

Given the versatility of avionic equipment the following table provides typical examples that could be helpful for an applicant or DOA holder in the decision process to classify a design change as Minor or Major.

As this is a living document, changes can be made without previous notice.

Operational aspects are not subject of this table, e.g. change from VFR to IFR.

**Change Record:**

Version	Change description	Date
01	Initial Release	December 2016
02	Introduction of Obstacle Detection Systems Changes to FLARM®/FLOICE® conditions New classification for GNSS equipment Change of “active” antenna by “transmitting” antenna Minor formatting changes	March 2018
03	<a href="#">Introduction of a note in GNSS navigator subject</a>	March 2018

**NOTES:**

- The last column of the table aims at providing complementary certification elements/peculiarities to be accounted for in the substantiation data package for the design change.
- Lithium battery: Installation of equipment with such battery shall be classified MAJOR if Special Condition applies. See Appendix.

If not in the list or if in doubt, please contact EASA under [rotorcraft@easa.europa.eu](mailto:rotorcraft@easa.europa.eu)

Abbreviations are listed at the end of the table.

		Classification	Certification	
Subject	Classification	Conditions	Specific Guidance Material	Remarks (i.e. Test requirements, Documentation, ... see Note above)
GNSS navigator (also including Touch Screen feature)	Standard Change	<ul style="list-style-type: none"> <li>Applicability limited in the CS-STAN CS-SC052a</li> <li>VFR operation only</li> <li>For situational awareness only</li> <li>No interfaces with autopilot, HTAWS or ADS-B transmitter</li> </ul> <p><b>NOTE:</b> For integrated equipment also providing non-(E)TSO functions, these functions are not covered by the CS-STAN.</p>	CS-STAN [CS-SC052a]	<p><b>TEST REQUIREMENTS:</b></p> <ul style="list-style-type: none"> <li>As defined per equipment manufacturer</li> </ul> <p><b>DOCUMENTATION:</b></p> <ul style="list-style-type: none"> <li>ICA</li> <li>AFM SUPPLEMENT</li> </ul>
	Minor	<ul style="list-style-type: none"> <li>Only additional installation for IFR operation</li> <li>Only for situational awareness, not to be used as primary means of navigation and/or terrain avoidance</li> </ul>	AMC 20-4 AMC 20-5 or AC 20-138D applicable	<p><b>TEST REQUIREMENTS:</b></p> <ul style="list-style-type: none"> <li>Compatibility check of the installation with the a/c environment</li> </ul>

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Classification			Certification	
Subject	Classification	Conditions	Specific Guidance Material	Remarks (i.e. Test requirements, Documentation, ... see Note above)
		<ul style="list-style-type: none"> <li>Not to be used for PRNAV, RNP-RNAV, etc.</li> <li>No interfaces with autopilot, HTAWS or ADS-B transmitter</li> <li>SBAS disabled</li> </ul>	part	<u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>AFM SUPPLEMENT AS REQUIRED,</li> <li>ICA AS REQUIRED</li> </ul>
	Major	<ul style="list-style-type: none"> <li>Used as primary means of navigation and/or terrain avoidance</li> <li>Interfaces with autopilot, HTAWS or ADS-B transmitter</li> <li>All other RNP-RNAV operations</li> </ul> <u>NOTES:</u> When this equipment is intended to be limited to VFR but installed on an IFR helicopter, it is a Major change	AMC 20-4, JAA TGL-10, AMC 20-26, AMC 20-27, EASA CM-AS-002 Issue 1 Rev 01 AMC 20-28	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>As per applicable AMC or TGL</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT AS REQUIRED,</li> <li>ICA AS REQUIRED</li> </ul>
HTAWS	Major	None	MG18 of FAA AC 27-1B or AC 29-2C  (DO 309, ETSO-C194)	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>As per MG18</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>ICA AS REQUIRED</li> </ul>
XPDR Mode S, Elementary Surveillance (ELS)	Minor	<ul style="list-style-type: none"> <li>Replacement of existing transponder with ELS capable unit</li> <li>No substantial changes to interfacing</li> <li>No changes to the antenna installation</li> </ul>	CS-ACNS Subpart D Section 2	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>Per CS-ACNS Subpart D Section 2</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>AFM SUPPLEMENT</li> <li>AS REQUIRED BY CS ACNS Subpart D section 2</li> <li>ICA AS REQUIRED</li> </ul>
	Major	<ul style="list-style-type: none"> <li>New antenna or substantial modifications to antenna installation (Rationale: possible impact in the performance of the antenna and/or potential structural impact of the installation on the H/C primary structure).</li> </ul>	CS-ACNS Subpart D Section 2	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>Per CS-ACNS Subpart D Section 2</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>AFM SUPPLEMENT</li> <li>SSA</li> <li>AS REQUIRED BY CS ACNS Subpart D section 2</li> <li>ICA AS REQUIRED</li> </ul>
XPDR, Mode S,	Major	None	CS ACNS Subpart D	<u>TEST REQUIREMENTS:</u>

