# Purpose

The purpose of this checklist is to provide a system to assist with the FAA design and installation conformity inspection process. This form is primarily intended to serve applicants for FAA design approvals under 14 CFR Part 21. This form may also serve companies or individuals engaged in research and development or homebuilding who want to track the detailed conformity status of aircraft parts and assemblies.

For individuals or companies engaged in FAA design approval activities under 14 CFR part 21, this checklist provides a mechanism to ensure that all necessary design and production data is provided to complete FAA forms 8130-9 (Statement of Conformity), 8120-10 (Request for Conformity) and 8100-1 (Conformity Inspection Record).

This checklist is a guideline, and does not constitute any particular FAA compliance or conformity record.

# Instructions

To complete this checklist, use the table provided on subsequent pages to provide objective evidence and information for each line item. The checklist is broken down into the following general sections

1. Identifies the applicant for the approval, and the design or process data that will be used for the inspection
2. Identifies the if inspection is associated with a part, assembly, and/or process
3. Identifies data for forms 8130-9 and 8120-10.
4. Identifies information to provide objective evidence in support of completion of the conformity inspection record, FAA form 8110-1.
5. Identifies how to document and communicate data for a deviation or nonconformance

For each line of the checklist:

1. Add any requested information
2. Indicate if that line item is acceptable in the yes/no box as applicable
3. Provide any available document identifications or numbers, dates, names, or other references to objective evidence to support and associated with the specified information.
4. In locations where requested, provide an appropriate attachment with this checklist.

Note: Some items on this checklist may not be applicable to your conformity inspection, mark these items “N/A” in the verify column.

# Additional Resources

Momentum Aeronautics provides a range of engineering and airworthiness inspection services to support applicants involved in design and production activities for aircraft and rotorcraft. Our resources include a full FAA DER and DAR staff who can provide immediate and effective support on your particular project. Please visit our website for more information.

