DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE LIFE CYCLE MANAGEMENT CENTER
WRIGHT-PATTERSON AIR FORCE BASE OHIO

BULLETIN
AWB–230
12 July 2023
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United States Air Force Airworthiness Bulletin (AWB)-230

Subject: Airworthiness Endorsement

Attachments: (1) Glossary of References and Supporting Information

(2) Table 1 Air System Classes

1. **Purpose.** Define the process for the United States Air Force (USAF) Technical Airworthiness Authority (TAA) to endorse technical personnel based upon satisfaction of applicable requirements and identify the associated responsibilities for airworthiness (AW) execution.

2. **Office of Primary Responsibility (OPR).** USAF AW Office, AFLCMC/EZZ (USAF.Airworthiness.Office@us.af.mil).

3. **Applicability.** Government employees (military or civilian) from USAF and other Department of Defense (DoD) organizations showing and finding compliance for AW projects in support of USAF programs.

4. **Policy.** AFPD 62-6, *USAF Airworthiness*, establishes that the TAA has responsibility to organize, train, and equip the engineering workforce to independently assess air systems. DAFI 62-601, *Airworthiness*, establishes that the TAA endorses and accredits suitably qualified and experienced individuals to serve as subject matter experts and delegated technical authorities to assist in the execution of design activity of AW.

5. **Background.** To effectively implement USAF AW processes, the TAA must identify and utilize qualified personnel to execute the technical AW assessment process. The TAA evaluates technical personnel for their experience and qualifications to assess AW criteria within MIL-HDBK-516, *Airworthiness Certification Criteria*.

   5.1 Delegated Technical Authorities (DTAs) have the responsibility to utilize engineers that are suitably qualified to execute the AW assessment process. Individuals endorsed through the process described herein meet this requirement. AWB-110, *Airworthiness Planning,* requires programs to identify personnel and their qualifications.

   5.2 Previously, endorsements were granted for Level 1 (Technical Directors [TD], TAA Deputies, and Senior Leaders), Level 2 (Technical Advisors [TA]), or Level 3 (Subject Matter Experts [SME] and Technical Experts [TE]). Moving forward, the TAA will no longer establish endorsement levels.

6. **Endorsement.** The TAA grants endorsements at the section (e.g., Section 9 – Crew Systems) or sub-section (e.g., 9.1 – Escape and Egress Systems) level and not for individual paragraphs. The TAA may define groupings of criteria for discipline-specific endorsements (e.g., CNI). The endorsee may request endorsement for all mission design series (MDS), class of air systems (eg, Fighter, Bomber, etc.), or specific/multiple military design series (e.g., AC-130J or C-130s), if appropriate. Refer to Attachment 2, Table 1 *Air System Classes* for full descriptions. All individuals finding compliance on AW projects should be endorsed. Current endorsements are grandfathered until their assigned expiration.

6.1 **Education and Training Requirements.** Applicants for AW endorsement must meet a minimum set of education and training requirements to receive consideration. The minimum education is a bachelor's degree in engineering from an Accreditation Board for Engineering and Technology (ABET) program. The only exception to a bachelor's degree in engineering is for those in the configuration management career field. The minimum training requirements include AIR-116, and AIR-216. Section specific focus week classes and AIR-316 are strongly recommended, unless otherwise required for specific section endorsement. Credentials for endorsement in each technical discipline to ensure an applicant has proven proficiency for specific section(s) and sub-section(s) are documented in AC-23-01.

6.2 **Experience Requirements.** For endorsement consideration, a minimum of five (5) years United States Government engineering or configuration management experience in a relevant technical discipline is required to apply. Additional requirements per section and sub-section may be found in AC-23-01. Industry experience with direct MIL-HDBK-516 application may be considered.

6.3 **Endorsement Validity.** The endorsements are valid for the period explicitly stated in the TAA-issued certificate of endorsement and remains valid when the TAA changes. Re-endorsement is required after expiration by submitting a renewal application through the Airworthiness Certification Tool (ACT). Endorsements are valid for 5 years unless a project-specific endorsement is approved. Endorsees must meet with TA/TEs at a minimum interval of 2 years to review and discuss completed AW activity within endorsement area. AIR-116 training must be repeated every 2 years to maintain endorsement.

6.4 **AFLCMC/EZ TEs.** AFLCMC/EZ TEs must meet endorsement requirements for finding compliance on reportable projects. To receive endorsement, the TE for the technical discipline must submit an application to the USAF AW Office through ACT (see AWB-100 for a link to the site). When recommending endorsement for individuals not meeting all requirements, TDs must document shortfalls, corrective action plan, and rationale for approval by the TAA. Endorsements for AFLCMC/EZ TEs, who have been in position for at least 2 years, expire 5 years after departing for another government position.

7. **Process.** All endorsement candidates (except for those relevant to the paragraph 6.4 process) will complete and submit an AW Endorsement Application to the USAF AW Office through ACT (see AWB-100 for a link to the site). The resume submitted as part of the application package should demonstrate an understanding of key terminology and concepts relating to the requested sections and contain details on AW work performed including specific projects and tasks tied to the AW criteria assessed.

7.1 Endorsement applicants must seek sponsorship from other endorsed personnel in the same technical discipline, or AFLCMC/EZ TE/TA/TD home office personnel, who have direct knowledge of the applicant's experience, can vouch for the application content and competence for endorsement. Individuals who believe they don't have access to anyone who meets the requirements for sponsorship of their endorsement application should contact the AW Office for guidance. Applications do not require Chief Engineer and Director of Engineer signatures. The USAF AW Office will conduct a review of the applications for completeness.