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Enhanced Surveillance (EHS)			section 3	<ul style="list-style-type: none"> <li>PER CS ACNS Subpart D section 3</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>AS REQUIRED BY CS ACNS Subpart D section 3</li> <li>ICA AS REQUIRED</li> </ul>
XPDR, Mode S, ADS-B out	Minor	Compliance using AMC 20-24 for operational credit and the following conditions are met: <ul style="list-style-type: none"> <li>The transponder is ETSO-2C112b approved and complies with the requirements of ED-102/DO-260 or DO-260A, and</li> <li>The GNSS receiver is approved under any of ETSO C-129A, TSO C-129, TSO C-129A, ETSO C-145/C-146, or TSO C-145A/C146A, and</li> <li>The interface between the transponder and GNSS received is direct (no routing through other equipment).</li> </ul>	AMC 20-24	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>Per AMC 20-24</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>AS REQUIRED BY AMC 20-24</li> <li>ICA AS REQUIRED</li> </ul>
	Major	<ul style="list-style-type: none"> <li>Compliance using CS-ACNS for operational credit</li> <li>Compliance using AMC 20-24 for operational credit and the conditions for Minor classification are not met</li> </ul>	CS ACNS Subpart D section 4  AMC 20-24	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>Per CS-ACNS Subpart D Section 4 or AMC 20-24</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>AS REQUIRED BY CS ACNS Subpart D section 4 or AMC 20-24</li> <li>ICA AS REQUIRED</li> </ul>
ADS-B IN	Major	None	AC 20-172B	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>ICA AS REQUIRED</li> </ul>
Enhanced Vision System (EVS)	Major	None	Generic CRI for EVS	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED</li> </ul>

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Subject	Classification	Conditions	Specific Guidance Material	Remarks (i.e. Test requirements, Documentation, ... see Note above)
				<u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>ICA AS REQUIRED</li> </ul>
Synthetic Vision System	Major	None	Generic CRI for SVS	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>ICA AS REQUIRED</li> </ul>
Upgrade of Avionics	Minor	<ul style="list-style-type: none"> <li>Exchange of single component in existing system</li> <li>No change to highly integrated units, no added functionality</li> <li>No changes to general pilot-system interface design</li> <li>No interface to autopilot</li> </ul>	AC27/29 MG-1	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS PER AC27/29 MG-1</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>ICA</li> <li>AFM SUPPLEMENT</li> </ul>
	Major	<ul style="list-style-type: none"> <li>New functionality or change of basic technology: change to high integrated units, change from electromechanical installation to a "glass type cockpit", change from conventional screen to "touchscreen" technology</li> <li>Change of primary or functional displays</li> <li>Change of pilot interface</li> </ul>	GM 21.A.101 analysis  AC27/29 MG-1  Generic CRI for Touchscreens	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED PER AC27/29 MG-1 AND THE APPLICABLE CRIs</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>ICA</li> </ul>
TCAS I or TAS	Minor	None	AMC 20-15 NOT applicable	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED TO DEMONSTRATE COMPLIANCE WITH §1301.</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>ICA</li> <li>AFM SUPPLEMENT</li> </ul>

