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

BULLETIN
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United States Air Force (USAF) Airworthiness Bulletin (AWB)-1009

Subject: Airworthiness Flight Authorizations – Military Type Certificate (MTC)/Military Flight Release (MFR)

Attachments: (1) Glossary of References and Supporting Information
(2) Flight Authorization Authority, Reportability, and Issuance Guidelines

1. **Purpose:** This bulletin provides direction, templates, and instructions for issuance or rescission of airworthiness flight authorizations. This bulletin supersedes AWB-015A, *Military Type Certificate (MTC) and Supplemental Military Type Certificate (SMTC)* and AWB-006, *Military Flight Release (MFR)*.

2. **Office of Primary Responsibility (OPR):** The USAF Airworthiness (AW) Office, AFLCMC/EZSA, is the OPR. Comments, suggestions, or questions on this bulletin should be emailed to the USAF AW Office Mailbox at USAF.Airworthiness.Office@us.af.mil.

3. **General Overview of Flight Authorizations:** Department of Defense Directive (DoDD) 5030.61, *DoD Airworthiness Policy*, directs airworthiness approvals be issued by an airworthiness authority (or delegated airworthiness authority) and made available prior to flight. The USAF Technical Airworthiness Authority (TAA) and authorized Delegated Technical Authority (DTA) issue airworthiness flight authorizations to comply with this requirement.

   a. An airworthiness flight authorization is the airworthiness approval defined in DoDD 5030.61, issued by the TAA or authorized DTA, which affirms that the appropriate tenets of the airworthiness process are met and that the air system was assessed against the required airworthiness standards and any residual risk to aircrew, ground crew, passengers, or to third parties has been accepted by the appropriate authority. In this AWB the term 'flight authorization' is used to refer to an 'airworthiness flight authorization.' Flight authorizations include documented configuration, restrictions, limitations, approved operational and maintenance technical orders (TOs), intended usage, and accepted risks.

   b. USAF flight authorizations consist of either a Military Type Certificate (MTC) or a Military Flight Release (MFR). An MFR is issued in lieu of the Military Experimental Flight Release (MEFR), Military Restricted Flight Release (MRFR), and Special Flight Release (SFR) addressed in Air Force Instruction (AFI) 62-601, *USAF Airworthiness*, paragraphs 1.7.1.1, 1.7.1.4, and 1.7.2, respectively.

   c. Flight authorizations are issued, if appropriate, on the basis of design-based or non-design-based airworthiness assessments.

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(1) Design-based assessments are conducted when (a) an airworthiness certification basis can be established consisting of a specified set of design criteria, and (b) the design of an air system can be assessed for compliance with the specified certification basis. A certification basis supporting a design-based assessment can be TAA-approved or originate from a TAA-recognized process (e.g., FAA, US Navy, US Army). Design-based assessments are the preferred approach for new air systems and modifications to existing air systems. Design-based flight authorizations take the form of either an MTC or an MFR.

(2) Non-design-based assessments are conducted when it has been determined by the TAA or authorized DTA that a design-based airworthiness certification cannot reasonably be accomplished, but when there is a compelling military need to operate the air system. They are typically performed on a "by-exception" basis for unique aircraft or situations. Non-design-based flight authorizations only result in an MFR.

d. Flight authorizations must capture all elements which are included in the airworthiness assessment and necessary to fly the air system. For example, Unmanned Aircraft Systems (UASs) are typically comprised of an Air Vehicle and Control Station(s). Both the Air Vehicle and the Control Station(s) are required to satisfy airworthiness; therefore flight authorizations will identify both the Air Vehicle configuration and Control Station configuration, or combinations thereof, which are approved for flight IAW restrictions, limitations, intended usage, and accepted risks.

e. An initial flight authorization is required for newly designated Mission Design Series (MDS) air systems (and those issued their own TO series). The TAA issues the initial flight authorization for new MDS air systems.

f. All modifications to USAF air systems that impact airworthiness require a flight authorization.

