STANDARDS RELATED DOCUMENT

AQAP-2131-SRD.1

GUIDANCE ON THE USE OF AQAP-2131 EDITION C

Edition A Version 1

JANUARY 2020

NORTH ATLANTIC TREATY ORGANIZATION

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NORTH ATLANTIC TREATY ORGANIZATION (NATO)

NATO STANDARDIZATION OFFICE (NSO)

NATO LETTER OF PROMULGATION

24 January 2020

1. The enclosed Standards Related Document, AQAP-2131-SRD.1, Edition A, Version 1, GUIDANCE ON THE USE OF AQAP-2131 EDITION C, which has been approved in conjunction with AQAP-2131 by the nations in the Life Cycle Management Group, is promulgated herewith.

2. AQAP-2131-SRD.1, Edition A, Version 1, is effective upon receipt and replaces the guidance that was published as Annex B of AQAP-2009.

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4. This publication shall be handled in accordance with C-M(2002)60.

Zoltán GULYÁS
Brigadier General, HUNAF
Director, NATO Standardization Office

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Chapter 1 - Introduction

1. Background

1. AQAP-2131 contains quality assurance requirements for Supplier final inspection and testing. Compliance with AQAP-2131 provides confidence to the Acquirer that the Supplier can deliver product that meets contract requirements and provides appropriate evidence to support acceptance (i.e. certificates and test results).

2. AQAP-2131 is a standalone quality assurance publication and does not require Suppliers to have a management system compliant with the requirements of ISO 9001 or AS 9100. It does recognise the basic quality management system fundamentals and vocabulary contained in ISO 9000 as qualified by AQAP specific definitions.

3. It should be noted that acquiring nations may use supplementary contractual requirements and issue supplementary guidance that reflects their national practice. Readers are encouraged to contact their National Quality Assurance Authority if further clarification is required. Contact details for National Authorities are contained in AQAP-4107 SRD.1.

2. Purpose

1. This guidance document has been published to promote a consistent interpretation of the AQAP-2131 requirements.

2. This guidance document is for all users of the NATO contractual AQAPs: Acquirers, Suppliers and Government Quality Assurance Representatives (GQAR).

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Chapter 2 – Guidance for the use of AQAP-2131

1. General

Table 1 (below) provides guidance on the requirements within AQAP-2131 Edition C.

2 – Definitions

1. **Appropriate National Authority**: In the context of Government Quality Assurance (GQA) this is interpreted as being the National Quality Assurance Authority (NQAA).

2. **National Quality Assurance Authorities:** The Military service, Government agency or organisation within a NATO and PfP nation identified to other Allied nations as the authority for NATO quality assurance matters. Note: There may be more than one designated NQAA within a NATO or PfP nation.

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Table 1: Guidance for AQAP-2131 Requirements

Requirement	Guidance
2.1. Final Inspection and Test	
1. The Supplier shall perform all inspection and testing of the product necessary to demonstrate conformity with contract requirements, and shall retain documented information for inspection and test sufficient to demonstrate the conformity of the product to contract requirements.	The Supplier is responsible for ensuring that all requirements, including requirements and expectations relating to quality* are met. The Supplier is expected to identify requirements and prepare information on how they will be confirmed. If product characteristics cannot be confirmed at final inspection, inspection and test activities should be performed during the product realization. It is also necessary to consider inspection and testing carried out by external providers. The compliance of the product with the requirements of the contract is to be documented by the Supplier. Such documentation could be based on their own controls or records of inspections and tests carried out by external providers. All documented information is expected to be retained and available to the GQAR and/or Acquirer. *Requirements relating to quality: When AQAP-2131 is required, the Acquirer expects the Supplier to be able to perform sufficient quality controls necessary to produce readily available documentation that shows conformance of each and every item to be delivered. This expectation is often not expressed directly or in writing, but is expected and is required nonetheless.
2. The Supplier shall maintain documented procedures for inspection and test activities which include acceptance criteria.	Prior to final inspection and testing, acceptance criteria might be provided by the customer, stated in the product documentation or set internally as requirements before shipment. The actions to be performed if the acceptance criteria fail to be met during test/inspection should also be described.

