

MDA Space

Supplier Quality Manual

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Information included herein is not controlled under Canadian and/or US Export Laws and does not require an export permit.

Revision and History Page

Revision	Amendment	Date
-	Initial release	February, 2026
A	Moved Counterfeit Parts Prevention and Traceability and Shelf Life to Section 1. Added a paragraph to "EEE Components". Updated Table 3-1 to match what is expected from suppliers. Deleted Table 3-2. Added small verbiage through Section 3. Updated time and added an extra note in Section 6 & 6.1.	May, 2026
B	Updated simple wording in Section 1 “General Quality Requirements”. Table 3-1 QRS level contents re-arranged to match better requirements. Matched Section 3 to match Table 3-1 and updated applicable headers. Two Key contents were added to Section 3.5.4. Added Section 4.1 MDA Space Property. Added a paragraph in Section 7 explaining Deviations vs Waivers. Replaced Quality Analyst with Supplier Quality Engineering in Table 8.1. Added Section 8 for Supplier RMA, updated following headers accordingly.	July, 2026
C	Updated Shelf life from 10% to 20%. Added Section 1.18 and updated applicable headers. Table 3-1 updated to reflect changes required for Suppliers/Customers. Moved Test Data & Submission of Test Items to general requirements. Added Photograph of Packaged Item to Level 4. Table 3-7.1 updated Sample size due to being incorrect. Added Sub-Headers for Level 3. Slightly updated Section 3.3.1 and sub-sections wording for clearer understanding. Added a statement to 3.3.1 for better understanding.	September, 2026

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Introduction

The Supplier Quality Manual (SQM) outlines MDA Space's quality requirements, establishing the foundation for a successful and collaborative partnership with our suppliers and sub-contractors.

MDA Space's Quality Vision

MDA Space's quality vision is to drive growth through innovation, exceed customer expectations, and deliver the highest quality products in our industry. To achieve this goal, we recognize the importance of building and maintaining mutually beneficial relationships with our suppliers, who are valued as integral partners and extensions of our business.

We are committed to fostering best-in-class partnerships that enable us to consistently meet and exceed our customers' expectations. To that end, we are actively working to strengthen our supplier relationships, ensuring we can deliver exceptional quality products and services.



**PUT THE CUSTOMER
MISSION FIRST**



**BE
EXCEPTIONAL**



**DO
THE RIGHT THING**



**ALWAYS
DELIVER**



**BETTER
TOGETHER**

Supplier Quality Manual (SQM) Purpose and Scope

The SQM defines MDA Space's quality requirements for suppliers and sub-tier suppliers. Each of MDA Space's suppliers is required to comply with this SQM to ensure the quality and reliability of parts and products delivered to MDA Space and our Customers.

The SQM is comprised of the following key sections:

- 1) General Quality Requirements
- 2) Quality Clauses
- 3) Quality Record Submission Levels
- 4) Packaging Requirements
- 5) Non-conformance Reporting
- 6) Waivers, Deviations and Unauthorized Repairs & Reworks

The SQM is located at <https://bramptonpurdoc.mda.space/>



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For the purposes of the SQM, the term "Contract" refers to the Purchase Order and/or any other procurement agreement between MDA Space and the supplier, and the term "Item" refers to any item, good, part, material, hardware and/or service to be delivered by the supplier under the Contract.



1. General Quality Requirements

1.1 Supplier Evaluation and Qualifications

MDA Space's Approved Supplier List is comprised of suppliers who have successfully completed our Supplier Approval Process. To ensure a comprehensive evaluation, we assess and evaluate suppliers based on three key pillars: technical capability, quality management, and performance reliability. At a minimum, MDA Space's suppliers must be certified to the international standard ISO 9001:2015, while certification to the aerospace standard AS9100 is preferred. In the absence of these certifications, additional audits or evaluations may be required to approve a supplier.

The Supplier shall advise MDA Space, in writing, of any changes to its Quality Management System, or its ISO 9001 or AS9100 certification status.

The MDA Space Quality Assurance team conducts periodic evaluations of suppliers. These evaluations may involve requesting suppliers perform a self-assessment or, when necessary, undergo an on-site audit conducted by the MDA Space's Quality Assurance team.