(1) The TAA approves reportable modifications and issues associated flight authorizations.

(2) Authorized DTAs approve non-reportable modifications and issue associated flight authorizations. A non-reportable MTC may be issued by the DTA if the baseline air system has been issued an MTC by the TAA.

(3) A flight authorization may cover multiple configurations if those configurations were included in the supporting airworthiness assessment

Refer to Attachment 1 for information regarding modification reportability and approval authority guidelines as well as numbering convention for reportable and non-reportable flight authorizations.

g. The TAA or authorized DTA issues an MFR for civil owned aircraft performing Public Aircraft Operations (PAO) in accordance with AWB-1012, *USAF Airworthiness (AW) Requirements for Contractor-Owned and Contractor-Operated (COCO) Aircraft*.

h.   For Foreign Military Sales (FMS) aircraft, the TAA or authorized DTA issues flight authorizations for flight testing and limited operational flights only to the point of foreign partner country acceptance if the USAF is the airworthiness authority (defined in the Letter of Offer and Acceptance); the TAA or authorized DTA provides an airworthiness recommendation in lieu of a flight authorization when the aircraft are released to the foreign country.

i.   Refer to AWB-1010, *Military Certificate of Airworthiness (MCA)* for requirements regarding issuance of MCAs.

j.   Flight authorizations reference supporting documents which provide justification for the airworthiness approval. See MTC and MFR templates linked in Attachment 1 for further guidance regarding supporting documentation. Typical documentation includes, but is not limited to:

   (1)   Approved design-based compliance report documenting non-compliances to approved certification basis and resulting risk assessment; or non-design-based Airworthiness Assessment, if applicable.

   (2)   Risk acceptance letter(s), documenting acceptance of all identified risks by the appropriate authority(s).

   (3)   Configuration description.

   (4)   Operator and Maintenance Technical Data.

   (5)   Intended usage, limitations, and restrictions (if not included in TOs).

   (6)   Flight test plan (if applicable).

k.   The issuance of an MFR does not prohibit future issuance of an MTC, and the issuance of an MTC does not prohibit future rescission to an MFR. Flight authorization type is dependent upon many factors, but key amongst those is risk level, which can change with time. For example, if an air system that is initially issued an MTC subsequently discovers a SERIOUS or HIGH risk, the MTC may be revoked and replaced by an MFR. Conversely, an air system that is initially issued an MFR due to SERIOUS or HIGH risk may be granted an MTC once the risk is successfully mitigated to MEDIUM or lower.

4. **MTCs:** An MTC is an approval to fly a design configuration for the intended usage up to the Service Life Limit when a design is significantly compliant with its certification basis (typically only LOW/MEDIUM risks remain due to non-compliance).

a.   The MTC applies to all conforming air systems (i.e., those air systems corresponding to the type design for which the MTC is issued).

b.   MTCs may be issued under the condition that the airworthiness assessment is accomplished against:

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       (1)   A TAA-approved design-based certification basis, OR;

       (2)   A TAA-recognized process (e.g., FAA, US Navy, US Army) in which the air system is operated and utilized in the same manner. Any USAF-unique configurations or operational aspects are addressed via USAF airworthiness assessment.

  c.   MTCs are issued when risks due to any non-compliance to the certification basis are assessed at LOW or MEDIUM levels. All risks must be accepted by the appropriate risk acceptance authority.

  d.   The TAA may choose to issue an MTC for a design with a SERIOUS risk level only when the risk is accepted by the appropriate risk acceptance authority AND:

       (1)   The risk is fully understood, and is fully funded to be mitigated (If mitigation funding is cancelled, the Program Manager (PM) must notify the TAA), OR;

       (2)   The TAA determines the risk has been mitigated to as low as reasonably practicable (ALARP).

  e.   The TAA will not issue an MTC for air system designs with HIGH risks.

  f.   After MTC issuance by the TAA, authorized DTAs may issue subsequent non-reportable MTCs for non-reportable modifications.

  g.   PMs shall pursue an MTC (or operational MFR) prior to entering dedicated operational testing and evaluation or delivery of aircraft for first operational use.

