RTCA Special Committee 186, Working Group 5

ADS-B UAT MOPS

Meeting #12

Revision 1 of the Test Procedure Matrix for Review in Washington

Presented by Gary Furr

SUMMARY
This Draft of the Test Procedure Matrix corresponds to the versions of Sections 2.2 and 2.4 that will be reviewed in the Washington DC meeting. Yellow highlighting in the "Requirements" column means that there is still some question or TBD for that subparagraph. Yellow highlighting in the "Responsible" and "Written" columns means that there is still an open issue with the Test Procedure, or it has not yet been drafted.

TEST PROCEDURE DEVELOPMENT COVERAGE								
Item #	**Requirements Section**	**Short Title**	**Test Section**	**Responsible**	**Written**	**Reviewed**	**Complete**	**Re-Work Needed**
1	2.2	Equipment Performance – Standard Conditions	***No Test Required***					
2	2.2.1	Definition of Standard Conditions	***No Test Required***					
3	2.2.1.1	Signal Levels	***No Test Required***					
4	2.2.1.2	Desired Signals	***No Test Required***					
5	2.2.2	ADS-B Transmitter Characteristics	***No Test Required***					
6	2.2.2.1	Transmission Frequency	2.4.2.1	David Thomas	YES	YES	YES	
7	2.2.2.2	Modulation Rate	2.4.2.2	David Thomas	YES	YES	YES	
8	2.2.2.3	Modulation Type	2.4.2.3	David Thomas	YES	YES	YES	
9	2.2.2.4	Modulation Distortion	2.4.2.4	David Thomas	YES	YES	YES	
10	2.2.2.5	Transmitter Power Output	2.4.2.5	Tom Pagano	YES			
11	2.2.2.6	In Band Transmission Spectrum	2.4.2.6	Tom Pagano	Re-Done			
12	2.2.2.7	Out-of-Band Emissions	2.4.2.7	Tom Pagano	Re-Done			
13	2.2.3	Broadcast Message Characteristics	***No Test Required***					
14	2.2.3.1	ADS-B Message Format	***No Test Required***					
15	2.2.3.1.1	Synchronization	2.4.3.1.1	Tom Pagano	YES	YES	YES	
16	2.2.3.1.2	Payload	***No Test Required***					
17	2.2.3.1.3	FEC Parity	***No Test Required***					
18	2.2.3.1.3.1	Code Type	2.4.3.1.3.1	Ei Mon Phyu	Re-Done			
19	2.2.3.1.3.2	Generation and Transmission Order of FEC Parity	2.4.3.1.3.2	Ei Mon Phyu	Re-Done			
20	2.2.3.2	Ground Uplink Message Format	***No Test Required***					
21	2.2.3.2.1	Synchronization	***No Test Required***					
22	2.2.3.2.2	Payload (Before Interleaving and After De-Interleaving)	***No Test Required***					
23	2.2.3.2.2.1	UAT-Specific Header	***No Test Required***					
24	2.2.3.2.2.1.1	"Ground Station Latitude" Field Encoding	***No Test Required*** (function performed by ground station)					
25	2.2.3.2.2.1.2	"Ground Station Longitude" Field Encoding						
26	2.2.3.2.2.1.3	"Position Valid" Field Encoding						
27	2.2.3.2.2.1.4	"UTC" Field Encoding						
28	2.2.3.2.2.1.5	Reserved Bits						