1.2 Environmental Controlled Area Requirements

Adherence to MDA Space's Environmental Controlled Area Requirements is necessary for applicable Items, as outlined in the Contract.

All Space Level assemblies for Flight hardware shall comply with ISO 14644-1, ISO 8 clean room. Assemblies shall be cleaned, and production shall be performed in a Class 8 or higher clean room environment, in accordance with ISO 14644-1.

MDA Space's Supplier Approval Process may include the identification of Environmental Controlled Area Requirements, and it is the responsibility of the Supplier to ensure compliance with the required standards.

Note: The Space Level/Flight Hardware drawing configuration suffix format is "-5xx"

1.3 Change in Approval, Drawing, Processes, Materials or Procedures

Supplier shall not change any drawing, process, material, or procedure without prior MDA Space written approval, if such drawing, process, material, or procedure was previously approved as provided for in the Contract.

In the event of any discrepancies between the requirements outlined in this Supplier Quality Manual, and the drawing or Statement of Work (SOW), the requirements specified in the drawing and SOW shall take precedence. The Supplier Quality Manual requirements are superseded by those in the drawing and SOW.

1.4 Notification of Facility Change

Supplier shall not use nor relocate any production, manufacturing, processing or test facilities to differ from previous approval by MDA Space, during performance of work specified in the procurement document, without MDA Space approval.

1.5 Change of Management/Owner

Supplier shall notify MDA Space when a significant change in management, ownership or location has occurred.



1.6 Change to Third-Party Registration/Accreditation during active Buyer's Purchase Order

Supplier shall notify Buyer when any change has occurred to Seller's Third-Party AS9100, ISO9001 and/or Nadcap registration. Supplier shall provide MDA Space with a copy of Supplier's Certificate of Accreditation. Upon expiration and/or change in Supplier's accreditation status (including name and/or ownership change), the Supplier shall provide MDA Space with a current certificate.

MDA Space, MDA Space representative and MDA Space Customer have the right to conduct surveys, audits and surveillance of supplier facilities and sub-tier suppliers with prior coordination with supplier, to determine capability to comply, and to verify continuing compliance, with the requirements of the procurement document.

MDA Space may refuse to accept item if supplier fails to submit certifications, documentation, test data or reports specified by the QRS Level or procurement document.

1.7 Documentation Retention

Supplier shall maintain and make available to MDA Space to review all Quality Records associated with inspection, test and reviews associated with the supplier's Quality Management System.

Suppliers shall have a procedure for the retention, identification, storage and retrieval of Quality Records for a minimum period of 10 years from the date of the last shipment of purchase order or as required per contract or regulatory requirements. After period of 10 years, prior to disposal, supplier shall notify MDA Space, MDA Space reserves a right to request transfer of records and articles.

1.8 Ethical Behaviour

Suppliers shall engage in ethical behavior and not engage in any form of corruption, bribery, anti-competitive agreements or other unfair business practices. Appropriate action will be taken for any instance of infraction of employees' compliance with these principles.

1.9 Safety

Suppliers should plan, implement, and control the processes needed to assure personnel and product safety during the entire product life cycle including, but not limited to, manufacturing, testing, storage, handling and transportation. The safety of the test equipment, fixture, and environment shall also be considered.

1.10 Employee Certifications

Suppliers may be required to have some of their employees certified to relevant industry standards, such as IPC and NASA standards. Details of the specific standard requirement will be communicated to the suppliers under a Statement of Work/Drawing/Purchase Order. It is the supplier's responsibility to ensure compliance to the required standards and additional IPC and NASA certifications for its organization and employees.

1.11 Flow Down of Requirements

Supplier shall control sub tier supplier procurements to ensure Quality and Customer Property Requirements specified in the procurement document are satisfied. All items procured from its sub tiers conform to all requirements of the MDA Space purchase order. Any IPC or NASA certification requirement needs to be flown down the sub tier when there is a requirement. It is the sole responsibility of the suppliers to ensure all their sub tiers are in compliance with the IPC, NASA requirements prior awarding any job to them.



1.12 MDA Space Process Control Requirement

MDA Space Process Control Requirement (PCR) documents outline specific procedures and requirements such as handling, cleaning, chemical coating, and other critical processes. If specified on a Statement of Work/Drawing/Purchase Order, the Supplier shall comply with the PCR's requirements.