5. MFRs: An MFR is an approval to fly specific air systems in a design configuration for a defined period of time, when that design may not meet the full standards and/or intent of an MTC. The TAA or authorized DTA may issue MFRs for air systems as a means to deploy them for flight testing or operational fleet usage. AFI 62-601, paragraphs 1.7.1.1, 1.7.1.4, and 1.7.2 created three sub-categories of flight release: Military Experimental Flight Release (MEFR), Military Restricted Flight Release (MRFR), and Special Flight Release (SFR). During initial policy implementation in 2010, these sub-categories were determined to be unnecessary, and the TAA directed only the top-level term MFR be utilized.

  a.   MFRs define conditions, limitations, and restrictions that must be observed in order to maximize safe flight operations. MFRs may be issued for air systems progressing through either design-based airworthiness or non-design-based airworthiness assessment.

  b.   All risks must be accepted by the appropriate risk acceptance authority.

  c.   All flight test air systems will fly on an MFR during development testing.

d. **Design-Based MFRs:** The TAA or authorized DTA may issue design-based MFRs for flight testing or operational usage for air systems that have not yet shown sufficient compliance to their approved certification basis.

 (1) Flight test – Programs require an MFR to conduct flight test of the developmental configuration. Note: An MFR shall be used for developmental flight test regardless of whether the program already has or is seeking an operational MFR or MTC. The Chief Engineer (CE) shall create an Experimental Flight Release Basis (EFRB) for the flight test airworthiness assessment. Following this airworthiness assessment and formal risk acceptance by the appropriate risk acceptance authority, the TAA or authorized DTA will issue a flight test MFR.

 (2) Operational fleet – If a certification basis criteria non-compliance is identified that result in SERIOUS or HIGH risks for an operational fleet air system design, the TAA will issue an MFR after the risks have been accepted. Discovery of such non-compliances may occur during an airworthiness assessment process or during other phases of operations.

e. **Non-Design-Based MFRs:** Seeking to acquire and operate an air system under a non-design-based MFR is not an acceptable acquisition strategy for establishing airworthiness certification, and requires TAA or authorized DTA determination that the standard USAF design-based airworthiness certification process is not feasible.

 (1) Non-design-based MFRs will be issued by the TAA or authorized DTA when the risk has been quantified and accepted. Non-design-based airworthiness assessments may be achieved through the following methods:

 (a) Operational appraisal (contact the Airworthiness Office for an associated checklist).

 (b) Safety records.

 (c) Qualitative/quantitative assessment.

 (2) Given that no TAA-approved certification basis will exist, the quantity and quality of data available directly impacts the assessed operational risk, limitations, operating restrictions, and environment for non-design-based MFRs.

f. **Determination of MFR Expiration:** The TAA or authorized DTA will determine the appropriate MFR expiration date or alternate expiration criteria. Depending upon the MFR, the proposed expiration should consider the risk assessment, risk exposure, and time necessary to complete outstanding verification activities leading to issuance of an MTC; completion of the flight test program; required operational activities; or next risk re-acceptance date (per AFI 91-202). Alternate expiration criteria, typically a flight hour limit, may include service life, life-limited component life, flight test completion, program milestone, or other. Expiration of DTA-issued non-reportable flight authorizations may

not exceed the expiration of the baseline ('parent') TAA-issued flight authorization.

g. **Issuance of MTC:** For air systems that have previously been issued MFRs through design-based assessments, when the air system has been shown to be significantly compliant, the PM may request the TAA issue an MTC. The PM must submit required "show compliance" documentation for TAA airworthiness assessment.