29	2.2.3.2.2.1.6	"Application Data Valid" Field Encoding						
30	2.2.3.2.2.1.7	"Slot ID" Field Encoding						
31	2.2.3.2.2.1.8	"TIS-B Site ID" Field Encoding						
32	2.2.3.2.2.1.9	Reserved Bits						
33	2.2.3.2.2.2	Ground Uplink Application Data	***No Test Required***					
34	2.2.3.2.3	FEC Parity (Before Interleaving and After De-Interleaving)	***No Test Required***					
35	2.2.3.2.3.1	Code Type	***No Test Required***					
36	2.2.3.2.3.2	Generation and Transmission Order of FEC Parity	***No Test Required***					
37	2.2.3.2.4	Interleaved Payload and FEC Parity	***No Test Required***					
38	2.2.4	The ADS-B Message Payload	***No Test Required***					
39	2.2.4.1	Payload Type	***No Test Required***					
40	2.2.4.2	Payload Elements	***No Test Required***					
41	2.2.4.3	ADS-B Payload Composition by Payload Type Code	***No Test Required***					
42	2.2.4.4	Payload Transmission Order	2.4.4.4	Gary Furr	YES	YES	YES	
43	2.2.4.5	Payload Contents	***No Test Required***					
44	2.2.4.5.1	HEADER Element	2.4.4.5.1	Gary Furr	YES	YES	YES	

TEST PROCEDURE DEVELOPMENT COVERAGE								
Item #	**Requirements Section**	**Short Title**	**Test Section**	**Responsible**	**Written**	**Reviewed**	**Complete**	**Re-Work Needed**
45	2.2.4.5.1.1	"PAYLOAD TYPE CODE" Field Encoding	2.4.4.5.1.1	Ei Mon Phyu	YES	YES	YES	
46	2.2.4.5.1.2	"ADDRESS QUALIFIER" Field Encoding	2.4.4.5.1.2	Ei Mon Phyu	Re-Done			
47	2.2.4.5.1.3	"ADDRESS" Field Encoding	***No Test Required***					
48	2.2.4.5.1.3.1	ICAO 24-bit Aircraft Address of Transmitting Aircraft	2.4.4.5.1.3.1	Bob Burns	Re-Done			
49	2.2.4.5.1.3.2	Self-Assigning Temporary Address of Transmitting Aircraft/Vehicle	2.4.4.5.1.3.2	Bob Burns	Re-Done			
50	2.2.4.5.1.3.3	ICAO 24-bit Aircraft Address of TIS-B Target Aircraft	***No Test Required*** (function performed by Ground Station)					
51	2.2.4.5.1.3.4	TIS-B Track File Identifier						
52	2.2.4.5.1.3.5	Surface Vehicle Address						
53	2.2.4.5.1.3.6	Fixed ADS-B Beacon Address						
54	2.2.4.5.2	STATE VECTOR Element	2.4.4.5.2.1 – 2.4.4.5.2.10	Gary Furr	YES	YES	YES	
55	2.2.4.5.2.1	LATITUDE and LONGITUDE Field Encoding	2.4.4.5.2.1	Ei Mon Phyu	YES	YES	NO	YES
56	2.2.4.5.2.1.1	Latitude and Longitude for $NAC_P < 9$	2.4.4.5.2.1.1	Ei Mon Phyu	YES			
57	2.2.4.5.2.1.2	Latitude and Longitude for $NAC_P >= 9$	2.4.4.5.2.1.2	Tom Pagano	YES			
58	2.2.4.5.2.2	ALTITUDE TYPE Field Encoding	2.4.4.5.2.2	Ei Mon Phyu	Re-Done			
59	2.2.4.5.2.3	ALTITUDE Field Encoding	2.4.4.5.2.3	Ei Mon Phyu	YES			
60	2.2.4.5.2.4	NIC Field Encoding	2.4.4.5.2.4	Ei Mon Phyu	YES			
61	2.2.4.5.2.5	Air/Ground State Field Encoding	2.4.4.5.2.5	Tom Pagano	Re-Done			