1.13 Supplier's Compliance with Applicable PCRs and Standards.

It is the supplier's responsibility to review, acknowledge, and ensure full compliance with all applicable PCRs and industry Standards.

Examples of some of the standards are detailed below and in Table 1.

ASTM E-595 Standard Test Method for Total Mass Loss and Collected Volatile Condensable Materials from Outgassing in a Vacuum Environment

IPC-A-600 Acceptability of Printed Boards

IPC-A-610 Acceptability of Electronic Assemblies

IPC-2221 Generic Standard on PWB Design

IPC-2222 Sectional Standard on Rigid Organic PWB Design

IPC-2223 Sectional Design Standard for Flexible Printed Boards

IPC-4101 Specification for Base Materials for Rigid and Multilayer Printed Boards

IPC-6011 Generic Performance Specification for Printed Boards

IPC-6012 Qualification and Performance Specifications for Rigid Printed Boards

IPC-6013 Qualification and Performance Specifications for Flexible Printed Boards

IPC/WHMA-A-620 Requirements and Acceptance for Cable and Wire Harness Assemblies

J-STD-001 Requirements for Soldered Electrical and Electronic Assemblies

Table 1: IPC and NASA Standards for PWB, CCA, and Cable Harness Design, Assembly, and Inspection

Requirement	IPC Standard	NASA Standard
Facility and Personnel	J-STD-001	NASA-STD-8739.1 NASA-STD-8739.2 NASA-STD-8739.3 NASA-STD-8739.4
PWB Design	IPC-2221 IPC-2222 IPC-2223	N/A
PWB Fabrication and Acceptance	IPC-A-600 IPC-6011 IPC-6012 IPC-6013	S312-P-003
CCA	J-STD-001 IPC-A-610	NASA-STD-8739.2 NASA-STD-8739.3
Conformal Coating and Staking	J-STD-001	NASA-STD-8739.1
Cable Harness	IPC/WHMA-A-620 J-STD-001	NASA-STD-8739.4



1.14 Raw Material

Shipment of material shall be accompanied by a Certificate of Compliance from supplier, stating at a minimum: Material identification by specification number and material conditions where applicable; the raw material manufacturers or mill's heat lot or batch number. Refer to section 3.1.1 for more information.

1.15 Counterfeit Parts Prevention and Traceability

Supplier must ensure that all items on the procurement are traceable to source of origin by lot/batch number or date code. Source of origin traceability must be reflected on release documentation or on the item package label to Buyer.

Counterfeit Parts Prevention

Pursuant to AS5553, the Supplier shall ensure that all parts incorporated into Items and/or Items have been procured directly from an Original Equipment Manufacturer (OEM) or a first-tier OEM authorized Distributor. If the Supplier cannot procure the part directly from the OEM or a first-tier OEM authorized distributor, MDA Space's written approval is required.

Raw Material Traceability

All material shall be procured directly from a manufacturer or shall show full traceability from the mill, through any subsequent processing steps, including chemical/physical test results and/or inspection showing full compliance to the material's specification requirements.

1.16 Shelf Life

For the purposes of this SQM, Shelf Life means the period of time, starting from the date of manufacture, that an Item, when stored under specified conditions, will remain usable and effective for its intended purpose.

When the Item has a Shelf Life, the Supplier shall ensure that the date of the manufacture and date of expiry is visibly marked on the Item and included in accompanying documentation.

The Supplier shall ensure not more than twenty percent (20%) of the Shelf Life has elapsed at the time of receipt of the Item by MDA Space. If this requirement cannot be met, the Supplier shall request direction from MDA Space.

Seller should refer to MIL-STD-129 or ISO 2230:2002(E), and Mil-HDBK-695 for guidance with Shelf Life.

1.17 Serialization

When serialization is required, as identified on the drawing, each Item shall be marked with the Supplier's unique serial number, unless an MDA Space serial number has been provided in the Contract. The Supplier's serial number shall be unique to each Item. A suggested format for the serial number is: **[Supplier's three-letter code] - [Job number] - [Sequential unique number]**. The serial number(s) shall be referenced on the Supplier's release documentation, including shipping documents, CofCs, test reports, and other relevant records.