6. **Flight Authorization Updates**: Updates to approved documented configuration, restrictions, limitations, intended usage, or accepted risks constitute a change to the baseline and require a new flight authorization. Restrictions issued on previously approved flight authorizations may be removed or updated after evidence of appropriate risk mitigation (e.g., results of mitigation validation, updated risk assessments) is provided. Removal of or updates to restrictions must be approved by the original issuing authority. Risk assessments must be current and accepted for the duration of the requested extension. Administrative changes and extensions, which do not change the baseline for which the flight authorization was initially approved, may be issued by the original issuing authority. See Attachment 1 for guidance on administrative updates.

7. **Flight Authorization Templates and Guidelines:** MTC and MFR templates, available on the USAF AW Office SharePoint website and linked in Attachment 1, illustrate the format of both MTCs and MFRs, and provide instructions for completing the templates. Attachment 2 provides information regarding conditions and approval authority for flight authorizations as well as guidelines for assigning configuration tracking numbers to each MTC and MFR issued through the USAF AW Office or cognizant program office (PO). In addition, Attachment 2 details responsibilities regarding coordination with the USAF AW Office.

8. **Rescission of flight authorizations:** If an authorized DTA becomes aware of a SERIOUS or HIGH safety of flight risk in their operational fleet, due to a non-compliance to the certification basis, they must notify the appropriate authority in accordance with the DTA terms and conditions. Upon formal determination of a SERIOUS or HIGH safety of flight risk, the TAA may send notification of intent to rescind the airworthiness approval, with rescission date, to the PM and CE/DTA. If rescission becomes necessary, a formal rescission notification memo will be forwarded to the PM by the TAA. If the aircraft is on an MTC, the TAA may define conditions that may enable retention of an MTC; otherwise an MFR may be issued upon the necessary risk acceptance. Regardless, re-issuance of flight authorizations is required to document the newly identified risk and risk acceptance.

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

USAF Airworthiness Sharepoint site:
https://cs.eis.afmc.af.mil/sites/AeroEngDisciplines/Systems/Airworthiness/default.aspx
DoDD 5030.61, *DoD Airworthiness Policy*
AFI 62-601, *USAF Airworthiness*
AWB-1012, USAF Airworthiness (AW) Requirements for *Contractor-Owned and Contractor-Operated (COCO) Aircraft*
MFR Template
(https://cs.eis.afmc.af.mil/sites/AeroEngDisciplines/Systems/Airworthiness/Templates/MFR%20Template.docx)
MTC Template
(https://cs.eis.afmc.af.mil/sites/AeroEngDisciplines/Systems/Airworthiness/Templates/MTC%20Template.docx)
AFI 91-202, *The US Air Force Mishap Prevention Program*
AWB-1010, *Military Certificate of Airworthiness (MCA)*

Abbreviations and Acronyms

AFI – Air Force Instruction
ALARP – As Low As Reasonably Practicable
AW – Airworthiness
AWB – Airworthiness Bulletin
CE – Chief Engineer
COCO – Contractor-Owned, Contractor-Operated
DoDD – Department of Defense Directive
DTA – Delegated Technical Authority
EFRB – Experimental Flight Release Basis
FAA – Federal Aviation Administration
FMS – Foreign Military Sales
IAW – In Accordance With
MCA – Military Certificate of Airworthiness
MDS – Mission Design Series
MEFR – Military Experimental Flight Release
MFR – Military Flight Release
MRFR – Military Restricted Flight Release
MTC – Military Type Certificate
OPR – Office of Primary Responsibility
PAO – Public Aircraft Operations
PM – Program Manager
PO – Program Office
SFR – Special Flight Release
SMTC – Supplemental Military Type Certificate
TAA – Technical Airworthiness Authority

TO – Technical Order
UAS – Unmanned Aircraft System
USAF – United States Air Force

Terms

Airworthiness Assessment – A technical evaluation of data against specific airworthiness criteria and determination of residual risk. An airworthiness assessment is a critical step in the airworthiness approval process but itself does not necessarily result in the issuance of an airworthiness approval.