3. The Supplier shall ensure the application of appropriate inspection and test processes and effective communication that capture and deliver contractual requirements.	During the review of the contract, the Supplier is required to identify the inspection and test processes and procedures, the expected/required results and other documented information necessary to demonstrate the product's compliance with the requirements of the contract. Final inspection and testing acceptance criteria may be provided by the Acquirer in contractual documentation.
4. The respective test status of the products shall be recognizable at any stage of inspection.	The Supplier is required to determine inspection and test stages and identify verification status of the products. All products entering the Supplier facilities are required to have a verification status; even if this status is ‘untested’, ‘not verified’, ‘subject to inspection’ or similar.
5. The Supplier shall ensure that all devices used for tests and (final) inspection are metrologically confirmed. When an item of measuring equipment is found to fail re-calibration or is not in calibration and when there are affected products, the GQAR and/or Acquirer is to be informed and presented with details of affected products, including products already delivered.	The Supplier is required to have/establish the processes and procedures appropriate to ensure that all devices used for tests and (final) inspection are metrologically confirmed. The metrological confirmation comprises measuring equipment calibration and measuring equipment verification related to intended use of the equipment (Fig 2 - Metrological confirmation process for measuring equipment. - in ISO 10012:2003), as well as any required sealing and labelling. Information relevant to the metrological confirmation status of measuring equipment is to be readily available for the operator. Prior to the metrological confirmation the suitability of the measuring equipment is to be demonstrated and documented.

6. The Supplier shall maintain documented information concerning the appropriate competence of all personnel performing inspection and test.	Documented information on competence of personnel is required to be available to the GQAR and/or Acquirer.
2.2. Control of Externally Provided Products	
1. The Supplier shall flow down the applicable contractual requirements to external providers by referencing the stated contractual requirement, including relevant AQAP(s). The Supplier shall insert the following in all purchasing documents: "All requirements of this contract may be subject to GQA. You will be notified of any GQA activity to be performed."	The Supplier is required to ensure that they apply adequate control across their supply chain by providing the necessary assurance of compliance to contractual requirements for their external providers, identifying and managing areas of risk and ensuring communication of customer requirements.
2. The Supplier shall on request provide the GQAR and/or Acquirer with a copy of any subcontracts or orders for products related to the contract. The Supplier shall notify the GQAR and/or Acquirer if a subcontract or order has been identified as constituting or involving risk.	This requirement is intended to focus the Supplier's QA resources on risk areas through the supply chain. By ensuring the availability of appropriate information for the GQAR and/or Acquirer, they can consider performing GQA at external providers. When the Supplier is requested for this information, they may provide a product or work breakdown structure to explain/illustrate the supply chain. The Supplier is encouraged to consider the risk of counterfeit material entering the supply chain. Further guidance is contained at Annex A.
3. The Supplier shall retain documented information of verification and/or validation of purchased products. The documented information shall be made available to the GQAR and/or Acquirer upon request.	This paragraph is considered self-explanatory.
4. When the Supplier establishes that an acquirer-supplied product is unsuitable for its intended use, they shall immediately report to and coordinate with the Acquirer on the corrective actions to be taken. The Supplier shall also inform the GQAR upon request. Until action is resolved the product should be treated as a nonconforming product.	This paragraph is considered self-explanatory.

2.3. Traceability	
1. The Supplier shall have appropriate processes in place for traceability of the product through production, inspection and delivery.	Requirements for traceability placed on the Supplier may help to minimize the impact of non-conforming material on product in production, at inspection or already delivered. This requires Suppliers to maintain build records during manufacture where components and materials have been used. Examples of this could include O seals, welding consumables and other material that are batch controlled. Such records should be able to support product recall in the event that material is subsequently found to be suspect or nonconforming.
2. The Supplier shall have appropriate processes in place for traceability to support product recall.	See guidance **for 2.3.1**
2.4. Preservation	
1. Specific storage conditions (i.e. temperature, dust, humidity) shall be identified by the Supplier. The Supplier shall comply with these specific requirements during all relevant processes (storage, shipping, transport etc.). Information related to specific storage conditions shall be communicated by the Supplier to the Acquirer.	These specific storage and handling conditions are required to be adequately stated in the product documentation or in other documentation provided to the Acquirer.