1.18 Test Data

Suppliers must be able to provide applicable Inspection Reports/Test Data when requested by MDA Space.

- 1) For all fasteners, suppliers shall provide a third-party inspection report including dimensional, chemical, metallurgical and mechanical inspection, and pull test traceable to the original manufacturer by lot or batch number. The original manufacturer's name and lot or batch number shall be identified on the packaged Items and all documents provided with the Items
- 2) When applicable, test data (inspection results, group data, screening data, graphs, films, coupons, tested Items, etc.) reflecting the applicable requirements (drawing notes, Destructive Physical Analysis, Particle Impact Noise Detection, tensile test, radiographic services, test procedures, specifications, etc.) shall be submitted to MDA Space
- 3) Inspection and/or test data reflecting the requirements of the applicable drawings and specifications shall be recorded and included with the shipment or submitted to MDA Space Quality Assurance Team in advance according to the appropriate QRS Level.
- 4) When applicable, Group test data and/or screening data in accordance with the applicable specifications must be included with the shipment or submitted to MDA Space Quality Assurance Team in advance according to the appropriate QRS Level.

1.19 EEE Components

Suppliers shall ensure all pieces for each item are from the same inspection lot and the same date code of manufacture. Separate inspection and test report shall be submitted by suppliers for each date code if same date code requirement cannot be fulfilled.

For parts whose numbers end in **-3xx** and **-5xx**, suppliers shall ensure that the date code of each item is **no older than 36 months** at the time of receipt at MDA Space.

For all other parts, suppliers shall ensure that the date code of each item is **no older than 60 months** at the time of receipt at MDA Space.

Suppliers must obtain written approval from MDA if they are unable to comply with this requirement.

1.20 Software

Suppliers providing software shall provide Certificate of Compliance and supporting documentation sufficient to establish that: All requirements are achieved or waivers submitted; Configuration is correct and deliverables are properly identified and marked; Planned level of acceptance is achieved and/or deviations/waivers are part of the deliverable documentation package; Operating instructions accompanying the developed software are sufficient to enable loading, initialization, and operation by MDA Space's personnel

1.21 Cybersecurity

Suppliers providing hardware or software that may pose potential cybersecurity risks must ensure compliance with the following requirements:

1.21.1 Tamper Proof Seals

- Suppliers shall provide tamper seals according to NIST 800-53 requirements for all equipment provided.

1.21.2 Cybersecurity System

- The Supplier shall acknowledge and confirm that they maintain and use a Cybersecurity assurance system which is in accordance with industry standard practices (e.g., NIST Special Publication 800-53 Rev. 5 as may be amended).
- The Cybersecurity assurance system shall include a plan for managing supply chain risks associated with the research and development, design, manufacturing, acquisition, delivery, integration, operations and maintenance, and disposal of systems, system components or system services, which are regularly reviewed and updated and protected from unauthorized disclosure or modification.
- The Cybersecurity assurance system shall include a process or processes to identify and address weaknesses or deficiencies in the supply chain elements and processes.

1.21.3 Advance Notification of Cybersecurity Issues

- In the event of cybersecurity defects, incidents, etc., affecting the product and/or services, Supplier must inform MDA Space within 72 hours of identifying the issue.

1.21.4 Cybersecurity Control Documentation

- Supplier shall provide Cybersecurity Control history related documentation for all equipment provided.

1.22 Laser Safety Requirement

If applicable, suppliers shall provide with each Item shipment, authenticated laser safety data indicating the class of laser and quantitative test reports, showing the degree of compliance with applicable specifications.

1.23 Surveys, Audits and Surveillance

MDA Space, its authorized representatives and its customers, reserve the right to conduct surveys, audits and surveillance of supplier facilities and sub-tier suppliers with prior notice and coordination with the supplier. The purpose of these activities is to assess the supplier's capability to comply with MDA Space's quality requirements.

2. Quality Clauses

In addition to the requirements defined under the QRS Levels, there may be Quality Clauses included under the Contract, to which the Supplier must comply. The purpose of these Quality Clauses is to bring attention to specific and/or unique requirements not addressed under this SQM.