Airworthiness Approval – A document that affirms that the appropriate tenets of the airworthiness process are met and that the aircraft or air system was assessed against the required airworthiness standards and any residual risk to aircrew, ground crew, passengers, or to third parties has been accepted by the appropriate authority. The airworthiness approval includes a complete description of the aircraft or air system's configuration, operating limitations, and other operating information necessary for safe operation. USAF airworthiness approvals are flight authorizations, and include MTCs and MFRs issued by the USAF TAA or authorized DTA.

As Low As Reasonably Practicable (ALARP) – A computation that must be made by the risk owner in which the quantum of risk is placed on one scale and the sacrifice involved in the measures necessary for averting the risk (whether in money, time or trouble) is placed in the other, and that, if it be shown that there is a gross disproportion between them – the risk being insignificant in relation to the sacrifice – the risk owner discharges the onus on them. Thus, ALARP is essentially a level of safety which meets legacy reliability, performance, and mishap events in which neither the USAF, nor equivalent Sister Services, are driving for increased resources to improve. Examples: Engine loss in a single engine aircraft, less than full envelope protection for ejections.

Certification Basis – 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*.

Experimental Flight Release Basis – The limited set of approved airworthiness certification criteria, standards, and methods of compliance tailored to reflect the exact configuration and capabilities of the flight test or developmental aircraft. It is derived from the approved airworthiness certification basis and serves as a checklist against which readiness to initiate flight test may be assessed.

Military Flight Release (MFR) – The approval to fly specific aircraft in a design configuration for a defined period of time, when that design may not meet the full standards and/or intent of an MTC.

Military Type Certificate (MTC) – The approval to fly a design configuration for the intended usage up to the Service Life Limit when a design is significantly compliant with its certification basis (typically only LOW/MEDIUM risks remain due to non-compliance).

Mission Usage– The profiles flown within the operating environment, including duration and severity factor, particularly as they relates to air system cyclic, stress, or fatigue limits and service life.

Operating Environment – The flight envelope the air system has been designed to withstand, including but not limited to airspeed, altitude, acceleration, and environmental limits.

Attachment 2
Flight Authorization Authority, Reportability, and Issuance Guidelines

Instructions:
This attachment explains conditions/criteria for flight authorization issuance, approval authority, airworthiness process product guidelines, and numbering convention. Use this attachment to:
  a. Determine which type of flight authorization is most appropriate.
  b. Understand the approval authority for each type of flight authorization.
  c. Understand the airworthiness process products expected for each type of flight authorization.
  d. Understand how each flight authorization issuance should be numbered.

The following columns are provided in the table below:
  Conditions/Criteria: The conditions/criteria under which each flight authorization type can be issued
  Approval Authority: The airworthiness authority responsible for making an airworthiness assessment and issuing a flight authorization
  Airworthiness Process Product Guidelines: The expected products of the airworthiness process needed to support issuance of a flight authorization. Note these may be different than Block 8 (Supporting Documentation) of MTC/MFR templates.
  Flight Authorization Number: The numbering convention for a specific flight authorization.

Military Type Certificate			
New Air System MTC Issuance			
Conditions/Criteria	**Approval Authority**	**Airworthiness Process Product Guidelines**	**Flight Authorization Number**
1. Air system is significantly compliant with the approved certification basis. 2. Risks are assessed per the AWB on Risk Identification and Acceptance. In most cases, only LOW/MEDIUM risks remain due to non-compliance. Depending on TAA discretion, risk level may be SERIOUS. 3. Relies on design-based airworthiness assessment. Certification Basis can be based on MIL-HDBK-516 criteria or other (e.g., FAA, MAA).	TAA Issues and Approves	✓ AW Plan or Airworthiness Determination Form (ADF) ✓ Certification Basis ✓ MTC Form ✓ Configuration Description or System Specification/Verification Doc ✓ Compliance Report ✓ Risk acceptance letter(s) from appropriate authority ✓ Substantiating Data (e.g. Test Reports, Drawings, Analysis) ✓ TOs (Flight Manuals, Maintenance Manuals)	Each certification receives a unique alpha-numeric identifier. MDS designation (limited to 10 characters) + "C" + four digit number e.g., F15E-C0001.

