United States Air Force (USAF) Airworthiness Bulletin (AWB)-345

Subject: USAF Airworthiness (AW) Policy for Security Cooperation (SC) Programs

Attachments: (1) SC Air System AW Assessment Flow Process Flow Chart
               (2) Glossary of References, Abbreviations, and Acronyms
               (3) Suggested content for AW Process Summary Memorandum for Record

1. Purpose. Provide instructions for implementation of USAF Airworthiness policy within Security Cooperation programs.

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


   3.1. Direct Commercial Sales (DCS). A sale of defense articles or defense services made under a Department of State issued license by US industry directly to a foreign buyer, and which is not administered by Department of Defense (DoD) through Foreign Military Sales (FMS) procedures.

   3.2. Foreign Military Sales (FMS). That portion of US Security Assistance (SA) authorized by the Foreign Assistance Act of 1961, as amended, and the Arms Export Control Act of 1976, as amended. This assistance differs from the Military Assistance Program and the International Military Education and Training Program in that the recipient provides reimbursement for defense articles and services transferred.

   3.3. Security Assistance (SA). Programs authorized by Title 22 USC, or other related statutes by which the US provides defense articles, military training, and other defense-related services by grant, loan, credit, cash sales, or lease, in furtherance of national policies and objectives. Those SA programs that are administered by the US Government (USG) Executive Department are a subset of Security Cooperation (SC).

   3.4. Security Cooperation (SC). All DoD interactions with foreign defense establishments to build defense relationships that promote specific US security interests, develop allied and friendly military capabilities for self-defense and multinational operations, and provide US forces with peacetime and contingency access to a host nation.

   3.5. Partner Nation (PN). A foreign government or international organization that the President determines to be eligible to make purchases as regulated by the Arms Export Control Act of 1976, as amended.

4. Background.

   4.1. DoD AW Policy. Department of Defense Directive (DoDD) 5030.61, DoD Airworthiness Policy, paragraph 3a requires all aircraft and air systems owned, leased, operated, used, designed, or modified by DoD to complete an AW assessment in accordance with Military Department policy.

4.3. DoD policy requires the same rigor to be applied to SC programs as to USAF programs.

4.3.1. Defense Security Cooperation Agency (DSCA) Policy. The DSCA Security Assistance Management Manual (SAMM) states "SC activities shall be planned, programmed, budgeted, and executed with the same high degree of attention and efficiency as other integral DoD activities. SC requirements shall be combined with other DoD requirements and implemented through standard DoD systems, facilities, and procedures" (C1.1.1). Furthermore, the DSCA SAMM states "It is DoD policy that defense articles sold under FMS programs should reflect favorably upon the United States" (C4.4.2).

4.3.2. Defense Federal Acquisition Regulation (DFAR). The DFAR Supplement (DFARS) requires DoD to “conduct FMS acquisitions under the same acquisition and contract management procedures used for other defense acquisitions” (Section 225.7301(b)).

4.4. SC Program Flight Operations. As part of the execution of SC programs, flight operations may be required. These operations may include, but are not limited to, ferry flights, compliance activities for airworthiness, requirements verification and validation, production testing, and training. USG personnel, contractors, or PN representatives may execute flight operations.

5. Applicability.

5.1. This bulletin is applicable when the USAF procures or modifies air systems under SC programs.

5.1.1. Modification includes, but is not limited to, creating the technical design package, creating the installation package, providing the installation package, performing the modification (either directly or via contract) and/or providing technical data.

5.2. The correct application of AW policy is not always readily discernable for SC programs that do not fit the mold of a typical PN acquisition or modification program, such as hybrid FMS/DCS programs. For these programs, consult the USAF AW Office for assistance in developing an acceptable AW strategy.

5.3. This bulletin is not applicable to programs that are solely DCS.

6. AW Process. Programs shall follow the standard AW process IAW AFI 62-601 and Technical Airworthiness Authority (TAA)-issued AWBs with the additional requirements and considerations for SC programs:

6.1. AW Planning. The AW plan and the Letter of Offer and Acceptance (LOA) are essential to the planning process. The LOA is the agreement between the Program Office (PO) and PN. The AW Plan is the agreement between the PO and the TAA.
6.1.1. When developing the LOA, the PO should determine the current configuration and condition of all PN air systems requiring modification. Air systems with unknown initial configurations or not in condition for safe flight may add scope to the LOA.

6.1.2. The minimum AW requirements, as defined by USAF AW Policy, shall not be relieved, waived, or otherwise reduced by the LOA. The PO should address the following in the LOA:

6.1.2.1. The statement of operating intent (SOI) from the PN defining the air system's planned usage, life cycle, environment, and maintenance strategy.