62	2.2.4.5.2.5.1	Determination of Airborne/On Ground Condition	2.4.4.5.2.5.1	Tom Pagano	YES			
63	2.2.4.5.2.5.2	Validation of Airborne / On Ground Condition	2.4.4.5.2.5.2	Tom Pagano	YES			
64	2.2.4.5.2.6	Horizontal Velocity Subfields	***No Test Required***					
65	2.2.4.5.2.6.1.(a)	Encoding as "North/South Velocity" Sign Bit	2.4.4.5.2.6.1.1	Gary Furr	YES			
66	2.2.4.5.2.6.1.(b)	Encoding as "North Velocity Magnitude" - Subsonic	2.4.4.5.2.6.1.2	Gary Furr	YES			
67	2.2.4.5.2.6.1.(b)	Encoding as "North Velocity Magnitude" - Supersonic	2.4.4.5.2.6.1.3	Gary Furr	YES			
68	2.2.4.5.2.6.2.(a)	Encoding as "Airspeed Format" – (IAS or TAS)	2.4.4.5.2.6.2.1	Gary Furr	YES			
69	2.2.4.5.2.6.2.(b)	Encoding as "Airspeed or Ground Speed" - Subsonic	2.4.4.5.2.6.2.2	Gary Furr	YES			
70	2.2.4.5.2.6.2.(b)	Encoding as "Airspeed or Ground Speed" - Supersonic	2.4.4.5.2.6.2.3	Gary Furr	YES			
71	2.2.4.5.2.6.3.(a)	Encoding as "East/West Velocity" Sign Flag	2.4.4.5.2.6.3.1	Gary Furr	YES			
72	2.2.4.5.2.6.3.(b)	Encoding as "East Velocity" Magnitude - Subsonic	2.4.4.5.2.6.3.2	Gary Furr	YES			
73	2.2.4.5.2.6.3.(b)	Encoding as "East Velocity" Magnitude - Supersonic	2.4.4.5.2.6.3.3	Gary Furr	YES			
74	2.2.4.5.2.6.4.(a)	Encoding as "Track Angle/Heading" Type	2.4.4.5.2.6.4.1	Ei Mon Phyu	Re-Done			
75	2.2.4.5.2.6.4.(b)	Encoding as "Track Angle/Heading" Data Subfield	2.4.4.5.2.6.4.2	Gary Furr	YES			
76	2.2.4.5.2.7	Vertical Velocity or A/V Field	***No Test Required***					
77	2.2.4.5.2.7.1	Encoding as Vertical Velocity Form	2.4.4.5.2.7.1.1 – 2.4.4.5.2.7.1.3	Gary Furr	YES			
78	2.2.4.5.2.7.1.1	"VV Src" Subfield Encoding	2.4.4.5.2.7.1.1	Bob Burns	YES			
79	2.2.4.5.2.7.1.2	"VV Sign" Subfield Encoding	2.4.4.5.2.7.1.2	Gary Furr	YES			
80	2.2.4.5.2.7.1.3	"Vertical Rate" Subfield Encoding	2.4.4.5.2.7.1.3	Gary Furr	YES			
81	2.2.4.5.2.7.2	Encoding as "A/V Length and Width Code" Form	2.4.4.5.2.7.2	Ei Mon Phyu	Re-Done			

TEST PROCEDURE DEVELOPMENT COVERAGE								
Item #	**Requirements Section**	**Short Title**	**Test Section**	**Responsible**	**Written**	**Reviewed**	**Complete**	**Re-Work Needed**
82	2.2.4.5.2.8	UTC Field Encoding	2.4.4.5.2.8	Ei Mon Phyu	Re-Done			
83	2.2.4.5.2.9	Reserved Bits	2.4.4.5.2.9	Ei Mon Phyu	YES			
84	2.2.4.5.2.10	Reserved Byte 18, Payload Type Zero	2.4.4.5.2.10	Ei Mon Phyu	YES			
85	2.2.4.5.3	State Vector Element (For TIS-B)	***No Test Required***					
86	2.2.4.5.3.1	"TIS-B SITE ID" Field Encoding	***No Test Required***					
87	2.2.4.5.3.2	Encoding for All Other Fields	***No Test Required***					
88	2.2.4.5.4	Mode Status Element	2.4.4.5.4.1 – 2.4.4.5.4.14	Gary Furr	YES			