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ACAS (TCAS II)	Major	None	AMC 20-15	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>Per AMC 20-15</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>ICA</li> </ul>
COM with 8.33 KHz Channel spacing	Standard Change	<ul style="list-style-type: none"> <li>Non complex motor-powered rotorcraft</li> <li>VFR operation only</li> <li>Exchange of COM units only</li> <li>No antenna installation</li> <li>No added functionality</li> <li>ETSOed VHF COM</li> </ul>	CS-STAN [CS-SC001a]	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>As defined per equipment manufacturer</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>ICA</li> <li>AFM SUPPLEMENT</li> </ul>
	Minor	<ul style="list-style-type: none"> <li>Exchange of units only</li> <li>No added functionality</li> <li>No Antenna installation</li> <li>No changes to general pilot-system interface design</li> <li>ETSOed VHF COM</li> </ul>	CS-ACNS Subpart B Section 1  AC27/29 MG 1	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>Per CS-ACNS Subpart B Section 1</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>ICA</li> <li>AFM SUPPLEMENT</li> </ul>
	Major	<ul style="list-style-type: none"> <li>If any of the Minor conditions is not met or other conditions are set</li> </ul>		
WX Radar	Minor	<ul style="list-style-type: none"> <li>Upgrade with use of existing locations</li> <li>No significant weight increase</li> <li>No new functionality</li> </ul>	AC 20-182	<u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>Potential update AFM limitations / Safety Distances on ground</li> </ul>
	Major	<ul style="list-style-type: none"> <li>New Installation, major alteration to existing installation</li> <li>Need of interlock with radar-altimeter and WOW</li> <li>Integration with new multifunction displays</li> </ul>	AC 20-182  AMC 25-11 Appendix 7 Weather Displays	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>ICA</li> </ul>
Weather through Datalink	Minor	<ul style="list-style-type: none"> <li>For VFR operation</li> </ul>	AMC 25-11 Appendix 7 Weather Displays	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED</li> </ul>

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				<u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>ICA AS REQUIRED</li> </ul>
	Major	None	AMC 25-11 Appendix 7 Weather Displays	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>ICA AS REQUIRED</li> </ul>
EFB installed resources  and  Mounting devices for portable EFB  (as per AMC 20-25 definition)	Minor	<ul style="list-style-type: none"> <li>No connection to Avionics</li> </ul>	AMC 20-25	<u>NOTE:</u> Whether or not paper will still be required is an <b>operational</b> concern, not related to airworthiness.  <u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>As per AMC 20-25</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>As per AMC 20-25 Chapter 6.1.2</li> </ul>
	Major	<ul style="list-style-type: none"> <li>Connection to avionics (including wireless)</li> </ul>	AMC 20-25	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>As per AMC 20-25.</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>As per AMC 20-25 Chapter 6.1.2</li> </ul>
ELT/ADEL T	Minor	<ul style="list-style-type: none"> <li>No interface with primary navigation systems.</li> </ul>	CM-AS-008 Issue 1 Proposed AMC 27.1470, AMC 29.1470(*)  (*) EASA NPA 2016-01	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED TO DEMONSTRATE COMPLIANCE WITH §1301 and proposed §1470(*).</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>ICA</li> <li>Flight Manual Supplement</li> </ul>
	Major	<ul style="list-style-type: none"> <li>Installation of external antenna or ADEL T might lead to Major change due to structural impact</li> <li>New external active antenna installation on IFR rotorcraft</li> <li>See Appendix for Lithium battery applicability</li> </ul>		<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED TO DEMONSTRATE COMPLIANCE WITH §1301 and proposed §1470(*).</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>ICA</li> </ul>

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				<ul style="list-style-type: none"> <li>Flight Manual Supplement</li> </ul>
Antenna Installation / change	Standard Change	<ul style="list-style-type: none"> <li>Non complex motor-powered rotorcraft</li> <li>Exchange of antennas other than RADAR and directional SAT/COM</li> <li>No large antennas (e.g. High Frequency (HF) or Direction Finding (DF) antennas) included.</li> </ul>	CS-STAN [CS-SC004a]	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED BY MANUFACTURER AND AS REQUIRED TO CONFIRM ANTENNA PERFORMANCE</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>ICA</li> </ul>
	Minor	<ul style="list-style-type: none"> <li>If conditions of installation are not enough to match the Major classification according to Part 21.A.91 (Annex 1 to EU 748/2012).</li> </ul>	AC 27/29	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED TO CONFIRM ANTENNA PERFORMANCE.</li> <li>AS REQUIRED BY CERTIFICATION SPECIFICATIONS</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>ICA</li> </ul>
	Major	<ul style="list-style-type: none"> <li>Installation of new large antenna or change of location of large antenna</li> <li>Installation of any new transmitting antenna or relocation of existing one on IFR rotorcraft</li> </ul>	AC 27/29	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED TO CONFIRM ANTENNA PERFORMANCE.</li> <li>AS REQUIRED BY CERTIFICATION SPECIFICATIONS</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>ICA</li> </ul>
Mobile phone installations	Minor	<ul style="list-style-type: none"> <li>Certified as “No hazard – no credit”</li> <li>Phone installation fully integrated into the aircraft audio system not requiring use of remote handset.</li> <li>No use by the handling pilot</li> <li>No use by non-handling pilot, if applicable, during take-off or landing</li> </ul> <p>NOTES: Hand held personal cellular phones are not considered</p>	AC 27/29	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>EMI/EMC verification</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>AFM SUPPLEMENT</li> <li>SSA</li> <li>ICA AS REQUIRED</li> </ul> <u>NOTE:</u> <ul style="list-style-type: none"> <li>Means are set to allow the handling-pilot does not receive incoming calls while airborne</li> </ul>
	Major	If any of the Minor conditions is not met or other conditions are set	AC 27/29	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>EMI/EMC verification</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>AFM SUPPLEMENT</li> </ul>