Quality Clauses are located at <https://bramptonpurdoc.mda.space/>

3. Quality Record Submission Levels

Suppliers shall comply with the Quality Record Submission (QRS) Level specified in the Contract, as it dictates the specific documentation requirements for demonstrating compliance with MDA Space's quality standards. The documentation as described shall be submitted to MDA Space for approval.

Table 3-1 General Guidelines for QRS levels

ITEM	QRS LEVEL	CONTENTS
1	LEVEL I	- Submission – Level I - Certificate of Compliance Note: Suppliers can use their own Certificate of Compliance template and submit to MDA Space
2	LEVEL II	- LEVEL I + - Quality Record Submission Cover Page - MDA Space Compliance Checklist Note: Suppliers shall only use MDA Space's provided Cover Page & Compliance Checklist
3	LEVEL III	- LEVEL II + - Inspection Report - CMM Report (When requested by MDA Space Quality Assurance Team) Note: No QA review and approval required prior shipping. Only acknowledgment of receipt of the report required prior shipment.
4	LEVEL IV	- LEVEL III + - Photograph of Part (When requested by MDA Space Quality Assurance Team) - Source Inspection - Photograph of Packaged Item - Approval from MDA Space Quality prior to Shipment



5	LEVEL V	• LEVEL IV + - Mandatory Inspection Points (MIP) - Test procedures - EIDP Package
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3.1 Submission – Level I

Supplier shall complete the following:

3.1.1 Certificate of Compliance

Supplier shall provide a Certificate of Compliance (CofC) to formally document that the Item meets all requirements of the Contract.

The Supplier may use its own CofC template or form, provided it includes the following information:

- 1) MDA Space Purchase Order Number and Line Number
- 2) Item Part Number & Item Revision.
- 3) Quantity; and
- 4) A statement confirming that the Item(s) meet applicable drawings, specifications, and Contract requirements

Additionally, the Supplier must ensure that each Item is traceable to source of origin by lot/batch number or date code. Source of origin traceability shall be reflected in release documentation.

3.2 Submission – Level II

In addition to Level I, supplier shall complete the following:

3.2.1 Quality Record Submission Cover page

Suppliers shall use MDA Space's Quality Record Submission Cover Page for each Quality Level Submission package. This form is located at <https://bramptonpurdoc.mda.space/> named SCM017 Quality Record Submission Cover Page.

3.2.2 MDA Space Compliance Checklist

Suppliers shall complete and submit an MDA Space Compliance Checklist, located at <https://bramptonpurdoc.mda.space/> named SCM018 MDA Space Compliance Checklist.

Suppliers shall complete every section of the form and mark "N/A" when a specific statement reasonably does not apply to their product/organization.



3.3 Submission – Level III

In addition to Level II, supplier shall complete the following:

- 1) Dimensional report using First Article Inspection requirements in accordance with AS9102 for any quantity less than or equal to five (5). Only First Piece inspection report is required for each run.
- 2) For any quantity more than five (5) and less than or equal to ten (10), Supplier Product Control to be provided by reporting First piece, last piece inspection results, and average and range of all inspected parts for each measured drawing characteristic.
- 3) For any quantity more than ten (10), an MDA Space modified version of General Inspection Sampling Plan based on ISO 2859-1 must be used. Table 3.7-1 provides instruction on sample size required for inspection and reporting.
- 4) CMM reports are to be provided as a supporting document to accompany AS9102 forms for the first and last piece inspections for each run. CMM report is to be provided when it is applicable and required by MDA Quality Assurance team.

Table 3.7-1: Sample Size required for Inspection and Reporting

Lot Size Range	Sample Size Code Letter	Sample Size	Acceptance Number
11-150	B	11	0
151-280	C	20	0
281-500	D	32	0*
501-1200	E	50	0*
1201-3200	F	80	0*
3201-10000	G	125	0*
10001+	H	200	0*

Table 3.7-1 Notes:

