United States Air Force (USAF) Airworthiness Bulletin (AWB)-1011

Subject: Airworthiness Expert Endorsement

This bulletin supplements USAF policy and instruction. In cases of conflict, this bulletin takes precedence per paragraph 2.3.4.1 of Air Force Instruction (AFI) 62-601, AFMC Supplement, USAF Airworthiness, 12 May 2011.

References:
a. AFI 62-601, *USAF Airworthiness*, 11 June 2010
b. AFI 62-601, AFMC Supplement, *USAF Airworthiness*, 12 May 2011
c. AFPD 62-6, *USAF Airworthiness*, 11 June 2010
d. MIL-HDBK-516 Expanded, *ASC/EN Airworthiness Certification Criteria*, 26 September 2005 (Expanded Version of MIL-HDBK-516B w/Change 1, *Airworthiness Certification Criteria*, 29 February 2008)

1. **Purpose.** This bulletin describes the general process to accredit (TAA preference to use the term endorse herein) Subject Matter Experts (SMEs) for assessment of specific MIL-HDBK-516 (Reference d.) airworthiness paragraph/paragraphs (Paragraph: Criteria, Standard and Method of Compliance) in support of United States Air Force (USAF) aircraft airworthiness certification efforts.

2. **Office of Primary Responsibility (OPR).** The USAF Airworthiness Office, Air Force Life Cycle Management Center/Engineering (AFLCMC/EN-EZ). Comments, suggestions, or questions on this bulletin should be emailed to the USAF Airworthiness Office mailbox at USAF.Airworthiness.Office@wpafb.af.mil.

3. **Endorsement.** The USAF Technical Airworthiness Authority (TAA) has the responsibility (AFMC Supplement to AFI 62-601, paragraph 2.2.9 (References a. and b.) to define accreditation requirements for airworthiness experts and to endorse individuals to serve as SMEs in support of AFPD 62-6 (Reference c.) execution. The TAA has provided an initial set of specific definitions and criteria for endorsement at one of three levels. An endorsed Level 1 engineer has the widest breadth of knowledge and experience and thus the highest level of experience and knowledge is required. Accordingly, endorsed Level 2 and Level 3 engineers have decreasing breadth and associated requirements. Level 2 and 3 engineers provide direct support to the Airworthiness Board (AB) and special airworthiness assessments. SME endorsements are valid for a period of five years, unless explicitly stated in the TAA-issued certificate of endorsement. Re-endorsement will be required after expiration.

4. **Process.** It is the responsibility of all other AFMC units to identify and propose SMEs to the TAA for endorsement (Reference b., paragraph 2.3.2).

   a. **Open Season:** At the direction of the TAA, calls for nominations at specific levels will be put out by the USAF Airworthiness Office to various groups (specific centers/complexes and other service technical offices), with application procedures included in the call. All interested individuals will complete an Airworthiness Subject Expert Endorsement Application and attach a resume; specific details will be contained in the call for nominations and application form.

   b. **Outside of open season:** Personnel may submit applications under the following circumstances:

      (1) Upon application for an airworthiness position.
      (2) Upon assumption of duties in an airworthiness position.
      (3) Upon completion of additional education, training or experience that qualifies the individual for increased SME authority.

5. **Notifications.** The USAF Airworthiness Office will conduct a review of the applications and will notify applicants of the determination. Endorsed applicants will receive a TAA-issued certificate of endorsement and additional information on any additional accreditation and renewal requirements. Applicants not endorsed will be notified and identification of deficient areas requiring improvement (e.g., additional education, training, or experience shortfalls) shall be provided.

6. **Recordkeeping:** The TAA will maintain a record of approved airworthiness experts.

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Attachment

DEFINITIONS AND CRITERIA FOR AIRWORTHINESS EXPERT ENDORSEMENT

LEVEL 3

Roles & Responsibilities:

- Has technical expertise in one or more MIL-HDBK-516B Expanded sections, sub-sections, and/or criteria (paragraphs).
- Ensures MIL-HDBK-516B Expanded sections, sub-sections, or paragraphs technical assessments are appropriately executed and cross-section interrelationships addressed
- Determines compliance and non-compliance with MIL-HDBK-516B Expanded paragraphs (criteria with associated Standard and Method of Compliance).
- Reports to the responsible Level 2, and Level 1 regarding the airworthiness assessments.

Criteria:

For Engineers:

- Engineering Degree (Bachelor's Degree [BS], Master's Degree [MS], or Doctor of Philosophy Degree [PhD]) from Accreditation Board for Engineering and Technology (ABET) accredited engineering programs.
- Qualified in Engineering Job Series (e.g., 0801, 0855, etc.).
- Five years (less by exception) experience in the technical disciplines associated with the applicable MIL-HDBK-516B Expanded sections, sub-sections and/or paragraphs.

For Configuration and Data Management

- Qualified in Configuration and Data Management Job Series (0301).
- Five years (less by exception) experience in the technical disciplines associated with the applicable MIL-HDBK-516B Expanded sections, sub-sections and/or paragraphs.

LEVEL 2

Roles & Responsibilities:

- Has technical expertise in one or more MIL-HDBK-516B Expanded sections or sub-sections. Oversees airworthiness assessments performed by SMEs within their responsible sections or sub-sections.
- Reports airworthiness findings and recommendations to the responsible Level 1 regarding the airworthiness assessments.
- Render Hazard Risk recommendations for MIL-HDBK-516B Expanded non-compliances.

Criteria:

- Meets Level 3 Endorsed Airworthiness Expert Criteria; plus
- Five additional years (ten years total; less by exception) experience in the technical disciplines associated with the appropriate MIL-HDBK-516B Expanded sections and/or sub-sections.

LEVEL 1

Roles & Responsibilities:

- Member of USAF Airworthiness Board.
- Represents an entire domain (Technical Disciplines covered within Avionics-oriented, Flight Systems-oriented or Systems Engineering-oriented portions of MIL-HDBK-516B Expanded; each of the three main subjects is considered a domain) to USAF Airworthiness Board.
- Renders Hazard Risk determinations for MIL-HDBK-516B Expanded non-compliances.

Criteria:

- Meets Level 2 endorsed Airworthiness Expert Criteria; plus
- Meets minimum technical qualifications for domain Technical Director Position sub-sections