AEROSPACE STANDARD

AS6462™	REV. D

Issued 2012-11
Revised 2019-11
Stabilized 2023-12

Superseding AS6462C

AS5553C, Counterfeit Electrical, Electronic, and Electromechanical (EEE) Parts; Avoidance, Detection, Mitigation, and Disposition Verification Criteria

RATIONALE

The “D” Revision of AS5553 incorporated AS6462 into the document. This document is no longer being maintained by the committee.

STABILIZED NOTICE

This document has been declared “STABILIZED” by SAE G-19 Counterfeit Electronic Parts Committee and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist.

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)**
Tel: +1 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
SAE WEB ADDRESS: **http://www.sae.org**

For more information on this standard, visit
https://www.sae.org/standards/content/AS6462D/

FOREWORD

This document standardizes the criteria for the assessment of requirements, practices, and methods related to counterfeit EEE parts management/avoidance, supplier management, procurement, inspection, test/evaluation, mitigation, reporting, and response strategies.

TABLE OF CONTENTS

1. SCOPE

1.1 Purpose/Application

This document is intended for use during audits to the requirements of AS5553C. It may be used by all contracting organizations that procure EEE parts, whether such parts are procured directly or integrated into electronic assemblies or equipment as guidance for evaluating compliance to AS5553C.

2. REFERENCES

2.1 Applicable Documents

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AS5553C Counterfeit Electrical, Electronic, and Electromechanical (EEE) Parts; Avoidance, Detection, Mitigation, and Disposition

AS9003 Inspection and Test Quality Systems, Requirements for Aviation, Space, and Defense Organizations

AS9100 Quality Management Systems - Requirements for Aviation, Space, and Defense Organizations

NOTE: Also available as EN9100 and JISQ9100.

AS9120 Quality Management Systems - Requirements for Aviation, Space, and Defense Distributors

2.1.2 ISO Publications

Available from International Organization for Standardization, ISO Central Secretariat, 1, ch. de la Voie-Creuse, CP 56, CH1211 Geneva 20, Switzerland, Tel: +41 22 749 01 11, www.iso.org.

ISO 9000 Quality Management Systems - Fundamentals and vocabulary

ISO 9001 Quality Management Systems - Requirements

2.2 Terms and Definitions

For the purposes of this document, the terms and definitions stated in ISO 9000 and AS5553C shall apply.

3. REQUIREMENTS

Table 1 shall be used to establish compliance to AS5553C. The table contains the AS5553C requirement clause, criteria for compliance, method of evaluation, record of compliance, and a column for notes.

The Methods of Evaluation (MOE) identified in Table 1 are for guidance only in establishing the methodology for conducting the audit; as such, the MOE may be modified, as deemed appropriate by the auditor(s). The MOEs are included to structure the audit at the depth necessary to verify compliance to the AS5553C, Section 3 Requirements.

Table 1 - Verification criteria

AS5553C Clause	Requirement	Comply ?	Criteria for Compliance	Method of Evaluation (MOE)	Record of Compliance	Notes
3. 3.1	**REQUIREMENTS** **Counterfeit EEE Parts Control Plan** The organization shall(1) develop and implement a risk-based counterfeit EEE parts control plan that documents its processes used for risk identification, mitigation, detection, avoidance, disposition, and reporting of suspect counterfeit or counterfeit EEE parts and/or assemblies containing such EEE parts. The control plan shall(2) include the processes described in 3.1.1 through 3.2. The control plan shall(3) be maintained, updated, and sustained based on evolving counterfeiting techniques and trends. NOTE: The plan updates may include avoidance techniques and information contained in industry standards.		(1) The counterfeit EEE Parts Control Plan (The Plan) must: Document the Organization's processes for risk identification, mitigation, detection, avoidance, disposition, and reporting of suspect or counterfeit EEE parts and/or assemblies containing such EEE parts. Have evidence that the plan has been implemented. (2) The Plan must include sections detailing the processes used to meet the requirements of 3.1.1 through 3.2. (3) The Plan must have a process for the Plan to be maintained, updated, and sustained to address evolving counterfeiting techniques and trends.	MOE - Review the contents of the plan and verify it includes all of the processes of 3.1.1 through 3.2. Review the plan to verify that it includes evidence of maintenance, updates, and sustainment of the plan based on evolving counterfeit techniques and trends	Record the plan title, number, release date, and revision. Record scope of plan includes all requirements. Record other documented evidence/artifact such as a revision table.	
3.1.1	**Personnel Training** The organization shall(1) train employees in the awareness, avoidance, detection, mitigation, and disposition of suspect counterfeit or counterfeit parts, if relevant to their organizational role and/or function. NOTE: Relevant personnel may include those involved with customer interface, management, program and project management, procurement, quality		(1) The Plan must contain the detailed information to train employees about the awareness, avoidance, detection, mitigation, and disposition of suspect counterfeit or counterfeit EEE parts if relevant to their organizational role and/or function.	MOE - Review the Organization's training program to verify the training covers awareness, avoidance, detection, mitigation, and disposition of suspect counterfeit or counterfeit EEE parts as relevant to the employee organizational role and/or function.	Record the training program reviewed. Record if they have training records for relevant personnel. Record rationale for acceptability and comments.	