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Permanent Reportable Modification to Air System with an existing MTC			
Conditions/Criteria	**Approval Authority**	**Airworthiness Process Product Guidelines**	**Flight Authorization Number**
1. Any permanent configuration change or alteration to an item, change in capability, change in service life, or change in mission usage that has a potentially significant impact on airworthiness (see the AWB on Determining Reportability). 2. Modification is significantly compliant with the approved certification basis. 3. Risks are assessed per the AWB on Risk Identification and Acceptance. In most cases, only LOW/MEDIUM risks remain due to non-compliance. Depending on TAA discretion, risk level may be SERIOUS. 4. Relies on design-based airworthiness assessment.	TAA Issues and Approves	✓ ADF ✓ Certification Basis ✓ MTC Form ✓ Configuration Description or System Specification/Verification Doc ✓ Compliance Report ✓ Risk acceptance letter(s) from appropriate authority ✓ Substantiating Data (e.g. Test Reports, Drawings, Analysis) ✓ TOs (Flight Manuals, Maintenance Manuals, Time Compliance Technical Orders)	Each reportable change receives a unique alpha-numeric identifier sequential to the prior MTC number. MDS designation + "C" + number sequential to prior certification number e.g., F15E-C0002, F15E-C0003, etc.
Permanent Non-Reportable Modification to Air System with an existing MTC			
Conditions/Criteria	**Approval Authority**	**Airworthiness Process Product Guidelines**	**Flight Authorization Number**
1. Any permanent configuration change or alteration to an item, change in capability, change in service life, or change in mission usage that does not have a potentially significant impact on airworthiness (see the AWB on Determining Reportability). 2. Modification is significantly compliant with the approved certification basis. 3. Risks are assessed per the AWB on Risk Identification and Acceptance. Risk no higher than LOW or MEDIUM. 4. Relies on design-based airworthiness assessment. 5. The reportability decision via the Airworthiness Determination Form (ADF) (see AFLCMC OI 62-601) has DOE/DTA agreement the modification is non-reportable.	DTA Issues and Approves DOE/DTA Concurs on Non Reportability	✓ ADF ✓ Certification Basis ✓ MTC Form ✓ Configuration Description or System Specification/Verification Doc ✓ Compliance Report ✓ Risk acceptance letter(s) from appropriate authority ✓ Substantiating Data ✓ TOs	Each non-reportable change receives a unique alpha-numeric identifier appended to the baseline MTC number, or if applicable, sequential to the last non-reportable mod MTC number (numbers provided sequentially by the PO's configuration manager for airworthiness). Certification number + "nr" + sequential three digit number e.g., F15E-C0001-nr001, F15E-C0001-nr002, etc.

