

RESTRICTED - COMMERCIAL (When completed)

## System Requirement Document (SRD)

### Compliance Matrix for a Mode 5 Ramp Test Set Ref: LSBU15/0126

DETAILS OF EQUIPMENT OFFERED (*Specification, Compliance and Remarks columns to be completed by Tendering Company*):

- Notes: 1. **Please complete electronically.** The boxes to be completed will expand to accommodate data the Tendering Company wishes to include.  
2. Please attach OEM statements if required, in regard to **Section 8, 9, & 10** below.

EQUIPMENT MANUFACTURER		MODEL No.	
SUPPLIED BY:			

COMPILED BY	Mark Clinton	Position:	Technical Officer				
APPROVED BY	Ben Sullivan	Position:	Lead Eng	Signed:		Date:	

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<b>Specification Requirement</b>	<b>Critical, Desired, or For information only</b>	<b>Specification Of Equipment Offered (max - min etc)</b>	<b>Compliance Yes or No</b>	<b>Remarks</b>
<b>1. EQUIPMENT TYPE:</b> Ramp test set capable of Testing to Mode 5, must be 1 man portable and able to be Tripod mounted.	<b>Critical</b>			
<b>2. COMMERCIAL OFF THE SHELF (COTS).</b>	<b>Desirable</b>			
<b>3. SYSTEM CONFIGURATION.</b> Transponder Test Modes (1,2,3/A,C,S(EHS/ELS,4 & mode 5 (Level 1 & 2). Interrogator Test Modes (1,2,3/A,C,S,4,Mode 5, TCAS, ETCAS (Level 1& 2). DO-260B Compliant: ADS-B out test capability. Mode 5 Tx/Rx Pulse measurement. Mode 5 data acquisition formats 0-23 displayed. Mode 5 Squitter data displayed. KIT/KIR-1C crypto applique compatible (for Mode 4 testing). KIV-77 crypto applique compatible (for Mode 5 testing).	<b>Critical</b>			

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Be capable of testing to the requirements of FAR 43 appendix F ( ATC transponder test and inspections). Altitude Selection 50ft Increments or use of Mode 'S' Signal from AC (Mode '3C'). Test set should be capable of simulating dynamic target scenarios for TCAS testing ( i.e level, above, dive and climb)	<b>Critical</b>          <b>Desirable</b>			
<b>4. DIMENSIONS:</b> Must be able to be carried by one person	<b>Critical</b>			
<b>5. ACCURACY:</b> Be capable of testing to the requirements of FAR 43 appendix F ( ATC transponder test and inspections).	Critical			RVSM, ETCAS

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<b>6. SYSTEM POWER REQUIREMENT:</b> Battery Powered 8 Hrs Minimum (x2). 110V/220V AC 50-60Hz for charging. 115V 400Hz Aircraft supply compatible with 125M.	<b>Critical</b>  <b>Critical</b>  <b>Desirable</b>			<ul style="list-style-type: none"> <li>State operation life and charging cycles life if battery fitted.</li> <li>State battery make, model and composition.</li> <li>Provide Safety Data Sheet for Battery/s</li> </ul>
<b>7. CALIBRATION INTERVAL:</b> The equipment offered shall operate to its specified performance for a period of not less than 12 months. If longer periods are recommended, these should be stated. Although not necessarily preferable, calibration may make use of proprietary software and/or hardware. However, the use of "licensed codes" for calibration access to the equipment shall not be permitted.	<b>Critical</b>			

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<b>8. CE CONFORMITY.</b> BS EN61010 or equivalent MIL-STD	<b>Critical</b>			
<b>9. INTERFERENCE EMISSION &amp; IMMUNITY STANDARDS:</b> Must comply with Def-Stan 59-411 or equivalent.	<b>Critical</b>			
<b>10.INGRESS PROTECTION STANDARD:</b> IP54 or equivalent.	<b>Critical</b>			
<b>11.SAFETY STANDARD:</b> Must meet current British/European electrical and EMC legislation requirements for portable Test equipment or equivalent.	<b>Critical</b>			
<b>12.SYSTEM MANUFACTURER (OEM), QUALITY SYSTEM APPROVAL:</b> Certificates of Conformity are required.	<b>Critical</b>			
<b>13.SYSTEM SUPPLIER QUALITY SYSTEM APPROVAL.</b>	<b>Critical</b>			

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<b>14.SYSTEM OVERALL WEIGHT.</b> Must be 1 man portable/Operational	<b>Critical</b>			
<b>15.CALIBRATOR USER MANUAL.</b>	<b>Desirable</b>			
<b>16.UK BASED REPAIR FACILITY AND TECHNICAL ADVICE.</b>	<b>Critical</b>			
<b>17.AVAILABILITY OF TECHNICAL DATA AND INFORMATION FOR MOD REPAIR CONTRACTOR USE.</b>	<b>Desirable</b>			
<b>18.UK BASED CALIBRATION FACILITY.</b>	<b>Critical</b>			
<b>19.AVAILABILITY OF CALIBRATION DATA, SOFTWARE &amp; PROCEDURES FOR MOD CALIBRATION CONTRACTOR USE.</b>	<b>Desirable</b>			
<b>20.CALIBRATOR SPARES &amp; REPAIR LEAD TIMES.</b> Cal: >10 Days Repair: >30 Days	<b>Critical</b>			

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<b>21.OEM PLANNED FULL SUPPORT, OUT OF SERVICE DATE:</b> 10 years minimum availability from contract placement in FY16/17 plus a further 5 years support after that.	<b>Critical</b>	Note: Equipment OEM statement required if supplier is different from manufacturer.		

**Cont.****B: TRIPOD**

<b>Description</b>	<b>Critical, Desired, or For information only</b>	<b>Details, Sizes and Other Information.</b>
TRIPOD	critical	Must be Compatible and able to mount the supplied equipment in order to assist in the long term use of the equipment

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<b>Specification Requirement</b>	<b>Critical, Desired, or For information only</b>	<b>Details, Sizes and Other Information.</b>
<b>AVAILABILITY OF ALL SEPARATOR MAJOR SPARES OEM PART NUMBER DETAILS.</b>	Desirable	
<b>Cable(s) for interfacing with KIR-1C COMSEC Device</b>		
<b>Cables / RF adapters to facilitate direct connection to Transponder under test</b>		Approx length 12ft - RF cables, 120Ft power cables ( Aircraft to T/S).
<b>Ruggedised Transit Case</b>		DEF Stan 81-41. Heavy duty wheels desirable

END.