AS5553C Clause	Requirement	Comply ?	Criteria for Compliance	Method of Evaluation (MOE)	Record of Compliance	Notes
	assurance, inspection, receiving, manufacturing, and engineering activities.					
3.1.2.	EEE Parts Availability The processes shall (1) maximize the use of available, authentic, originally designed, and qualified EEE parts throughout the product's life cycle (e.g., address obsolescence risk, as in STD 0016). NOTE: When availability or obsolescence risks are identified, the resolution process should consider: lifetime buys, alternate/multiple sources, adequate procurement lead time, development of new items or sources, redesign, or other appropriate mechanisms to proactively reduce the risk of exposure to suspect counterfeit or counterfeit EEE parts. Recommend customer notification of identified obsolescence risks and proposed actions.		(1) The processes must demonstrate that they maximize the use of the available authentic, originally designed, and qualified EEE parts throughout the product's life cycle.	MOE - Review that the Organization's processes, such as a parts management plan, address the use of available authentic, originally designed, and qualified EEE parts throughout the product's life cycle. Review evidence of examples where the process has been applied.	Record document title, number(s), release date, and revision. Record rationale for acceptability and comments. Record other documented evidence/artifact.	
3.1.3	**Purchasing Process** The processes shall: NOTE: Suppliers should be screened against current known counterfeit data, including part numbers and sources of supply. Consider source selection based on the source's application of recognized industry counterfeit avoidance standards (e.g., AS6081, AS6496, ARP6178, AS6171). Consider other sources of information about counterfeiting prior to procurement of EEE parts (e.g., GIDEP, ERAI, anti-counterfeiting		See below.	See below.	See below.	

AS5553C Clause	Requirement	Comply ?	Criteria for Compliance	Method of Evaluation (MOE)	Record of Compliance	Notes
	forum). The extent of performance monitoring applied should be determined by the level of risk involved in the procurement, the nature of the product and the source of the supply. A combination of monitoring methods can be used effectively to ensure outcomes are achieved. Assurance actions may include surveys, audits, review of product alerts (e.g., GIDEP, ERAI, anti-counterfeiting forum), review of supplier quality data, compliance to counterfeit avoidance and detection industry standards, or other methods deemed appropriate for the procurement.					
3.1.3a	**Purchasing Process** The processes shall(1): Assure procurement of EEE parts from authorized sources, or from those suppliers who provide EEE parts obtained exclusively from authorized sources, when the EEE parts are still being manufactured or available in stock directly from such sources.		(1) Documented process to procure directly from Authorized Sources or those suppliers who provide EEE parts obtained exclusively from Authorized Sources.	MOE - Review the purchasing process to confirm that it provides for procurement of EEE parts from Authorized Sources (as defined by AS5553) or those suppliers who provide EEE parts obtained exclusively from Authorized Sources.	Record the process document number, revision, and date. Record rationale for acceptability and comments.	
3.1.3b	**Purchasing Process** The processes shall(1) : Ensure objective evidence is maintained that the EEE parts supplier is an authorized source or a supplier who provides EEE parts obtained exclusively from authorized sources.		(1) Purchasing process shall document and retain objective evidence that the supplier is an Authorized Source or a supplier who provides EEE parts obtained exclusively from Authorized Sources.	MOE - Look at the objective evidence that the supplier was an Authorized Source or a supplier who provides EEE parts obtained exclusively from Authorized Sources at the time of procurement.	Record objective evidence reviewed. Record rationale for acceptability and comments.	
3.1.3c	**Purchasing Process** The processes shall(1): When using suppliers that provide EEE parts exclusively from authorized sources, a		(1) Purchasing process shall document and retain objective evidence of the requirements to obtain EEE parts	MOE - Confirm the objective evidence that the organization reviews, audits, and/or evaluates	Record process document title, number(s), release date, and revision. Record rationale for	