89	2.2.4.5.4.1	Emitter Category Field	2.4.4.5.4.1	Tom Mosher	YES			
90	2.2.4.5.4.2	Flight ID Field	2.4.4.5.4.2	Tom Mosher	YES			
91	2.2.4.5.4.3	Compressed Format Encoding for "Emitter Category" and "Flight ID"	***No Test Required***					
92	2.2.4.5.4.3.1	Bytes #18 and #19	2.4.4.5.4.3.1	Tom Mosher	YES			
93	2.2.4.5.4.3.2	Bytes #20 and #21	2.4.4.5.4.3.2	Tom Mosher	YES			
94	2.2.4.5.4.3.3	Bytes #22 and #23	2.4.4.5.4.3.3	Tom Mosher	YES			
95		Flight ID Field – Not Available	2.4.4.5.4.3.4	Tom Mosher	YES			
96	2.2.4.5.4.4	"Emergency/Priority Status" Field Encoding	2.4.4.5.4.4	Ei Mon Phyu	YES			
97	2.2.4.5.4.5	"UAT MOPS Version" Field Encoding	2.4.4.5.4.5	Ei Mon Phyu	YES			
98	2.2.4.5.4.6	"SIL" Field Encoding	2.4.4.5.4.6	Ei Mon Phyu	YES			
99	2.2.4.5.4.7	"Time of Transmission (MSO)" Field Encoding	2.4.4.5.4.7	Ei Mon Phyu	YES			
100	2.2.4.5.4.8	Reserved Bits (for BAQ)	2.4.4.5.4.8	Ei Mon Phyu	YES			
101	2.2.4.5.4.9	"NAC_P" Field Encoding	2.4.4.5.4.9	Ei Mon Phyu	YES			
102	2.2.4.5.4.10	"NAC_V" Field Encoding	2.4.4.5.4.10	Ei Mon Phyu	YES			
103	2.2.4.5.4.11	" NIC_{BARO}" Field Encoding	2.4.4.5.4.11	Ei Mon Phyu	YES			
104	2.2.4.5.4.12	"Capability Codes" Field Encoding	2.4.4.5.4.12	Bob Burns	YES			
105	2.2.4.5.4.12.1	"CDTI Traffic Display Capability" Subfield	2.4.4.5.4.12.1	Bob Burns	YES			
106	2.2.4.5.4.12.2	"TCAS/ACAS Installed and Operational" Subfield	2.4.4.5.4.12.2	Bob Burns	YES			
107	2.2.4.5.4.13	"Operational Modes" Field Encoding	2.4.4.5.4.13	Bob Burns	YES			
108	2.2.4.5.4.13.1	"TCAS/ACAS Resolution Advisory" Flag	2.4.4.5.4.13.1	Bob Burns	YES			
109	2.2.4.5.4.13.2	"IDENT Switch Active" Flag	2.4.4.5.4.13.2	Bob Burns	YES			
110	2.2.4.5.4.13.3	"Requesting ATC Services" Flag	2.4.4.5.4.13.3	Bob Burns	YES			
111	2.2.4.5.4.14	True/Magnetic Heading Flag	2.4.4.5.4.14	Bob Burns	YES			
112	2.2.4.5.4.15	Reserved Bits	2.4.4.5.4.15	Bob Burns	YES			
113	2.2.4.5.5	Auxiliary State Vector Element	2.4.4.5.5.1 – 2.4.4.5.5.2	Gary Furr	YES			
114	2.2.4.5.5.1	"Secondary Altitude" Field Encoding	2.4.4.5.5.1	Ei Mon Phyu	Re-Done			
115	2.2.4.5.5.2	Reserved Bits	2.4.4.5.5.2	Bob Burns	YES			
116	2.2.4.5.6	Target State Element (Payload Type Codes "3" and "4")	2.4.4.5.6.1 – 2.4.4.5.6.2.7	Gary Furr	YES			
117	2.2.4.5.6.1	"Target Heading or Track Angle" Field Encoding	***No Test Required***					
118	2.2.4.5.6.1.1	"Heading / Track Indicator" Flag Encoding	2.4.4.5.6.1.1	Bob Burns	YES			
119	2.2.4.5.6.1.2	"Target Source Indicator (Horizontal)" Subfield Encoding	2.4.4.5.6.1.2	Bob Burns	YES			
120	2.2.4.5.6.1.3	"Mode Indicator (Horizontal)" Flag Encoding	2.4.4.5.6.1.3	Gary Furr	YES			