Military Flight Release (MFR)			
New Air System Operational MFR Issuance			
Conditions/Criteria	**Approval Authority**	**Airworthiness Process Product Guidelines**	**Flight Authorization Number**
1. MDS air system is not significantly compliant with the approved certification basis (risk level may be SERIOUS or HIGH), or design may not meet the full standards and/or intent of an MTC (non-design-based assessments). 2. For non-MDS, COCO, and FMS air systems, see applicable AWBs. 3. Risks are assessed per the AWB on Risk Identification and Acceptance or by best available means (e.g., operational appraisal, etc.). 4. Relies on design-based or non-design-based airworthiness assessment.	TAA Issues and Approves for MDS air systems and MFRs with SERIOUS or HIGH risk. DTA Issues and Approves for non-MDS (COCO) air systems	✓ AW Plan or Airworthiness Determination Form (ADF) ✓ Certification Basis (if applicable) ✓ MFR Form ✓ Configuration Description or System Specification/Verification Doc ✓ Compliance Report or Airworthiness Assessment ✓ System Safety Risk Assessment(s) ✓ Risk acceptance letter(s) from appropriate authority ✓ Substantiating Data ✓ TOs	Each authorization receives a unique alpha-numeric identifier. MDS designation (limited to 10 characters) + "R" + four digit number e.g., F15E-R0001. FMS and COCO flight authorizations should identify air system and unique program in a fashion determined by the TAA or authorized DTA e.g., F15SA-R0001, F-16(IQ)–R0001.
Temporary or Permanent Reportable Modification to Air System with an existing MFR			
Conditions/Criteria	**Approval Authority**	**Airworthiness Process Product Guidelines**	**Flight Authorization Number**
1. Any temporary or permanent configuration change or alteration to an item, change in capability, change in service life, limited fleet numbers, or change in mission usage that has a potentially significant impact on airworthiness (see the AWB on Determining Reportability), or developmental flight test of that configuration. 2. Risks are assessed per the AWB on Risk Identification and Acceptance or by best available means (e.g., operational appraisal, etc.). 3. Relies on design-based or non-design-based airworthiness assessment.	TAA Issues and Approves	✓ ADF ✓ Certification Basis (if applicable) ✓ MFR Form ✓ Configuration Description or System Specification/Verification Doc ✓ Compliance Report or Airworthiness Assessment ✓ System Safety Risk ✓ Assessment(s) ✓ Risk acceptance letter(s) from appropriate authority ✓ Substantiating Data ✓ TOs	Each reportable change receives a unique alpha-numeric identifier sequential to the prior reportable mod MFR number. MDS designation + "R" + number sequential to prior MFR number e.g., F15E-R0001, F15E-R0002, etc. FMS and COCO flight authorizations should identify air system and unique program in a fashion determined by the TAA or authorized DTA e.g., F15SA-R0002, F-16(IQ)–R0002.

Temporary or Permanent Non-Reportable Modification to Air System with an Existing MFR			
Conditions/Criteria	**Approval Authority**	**Airworthiness Process Product Guidelines**	**Flight Authorization Number**
1. Any temporary or permanent configuration change or alteration to an item, change in capability, change in service life, limited fleet numbers, or change in mission usage that that does not have a potentially significant impact on airworthiness (see the AWB on Determining Reportability), or developmental flight test of that configuration. 2. Risks are assessed per the AWB on Risk Identification and Acceptance or by best available means (e.g., operational appraisal, etc.). Risk no higher than LOW or MEDIUM. 3. Relies on design-based or non-design-based airworthiness assessment. 4. The reportability decision via the ADF (see AFLCMC OI 62-601) has DOE/DTA agreement the modification is non-reportable.	DTA Issues and Approves DOE/DTA Concurs on Non Reportability	✓ ADF ✓ Certification Basis ✓ MFR Form ✓ Configuration Description or System Specification/Verification Doc ✓ Compliance Report ✓ Risk acceptance letter(s) from appropriate authority ✓ Substantiating Data ✓ TOs	Each non-reportable change receives a unique alpha-numeric identifier appended to the baseline MFR number, or if applicable, sequential to the last non-reportable mod MFR number (numbers provided sequentially by the PO's configuration manager for airworthiness). Last reportable mod number + "nr" + sequential three digit number e.g., F15E-R0001-nr001, F15E-R0001-nr002, etc. FMS and COCO flight authorizations should identify air system and unique program in a fashion determined by the TAA or authorized DTA e.g., F15SA-R0002-nr001, F-16(IQ)–R0002-nr001.

