

FAA Standard Airworthiness Certification Checklist (Large Aircraft)

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>COMPLETED</u>
1.	APPLICATION FORM (FAA FORM 8130-6) See the forms section of our website for detailed instructions on how to fill this form out. http://www.faa-aircraft-certification.com/faq-forms.html	<input type="checkbox"/>
2.	TYPE CERTIFICATE DATA SHEET CONFORMITY The type certificate data sheet (TCDS) is a document that has a formal description of the aircraft, engine or propeller. It lists limitations, exemptions and information required for type certification including airspeed limits, weight limits, thrust limitations, etc. The FAA/DAR will check this document for any specific notes related to the airworthiness certification and confirm that the aircraft serial number is listed. You can download a copy of this document for your aircraft type at: http://www.faa.gov/aircraft/air_cert/design_approvals/	<input type="checkbox"/>
3.	COPIES OF PREVIOUS CERTIFICATIONS Previous certification history is useful in determining a baseline for the current certification. If the aircraft has been registered outside the United States, this information can help determine what records the DAR will review.	<input type="checkbox"/>
4.	EXPORT CERTIFICATE OF AIRWORTHINESS The export certificate of airworthiness is typically (although not mandatory) issued by the foreign airworthiness authority and will indicate that the aircraft meets the requirements of the FAA.	<input type="checkbox"/>
5.	PROOF OF DE-REGISTRATION If the aircraft was previously registered in a foreign country, you need to see proof that the aircraft was deregistered. This is typically in the form of a telex or fax message from the foreign civil aviation authority to the FAA.	<input type="checkbox"/>
6.	PROOF OF U.S. REGISTRATION In the United States, the pink copy of the FAA Form 8050-1 can be used for this purpose. If the aircraft is located outside the United States, an official document (referred to as a fly-wire) issued by the FAA registration branch is needed to prove registration. Another acceptable method would be to search the FAA registration database at http://registry.faa.gov/aircraftinquiry . If you find the aircraft information listed, you can print that page and consider it proof of registration.	<input type="checkbox"/>

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7.	<p>NOISE STANDARDS</p> <p>If the aircraft has a U.S. type certificate and has not been substantially modified to the extent that there is an acoustical change, it meets the noise requirements of FAR Part 36.</p>	<input type="checkbox"/>
8.	<p>FUEL VENTING REQUIREMENTS</p> <p>FAR Part 34 applies to aircraft gas turbine engines. If an aircraft has a U.S. type certificate, it complies with this requirement.</p>	<input type="checkbox"/>
9.	<p>INTERIOR LAYOUT AND EMERGENCY EQUIPMENT LIST</p> <p>During the life of an aircraft, the interior configuration can change many times. Each configuration must be FAA approved. An STC or FAA Form 8110-3 is the usual form of approval. A drawing called the "Layout of Passenger Accommodation" (LOPA) is referenced in the approval document. Usually part of the LOPA is a drawing called the "Emergency Equipment Drawing". This document shows the location and part number of all the required emergency equipment required to be installed on the aircraft. The DAR will be looking for the approval document and conformity to the drawings as part of the audit.</p>	<input type="checkbox"/>
10.	<p>MATERIAL FLAMMABILITY CERTIFICATION</p> <p>Materials used in the interior of the aircraft and cargo compartments must meet the flammability requirements outlined in FAR 25.853. If you have changed seat covers or cushions, it is important that you obtain paperwork attesting to the materials compliance with this FAR.</p>	<input type="checkbox"/>
11.	<p>SUMMARY OF AIRCRAFT FLIGHT TIME</p> <p>You must be able to determine the total time and cycles of the aircraft and it's components. There should be a record (computer print out, or log book) that shows the times and cycles in chronological order from zero hours and cycles until the current hours and cycles.</p>	<input type="checkbox"/>
12.	<p>AIRWORTHINESS DIRECTIVES STATUS</p> <p>There should be a summary sheet showing the status of all airworthiness directives (AD's) in chronological order by AD number. An example of a summary sheet format can be found in Advisory Circular (AC) 43.9C Appendix 1. This AC can be downloaded from our website. In addition to the status summary, you should have the actual document (dirty fingerprint copy) used to record the accomplishment of the AD.</p>	<input type="checkbox"/>

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13.	SERVICE BULLETIN STATUS There should be a summary sheet showing the status of all Service Bulletins (SB's) in chronological order by SB number. In addition to the status summary, you should have the actual document (dirty fingerprint copy) used to record the accomplishment of the SB.	<input type="checkbox"/>
14.	STRUCTURAL INSPECTION ITEMS STATUS Supplemental Structural Inspections were mandated by the FAA for older aircraft by airworthiness directives and targeted certain principal structural elements. Now newer aircraft include special structural inspections as part of their maintenance program. Typically a last done – next due status from the maintenance program would be all that is required for certification.	<input type="checkbox"/>
15.	CERTIFICATION MAINTENANCE REQUIREMENTS (CMR'S) A CMR is a required periodic task, established during the design certification of the airplane as an operating limitation of the type certificate. CMR's usually result from a formal, numerical analysis conducted to show compliance with catastrophic and hazardous failure conditions. A list of CMR's required can be found in the manufacturer's maintenance planning document, or other documentation referenced on the type certificate data sheet (TCDS). A summary sheet should be prepared that shows when the CMR's were accomplished and when they are next due.	<input type="checkbox"/>
16.	AIRWORTHINESS LIMITATIONS (AWL'S) AWL's are an FAA approved means of introducing certain inspections or maintenance practices to prevent problems with certain systems. They can be in the form of an Airworthiness Limitation Instruction (ALI) or Critical Design Configuration Control Limitation (CDCCL). A list of AWL's required can be found in the manufacturer's maintenance planning document, or other documentation referenced on the type certificate data sheet (TCDS). A summary sheet should be prepared that shows when the CMR's were accomplished and when they are next due.	<input type="checkbox"/>
17.	INSTALLED COMPONENT LIST WITH CERTIFICATION TAGS Each component that is installed on an aircraft after manufacturer should be from a known manufacturing source. The only way to prove this is to keep a copy of the airworthiness certification for that part. This is typically a FAA Form 8130-3 (or an ICAO member country's certification while under their registry) however for a new part the manufacturers certification is acceptable. You should keep a list of all components changed and a copy of the certification document with the records.	<input type="checkbox"/>

