

JABATAN PENERBANGAN AWAM
DEPARTMENT OF CIVIL AVIATION
MALAYSIA

APPROVED DESIGN ORGANIZATION CHECKLIST

1.	ORGANIZATION AND RESPONSIBILITIES	
1.1	Availability and usage of Procedure Manual relevant to Terms of Approval with description of responsibilities and authorities	
1.2	Procedure for delegated functions described in DOA Procedure Manual	
1.3	Periodical review of Procedure Manual for adequacy, currency and updated as necessary	
1.4	DOA operating within its Terms of Approval	
1.5	Repair, overhaul, modification is limited to products that have production approval granted	
1.6	Assurance by facility for continuation of its Terms of Approval	
1.7	Availability of a representative for communicating with DCA with respect to interpretation of regulations, policies, procedures, and maintenance of certification data and certification checklist	
1.8	Representative has authority to administer requirements effectively	
1.9	Description of organizations responsible for engineering and flight test functions and their authority levels defined.	
1.10	Description of organizations responsible for conformity inspection and airworthiness function and their authority levels defined.	
1.11	Approved procedures, regulations, and policies available to authorized personnel.	
1.12	Availability of engineering, flight test, and inspection personnel to determine compliance to airworthiness requirements	
1.13	Current list of products repaired or modified under the Terms of Approval.	
1.14	Current list of all certificates for which it holds approval.	
1.15	Requirement for personnel to have knowledge, skills, and abilities to assigned responsibilities.	
1.16	Periodic training and updates for delegated functions and procedures for personnel	
1.17	Tags, forms, and other certification documents described in procedures manual controlled.	
1.18	Records retention follows appropriate regulations.	
1.19	For aircraft, presence of flight safety program.	
2.	PROJECT MANAGEMENT	
2.1	Certification basis or airworthiness requirements established and applied for repaired or modified type certificated product.	
2.2	Consideration on use of latest airworthiness standards when determining certification basis.	
2.3	Determination on the significance of project before submitting proposal to DCA	
2.4	Certification basis established and coordinated with DCA for new type certification projects.	
2.5	Proposal or similar documents reviewed by personnel before submission to DCA	

2.6	Proposal or similar document for project initiation submitted to DCA.	
2.7	DCA response to proposal obtained prior to the issuance of the certificate.	
2.8	DCA concurrence for the application of all equivalent safety provisions.	
2.9	AD identified for repaired/modified product and evaluated for type design change.	
2.10	Coordinate milestones and unique project requirements internally and with DCA.	
2.11	Identification and resolution of significant technical, regulatory, and administrative issue within facility and with DCA	
2.12	Personnel communicate for project coordination and with DCA when applicable.	
2.13	Coordination between personnel on projects that require approvals in more than one technical area.	
2.14	Certification tests identified, documented, and approved.	
2.15	Process and approval of authorization to personnel on conformity, airworthiness inspections, and flight test to meet requirements of TC, modification, amended TC certification.	
2.16	Compliance inspections by authorized personnel.	
2.17	Conformity inspections completed and documented before certification test.	
2.18	Nonconforming products/parts dispositioned by engineering before tests or final approval.	
2.19	DCA-requested participation and/or determination of specific findings completed.	
2.20	AFM/AFMS formatted, documented, coordinated, approved, and controlled.	
2.21	Process and approve document, e.g. TIR/STIR documented conformity, airworthiness inspections, and flight tests.	
2.22	Project requires TC or amendment identified, documented, and approved.	
2.23	DOA coordinator gets concurrence from applicable personnel and all items completed before TC issue.	
2.24	Ensure modification/repair approval issued to type certificated aircraft.	
2.25	Modification Approval (DCA SOC) properly completed.	
2.26	Documentation of certification activities such as certification summary report when completed.	
2.27	Coordinator assures type design data, technical data, and/or repair data approved, documented, and controlled.	
3	DESIGN DATA CONTROL	
3.1	Type design data, technical data, and/or repair data documented and controlled	
3.2	Documents and forms used for approval of data or record findings of compliance identified and listed in procedures manual.	
3.3	Determination and classification of type of data being approved during approval process.	
3.4	Drawing control system	
3.5	Type design data, technical data, and/or repair data approved.	
3.6	Software Configuration Management Plan (SCMP) or procedure to control airborne software configuration.	
3.7	Critically assessment software verification i.a.w. RTCA/DO-178 or other e.g. RTCA/DO-236.	
3.8	Configuration Index Document (CID) listing all software documents under configuration control defining hardware and software P/N.	
3.9	Practice/procedure for reporting, tracking, and resolving software problems.	