Date Extensions for MFRs & Administrative Changes for MTCs and MFRs			
Conditions/Criteria	**Approval Authority**	**Airworthiness Process Product Guidelines**	**Flight Authorization Number**
Administrative changes do not change the baseline for which the MTC or MFR was initially approved, but date extensions may expand the aircraft effectivity. Approval authority remains the same. 1. Required for extending past the expiration date on a previously approved reportable or non-reportable MTC or MFR, or, 2. Any other appropriate administrative change (e.g., typos, misinformation, tech order number changes, correcting tail/serial numbers, etc.). Note: If a T1 mod extension, the program office must ensure AFI 63-131, *Modification Management*, requirements are met. Administrative numbering may also be used to record mods with no impact to airworthiness, if desired.	**Reportable:** TAA Issues and Approves **Non-Reportable:** DTA Issues and Approves Extensions past the previously approved expiration date must be approved by the original issuing authority.	✓ MTC or MFR Form ✓ Other supporting documentation as required for admin change	Each administrative change receives a unique alpha-numeric identifier appended to the baseline flight authorization number, or if applicable, sequential to the last administrative change flight authorization number (numbers provided sequentially by the PO's Configuration Manager for airworthiness). Reportable or non-reportable identifier + "A" + sequential three digit number e.g., F15E-C0002-A001, or F15E-C0002-nr001-A001 (MTC) e.g., F15E-R0001-A001, or F15E-R0001-nr001-A001 (MFR).

Flight Authorization Numbering Convention and Coordination Requirements:

- Reportable MTC and MFR numbers shall be assigned by the USAF AW Office in coordination with the applicable PO. MDS designations shall be specific and limited to ten characters to allow for traceability, e.g., EC-130H, C-130J(IQ), F-22A.

- Non-reportable mod numbers shall be assigned by the PO Configuration Manager and shall retain the MTC or MFR identifier issued by the TAA for the configuration to be modified, followed by a sequential "nr" number until a future approved reportable mod drives the sequential "nr" number to restart at 001.

- Administrative changes such as date extensions or corrections shall be represented by a sequential alpha-numeric number, e.g., -A001, -A002, etc. Administrative changes to the base MTC or MFR do not drive subsequent non-reportable mod identifiers to restart at 001. Administrative numbering may also be used to record mods with no impact to airworthiness, if desired.

Examples	Identifier	Change 1	Change 2	Change 3
MDS No. 1	Base MFR	Admin Change to MFR	Subsequent nr Mod No. 1	Subsequent nr Mod No. 2
	C-130J-R0001	C-130J-R0001-A001	C-130J-R0001-nr001-A001	C-130J-R0001-nr002-A001
MDS No. 2	Base MFR (Iraq)	Subsequent nr Mod	Admin Change No. 1	Admin Change No. 2
	F-16(IQ)-R0001	F-16(IQ)-R0001-nr001	F-16(IQ)-R0001-nr001-A001	F-16(IQ)-R0001-nr001-A002
MDS No. 3	Base MTC	Subsequent nr Mod	Subsequent Reportable Mod	Subsequent nr Mod
	MQ9-C0001	MQ9-C0001-nr001	MQ9-C0002	MQ9-C0002-nr001
MDS No. 4	Base MTC Identifier	Admin Change to Base MTC	Subsequent nr Mod	Admin Change to nr Mod
	EC-130H-C0001	EC-130H-C0001-A001	EC-130H-C0001-nr001-A001	EC-130H-C0001-nr001-A002
MDS No. 5	Current MFR Identifier	Subsequent Reportable Mod	Subsequent nr Mod	Admin Change to -R0001 MFR
	F-22A-R0001-nr003	F-22A-R0002	F-22A-R0002-nr001	F-22A-R0001-nr003-A001

- Reportable modifications: MTC and MFR tracking is maintained by the USAF Airworthiness Office. DOEs must report an annual summary of airworthiness related activities per their delegation letter.

- Non-reportable modifications: MTC and MFR tracking must be maintained by the PO, must be included in the annual Airworthiness Determination Summary Report, and records available to the USAF Airworthiness Office for audit.

- No impact modifications: Modifications with no impact to airworthiness are managed by the PO and included in the annual Airworthiness Determination Summary Report; ADFs shall be available for audit.

- USAF Airworthiness Office Configuration Management personnel maintain status accounting of all issued MTCs and MFRs. Submit identifier number updates for all new MDS's and reportable changes to USAF.Airworthiness.Office@us.af.mil.

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