2. Products with limited shelf life shall be identified at final inspection and the expiry date should be marked on the product labels and the packaging. Only products with acceptable remaining shelf life shall be delivered by the Supplier/distributor.	The limited shelf life applies to all products that have a storage period. Where the product has been stored before dispatch to the Acquirer the remaining shelf life is to be confirmed to ensure it meets the contractual requirements.
3. The Supplier shall ensure the provision of adequate protection to prevent deterioration and damage during manufacture, storage and delivery.	Where the contract specifies special requirements for the protection or storage of the product, then the Supplier is to identify those requirements and provide objective evidence of their fulfilment. Otherwise the Supplier is to identify industry best practices to ensure the provision of adequate protection at manufacture, between processes, in storage awaiting dispatch and delivery.
4. The Supplier shall ensure that adequate packaging is used to assure product preservation and where applicable meet any contractual packaging and labelling requirements.	This paragraph is considered self-explanatory.
2.5 Products Presented by the Supplier for Release	
1. The Supplier shall ensure that only acceptable products, intended for delivery, are released. The GQAR and/or Acquirer reserve the right to reject nonconforming products.	This paragraph is considered self-explanatory.
2. The Supplier shall provide a Certificate of Conformity at release of product to the GQAR and/or Acquirer unless otherwise instructed. If the Supplier is not a manufacturer of the product, an Original Equipment Manufacturer (OEM) or an Authorized Manufacturer CoC shall be provided.	The Certificate of Conformity (CoC) is a document, signed by the Supplier, which states that, the product conforms with contractual requirements. The recommended minimum information required for a CoC is detailed at Annex B.

	The Supplier is asked to note that the contract may identify a specific CoC form and/or define contract specific information that should be included in the CoC. If the contract requires the GQAR to provide a statement of GQA then a signature block may be added to the CoC. Further information is provided at Annex B.
3. The Supplier is solely responsible for the conformance to requirements of products provided to the Acquirer.	This applies to both products manufactured by the Supplier and those supplied by its external providers, regardless of the degree of their processing. It also applies to materials included in products manufactured by the Supplier.
4. Where the GQAR and/or Acquirer is required to witness any final inspection or formal acceptance activities, the Supplier shall provide the GQAR and/or Acquirer with a minimum of 10 working days notification of the event unless otherwise stated in the contract.	This paragraph is considered self-explanatory.

2.6 Control of Nonconforming Products	
1. The Supplier shall identify, control and segregate nonconforming products (including counterfeit material).	For the Supplier to meet this requirement in a consistent and controlled manner it is reasonable to expect there to be established processes in place to ensure segregation, containment and identification of nonconforming product(s). Appropriate actions should be in place to determine and communicate its status to prevent nonconforming product entering the supply chain. Wherever possible, there is to be an area set aside for nonconforming product. The level of control / access, for this area, is to be proportionate for the type of product being controlled. This is to prevent unintentional use or entry into the supply chain. There may be a situation where nonconforming parts cannot be segregated or where it would not be cost effective to do so (e.g. major assemblies or temporary work locations). In these situations, positive materiel control and identification processes are to be confirmed, both in stock management systems and through physical identification or 'locking'. Counterfeit material, or suspected counterfeit material, is required to be treated as nonconforming product. See Annex **A** for additional guidance.

2. The GQAR and/or Acquirer reserve the right to reject all rework, repair and use as is dispositions.	This requirement establishes the right of the Acquirer/GQAR to reject the Supplier's dispositions of nonconforming product. This is required for proposals that will have a detrimental effect on the product, higher assemblies or through life support. e.g. a repair during manufacture may eliminate the possibility of future repairs during service life.
3. Records of rework, repair and use as is dispositions shall be retained as documented information.	The retained information is required to be made available to the GQAR and/or Acquirer to enable a considered evaluation of any potential impact on related products or systems. It must be noted that the cumulative effect of concessions should be considered at system level.
4. The Supplier shall maintain and retain documented information for the handling of nonconforming products.	This paragraph is considered self-explanatory.
5. The Supplier shall notify the GQAR and/or Acquirer of nonconformities and corrective actions required.	This paragraph is considered self-explanatory.
3.1. Support for the GQA Activities and Access to Supplier	
The Supplier shall provide to the GQAR and/or Acquirer: 1. The right of access to facilities where the contracted activities are being performed.	The requirements specified within Chapter 3 are to ensure that the GQAR and/or Acquirer has unlimited access to all facilities where any activities related to the implementation of the contract are carried out. This also applies to facilities external to the Supplier’s main facilities and facilities of external providers.