6.1.2.2. Any AW-related activities, processes, and/or products, required and agreed to through the SC program that are not otherwise required by the USAF AW policy/process.

6.1.2.3. Program flight operation requirements (e.g. ferry flights, compliance activities for airworthiness, requirements verification and validation, production testing, and training).

6.1.3. The PO shall coordinate all LOAs involving air systems with the TAA (through the USAF AW Office) to ensure the proper AW requirements exist.

6.1.4. The AW Plan shall identify the activities, processes, and/or products required by USAF AW policy as well as additional program requirements identified in the LOA and SOI.

6.2. AW Assessments.

6.2.1. New and Modifications of Existing Air Systems. The PO shall follow the USAF AW process IAW the requirements of AFI 62-601 plus any additional accepted and agreed to SC program requirements for acquisitions of new and modifications of existing foreign-owned air systems. Unless type certified by the Federal Aviation Administration (FAA), modification programs shall use MIL-HDBK-516 criteria to assess the modification and those systems directly impacted.

6.2.2. Baseline Air System Assessment for Existing Air Systems. If flight operations are required as part of the SC program (See 4.4), the PO shall conduct a baseline technical AW assessment and a maintenance AW assessment of the air system to identify any risks.

6.2.2.1. Even though these are not Contractor Owned/Contractor Operated (COCO) air systems, the technical AW assessment shall follow the procedures defined in AWB-340, USAF Airworthiness Requirements for Contractor-Owned Contractor-Operated Air Systems, Paragraph 7.3.

6.2.2.2. The maintenance AW assessment shall be accomplished by performing a physical inspection of the air system to determine if it is in a condition for safe operation and verify that all maintenance actions, required by approved technical data, are current. Refer to the applicable maintenance sections of the COCO Maintenance AW Assessment Checklist in USAF Airworthiness Circular (AC) 18-02 unless the PO has a suitable substitute.
6.2.2.3. Any risks identified during the baseline assessment should be mitigated prior to flight if possible. Operating limitations and restrictions required to mitigate these risks shall be documented in accordance with USAF AW policy. Risks not eliminated prior to flight shall be documented in a risk assessment.

6.3. **Compliance Report.** The PO shall complete a compliance report IAW AFI 62-601 requirements. This compliance report shall include the assessment from 6.2.1 and, if flight operations are required, 6.2.2.

6.4. **AW Approval Requirements.** When flight operations are required, both a technical AW assessment and maintenance AW assessment of the total air system are required (modified air system (6.2.1) and baseline air system (6.2.2)), prior to issuance of an AW approval.

6.4.1. Prior to issuance of AW approvals for required flights, the PO shall document all identified risks from the AW assessment (6.2.1) and the baseline air system assessment (6.2.2) IAW AWB-150 and receive acceptance for all approved risks IAW USAF policy.

6.4.2. The TAA shall issue AW approvals in accordance with USAF policy. USAF AW approvals shall expire no later than the conclusion of all flights within the SC program.

7. **AW Products.** If required by the LOA, the PO may provide the PN with products generated from the AW process (AW Plan, Certification Basis, Compliance Report, Risk Assessment, etc.) provided that the products meet foreign disclosure requirements and contractor distribution statements. The PO should provide risk assessments (6.2.1 only) to the PN as allowed.

7.1.1. SC programs are not eligible for issuance of USAF Military Type Certificates (MTC). If required by the LOA, the PO may provide a memorandum for record that summarizes the AW assessment process conducted and its outcome. Attachment 3 contains suggested content.

8. The PO should consult with the USAF AW Office (USAFAirworthiness.Office@us.af.mil) for clarification or assistance regarding proper application of AW policy to specific SC programs.

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Attachment 1

SC Air System AW Assessment Flow Process Flow Chart

Air System Acquisition or Modification for SC Program? (Ref Para. 5)

Yes

6.1 AW Planning
The PO should determine configurations and conditions of PN air systems requiring modification prior to LOA
The PO should address in the LOA:
The PN Statement of Operating Intent
AW-related activities, process, and/or products required by the PN in addition to USAF AW policy
Requirements for flight operations during the program
The PO shall:
Coordinate AW requirements in the LOA with the TAA
Document the airworthiness plan, incorporating program requirements, per the standard USAF AW process

6.2 AW Assessment
The PO shall complete an AW assessment IAW standard USAF AW process. Unless type certified by the Federal Aviation Administration (FAA), modification programs shall use MIL-HDBK-516 criteria to assess the modification

6.3 Compliance Report
The PO shall complete a compliance report IAW the requirements of AFI 62-601. This compliance report shall include the assessment from 6.2.1 and, if flight operations are required, 6.2.2.