3.10	Methods and facilities protecting computer programs from unauthorized access, inadvertent damage, or degradation.	
3.11	Software development environment (compilers, loaders, linkers, editors, emulators, etc) identified, documented and archived for each version of the delivered airborne software version.	
3.12	Airborne software programmed media handling and storage (environmental controls, magnetic interference)	
4	DESIGN CHANGE APPROVAL	
4.1	Changes to type design data, technical data, and/or repair data documented and controlled.	
4.2	Determination if a design change is major or minor.	
4.3	Minor design change approved under a method acceptable to DCA	
4.4	Major changes to type design, technical data, and/or repair data approved.	
4.5	Documents and forms used to document design changes approval and findings of compliance identified and listed in procedures manual.	
4.6	Corrective actions identified in AD incorporated into the DCA-approved design, if applicable.	
4.7	Specify repairable damage limits when applicable	
5	TESTING	
5.1	Certification tests identified, documented, and approved.	
5.2	Identification of personnel responsible for development of test plans, witnessing of tests, and test results documentation.	
5.3	Test equipment has degree of accuracy necessary to determine conformity of characteristics being measured/tested.	
5.4	Appropriate safety equipment available during certification testing.	
5.5	Authorized personnel assure conformity inspections are completed prior to certification tests.	
5.6	Personnel, (including inspection) participate in the review of test instructions or procedures.	
5.7	Test results documented and approved.	
5.8	Certification test discrepancies documented and dispositioned.	
5.9	Use of personnel not identified in procedures manual to assist in witnessing the required certification tests.	
6	CONFORMITY INSPECTION	
6.1	Statement of Conformity properly submitted.	
6.2	Conformity Inspections documented.	
6.3	Equipment used for inspection have the accuracy to determine conformity of the characteristics being inspected.	
6.4	"at-risk" conformity inspection record raised and tracked for in-process conformity inspections. Records reflect final approved design (inspections done before TIA issue or conformity request	
6.5	Personnel conduct conformity inspections on supplier/vendor when conformity cannot be determined at receipt.	
6.6	Methods for identification, control, and disposition of nonconforming products/parts.	

6.7	Software identified/marked externally/internally in accordance with engineering drawing requirement.	
6.8	Special processes coordinated with engineering and inspection personnel.	
6.9	Inspection personnel verify approved data are adequate for multiple approval and installation is airworthy.	
7	AIRWORTHINESS CERTIFICATION	
7.1	Application for airworthiness certification properly completed following approved procedures and submitted to DCA, as applicable.	
7.2	Limitations and conditions obtained from DCA before issuing permit to fly.	
7.3	Applicable airworthiness certificates obtained for the purpose for which the aircraft is flown.	
7.4	Airworthiness Directives (AD) incorporated.	
7.5	When export airworthiness approval issue, documents and instructions forwarded to aviation authority of importing country.	
7.6	Export airworthiness approvals obtained for all products exported.	
7.7	Flight manuals, supplements, and current weight and balance data provided with each aircraft before issuance of airworthiness certificate.	
7.8	Airworthiness Release Certificate issued by authorized personnel.	
8	DCA NOTIFICATION	
8.1	Submission of required information to DCA.	
8.2	Notify DCA (Design and Certification Dept) within 7 days of any change that could effect its terms of approval.	
8.3	Investigate unairworthy conditions or unsafe features or characteristics reported to DCA.	
8.4	Notify DCA when a TC or Licensing Agreement is transferred.	
9	CONTINUED AIRWORTHINESS	
9.1	Develop Instructions for Continued Airworthiness.	
9.2	Make available Instructions for Continued Airworthiness, including changes, to appropriate persons	
9.3	Design changes considered in Instructions for Continued Airworthiness, when appropriate.	
9.4	Repair data development specifies new inspections limits, when applicable.	
9.5	Provisions to receive feedback on service problems from users/installers of the product/part thereof	
9.6	Service problems investigated and prompt corrective action taken.	
9.7	Failures, malfunctions, and defects reported to DCA	
9.8	Information on the design changes made available to owners and operator of product when AD requires corrective action.	
9.9	Record or file of reported service difficulties generated and maintained.	
9.10	Means for keeping users of the product/part thereof informed of service information.	
9.11	Evaluate the effect on continued airworthiness or service issues for the product based on results from follow-on life cycle testing.	
9.12	Service bulletins and maintenance manuals approved by authorized personnel.	
9.13	Service bulletins, maintenance manuals, and changes thereto, forwarded to DCA.	

9.14	Assure only approved technical data, including changes, are user for repair, overhaul, and modification.	
10	AUDIT	
10.1	Internal auditing program to verify compliance with its approved procedures, established policies, and approved data.	
10.2	Share audit information with partner organizations that produces parts and assemblies, and perform installations.	
10.3	Periodic review implemented modification or repair for compliance to developed data.	
10.4	Feedback to higher-level management results of internal audit.	