- 1) Zero (0) means: Accept the lot if zero (0) defects found within the sample size and reject if one (1) or more is found
- 2) First Piece, last piece, average and range need to be provided and recorded using AS 9102 forms for each selected sample size.
- 3) For any lot greater than 280, SPC may be required in addition to the above sampling plan for selected critical dimensions identified by MDA Space. Capability Study, MSA, and Control Charts are required.
- 4) Inspection reports as per requirements outlined above shall be provided for each run. Multiple inspection reports shall be provided when supplier builds the Items on different runs with different setups according to AS9102 requirements
- 5) 100% inspection of each drawing characteristic on every single serialized Item is required when serialization is called out on the drawing

3.3.1 Inspection Report Structure

MDA Space uses the AS9102 (FAI) as a reporting structure when suppliers are required to provide inspection results. The Supplier shall follow the AS9102 standard for generating any inspection in accordance with the submission levels.

It is important to note that when serialization is required in accordance with the Item drawing, a FAIR shall be submitted to MDA Space for every individual Item and every individual design characteristic (i.e. not limited to the first Item only). The Supplier must ensure the design requirements are met and documented in the FAIR submitted to MDA Space.

Inspection Report includes all dimensional, physical, chemical, test or any other test that is required on the drawing.

To help and ensure a compliant FAIR, the Supplier must:

- 1) Plan FAI in collaboration with MDA Space
- 2) Identify roles and responsibilities of those required to complete FAI
- 3) Repeat FAI if changes occur that invalidate the original results, such as change in design, manufacturing process, parameters, setups, tooling OR after more than two (2) years lapse in production.

The Supplier must:

- 1) Ensure that when part specific gauges and tooling are required, they are qualified, calibrated and traceable/identified in the inspection report
- 2) Be able to provide evidence of compliance upon request by customer
- 3) When design requirements are in a DPD format and traditional 2D drawing information is not available for all applicable design requirements, DPD characteristics required for production shall be extracted, verified, and included in the FAIR. For example, if a basic dimension is not identified on the 2D Drawing, the true value shall be extracted from 3D model.

3.3.1.1 FAI and Non-conformances

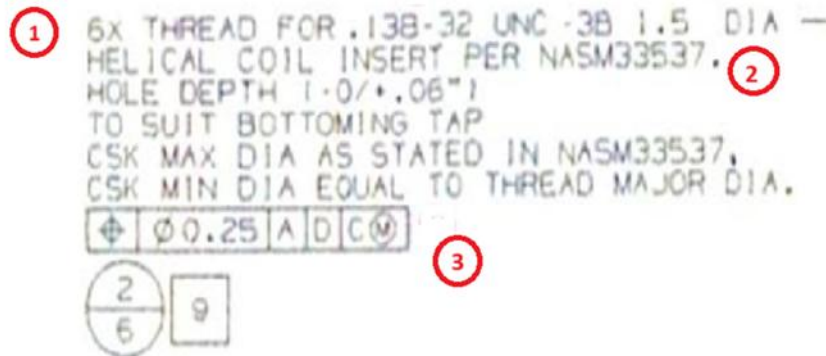
- 1) An FAI with design characteristic non-conformance(s) is considered by MDA Space as incomplete and will not be approved
- 2) The non-conformance must be reported in AS9102 Form 1 signed and shall be checked as "yes"
- 3) Non-conformance document number must be reported on AS9102 Form 3.

Note: A submitted Inspection report using FAI with an open/non-dispositioned non-conformance is called "Partial FAI". Suppliers are required to provide a Delta FAI to close outstanding open issues.

3.3.1.2 Inspection Report / FAI Characteristic Accountability

To ensure a compliant Inspection Report/FAIR, the Supplier must:

- 1) Verify every design characteristic during the FAI, and record the associated results, ensuring each characteristic has a unique number (Ballooned Drawing)
- 2) Verify characteristics that are not measurable in the final Item during the manufacturing process
- 3) Record units of measure in the FAIR that match the specifications on the drawing
- 4) Quantify inspection results (using variable data) when the drawing characteristic is called out with numerical limits on the drawing including the general notes, unless a check fixture is used or variable measurement is not possible
- 5) Use attribute data when the design characteristic does not specify numerical limits such as "Break all sharp edges"
- 6) Round inspection results to the same number of decimal points indicated on the drawing
- 7) Identify and balloon all features on the drawing (see below), including:
 - i. All dimensions
 - ii. All "NOTES" on the drawing
 - iii. "GENERAL" table
 - iv. "LIMITS"/General tolerances