| **Line** | **Data Required** | **Data Supplied** | **Notes** | **Verify (INIT)** |
| --- | --- | --- | --- | --- |
|  | Unique checklist reference number |  | Record this number on each page of the checklist |  |
|  | FAA Project Number |  |  |  |
|  | FAA NACIP conformity inspection reference number |  | Record the number at the top of electronic FAA form 8120-10 |  |
|  | FAA DMS tracking number |  |  |  |
|  | Managing FAA MIDO office  (address, e mail, phone and contact name) |  |  |  |
|  | Managing FAA ACO office  (address, e mail, phone and contact name) |  |  |  |
|  | Identify if this is a part or installation conformity inspection. Enter a description of one or both |  | In this case, “part” also means “assembly,” referred to as the “article” herein. |  |
|  | Applicant project manager’s contact info |  | Name, e mail, phone no. required for *all* contact info |  |
|  | Applicant company name and address |  |  |  |
|  | FAA project engineer contact info |  |  |  |
|  | MIDO inspector contact info |  |  |  |
|  | MIDO certification specialist contact info |  |  |  |
|  | DER contact info |  |  |  |
|  | DER certificate letter of authorization date |  |  |  |
|  | DAR contact info |  |  |  |
|  | DAR certificate letter of authorization date |  |  |  |
|  | Verify FAA form 8120-10 has been issued by engineering and processed by MIDO |  |  | DAR |
|  | Verify that a responsible agent for the applicant has issued FAA form 8130-9, record the form date, and the signatory’s name and title, note if any deviations are present |  |  | DAR |
|  | Verify conformity delegation request has been processed by MIDO in DMS with inspection(s) delegated to the DAR above |  |  | DAR |
|  | Time and date available for inspection |  |  |  |
|  | Location of the inspection, if different from the applicant’s physical address |  |  |  |
|  | Article or installation type |  | Choose one: aircraft, rotorcraft, engine or propeller |  |
|  | Make and model of type |  | Company and model number |  |
|  | Document requesting conformity inspection |  | PO, application date, letter, memo, other requesting document |  |
|  | Is there a Conformity Inspection Plan (CIP)? If so, record the document number and revision |  |  |  |
|  | Special instructions – ensure these are completed as required by 8120-10 during the inspection |  |  |  |
|  | Remarks for the 8120-10: ensure that non-conformity disposition and inspection delegation request is made for the designees on the checklist |  | Request DAR for conformity and vendor inspections, request DER for non-conformity disposition |  |
|  | Record the Master Drawing List (MDL) number, date and revision, if applicable |  |  |  |
|  | Part or assembly number(s)  (The “article(s)) to be inspected, qty of each and S/Ns if applicable |  |  |  |
|  | Total quantity of articles |  |  |  |
|  | Is/are the article(s) critical parts as defined by 14 CFR Sec. 45.15(c)? If so, are they marked appropriately? |  |  |  |
|  | Record drawing number(s) with dates and revisions specified on the approved design and process data |  |  |  |
|  | Verify that design data has been approved by the FAA or by a DER |  | Record form 8110-3 date; if FAA approved record the approval letter date |  |
|  | For an installation conformity on an aircraft, record the airframe, engine and propeller, incl. makes, models and serial numbers |  |  |  |
|  | Review FAA form 8130-9 statement of conformity. Are deviations present in any article or installation? If so, ensure they are treated appropriately. |  |  |  |
|  | Purchase orders for all materials and outside services – attach POs to checklist |  |  |  |
|  | Receiving – verify all received material/services conform to specs on the PO and design data – attach received PO |  |  |  |
|  | Work order numbers – attach WOs |  |  |  |
|  | Material specification(s) on design data |  |  |  |
|  | Material specification(s) used for production of article |  |  |  |
|  | Attach all material(s) certificates of conformance to this checklist |  |  |  |
|  | Process specifications(s) on design data |  |  |  |
|  | Process specifications used for production of article |  |  |  |
|  | Attach all process(es) certificates of conformance to this checklist, if applicable |  |  |  |
|  | What vendors were used for the procurement of material or services to complete the article(s)? |  |  |  |
|  | Are any vendors located outside the US? If so, ensure the approved supplier list includes vendor contact info |  |  |  |
|  | Does the vendor currently produce FAA PMA parts using an FAA approved quality system? |  |  |  |
|  | Is the vendor(s) currently serving any manufacturer with an FAA or EASA approved quality system? If so, which manufacturer? |  |  |  |
|  | Are vendor(s) providing a critical material and/or process requiring an on-site audit by the FAA or their designee in accordance with conformity inspection plan? If so record who performed this audit and attach objective evidence of on-site audit. |  |  |  |
|  | Are any commercial off the shelf (COTS) parts used on the article? If so, have they been received, inspected and documented with purchase orders using FAA approved procedures? |  | Verify the COTS components are on an approved commercial parts list (CPL). Verify COTS parts *are* *not* marked per 14 CFR Part 45. |  |