AS5553C Clause	Requirement	Comply ?	Criteria for Compliance	Method of Evaluation (MOE)	Record of Compliance	Notes
	process shall be established to review, audit, and/or evaluate sources and transactions to (1) Ensure parts have been obtained from authorized sources; (2) Ensure that the source has inventory control processes to prevent commingling of material from authorized sources and non-authorized sources.		exclusively from Authorized Sources, based on review, audit, and/or evaluation to ensure the suppliers: (1) Obtain EEE parts directly from Authorized Sources. (2) Maintain EEE parts to prevent commingling of material from Authorized Sources and non-Authorized Sources.	suppliers to assure suppliers obtain EEE parts directly from Authorized Sources and those EEE parts are controlled to prevent commingling with material from non-authorized sources.	acceptability and comments. Record objective evidence/artifact of compliance, e.g., reviews, audits, and/or evaluations.	
3.1.3d	**Purchasing Process** The processes shall(1): Evaluate, select, and monitor suppliers using sources of counterfeiting information to avoid the purchase of or use of suspect counterfeit or counterfeit EEE parts.		(1) Purchasing process shall use recognized industry sources of counterfeiting information to evaluate, select and monitor suppliers to avoid the purchase of or use of suspect counterfeit or counterfeit EEE parts.	MOE - Review processes to evaluate, select and monitor suppliers Confirm that the process includes evaluation and monitoring sources of counterfeiting information. See note for 3.1.3 for examples of sources.	Record process document title, number(s), release date, and revision Record objective evidence/artifact of compliance, e.g., purchase orders reviewed, supplier list reviewed, source of counterfeiting information.	
3.1.3e	**Purchasing Process** The processes shall(1): Require a documented risk assessment and risk mitigation process, by the organization with technical responsibility, for procurements from other than: (1) authorized sources, or (2) sources who provide EEE parts obtained exclusively from authorized sources. (1) The risk assessment shall(2) address: i. The likelihood of receiving a suspect counterfeit or counterfeit EEE part from the source; ii. The consequences of a suspect counterfeit or counterfeit EEE part being installed (e.g., human safety, mission		(1) When purchasing from other than Authorized Sources or sources who provide EEE parts obtained exclusively from authorized sources, the organization shall have a documented risk assessment and risk mitigation process. (2) The risk assessment process shall include: i. the likelihood of receiving a suspect counterfeit or counterfeit EEE part from the source; ii. The consequences of a suspect counterfeit or counterfeit EEE part being installed	MOE - Review the process to confirm a risk assessment is performed when procuring from other than Authorized Sources or Sources who provide EEE parts obtained exclusively from Authorized Sources. Determine the risk assessments includes the likelihood and consequences of receiving a suspect counterfeit or counterfeit EEE part from the source. Review a completed risk assessment to confirm that the risk	Record process document title, number(s), release date, and revision. Record the completed risk assessment including the specific part number, the manufacturer, and the supplier the assessment was performed against and date. Record reviewed evidence of the completed inspections and/or tests with accept/reject criteria. Record rationale for acceptability and	

AS5553C Clause	Requirement	Comply ?	Criteria for Compliance	Method of Evaluation (MOE)	Record of Compliance	Notes
	success, additional cost) where such consequences are made known to the organization. (2)The risk mitigation process shall(3) document inspections and/or tests that are utilized commensurate with the risk including acceptance and reject criteria. NOTE: Tests, inspections, and other risk mitigation methods should be performed in accordance with accepted customer and industry-recognized standards (e.g., AS6171, AS6081, CCAP-101, IDEA-STD-1010) and techniques designed to intercept and avoid the use of suspect counterfeit or counterfeit EEE parts.		(e.g., human safety, mission success, additional cost) where such consequences are made known to the organization. (3) The risk mitigation process shall document inspections and/or tests (including acceptance and reject criteria) utilized commensurate with the risk.	mitigation process was executed in accordance with the plan. Also verify different levels of risk (supplier and application) are identified and resulting mitigation inspections/tests are documented.	comments.	
3.1.4	**Purchasing Information** The documented process shall(1) specify contract/purchase order requirements to minimize the risk of being provided suspect counterfeit or counterfeit EEE parts. This includes:		See below.	See below.	See below.	
3.1.4a	**Purchasing Information** The documented process shall(1) specify contract/purchase order requirements to minimize the risk of being provided suspect counterfeit or counterfeit EEE parts. This includes: Flow down of applicable counterfeit avoidance and detection requirements to applicable contractors and their supply chain;		(1) The process must require contract/purchase orders to contain flow down requirements to applicable contractors and their supply chain to minimize the risk of being provided suspect counterfeit or counterfeit EEE parts.	MOE - Verify process requires flow-down of applicable requirements throughout the supply chain. Determine what requirements were flowed down by the organization. Review contract/purchase order(s) to determine what requirements were	Record document title, number(s), release date, and revision. Record the contract/purchase order(s) number, date, and part ordered. Record other documented evidence/artifact.	