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				<ul style="list-style-type: none"> <li>SSA</li> <li>ICA AS REQUIRED</li> </ul>
SATCOM	Minor	<ul style="list-style-type: none"> <li>Equipment upgrade. (for standard type and for iridium type)</li> <li>No antenna installation</li> </ul>		
	Major	<ul style="list-style-type: none"> <li>SATCOM is used for ATC communication</li> <li>New antenna installation</li> </ul>	AC 20-150B	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>ICA AS REQUIRED</li> </ul>
LPV approaches	Major	None	AMC 20-28	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>ICA</li> </ul>
Equipment with laser devices	Minor	<ul style="list-style-type: none"> <li>Installation is considered minor according to Part 21.A.91 (Annex 1 to EU 748/2012).</li> <li>Laser is classified less than Class 3B according to International Standard IEC 60825.</li> </ul>	Certification Memorandum CM-AS-006 Issue 1  AC 27/29	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>ICA</li> </ul>
	Major	<ul style="list-style-type: none"> <li>Class 3B and 4 laser emission not contained within the equipment itself.</li> </ul> NOTES: Lower Class laser may be classified as Major change if the installation meets other conditions set in Part 21.A.91 (Annex 1 to EU 748/2012).	Certification Memorandum CM-AS-006 Issue 1  AC 27/29	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>ICA</li> </ul>
Cockpit voice recorder (CVR)	Minor	<ul style="list-style-type: none"> <li>Equipment upgrade (change of recorder unit only)</li> <li>No change of location</li> <li>No change of general interfaces design</li> </ul>		<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED TO DEMONSTRATE COMPLIANCE WITH §1301 and §1457</li> </ul>
	Major	<ul style="list-style-type: none"> <li>Complete CVR system installation including Cockpit Area</li> </ul>	EASA Certification	<u>TEST REQUIREMENTS:</u>

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Subject	Classification	Conditions	Specific Guidance Material	Remarks (i.e. Test requirements, Documentation, ... see Note above)
		Microphone (CAM) and Audio Management System interface	Memorandum EASA-CM-AS-001  AC29-2C  ED-112A	<ul style="list-style-type: none"> <li>AS REQUIRED TO DEMONSTRATE COMPLIANCE WITH §1301 and §1457</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>ICA</li> <li>Flight tests</li> <li>Flight Manual Supplement</li> </ul>
Flight Data Recorder (FDR)	Minor	<ul style="list-style-type: none"> <li>Equipment upgrade (change of recorder unit only)</li> <li>No change of location</li> <li>No change of general interfaces design</li> </ul>		<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED TO DEMONSTRATE COMPLIANCE WITH §1301 and §1459</li> </ul>
	Major	<ul style="list-style-type: none"> <li>Complete FDR system installation</li> </ul>	AC29-2C ED-112A	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED TO DEMONSTRATE COMPLIANCE WITH §1301 and §1459</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>ICA</li> <li>Flight tests</li> <li>Flight Manual Supplement</li> </ul>
Mission Radio	Minor	<ul style="list-style-type: none"> <li>“Tactical” / UHF COM ( no hazard – no credit)</li> <li>No interference with cockpit communication</li> </ul>	DO-160 DO-313 AC27/29 MG 1	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>EMI/EMC verification</li> </ul> NOTE: <ul style="list-style-type: none"> <li>On/Off switch available</li> </ul>
	Major	<ul style="list-style-type: none"> <li>New antenna is installed on IFR rotorcraft</li> </ul>	DO-160 DO-313 AC27/29 MG 1	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>EMI/EMC verification</li> </ul>
Tracking device Mission data / parameter recorder	Minor	<ul style="list-style-type: none"> <li>No interface with the flight crew</li> <li>No interface with avionics systems</li> <li>No new transmitting antenna or antenna</li> <li>Breaker accessible to the pilot</li> </ul>	DO-160 DO-313 AC27/29 MG 1	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>EMI/EMC verification</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>RFMS to inform the pilot of breaker position and to describe any conditions for transmissions on ground (e.g. how to avoid automatic transmissions)</li> </ul>