121	2.2.4.5.6.1.4	Reserved Bits	2.4.4.5.6.1.4	Gary Furr	YES			
122	2.2.4.5.6.1.5	"Target Heading or Track Angle" Subfield Encoding	2.4.4.5.6.1.5	Gary Furr	YES			
123	2.2.4.5.6.2	"Target Altitude" Field Encoding	***No Test Required***					
124	2.2.4.5.6.2.1	"Target Altitude Type" Flag Encoding	2.4.4.5.6.2.1	Bob Burns	YES			

TEST PROCEDURE DEVELOPMENT COVERAGE								
Item #	**Requirements Section**	**Short Title**	**Test Section**	**Responsible**	**Written**	**Reviewed**	**Complete**	**Re-Work Needed**
125	2.2.4.5.6.2.2	"Target Source Indicator (Vertical)" Subfield Encoding	2.4.4.5.6.2.2	Bob Burns	YES			
126	2.2.4.5.6.2.3	"Mode Indicator (Vertical)" Flag Encoding	2.4.4.5.6.2.3	Bob Burns	YES			
127	2.2.4.5.6.2.4	"Target Altitude Capability" Subfield Encoding	2.4.4.5.6.2.4	Bob Burns	YES			
128	2.2.4.5.6.2.5	Reserved Bits	2.4.4.5.6.2.5	Bob Burns	YES			
129	2.2.4.5.6.2.6	"Target Altitude" Subfield Encoding	2.4.4.5.6.2.6	Bob Burns	YES			
130	2.2.4.5.7	Target State Element (Payload Type Code "6")	2.4.4.5.6.1.7 – 2.4.4.5.6.2.3	Bob Burns	YES			
131	2.2.4.5.8	Trajectory Change Element	2.4.4.5.8	Bob Burns	YES			
132	2.2.5	Procedures for Processing of Time Data	2.4.5	Tom Mosher				
133	2.2.5.1	UTC Coupled Condition	2.4.5.1	Tom Mosher	YES			
134	2.2.5.2	Non-UTC Coupled Condition	2.4.5.2	Tom Mosher	YES			
135	2.2.6	Procedures for ADS-B Message Transmission	***No Test Required***					
136	2.2.6.1	Scheduling of ADS-B Message Types	***No Test Required***					
137	2.2.6.1.1	Payload Selection Cycle	***No Test Required***					
138	2.2.6.1.2	ADS-B Payload Type Allocation	2.4.6.1.2	Tom Mosher	YES			
139	2.2.6.1.3	Message Transmission Cycle	2.4.6.1.3	Tom Mosher	YES			
140	2.2.6.2	ADS-B Message Transmit Timing	***No Test Required***					
141	2.2.6.2.1	The Message Start Opportunity (MSO)	2.4.6.2.1	Tom Pagano	YES			
142	2.2.6.2.2	Relationship of the MSO to the Modulated Data	2.4.6.2.2	Tom Mosher	YES			
143	2.2.6.3	Report Generation on Transmission of Own-Ship ADS-B Message	2.4.6.3	Tom Mosher	YES			
144	2.2.7	UAT Transmitter Message Data Characteristics	***No Test Required***					
145	2.2.7.1	UAT Transmitter Input Requirements	2.4.7.1	Tom Pagano				
146	2.2.7.2	Time Registration and Latency	***No Test Required***					
147	2.2.7.2.1	Requirements When in Non-Precision Condition and UTC Coupled	2.4.7.2.1.1 2.4.7.2.1.2	Tom Pagano	YES			
148	2.2.7.2.2	Requirements When in Precision Condition and UTC Coupled	2.4.7.2.2.1 2.4.7.2.2.2	Bob Burns	YES			
149	2.2.7.2.3	Requirements When Non-UTC Coupled	2.4.7.2.3	Tom Pagano				
150	2.2.7.2.4	Data Timeout	2.4.7.2.4	Tom Pagano				