Flight Ops Required? (4.4)

YES

6.2.2 Baseline Air System Assessment
The PO shall conduct a:
Technical AW assessment IAW AWB-340, Paragraph 7.3
Incoming maintenance assessment

6.4.1 Risk Acceptance
All identified risks from 6.2.1 and 6.2.2 must be accepted

6.4.2 AW Approval
AW approval issued for flights required by SC program.

NO

7. AW Products
As required by the LOA and provided disclosure/distribution requirements are met, the PO may provide the PN with:
ALL AW products including: AW Plan, Certification Basis, Compliance Report, Risk Assessments Memorandum for record summarizing assessment and its outcome

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Attachment 2

GLOSSARY OF REFERENCES, ABBREVIATIONS, AND ACRONYMS

References (latest revisions)
AFMAN 16-101, Security Cooperation (SC) and Security Assistance (SA) Management
AFI 62-601, USAF Airworthiness
AFPD 62-6, USAF Airworthiness
Defense Federal Acquisition Regulation Supplement (DFARS)
DoDD 5030.61, DoD Airworthiness Policy
AWB-340, Airworthiness Requirements for Contractor-Owned and Contractor Operated Air Systems

Abbreviations and Acronyms
AFI – Air Force Instruction
AW – Airworthiness
AWB – Airworthiness Bulletin
COCO – Contractor Owned/Contractor Operated
DCS – Direct Commercial Sales
DFARS – Defense Federal Acquisition Regulation Supplement
DoD – Department of Defense
DoDD – Department of Defense Directive
DSCA – Defense Security Cooperation Agency
FAA – Federal Aviation Administration
FMS – Foreign Military Sales
LOA - Letter of Offer and Acceptance
MTC – Military Type Certificate
PO – Program Office
PN – Partner Nation
SA – Security Assistance
SC – Security Cooperation
SOI – Statement of Operating Intent
TAA – Technical Airworthiness Authority
USAF – United States Air Force
USG – United States Government
Attachment 3

SUGGESTED CONTENT FOR AW PROCESS SUMMARY MEMORANDUM FOR RECORD

Based on the type of AW assessment conducted, select one of the following templates to summarize the AW process accomplished for the SC program in a memorandum for record.

AW Assessment leveraging MIL-HDBK 516:

An airworthiness assessment of the Mission/Design/Series [Procured/Modified] under Case Number [INSERT CASE NUMBER] was conducted in accordance with USAF airworthiness policy and process.

The Airworthiness Certification Basis (Reference a) was comprised of the applicable criteria from Military Handbook 516C, Airworthiness Certification Criteria. The design was assessed against the approved Certification Basis and conclusions documented in the approved Compliance Report (Reference b). The Risk Assessment package (Reference c) documents [A] High, [B] Serious, [C] Medium, and [D] Low airworthiness risks associated with non-compliances and recommended risk mitigations.

AW Assessment leveraging FAA Design Certification in whole:

An airworthiness assessment of the Mission/Design/Series [Procured/Modified] under Case Number [INSERT CASE NUMBER] was conducted in accordance with USAF airworthiness policy and process.

The Airworthiness Certification Basis was comprised of the FAA Type Certification Data Sheet (TCDS; reference a) and [X] applicable Supplemental Type Certificates (STC; reference b). FAA design certifications constitute the Compliance Report.

AW Assessment leveraging FAA Design Certification and MIL-HDBK 516:

An airworthiness assessment of the Mission/Design/Series [Procured/Modified] under Case Number [INSERT CASE NUMBER] was conducted in accordance with USAF airworthiness policy and process.

The Airworthiness Certification Basis was comprised of the FAA Type Certification Data Sheet (TCDS; reference a) and [X] applicable Supplemental Type Certificates (STC; reference b). Aspects of the configuration, flight envelope, and mission usage not included in the FAA Project Specific Certification Plan were assessed using criteria from MIL-HDBK-516C, Airworthiness Certification Criteria (Reference c).

FAA design certifications constitute the Compliance Report for the aspects of the configuration included in the FAA issued design certification.

For the configuration, flight envelope, and mission usage not included in the FAA design certification, the design was assessed against the approved Certification Basis and conclusions documented in the approved Compliance Report (Reference d). The Risk Assessment package (Reference e) documents [A] High, [B] Serious, [C] Medium, and [D] Low airworthiness risks associated with non-compliances and recommended risk mitigations.

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