2. Information pertaining to the fulfilment of requirements in the contract. 3. Unrestricted opportunity to evaluate Supplier compliance with this publication. 4. Unrestricted opportunity to conduct verification of product conformity with the contract requirements.	The Supplier is required to ensure that the GQAR and/or the Acquirer are provided all assistance necessary to enable the conduct of GQA; including the availability of suitable office space for performing administrative tasks and for the purpose of product verification.
5. Required assistance for evaluation, verification, validation, testing, inspection or release of the product for the accomplishment of GQA to contract requirements. 6. Accommodation and facilities for performing GQA. 7. The necessary equipment available for reasonable use for performing GQA. 8. Supplier personnel for operation of such equipment as required. 9. Access to information and communication facilities. 10. The necessary Supplier documentation to confirm product conformance to specification. 11. Copies of necessary documents, including those on electronic media.	The terms "facilities" and "assistance" cover, in particular: timely access to places where activities related to the execution of the contract are performed and, assistance with access to the information necessary for the conduct of the GQAR/Acquirer QA process such as documentation, results of audits,

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ANNEX A

Counterfeit Avoidance Guidance for AQAP-2110 and AQAP-2131

AQAP-2131 Ed.C Requirement

1. The **AQAP-2131** requirement for the avoidance of counterfeit materiel can be found in section 2.6.1:

The Supplier shall identify, control and segregate nonconforming products (including counterfeit material).

Guidance

2. Counterfeit materiel is by its nature nonconforming (i.e. there is a characteristic that does not fully comply with the specification or history of the materiel). This could include but not limited to raw material, manufacturing methods, lifetime of parts or false certification. What makes the nonconforming materiel counterfeit is the act of false misrepresentation.

3. Counterfeit materiel is undesirable in Defence equipment as it may have unpredictable performance and failure modes which could compromise capability and equipment safety. Below in Fig 2 is a diagram showing the most common counterfeiting modes and their representation