151	2.2.8	Receiver Characteristics	***No Test Required***					
152	2.2.8.1	Receiving Diversity	2.4.8.1	Tom Pagano	YES			
153	2.2.8.2	Receiver Performance	***No Test Required***					
154	2.2.8.2.1	Receiver Sensitivity	***No Test Required***					
155	2.2.8.2.1.1	Long ADS-B Message is Desired Signal	2.4.8.2.1.1	Tom Mosher	YES			
156	2.2.8.2.1.2	Ground Uplink Message is Desired Signal	2.4.8.2.1.2	Tom Mosher	YES			
157	2.2.8.2.2	Receiver Desired Signal Dynamic Range	2.4.8.2.2	Tom Mosher	YES			
158	2.2.8.2.3	Receiver Selectivity	2.4.8.2.3	David Thomas	YES			
159	2.2.8.2.4	Receiver Tolerance to Pulsed Interference	2.4.8.2.4	David Thomas	Re-Done			
160	2.2.8.2.5	Receiver Tolerance to Overlapping ADS-B Messages (Self Interference)	2.4.8.2.5	Tom Mosher	YES			
161	2.2.8.3	Receiver Message Processing	***No Test Required***					
162	2.2.8.3.1	Criteria for Successful Message Reception	***No Test Required***					
163	2.2.8.3.1.1	ADS-B Messages	2.4.8.3.1.1	Ei Mon Phyu	YES			
164	2.2.8.3.1.2	Ground Uplink Messages	2.4.8.3.1.2	Ei Mon Phyu	YES			
165	2.2.8.3.2	Receiver Discrimination Between ADS-B and Ground Uplink Message Types	2.4.8.3.2	Ei Mon Phyu	YES			
166	2.2.8.3.3	Receiver Processing of ADS-B Synchronization "Trigger"	2.4.8.3.3	Tom Mosher	YES			

TEST PROCEDURE DEVELOPMENT COVERAGE								
Item #	Requirements Section	Short Title	Test Section	Responsible	Written	Reviewed	Complete	Re-Work Needed
167	2.2.8.3.4	Receiver Processing of Ground Uplink Synchronization "Trigger"	2.4.8.3.4	Tom Mosher	YES			
168	2.2.8.3.5	Receiver Time of Message Receipt	2.4.8.3.5	Bob Burns	YES			
169	2.2.9	Report Assembly Requirements	2.4.9	Tom Mosher				
170	2.2.9.1	Report Assembly on Receipt of ADS-B Message	2.4.9.1	Tom Mosher				
171	2.2.9.2	Report Assembly on Receipt of Ground Uplink Message	2.4.9.2	Tom Mosher				
172	2.2.10	Receiver Subsystem Capacity and Throughput Requirements	2.4.10	Tom Mosher				
173	2.2.10.1	Fundamental Principals of Report Assembly	***No Test Required***					
174	2.2.10.2	Capacity for successful Message Reception	2.4.10.2	Tom Mosher				
175	2.2.10.3	Applicable Messages	2.4.10.3	Tom Mosher				
176	2.2.10.4	Message Reception-to-Report Completion Time	2.4.10.4	Tom Mosher				
177	2.2.11	Special Requirements for Transceiver Implementations	***No Test Required***					
178	2.2.11.1	Transmit-Receive Turnaround Time	2.4.11.1	Tom Mosher				
179	2.2.11.2	Receive-Transmit Turnaround Time	2.4.11.2	Tom Mosher				
180	2.2.12	Response to Mutual Suppression Pulses	***No Test Required***					
181	2.2.13	Self Test and Monitor	***No Test Required***					