AS5553C Clause	Requirement	Comply ?	Criteria for Compliance	Method of Evaluation (MOE)	Record of Compliance	Notes
				flowed down by the organization.		
3.1.4b	**Purchasing Information** The documented process shall(1) specify contract/purchase order requirements to minimize the risk of being provided suspect counterfeit or counterfeit EEE parts. This includes: Flow down a requirement for the authorized distributors to disclose if they are not authorized for the EEE parts they are supplying.		(1) The process must require that contracts/purchase orders have a clause requiring an Authorized Distributor to disclose when that distributor is not authorized for the EEE parts they are supplying.	MOE - Review contract/purchase order requirements and verify that there is a requirement for the supplier to disclose if they are not an Authorized Distributor for the parts they are supplying. Review contract/purchase order(s) to determine if the requirement was flowed down by the organization.	Record document title, number(s), release date, and revision. Record the contract/purchase order number, date, and part order. Record other documented evidence/artifact.	
3.1.5	**Verification of Purchased EEE Part(s)** The documented processes shall(1) verify that risk mitigation per 3.1.3.e is performed and meets acceptance criteria.		(1) The processes must verify the risk mitigation per 3.1.3.e of this standard is performed and meets acceptance criteria.	MOE - Review risk assessments and risk mitigation results generated per 3.1.3.e and verify they have been completed and meet the documented criteria.	Record the contract/purchase order number(s), risk assessment, risk mitigation, including any inspection and test results and their acceptance. Record rationale for acceptability and comments. Record other documented evidence/artifact.	
3.1.6	**Investigation** The organization shall(1) investigate suspect counterfeit and counterfeit EEE parts. The documented processes for the investigation shall(1) address the detection, verification, resolution, and control of in-process (post acceptance) and in-service suspect counterfeit or counterfeit EEE parts.		(1) The process must require an investigation of suspect counterfeit and counterfeit EEE parts. (2) The investigation process must document the detection, verification, resolution, and control of in-process (post acceptance) and in-service suspect counterfeit and counterfeit EEE parts.	MOE - Verify the process requires investigation and addresses counterfeit part detection, verification, resolution, and control of in-process (post acceptance) and in-service suspect counterfeit or counterfeit EEE parts. Review an investigation to determine if it	Record document title, number(s), release date, and revision. Record rationale for acceptability and comments. Record other documented evidence/artifact.	

AS5553C Clause	Requirement	Comply ?	Criteria for Compliance	Method of Evaluation (MOE)	Record of Compliance	Notes
				complied with the process.		
3.1.7	**Material Traceability and Control** The documented processes shall:		See below.	See below.	See below.	
3.1.7a	**Material Traceability and Control** The documented processes shall(1): Enable tracking of procured EEE parts back to an authorized source or mitigated risk per 3.1.3.e prior to product acceptance. NOTE 1: Authorized source/distributor records enable traceability/tracking to the manufacturer (e.g., OCM/OEM). NOTE 2: It is desirable for EEE parts traceability/tracking while in inventory.		(1) The Organization's traceability process must enable EEE parts to be tracked to an Authorized Source or tracked to mitigated risk per 3.1.3.e.	MOE - Verify process requires the ability to track EEE parts back to the Authorized Source or the parts' risk mitigation per 3.1.3.e. Review purchasing order/contract(s) and the appropriate receiving inspection record package(s) for an EEE part and verify compliance to the traceability requirements as tracking back to the Authorized Source or the parts risk mitigation per 3.1.3.e.	Record documentation reviewed to validate conformance to the traceability requirements. Record other documented evidence/artifact.	
3.1.7b	**Material Traceability and Control** The documented processes shall(1): Enable identification of the EEE parts and/or assemblies to the product(s) impacted when suspect counterfeit or counterfeit EEE parts or assemblies are discovered prior to or after customer acceptance.		(1) The traceability process must have the capability of identifying affected EEE parts or assemblies to the product(s) when suspect counterfeit or counterfeit EEE parts are identified prior to or after customer acceptance.	MOE - Review the Organization's process for traceability to confirm that it provides for tracing of suspect counterfeit or counterfeit EEE parts and/or assemblies to the product(s) affected prior to or after customer acceptance. If available, evaluate an actual case of suspect counterfeit or counterfeit EEE parts and confirm the traceability meets the requirement.	Record the process reviewed (revision and date). Document rationale for acceptability. Record other documented evidence/artifact.	