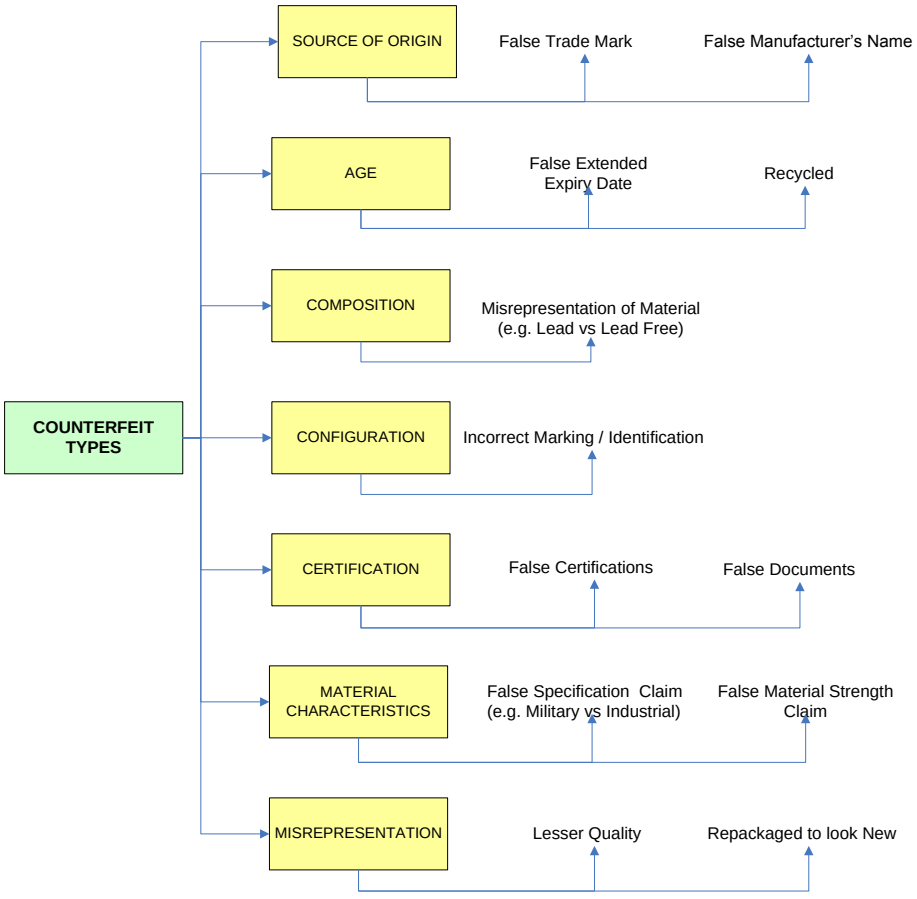

Figure 2: Diagram showing the counterfeiting modes

4. There is an increased probability of counterfeit materiel where:

a. the components or raw materials are of a type that are known to be vulnerable to counterfeiting,

b. the design requires the sourcing of parts that are obsolescent, or are foreseen to become obsolescent during the lifecycle of the equipment,

c. there are likely to be multiple tiers in the supply chain,

d. traceability of the materiel is not otherwise mandated,

e. the design includes electrical, electronic and electro-mechanical (EEE) Parts,

f. where counterfeiting of test results enables the product to be accepted by an organisation,

g. where counterfeiting of certificates enables an organisation to benefit from that certification without achieving the required standard or output.

5. There are recognised national standards already in existence, some specific to certain product domains, for example electronics is covered by AS5553.

6. Other guidance may be identified in:

- STANREC 4791-Avoidance of counterfeit materiel in the Defence supply chain;
- BSI PD IEC/TS 62668-1 Process management for avionics - Counterfeit prevention. Part 1: Avoiding the use of counterfeit, fraudulent and recycled electronic components;
- SAE AS6174 Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel.

7. The Supplier's process should reflect the counterfeit types and the level of risk. The diagram at Fig 3 reflects the risks described in the text in relation to counterfeit materiel in the supply chain and risk in Final products.

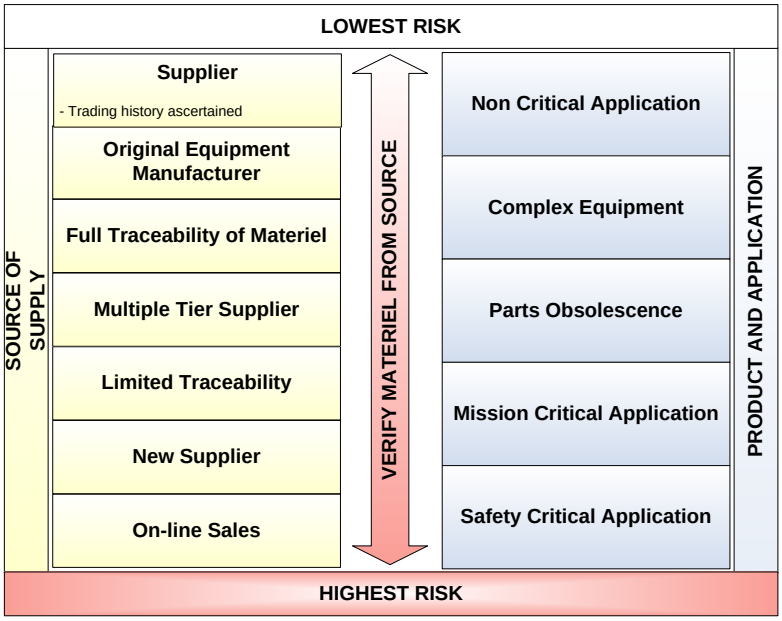

Figure 3: Counterfeit risk assessment diagram

Counterfeit Avoidance Strategy and Policy Statement

8. A Supplier who holds a counterfeit avoidance policy indicates a level of maturity in its approach to counterfeit avoidance. The benefits of having a counterfeit avoidance strategy and the implementation of the strategy through a policy statement, this will enable the organisation;

a. To understand what potential risks of counterfeit material are in the supply chain.

b. By the organisation using the counterfeit avoidance policy as the first steps in developing the controls, awareness, the resource requirements and identifying the organisations intent to address the issue.

Impact of Counterfeit Material

9. Counterfeit materiel is undesirable in defence equipment as it may have unpredictable performance and failure modes which could compromise capability and equipment safety.