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18.	HARD TIME COMPONENT STATUS WITH CERTIFICATION TAGS The aircraft manufacturer identifies certain components that require a specific maintenance action at specified intervals. These actions must be documented and a summary status of these components maintained to include the date and time when last done and when next due.	<input type="checkbox"/>
19.	LANDING GEAR OVERHAUL DATA AND LIFE LIMITED PARTS (LLP) STATUS Provide a copy of the last overhaul records for the landing gear and a summary of the life limited Parts installed in each gear to include the total cycles and cycles remaining until replacement.	<input type="checkbox"/>
20.	ENGINES - SUMMARY DATA Provide a copy of the last overhaul records for the engine and a summary of airworthiness directives accomplished and a summary of the life limited parts installed to include the total cycles and cycles remaining until replacement.	<input type="checkbox"/>
21.	AUXILLARY POWER UNIT - SUMMARY DATA Provide a copy of the last overhaul records for the APU and a summary of airworthiness directives accomplished and a summary of the life limited parts installed to include the total cycles and cycles remaining until replacement.	<input type="checkbox"/>
22.	STRUCTURAL REPAIRS WITH REPAIR MAP AND SUPPORTING DOCUMENTATION You must show that any repairs performed on the aircraft were accomplished in compliance with FAA-approved data and that the aircraft conforms to its type design requirements. A manufacturers published repair data (i.e., structural repair manual, SRM) is considered FAA-approved data. If the repair is not a manufacturers published repair, it will require FAA approval. This is typically done by a DER on a FAA Form 8110-3. The repair map shows the location of each structural repair and makes it easier for the DAR to identify and review the supporting documentation.	<input type="checkbox"/>

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23.	<p>MAJOR ALTERATIONS - STC'S.....</p> <p>You must show that any major alterations or modifications were accomplished in compliance with FAA-approved data and that the aircraft conforms to its type design requirements. Supplemental type Certificates (STC's), manufacturers service bulletins, or other data approved by the FAA on an FAA Form 8110-3 are examples of FAA-approved data. Keep in mind that you must have a right to use letter from the owner of the STC before it can be installed.</p>	<input type="checkbox"/>
24.	<p>FLIGHT MANUAL CURRENCY.....</p> <p>Before an aircraft can be certificated, it must have an up-to-date approved flight manual (AFM) on-board. The aircraft manufacturer will be able to tell you what the latest revision level is. Also note that any Modifications affecting aircraft performance or flight characteristics and avionics upgrades will have flight manual supplements issued. Check to make sure all flight manual supplements are inserted in the AFM.</p>	<input type="checkbox"/>
25.	<p>WEIGHT AND BALANCE AND EQUIPMENT LIST.....</p> <p>As part of the original airworthiness certification, the aircraft is weighed to determine that the ranges of weight and center of gravity are within the approved limits, as specified in the appropriate aircraft specification or type certificate data sheet. There must be a current weight and balance report available for the aircraft to include an updated equipment list. The original equipment list produced by the aircraft manufacturer lists those items of equipment which are replaceable on the aircraft to include the weights and moment arms. This list should be amended as components are changed and kept current during the life of the aircraft.</p>	<input type="checkbox"/>
26.	<p>INSPECTION PROGRAM STATUS / RECORD ENTRIES.....</p> <p>Each inspection accomplished must be recorded in the aircraft records. A summary showing when each inspection was performed and when it is next due makes it easy to determine the status of the inspection program. Provide a copy of each record entry (release to service) for each major inspection. A recent inspection (within 30 days of making application) is required for standard airworthiness certification. This should meet the requirements of FAR 43, Appendix D in scope and detail. Credit may be given for recent inspection performed in accordance with a continuous airworthiness inspection program. This is up to the discretion of the FAA/DAR.</p>	<input type="checkbox"/>

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27.	INSTRUMENTS, PLACARDS AND MARKINGS Ensure that the cockpit instruments and placards are correctly located, installed, and properly marked in the English language. Typically, chapter 11 of the aircraft maintenance manual can be used to determine which placards are required to be installed on the exterior and interior of an aircraft. The approved flight manual will show which instrument markings are required.	<input type="checkbox"/>
28.	TEST FLIGHT REPORT A test flight may or may not be required. This depends on the extent of maintenance performed during the inspection required for certification and/or the manufacturers requirements. If a test flight is necessary, include a copy of the test flight report and ensure that any in-flight discrepancies have be corrected.	<input type="checkbox"/>
29.	BOROSCOPE INSPECTION REPORTS Engine and APU boroscope inspections are normally performed as part of the aircraft routine inspection program and would be found in the aircraft records. However, if special boroscope inspections are required (to meet a lease agreement) then include a copy of the reports in the certification file.	<input type="checkbox"/>