



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

**BULLETIN**  
**AWB-516**  
28 JAN 2015

**United States Air Force (USAF) Airworthiness Bulletin (AWB)-516**

**Subject:** Change Notices for MIL-HDBK-516, *Airworthiness Criteria*

**Attachments:** (1) Glossary of References and Supporting Information  
(2) Change Notice Development Process  
(3) AWB-516 Change Notice Format

- 1. Purpose:** This bulletin directs Chief Engineers to assess new and changed designs against the current MIL-HDBK-516, including all Technical Airworthiness Authority (TAA) approved Change Notices (CN), when creating certification basis (CB) documents. CNs will be maintained on the USAF Airworthiness SharePoint site to include new or revised MIL-HDBK-516 Criterion, Standards, or Methods of compliance (CSM) per examples in Attachment (3).
- 2. Office of Primary Responsibility:** USAF AIRWORTHINESS OFFICE. Comments, suggestions, or questions on this bulletin should be emailed to the USAF AIRWORTHINESS OFFICE Mailbox ([USAF.AIRWORTHINESS.OFFICE@us.af.mil](mailto:USAF.AIRWORTHINESS.OFFICE@us.af.mil)).
- 3. Background:** Revision of MIL-HDBK-516 typically takes several years. In the interim, new or revised CSM will be approved via CNs and published IAW Attachment (2).
- 4. TAA Guidance:** Approved CNs will be considered as part of the current published version of MIL-HDBK-516 for all USAF development and modification efforts. Any CB that is prepared must include all approved CNs, if applicable, to the design under consideration. Tailoring to create the CB will be consistent with AWB-004, *Development of an Airworthiness Certification Basis*, as modified by the following:
  - a) The CB must be developed prior to release of any development acquisition packages (e.g., Request for Proposal (RFP)).
  - b) For new aircraft designs and reportable modifications, the Chief Engineer/Delegated Technical Authority (CE/DTA) will, IAW existing policy, obtain TAA approval of the exact version of MIL-HDBK-516 and CN(s) to be used for developing the CB.

- c) For any airworthiness effort, the CE/DTA will document on the cover page of the CB the approved source of the criteria with the following statement: "This certification basis document was derived from MIL-HDBK-516X, *Airworthiness Certification Criteria*, dated DDMMYYYY and MIL-HDBK-516 *Change Notice* #(s)."



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## Attachment 1

### GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

#### *References*

AWB-004, *Development of an Airworthiness Certification Basis*, 17 June 2011

USAF Airworthiness SharePoint website;

<https://cs.eis.afmc.af.mil/sites/AeroEngDisciplines/Systems/Airworthiness/default.aspx>

#### *Abbreviations and Acronyms*

**AFPD** — Air Force Policy Directive

**AW** – Airworthiness

**AWB** – Airworthiness Bulletin

**CB** – Certification Basis

**CE** – Chief Engineer

**CN** – Change Notice

**CSM** – Criteria, Standards, and Methods of Compliance

**DOE** – Director of Engineering

**DTA** – Delegated Technical Authority

**FAA** – Federal Aviation Administration

**PM** – Program Manager

**RFP** – Request for Proposal

**SIB** – Safety Investigation Board

**SME** – Subject Matter Expert

**TA** – Technical Advisor

**TAA** — Technical Airworthiness Authority

**TD** – Technical Director

**USAF** – United States Air Force

#### *Terms*

**Certification Basis (CB)** —The set of approved airworthiness certification criteria, standards, methods of compliance, and exemptions that apply to a specific air system. It is typically derived from MIL-HDBK-516, *Airworthiness Certification Criteria*, including TAA-approved CNs.

**Technical Airworthiness Authority (TAA)** – The USAF official authorized to define airworthiness standards, approve the certification basis, issue findings of compliance, and issue Military Type Certificates and other flight releases.

**USAF Airworthiness Bulletin (AWB)** — Procedures, practices and requirements for executing USAF airworthiness policy as defined and published by the TAA.