- 8) Note that basic dimensions do not need to be ballooned and are not required to be verified, however, if they are ballooned, then they need to be properly identified as "Basic Dimension" on the FAIR
- 9) Note that reference dimensions do not require reporting, but if they are ballooned, then they must be identified as "Reference Dimension" on the FAIR
- 10) Omit reporting on Calculated Mass, reference and basic dimensions
- 11) Mark "N/A" against any feature that is ballooned but is not applicable to the report and does not require to be reported and verified
- 12) Acknowledge limits and general tolerances with the verification indicator, "Acknowledged".
- 13) Identify and report reference to a standard or procedure on the drawing notes using a balloon and reported to indicate acknowledgement and compliance. See "8)" as an example (Balloon#2)

3.3.3 CMM Report

The supplier shall provide a CMM inspection report in accordance to the submission level and the sampling plan, for each drawing characteristic when it is applicable and required by MDA Quality Assurance team. The report shall be prepared and shall contain the following information:

- 1) Part number, revision, lot/batch, PO number, inspection date and inspector name.
- 2) CMM make/model, serial number, probe type and current calibration status.
- 3) Reference to the drawing or GD&T call-outs used.
- 4) Measured features with nominal values, actual results and pass/fail status.
- 5) Overall acceptance statement ("Conforms to drawing ...").

3.4 Submission – Level IV

In addition to Level III, supplier shall complete the following:

3.4.1 Photograph of Part

The Supplier shall provide photographic documentation for each Item when requested by MDA Space Quality Assurance Team. Photographs shall be taken after the final dimensional inspection and prior to packaging, and shall depict the part in the exact condition verified by the inspection results.

The supplier shall provide a complete set of images that include the following:

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- 1) **Overall view:** Full field image of the completed part showing the entire geometry, orientation and part-number marking
- 2) **Critical Features:** Close up images of each drawing-specified critical dimension. Example: surface-finish area, thread, weld, or other feature cited in the drawing notes
- 3) **Surface Condition:** Images that clearly display surface quality (coating, finish, cracks, dents, etc.) under uniform lighting to avoid shadows or glare.
- 4) **Identification:** Photograph of any permanent identification plate, label or barcode on the part with the identifier legible
- 5) **Multiple angles:** All six angles for three-dimensional parts to fully represent geometry

3.4.2 Source Inspection

MDA Space's Quality Assurance acceptance is required to release the shipment of the Item(s). MDA Space's Quality Assurance has the right of access to verify the quality of all materials non-proprietary processes and services included in this procurement at the Seller's facility. Seller shall notify Buyer at least seventy-two (72) hours in advance of the time that part(s) will be ready for source verification or acceptance.

MDA Space's Source Inspection may include, but is not limited to the following: Witnessing Supplier's performance of acceptance/qualification testing and inspections to MDA Space's specification/drawing requirements; Review of Supplier acceptance test/inspection data and reports to verify conformance with MDA Space's specification/drawing requirements; Verification of item traceability and Supplier's certification to ensure conformance with MDA Space's procurement document or specification/drawing requirements; Verification of Supplier's packaging and packing of items being procured to ensure conformance with MDA Space's procurement document or specification/drawing requirements. On-site inspection.

Delegated Source Inspection

MDA Space may authorize a trained, qualified and independent Supplier delegate (who hasn't been involved in any stage of the procurement on a subject Purchase Order) to perform final inspection on the MDA Space's behalf according to QRS Level requirements. The Supplier shall submit inspection documentation to the MDA Space Quality team for approval. MDA Space reserves the right to reject the Items upon receiving inspection.

3.4.3 Photograph of Packaged Item

Supplier shall ensure that a photograph of the packaged item is sent to MDA Space as part of the document submission.

Photograph shall include:

- 1) Individual Item packaging
- 2) Shipping label (If applicable)
- 3) Anti-Corrosion packaging (If applicable)
- 4) ESD Packaging with ESD label indicating handling instructions (If applicable)

3.4.4 Approval from MDA Space Quality prior Shipment

MDA Space Quality approval required prior to the release of the item(s). No shipment may be dispatched until MDA Space Quality has approved the product.