|  | Does the article(s) deviate from the approved design data in any way? |  |  |  |
|  | If deviations are present, have they been documented? Has a resolution been documented Attach forms if applicable |  |  |  |
|  | If a nonconformity is/are present on the article, has a DER been authorized to disposition the non-conformities? If so, who? |  |  |  |
|  | In the event of a non-conformity disposition, list design data or reports (with dates and revisions) to be used for re-inspection to support disposition. Ensure DER and DAR have made the appropriate entry on form 8100-1 for each disposition |  |  |  |
|  | What measuring equipment or process was used? |  |  |  |
|  | What calibration was/were performed for the measuring equipment? When were they performed? Was evidence of current calibration provided at the time of inspection. |  |  |  |
|  | First article inspection form: verify complete and attach to this checklist, verify that any discrepancies are noted. Ensure the first article form includes a record of dimensions, materials and/or processes as specified, used, and/or measured. |  | This form shall be reviewed by the applicant’s accountable manager in order to complete form 8130-9. Measurement of all dimensions must be recorded and compared, except for reference dimensions |  |
|  | Has an engineering change notice or order (ECN or ECO) been applied to the design data? |  |  |  |
|  | Has a certificate of conformance been issued by the applicant? |  | Form 8130-9 is acceptable |  |
|  | Have materials been handled and stored in a manner to ensure security from the time of construction to the time of inspection? |  | If applicable, reference a quality manual or other approved plan for storage procedures. |  |
|  | Attach ACCEPTED tags been issued for all conforming articles, or for articles that have a dispositioned non-conformity? |  | All conformed parts will be segregated in a secure area with access restrictions after the ACCEPTED tag has been issued |  |
|  | If an article contains a non-conformity that has been treated using the applicant’s quality system, then add the text  “MRB Form ID No\_\_\_\_\_\_\_”  to the ACCEPTED tag |  | Items may be tagged ACCEPTED with a non-conformity(ies), providing the non-conform is traceable, noted on form 8130-9, and dispositioned on form 8100-1 |  |
|  | Applicant to issue 8130-9 after the ACCEPTANCE tags have been issued, verify forms are attached. |  | Be sure to note any deviations on this checklist |  |
|  | Attach tag with text “R&D” only to the subject articles |  | This tag will be removed after the conformity inspection, and/or if form 8130-3 is issued |  |
|  | If a vendor was used as part of an FAA approved quality system, did the vendor complete the survey and are they acceptable for use? |  |  |  |
|  | If a vendor was used, are they listed on the applicant’s FAA approved supplier list? |  |  |  |
|  | ***DAR – as authorized – Execute the inspection and complete FAA form 8100-1*** as prescribed by FAA form 8120-10, record the end of inspection date Form 8100-1 block 5, record verification for the following lines |  | Ensure 8100-1 line items include the following:  1. 8120-10 ID and date  2. Letter of designation  3. FAA project number, DMS and NACIP ref numbers  4. 8130-9 ID and date  5. Lines for each inspection item | DAR |
|  | Material: Were raw materials used in the fabrication process in conformity with the design data? |  |  | DAR |
|  | Material: Is evidence available to ensure the chemical and physical properties were  identified and checked as appropriate? |  |  | DAR |
|  | Material: Is there documented evidence to show traceability from the raw material to  the prototype part? |  |  | DAR |
|  | Material: Are there any part or process deviations recorded against the submitted design data (including material review dispositions)? |  |  | DAR |
|  | Processes and Processing (Process): Is there a process specification for each special process? |  |  | DAR |
|  | Process: Has the applicant submitted the process specification for FAA engineering review? |  |  | DAR |
|  | Process: Does a check of the processed articles show the process produces consistent  parts that meet the type design? Is there statistical or other evidence to show this? |  |  | DAR |
|  | Process: Is the process being operated following the process specification? Are any  deviations recorded? |  |  | DAR |
|  | Critical and Major Characteristics (CMC): Has the applicant identified and inspected all critical and major characteristics? |  |  | DAR |
|  | CMC: Does the applicant have a record of these inspections? |  |  | DAR |
|  | CMC: Does witnessing the re-inspection and surveillance show the above inspections were accurate and adequate? |  |  | DAR |
|  | CMC: Are there any deviations recorded against the submitted design data  (including material review disposition)? |  |  | DAR |
|  | Workmanship: Does the workmanship add to the quality of the product? Could it be duplicated, and has the applicant set criteria to identify workmanship practices? |  |  | DAR |
|  | Adequacy of Drawings and Related Change Records (Drawings): Can the part be produced and inspected using the information on the  drawing? |  |  | DAR |