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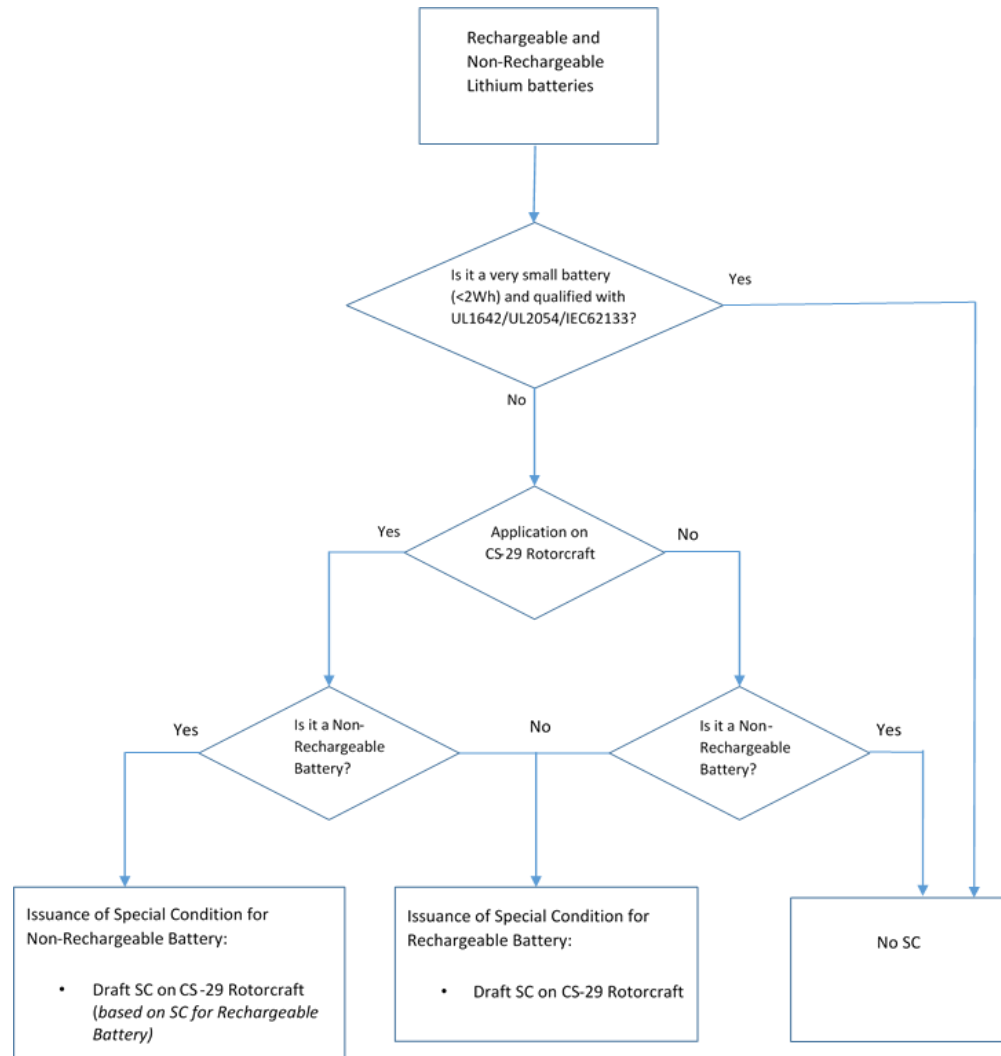
Classification			Certification	
Subject	Classification	Conditions	Specific Guidance Material	Remarks (i.e. Test requirements, Documentation, ... see Note above)
	Major	<ul style="list-style-type: none"> <li>New active antenna (GSM/GPRS, SATCOM, WiFi)</li> <li>Interface with the flight crew</li> <li>Interface with avionics systems</li> </ul>	DO-160 DO-313  AC27/29 MG 1	during re-fuelling operations) <u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>EMI/EMC verification</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>RFMS to inform the pilot of breaker position and to describe any conditions for transmissions on ground (e.g. how to avoid automatic transmissions during re-fuelling operations)</li> </ul>
Voice recognition	Major	None		<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>ICA AS REQUIRED</li> </ul>
Traffic awareness system for general aviation (e.g. FLARM®/FLOICE®)	Minor	<ul style="list-style-type: none"> <li>Certified as “No-Hazard, No Credit”</li> <li>Visual information not in the primary field of view</li> <li>Visual information displayed in a manner distinct from that of other aircraft systems (e.g. through a separate display or picture-in-picture display)</li> <li>No red indications to the crew</li> <li>Correct prioritisation in the COM architecture. Low priority of FLARM aural alerting in relation to aircraft alerts and radio.</li> </ul>	According to the proposed EASA Certification Memorandum CM-AS-010 <a href="https://www.easa.europa.eu/document-library/product-certification-consultations/proposed-easa-cm-010">https://www.easa.europa.eu/document-library/product-certification-consultations/proposed-easa-cm-010</a>	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>AFM SUPPLEMENT</li> </ul>
Obstacle detection systems	Major	<ul style="list-style-type: none"> <li>Obstacle Detection Systems relying on laser or other means, with pilot/system interface based on visual and/or aural feedback.</li> </ul>	CRI may be developed as appropriate	<u>TEST REQUIREMENTS:</u> <ul style="list-style-type: none"> <li>AS REQUIRED</li> </ul> <u>DOCUMENTATION:</u> <ul style="list-style-type: none"> <li>SSA</li> <li>AFM SUPPLEMENT</li> <li>ICA AS REQUIRED</li> </ul>