10. To manage the supply chain, understand the risks of supply and assure the providence of critical items will enable the Acquirer and Supplier to reduce the risk of:

a. Premature failure and expensive repairs and investigation;

b. Loss of confidence in the system or product;

c. Rework and loss of capability;

d. Legal action and loss of reputation.

11. By the Supplier actively planning and managing the risk of counterfeit materiel in their supply chain and formalising their process for identification and control of counterfeit parts, the Supplier offers:

a. Improved awareness and controls of their supply chain;

b. Assurance to the customer that the provenance and quality aspects of both the product and any sub-components are known;

c. Assurance that a system is in place to assure early detection of counterfeit parts within the supply chain;

d. Processes are in place and to be adhered to if counterfeit parts are detected; and

e. The correct remedial action is taken which includes containment, investigation and action.

ANNEX B – Minimum Certificate of Conformity (CoC) Content

A CoC should contain the following information as a minimum:

1) Supplier name and address;

2) Product;

a. Name,

b. Type number or model name/number,

c. Serial number/batch number,

d. Other data which specific for product to allow identification (i.e. batch quantity),

e. Any concessions;

3) A Supplier's statement; that the product conforms to all requirements of the technical specification/contract;

4) Technical specification/contract reference/identifier.

5) Date and place of issuing CoC;

6) Name, signature and position in the company of the competent person issuing the CoC.

Notes:

1. If the Supplier is not the OEM then the CoC must contain OEM certification details. This enables future traceability and logistic support.

2. If the contract requires the GQAR to provide a statement of GQA then a signature block may be added to the CoC. This should include the statement:

Government Quality Assurance Representative Statement of GQA:

With reference to this CoC, this is to attest that within the provisions of STANAG 4107, AQAP-2070 and the RGQA, the planned Government Quality Assurance has been performed.

3. The Supplier is asked to note that the contract may identify a specific CoC form and/or define contract specific information that should be included in the CoC.

**An example of Certificate of Conformity (CoC) is shown on the following pages.

GQAR Statement of Government Quality Assurance (GQA)

<table>
<tr><td colspan="5">Part I Supplier Certificate of Conformity</td><td>1. Supplier CoC Serial No.</td></tr>
<tr><td colspan="3">2. Supplier (Include name, address, Email, etc.):</td><td colspan="3">3. Contract number:

4. Contract modification Number:</td></tr>
<tr><td colspan="3">5. Approved Deviations and/or Concessions:</td><td colspan="3">6. Acquirer (Include name, address, Email, etc.):</td></tr>
<tr><td colspan="3">7. Delivery Address.</td><td colspan="3">8. Applicable to
Partial delivery Number:
Final delivery Number:</td></tr>
<tr><td>9. Contract Item #</td><td>10. Product description or Part #</td><td>11. Quantity</td><td>12. Shipment document</td><td>13. Undelivered Quantity</td><td></td></tr>
<tr><td colspan="6">14. Remarks or comments</td></tr>
<tr><td colspan="6">15. Supplier Statement of Conformity
It is certified that, apart from the approved deviation permits/ concessions noted in block#5 above, the products listed above conform in all respects to the contract requirements.</td></tr>
<tr><td>Date</td><td colspan="2">Supplier Name and Title</td><td colspan="3">Supplier Signature</td></tr>
</table>

<table>
<tr><td colspan="2">Part II GQAR Statement of GQA</td><td>1. Supplier CoC Serial No.</td></tr>
<tr><td colspan="3">2. Supplier:</td></tr>
<tr><td colspan="2">3. Contract number:</td><td>4. Contract Modification No.</td></tr>
<tr><td colspan="3">5. Remarks or comments:</td></tr>
<tr><td colspan="3">6. Government Quality Assurance Representative Statement of GQA:

Referring to the CoC indicated in block 1, this is to attest that within the provisions STANAG 4104, AQAP 2070 and the RGQA, the planned Government Quality Assurance has been performed.

(GQAR statement and signature of the CoC does not mean acceptance on behalf of the Acquirer of the product identified in Part 1. GQAR statement and signature does not mean that all items have been inspected and nor does it mean that any form of certification has been granted.)</td></tr>
<tr><td>Date:</td><td>QAR Information:

Name:

Phone:

Email address:</td><td>GQAR Signature:</td></tr>
</table>

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