7.2 The TDs for each technical discipline requested are responsible for the review of applications and will provide a positive/negative recommendation for endorsement to the TAA through the application form. TDs may utilize TAs and/or TEs for application review. Application reviewers are strongly encouraged to meet with applicants to discuss qualifications. Positive endorsement recommendations for individuals not meeting all endorsement requirements must document requirement shortfalls, corrective action plan, and rationale for consideration by the TAA.

7.3 The USAF AW Office will notify applicants of the determination within 6 weeks of submittal. For applicants denied endorsement, the TD will provide feedback of deficient areas requiring improvement (e.g., education, training, or experience).

7.4 Applicants denied endorsement may appeal in writing the decision through the USAF AW Office. The deputy TAA will review, contact the appropriate TD and make recommendations to the TAA.

7.5 Once approved by the TAA, endorsed applicants receive a TAA-issued certificate including the individual's specific endorsements, terms, and expiration.

7.6 For individuals not otherwise endorsed, project-specific endorsements, if requested to meet project type requirements, must be included in the AW Plan or project charter, and approved by the TAA. Project-specific endorsements could be approved in cases such as limited access programs, specialty programs and non-standard assessments. The AWP or project charter should outline the individual's education, training, and experience as well as rationale for the project-specific endorsement. An endorsement certificate is not issued in these circumstances, and the program office should contact the AW Office prior to requesting project-specific endorsements.

8. **Endorsement Extension**. AW Endorsed SMEs seeking extension to an expiring endorsement must submit an AW Endorsement Application to the USAF AW Office through ACT a minimum of two months prior to expiration. The form will capture the SME's AW and discipline experience since the last submittal. Extension requests follow the following process:

8.1 AW Office receives the application and sends to the appropriate TD(s) for review.

8.2 The TD will review to ensure that the AW endorsed SME continues to meet AW endorsement requirements for the approved MIL-HDBK-516 section/sub-section and air systems.

8.3 The TD provides the AW Office with their recommendation (positive or negative) of extension and/or any conditions. These are documented on the application.

8.4 The AW Office will seek the TAA approval for recommended extensions and provide the update to the AW Endorsed SME within a process timeline of 4 weeks. If the TD makes a negative determination, the SME will be informed by the TD who will provide feedback of deficient areas requiring improvement (e.g., education, training, or experience).

9. **Endorsement Revocation/Termination.** The TAA may revoke an endorsement due to violation of the endorsement terms and conditions. Revocation will be documented in a

TAA letter to the endorsee after a TD evaluation is conducted. The endorsees may follow the appeal process. An endorsement is terminated upon endorsee separation from the USAF.

10. **Endorsement Benefits.** AW training, and meeting the requirements for endorsement, supplement technical expertise with knowledge and skills that support evaluation of air systems utilizing MIL-HDBK-516. This endorsement demonstrates an individual's compliance to DoD AW policy for being suitably qualified to show and find compliance on AW assessments.

    10.1 Within Program Offices (PO), endorsed engineers and configuration managers provide the DTA with technical credibility for reportable (show compliance) and non-reportable (show and find compliance) assessments.

    10.2 The variety of digital engineering tools results in POs having unique skillsets. Endorsement may allow for utilization of these tools to find compliance without having to train external personnel.

    10.3 Utilization of all endorsed personnel on an AW assessment project may allow for delegation of the finding of compliance for specific reportable modifications to the PO.

    10.4 For special access programs, endorsements may alleviate access concerns due to limited billets or program security requirements.

    10.5 Engineering personnel may receive service and industry recognition, opportunities for increased career growth, contribution, and differentiation in job promotions.

11. **Record Keeping.** The USAF AW Office will maintain a record of approved AW endorsements and are available upon request. The USAF AW Office will maintain and report metrics of approved/rejected endorsement/extension applications.

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Director, Engineering and Technical Management/Services (AFLCMC/EN-EZ)
USAF Technical Airworthiness Authority

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

Air Force Policy Directive (AFPD) 62-6, *USAF Airworthiness*
Department of the Air Force Instruction (DAFI) 62-601, *USAF Airworthiness*
AWB-100 Airworthiness Process Overview and Terminology
AC-23-01 Airworthiness Endorsement Requirements
MIL-HDBK-516 Airworthiness Certification Criteria

Abbreviations and Acronyms

ABET – Accreditation Board for Engineering and Technology
AC- Airworthiness Circular
ACT – Airworthiness Certification Tool
AFPD - Air Force Policy Directive
AW - Airworthiness
AWB - Airworthiness Bulletin
DoD – Department of Defense
DTA - Delegated Technical Authority
OPR - Office of Primary Responsibility
PO – Program Office
SME – Subject Matter Expert
USAF – United States Air Force
TA – Technical Advisor
TAA - Technical Airworthiness Authority
TD – Technical Director
TE – Technical Expert

Attachment 2

Table 1. *Air System Classes*

Class I	Small, light air vehicles such as light utility, primary trainer, or light observation.
Class II	Medium weight, low-to-medium maneuverability air vehicles such as heavy utility/search and rescue; light or medium transport/cargo/tanker; early warning/electronic countermeasures/airborne command, control, or communications relay; antisubmarine; assault transport; reconnaissance; tactical bomber; heavy attack; or trainer for Class II.
Class III	Large, heavy, low-to-medium maneuverability air vehicles such as heavy transport/cargo/tanker; heavy bomber; patrol/early warning/electronic countermeasures/airborne command, control, or communications relay; or trainer for Class III.
Class IV	High-maneuverability air vehicles such as fighter/interceptor; attack; tactical reconnaissance; observation; or trainer for Class IV.
Class V	Rotorcraft
Class VI	V/STOL air vehicles