|  | Drawings: Are drawing tolerances practicable and attainable during production? What  evidence supports this? |  |  | DAR |
|  | Drawings: Has the applicant included all changes in the drawing submitted for FAA  approval (including one-time only deviations in the prototype article submitted for FAA testing)? |  |  | DAR |
|  | Drawings: What procedure does the applicant use to ensure an engineering change is  included in the production part and on the drawing? |  |  | DAR |
|  | Drawings: Did the drawing include all information needed to inspect the part, the material  to be used, the treatment of the material (such as hardness, finish, and any special process specifications)? |  |  | DAR |
|  | Inspection records: Do the inspection records show all inspections conducted? |  |  | DAR |
|  | Records: Do they show who conducted the inspection? |  |  | DAR |
|  | Records: Do they indicate the results of the inspection and disposition of unsatisfactory  conditions? |  |  | DAR |
|  | Records: Are procedures adequate to ensure re-inspection of parts that are reworked or  replaced? |  | This includes inspection of installation of new parts and inspection of the parts | DAR |
|  | Material review action: Is the material review procedure documented and adequate to ensure disposition for nonconformities? |  |  | DAR |
|  | Material review: Is there adequate corrective action for observed nonconformities to prevent reoccurrence? |  |  | DAR |
|  | Have “use as is” or “repair” dispositions for non-conformances been  submitted to FAA engineering for review, and have they been incorporated in the type design? |  | One-time only engineering orders | DAR |
|  | Previously produced parts: if parts were taken from approved stock, verify there is a system to associate any MRB actions with the parts |  | Nonconforming parts should not be used  unless it can be shown that they will have no adverse effects or they are re-inspected to record all deviations for FAA engineering evaluations. | DAR |
|  | Previously produced parts: Have the previously accepted deviations been made a part of the current design data submitted? |  | Are deviations listed on form 8130-9? | DAR |
|  | Software – does the conformity include software? If so, ensure checklist 00-903-56-02 is completed. |  |  |  |
|  | DER – as authorized – complete any non-conformity dispositions on FAA form 8100-1 if required |  | Record the data used for disposition and re-inspection on FAA form 8100-1 | DER |
|  | DAR – as authorized and if required – complete and document any additional inspections for 8100-1 items that have been dispositioned by the DER |  |  | DAR |
|  | DAR – If executing the conformity as specified by FAA Form 8110-1 (TIA) ensure all of the items requested in block 18A are completed. |  |  | DAR |
|  | DAR – as authorized, and if requested on form 8120-10 – issue FAA form 8130-3 tags for each article(s) specified |  | All 8130-3 tags will be for “new prototype parts” | DAR |
|  | Make a copy of each 8130-3 form for DAR’s 10 year records storage. Provide original 8130-3 to applicant. |  | Only if 8130-3 tags are required by 8120-10 | DAR |
|  | DAR – as authorized, and if requested (or required) on form 8120-10 – complete the type inspection report (8110-5) or supplemental type inspection report forms (8110-26) |  |  | DAR |
|  | Provide a copy of this checklist with attached FAA forms 8130-3, 8100-1, 8130-9 and inspection results to Chicago ACO project engineer |  |  | DAR |
|  | DAR to provide a record of the following to MIDO:   1. Cover letter with reference number 2. Copy of this checklist *without attachments* 3. Copy of 8100-1 4. Copy of 8130-9 5. Copy of 8120-10 6. Copy of DMS auth. 7. A list of the forms 8130-3 that were issued |  | This checklist and all attachments will be maintained on hardcopy file by the applicant as part of the conformity record for parts and assemblies. Checklist content may be updated in the process of execution, leading to the final checklist completion at the time of conformity inspection completion. | DAR |
|  | Verify that parts have been marked in accordance with 14 CFR Part 45 and/or IAW the FAA approved design data using procedures in the FAA approved quality manual. If the article is identified as critical ensure the serial numbers are marked on the part |  | Parts too small to mark should be marked per the applicable design data, or per an FAA approved quality manual |  |
|  | When checklist is complete, the applicant’s quality manager shall sign and date below |  | Date should be when checklist was completed. |  |
|  | When checklist is complete, the applicant’s document administrator shall make a hardcopy file with the following data:   1. Copy of this checklist with *all* attachments specified herein |  | The hardcopy file should be backed up with a PDF scanned copy and placed on controlled and secure digital storage. The original hardcopy file should be placed in the applicant’s controlled and secure file storage |  |
|  | Verify that conformed parts and assemblies are placed in the applicants secure storage area with their acceptance tag and forms 8130-3 attached (if applicable) |  |  |  |