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**APPENDIX:**

**Decisional Flow chart for the applicability of a Lithium Battery Special Condition**



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**Acronyms**

<b>A/C</b>	Aircraft
<b>A/P</b>	Autopilot
<b>ACAS</b>	Airborne Collision Avoidance System
<b>ADS-B</b>	Automatic Dependent Surveillance-Broadcast
<b>AFM</b>	Aircraft Flight Manual
<b>AFMS</b>	Aircraft Flight Manual Supplement
<b>AMC</b>	Acceptable Means of Compliance
<b>BRNAV</b>	Basic Area Navigation
<b>CERT</b>	Certification
<b>COM</b>	Communication
<b>CRI</b>	Certification Review Item
<b>CVR</b>	Cockpit Voice Recorder
<b>DOA</b>	Design Organization Approval
<b>EFB</b>	Electronic Flight Bag
<b>EGPWS</b>	Enhanced Ground Proximity Warning System (A Honeywell Brand Name)
<b>EHS</b>	Enhanced Surveillance
<b>ELS</b>	Elementary Surveillance
<b>ELT</b>	Emergency Locator Equipment
<b>EVS</b>	Enhanced Vision System
<b>FAQ</b>	Frequently Asked Questions
<b>FL</b>	Flight Level
<b>FMS</b>	Flight Management System
<b>GM</b>	Guidance Material
<b>GPS</b>	Global Positioning System
<b>GSM</b>	Global System for Mobile communications
<b>ICA</b>	Instruction for Continued Airworthiness

<b>IFR</b>	Instrument Flight Rules
<b>KHz</b>	Kilo Hertz
<b>LNP</b>	Lateral Navigation Performance
<b>NAV</b>	Navigation
<b>PRNAV</b>	Precision Area Navigation
<b>RF</b>	Radio Frequency
<b>RFMS</b>	Rotorcraft Flight Manual Supplement
<b>SATCOM</b>	Satellite Communication
<b>SBAS</b>	Space Based Augmentation Signal
<b>SSA</b>	System Safety Assessment
<b>SVS</b>	Synthetic Vision System
<b>TAS</b>	Traffic Advisory System
<b>TAWS</b>	Terrain Awareness Warning System
<b>TCAS</b>	Traffic and Collision Avoidance System
<b>TGL</b>	Temporary Guidance Leaflet
<b>VFR</b>	Visual Flight Rules
<b>VHF</b>	Very High Frequency
<b>WX</b>	Weather
<b>XPDR</b>	Transponder

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