on priority selection logic of displayed tracks.	
11	What logic should be used for Best Track Source Selection	See proposed paper from Joel Wichgers 5/16/2006	

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12	How are TIS-B/ADS-B/TCAS tracks correlated?	When ICAO addresses are not provided, use spatial correlation.	
13	When is a TCAS symbol shown on the CDTI?	More discussion needed. Coordinate with CDTI WG. One proposal: TCAS track is displayed when the correlating ADS-B or TIS-B falls outside the “Hybrid Surveillance” validation window. Concern: if displayed at different altitudes and TCAS resolution advisory indicates a climb/descent into ADS-B track, this could lead to confusion.	
14	Do we need to compensate for TIS-B latency?		
15	Are there any issues with receiving messages from multiple links for the same a/v (e.g., UAT and 1090)?		
16	Are there concerns with meeting ASA MASPS R3.210: Latency for the combination of ASSAP and the CDTI shall (R3.210) be less than 400 ms for targets that are used by coupled applications, targets against which there is an alert, and the 10 highest priority targets.		
17	Are there concerns with meeting ASA MASPS R3.188: Track estimation shall (R3.188) extrapolate all established tracks to a common time within one-second of delivery to ASA applications or the CDTI interface.		
18	Are there concerns with meeting ASA MASPS R3.178: The tracking function shall (R3.178) terminate a track when the maximum coast interval has been exceeded for all of the applications for which the track is potentially being used.		

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19	Are there concerns with meeting ASA MASPS p144: The maximum latency of the navigation data outputs to the ASA system will be less than 2 seconds (ASA MASPS, Page 144)		
20	What level of validation is required?	Unresolved. Check into DO-249.	