## Attachment 2

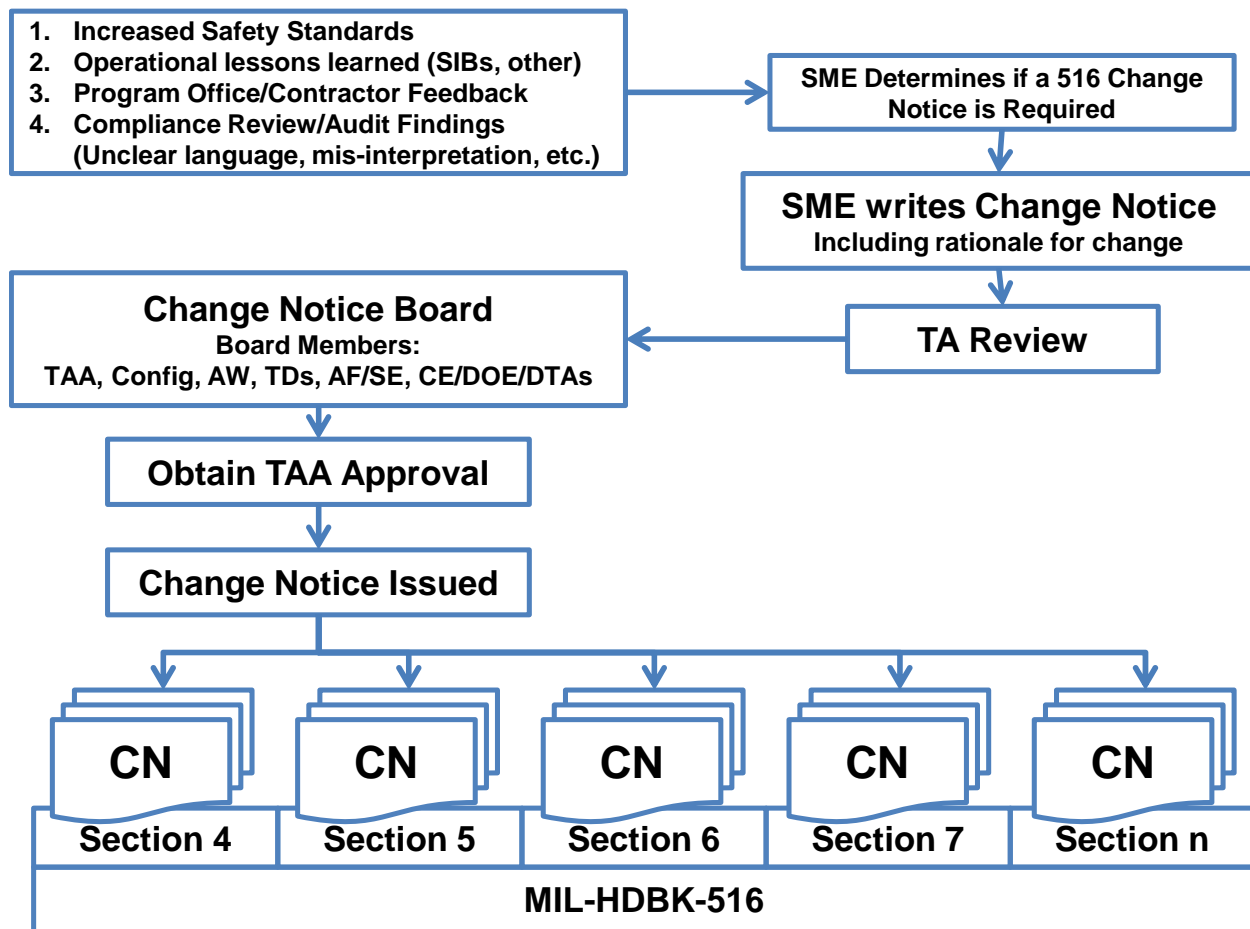
**CN Development Process**

Figure 1: CN Development Process

1. The potential need for a CN can come from many places.
  - a) Aerospace Industry or other Government Agency increased safety standards (e.g. FAA Airworthiness Circulars, Airworthiness Directives, or Regulatory changes)
  - b) Operational lessons learned (Safety Investigation Boards (SIB), other)
  - c) Program Office/contractor feedback
  - d) Compliance review/ audit findings (Unclear language, mis-interpretation, etc.)
2. Airworthiness (AW) Subject Matter Expert (SME) determines whether or not a CN is required. If required, the SME writes the CN which is reviewed by the appropriate Technical Advisor (TA) responsible for that section of MIL-HDBK-516. If it crosses multiple sections, then the TA's from each section coordinate.
3. After TA coordination, the CN is submitted by the AW SME to the USAF Airworthiness Office for consideration by the CN Board.
  - a) The TAA (or delegate) is the Chair and approval authority for CNs.

- b) Board membership consists of the Technical Directors (TDs), AF/SE rep, AW Branch Chief/TA, DOE/DTAs, and CE/DTAs.
- 4. Upon approval, the CN is then published by the USAF AW office & notification sent to all DTAs (DoEs/CEs), USAF AW SMEs, and Tri-Service representatives (for information only).
  - a) CNs will be published to folder “AWB-516 CNs” on the AW SharePoint Site under “MIL-HDBK-516 AW Criteria.”
  - b) The MIL-HDBK-516 CB template will also be updated by the USAF AW Office to include the CN paragraph changes..
- 5. MIL-HDBK-516 update schedule will be worked as a Tri-Service effort.
  - a) AW configuration will determine the appropriate MIL-HDBK-516 update schedule based on the number of active CNs and significance of the changes.
  - b) If CNs are incorporated into a revision of MIL-HDBK-516, they will be archived within the folder for posterity

**Attachment 3**

**MIL-HDBK-516 CHANGE NOTICE FORMATS**  
 (CNs will be posted on SharePoint)

**FORMAT EXAMPLE for Table of Contents of MIL-HDBK-516 Change Notice Summary:**

<b>CN #</b>	<b>Title</b>	<b>Date CN Approved</b>	<b>Paragraphs Affected or Created</b>	<b>Date Incorporated into MIL-HDBK-516</b>
Example 1	Head borne equipment	DDMMMYYYY	Modified paragraphs: X.1.1x , X.3.x, X.4.1.x Added: X.1.1.1.1.x	516X, DDMMMYYYY in paragraphs: x.x.x.x,y.y.y
Example 2	Service Life Limit	DDMMMYYYY	Modified 5.7.5 Standard and Method of Compliance	

**FORMAT EXAMPLE for Individual MIL-HDBK-516 Change Notices**

<b>CN #</b>	<b>Para</b>	<b>Criteria</b>	<b>Rationale for Change</b>	<b>Standard</b>	<b>Method of Compliance</b>
Example 2	5.7.5	Verify the aircraft structure service life limit	Section X does not sufficiently address IAT.....	1. The aircraft structure service life limit shall be established in terms of equivalent flight hours (or other appropriate measures of damage such as landings, pressure cycles, etc.) <u>and the IAT Program shall be used to determine when each aircraft reaches the limit.</u> 2. The initial structure service life limit shall be based upon the design analyses correlated to full-scale ground and flight testing with supporting risk analysis. The initial aircraft structure service life limit shall not exceed 50% of the full- scale airframe durability test demonstrated service life...	Durability and damage tolerance analysis report. Corrosion assessment report. Risk analysis report. FSMP report. Durability and damage tolerance test report. Teardown inspection report, if conducted. <u>Service life limit extension verification report, if applicable</u>