182	2.2.13.1	Self Test	2.4.13.1	Bob Saffell				
183	2.2.13.2	Broadcast Monitoring	2.4.13.2	Bob Saffell				
184	2.2.13.3	Address Verification	2.4.13.3	Bob Saffell				
185	2.2.13.4	Receiver Self Test Capability	2.4.13.4	Bob Saffell				
186	2.2.13.5	Failure Annunciation	***No Test Required***					
187	2.2.13.5.1	ADS-B Transmission Device Failure Annunciation	2.4.13.5.1	Bob Saffell				
188	2.2.13.5.2	ADS-B Receiving Device Failure Annunciation	2.4.13.5.2	Bob Saffell				
189	2.2.13.5.3	Co-Located ADS-B Transmission and Receiving Device Failure Annunciation	2.4.13.5.3	Bob Saffell				
190	2.2.14	Antenna System	***No Test Required***					
191	2.2.14.1	Polarization	2.4.14.1	Bob Saffell				
192	2.2.14.2	Antenna Voltage Standing Wave Ratio (VSWR)	2.4.14.2	Bob Saffell				
193	2.2.15	Interfaces	***No Test Required***					
194	2.2.15.1	ADS-B Transmitting Device Interfaces	***No Test Required***					
195	2.2.15.1.1	ADS-B Transmitting Device Input Interfaces	2.4.15.1.1	Bob Saffell				
196	2.2.15.1.1.1	Discrete Input Interfaces	2.4.15.1.1.1	Bob Saffell				
197	2.2.15.1.1.2	Digital Communication Input Interfaces	2.4.15.1.1.2	Bob Saffell				
198	2.2.15.1.1.3	Processing Efficiency	2.4.15.1.1.3	Bob Saffell				
199	2.2.15.1.2	ADS-B Transmitting Device Output Interfaces	***No Test Required***					
200	2.2.15.1.2.1	Discrete Output Interfaces	2.4.15.1.2.1	Bob Saffell				
201	2.2.15.1.2.2	Digital Communications Output Interfaces	2.4.15.1.2.2	Bob Saffell				
202	2.2.15.2	ADS-B Receiving Device Interfaces	***No Test Required***					
203	2.2.15.2.1	ADS-B Receiving Device Input Interfaces	***No Test Required***					
204	2.2.15.2.1.1	Discrete Input Interfaces	2.4.15.2.1.1	Bob Saffell				
205	2.2.15.2.1.2	Digital Communication Input Interfaces	2.4.15.2.1.2	Bob Saffell				
206	2.2.15.2.1.3	Processing Efficiency	2.4.15.2.1.3	Bob Saffell				
207	2.2.15.2.2	ADS-B Receiving Device Output Interfaces	***No Test Required***					
208	2.2.15.2.2.1	Discrete Output Interfaces	2.4.15.2.2.1	Bob Saffell				
209	2.2.15.2.2.2	Digital Communications Output Interfaces	2.4.15.2.2.2	Bob Saffell				
210	2.2.16	Power Interruption	2.4.16	Bob Saffell				

TEST PROCEDURE DEVELOPMENT COVERAGE								
Item #	**Requirements Section**	**Short Title**	**Test Section**	**Responsible**	**Written**	**Reviewed**	**Complete**	**Re-Work Needed**
211	2.2.17	Compatibility with Other Systems	***No Test Required***					
212	2.2.17.1	EMI Compatibility	2.4.17.1	Bob Saffell				
213	2.2.17.2	Compatibility with GPS Receivers	2.4.17.2	Bob Saffell				
214	2.2.17.3	Compatibility with Other Navigation Receivers and ATC Transponders	2.4.17.3	Bob Saffell				