

AIRWORTHINESS CIRCULAR

Alternate Airworthiness Product Format for Non-reportable Modifications

PURPOSE:

This Airworthiness Circular (AC) establishes a single Airworthiness (AW) Product as an acceptable, alternative method for Delegated Technical Authorities (DTAs) to document the AW Determination Form (ADF), Certification Basis (CB), and Compliance Report (CR) for non-reportable modifications that meet certain conditions.¹

SCOPE:

This AC applies to all air system modifications that meet the conditions defined herein.

CANCELLATIONS:

Not applicable. This is the first issuance of this AC.

REFERENCED DOCUMENTS:

1. AFI 62-601, *USAF Airworthiness*
2. MIL-HDBK-516C, *Airworthiness Certification Criteria*
3. AW Bulletin (AWB)-225, *Airworthiness Delegated Technical Authorities*
4. AWB-320, *Aerial Refueling (AR)*
5. AWB-1011, *Airworthiness Expert Endorsement*
6. Air Force Life Cycle Management Center (AFLCMC) Standard Process for Competency Management

BACKGROUND:

Typical AW products (i.e., ADF, CB, and CR) have been established in AFI 62-601, *USAF Airworthiness*, and subordinate AWBs. Experience since implementation of the current AW process (circa 2010) has shown that the prescribed formats (e.g., MS Excel) are too onerous for modifications that have a limited scope and require minimal verification activities to show compliance to AW criteria (e.g., pass/fail testing, verification by inspection/analysis, electromagnetic interference and electromagnetic compatibility [EMI/EMC] source/victim testing). This AC establishes an alternate ADF, CB, and CR format for modifications that meet the conditions below. This format will be subsequently referred to as the AFLCMC/EZZ Template 140-1, *Airworthiness Assessment Report*.

DISCUSSION AND RECOMMENDATIONS:

Modifications that meet all the following criteria may use Template 140-1:

1. Clearly non-reportable (i.e., the hazard assessment used in the ADF is not necessary to determine reportability with certainty)
2. No impact to any coupling air system (ref. AWB-320; contact the Aerial Refueling Certification Agency for assistance in cases of uncertainty)

¹ The Technical AW Authority (TAA) may delegate authority to approve AW products for non-reportable modifications to DTAs in accordance with AWB-225, *Airworthiness Delegated Technical Authorities*.

3. Limited to any of the following modification types:
 - a. Carry-on/carry-off equipment, excluding electronic flight bags
 - b. Aeromedical equipment
 - c. Modifications to or installation of non-flight/safety critical equipment that (a) do not exceed existing provisions, and (b) are physically and functionally separated from flight/safety critical systems (e.g., upgrade of a rack-mounted mission computer that does not require significant changes to the rack structure, electrical, and cooling interfaces, and does not interface with flight/safety critical systems)
 - d. Temporary test equipment within the scope of MIL-HDBK-516C, criterion 20.2.1
 - e. Modifications fully approved under Federal Aviation Administration (FAA)-approved production processes that do not require a new or updated Supplemental Type Certificate (STC) or Type Certificate (TC)
 - f. FAA-approved Service Bulletin (SB) corrective actions
 - g. FAA-approved Airworthiness Directive (AD) corrective actions

DTAs can contact the USAF AW Office to obtain approval to use the Template 140-1 for modifications that do not meet the criteria noted above. Modifications that involve a high degree of technical uncertainty or affect critical portions of structure, flight technologies, propulsion, subsystems, avionics, or software shall not use the Template 140-1.

PROCESS:

Use Template 140-1 to document the ADF, CB, and CR. A digital copy is available at <https://cs2.eis.af.mil/sites/23230/Airworthiness/SitePages/Home.aspx>.

1. Complete Sections I and II in lieu of the ADF. A hazard assessment to determine reportability is not required.
2. Complete Section III in lieu of the CB. Rationale for non-applicable criteria is not required. The standards and methods of compliance for each applicable criterion cannot be tailored beyond the air system's baseline CB. A full reproduction of the criteria, standards, and methods of compliance is not required.
3. Complete Section IV in lieu of the CR.
4. Note: Changes in modification scope or technical design may require an update to previously completed sections or may preclude use of Template 140-1.
5. Note: Section II through IV must be approved by a DTA in accordance with AWB-225.

Given the reduced documentation required, personnel with an AW SME Endorsement or validated Competency Management Skill Level of Intermediate, Advanced, or Expert in the impacted Technical Disciplines should coordinate on Template 140-1, Sections III and IV.² Refer to the Template 140-1 for additional instructions.

Figure 1 compares the Template 140-1 to the standard format established in USAF AWBs.

² Refer to AWB-1011, *Airworthiness Expert Endorsement*, and the *Air Force Life Cycle Management Center (AFLCMC) Standard Process for Competency Management* for additional information.

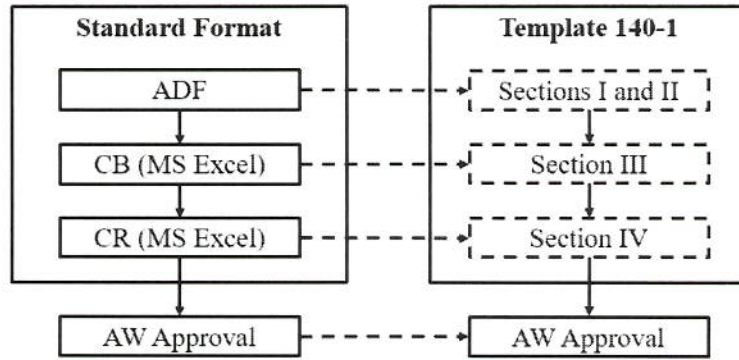


Figure 1

Each DTA shall identify the modifications that used this format in their annual report required by AWB-225.

POINT OF CONTACT:

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