3.5 Submission – Level V

In addition to Level IV, supplier shall complete the following:



3.5.1 Mandatory Inspection Points

Mandatory Inspection Points (MIP) may be conducted by the MDA Space Quality Assurance.

MDA Space Quality Assurance may request to verify/witness inspection or operation points in the Supplier's manufacturing process. MDA Space's Quality Assurance has the right to verify the quality of all materials, non-proprietary processes and services included in the procurement at the Supplier's facility. The Supplier shall notify MDA Space at least seventy-two (72) hours in advance of the time that Item(s) will be ready for MIP verification.

3.5.2 Test Procedures

The Supplier shall provide a complete set of inspection and test procedures that fully satisfy the requirements identified in the applicable procurement documentation (including, but not limited to, drawings, specifications, and approved test plans).

3.5.3 End Item Data Package (EIDP)

- The End Item Data Package (EIDP) is a comprehensive set of documents, records, and results that demonstrate an Item's full compliance with the requirements of the Contract. This package includes all the details to allow necessary for MDA Space to verify the final configuration, performance characteristics, and adherence to relevant standards and procedures throughout the manufacturing, integration, and testing phases
- This record is used over the lifetime of the Item to address Customer requirements

The EIDP shall include the following sections, which may be modified only if first approved by MDA Space in writing:

Key Contents of an EIDP - Technical Sections

The following is the minimum requirement that suppliers need to provide as part of the EIDP package:

- EIDP Content Page
- Log Book - System and Component History Record
- Notes and Comments
- Certificate of Compliance (as provided in accordance with the applicable QRS Level)
- Operating Time/Cycles Record
- List of Open Work
- Connector Mate/De-mate Record
- List of Serialized Components
- As-Built Configuration List
- Drawings
- List of Request for Deviation/Waivers
- List of Non-conformances/Failure Analysis Reports
- List of Non-Flight or Temporary Installed Hardware
- List of Test Procedures/Results
- End Item Weight
- Shipping Documents
- Certificate of Cleanliness

EIDP Content Page:

- Included sections are marked with an 'X' and required to be part of the EIDP package.



- Comments section includes non-conformances and deviation / waivers, if any. Or “None” if there aren’t any. Below is a snapshot of the Content Page. If the sections are not applicable mark them as “N/A”.

End Item Data Package
Page 1 of 2

oc. No.:	Issue:	Date (yyyy/mm/dd):
Change:		Date (yyyy/mm/dd):

Table of Contents

Document Sections	Includes	Vol.	Comments
1 Log Book			
1.1 System and Component Historical Record	()		
1.2 Operating Time Record	()		
1.3 End Effector Operational Cycles Record	()		
1.4 Limited Life Operating Cycles Record	()		
1.5 List of Open Work/Test	()		
1.6 Notes and Comments	()		
1.7 Connector Mate/Demate Record	()		
2 List of Serialized Components	()		
3 As-Built Configuration List	()		
4 Post Configuration Audit Modification/Drawing Changes	()		
5 Drawings	()		
6 List of Request for Deviation/Waivers	()		
7 List of Nonconformances/FAR	()		
8 List of Limited Life/Age Sensitive Items	()		
9 List of Non-Flight or Temporary Installed Hardware	()		
10 List of Test Procedures/Results	()		
11 End Item Weight	()		
12 Shipping Documents	()		
13 Certificate of Cleanliness	()		
14 Bent Pin Record	()		
15 Orifice Records	()		
16 Repair Limitations	()		
17 Pressure Vessel Data	()		
18 Pyrotechnic Data	()		
19 Non-Standard Calibration Data	()		
20 Photographs	()		
21 Other	()		

Legend (X)

To access the Cover and Content Page forms, use the link below:

<https://bramptonpurdoc.mda.space/>

Document Name: 6 – End Item Data Package Form

Note: Suppliers can use their own forms and templates when submitting EIDP package to MDA Space.

Log Book - System and Component History Record

- A high-level summary of significant events during the assembly and test of the Item.

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- These are maintained through the life of the Item
- This record is used to record each significant event that the Item is subjected to:
 - Receipt of the Item from the Supplier, subcontractor or Customer
 - Removal of hardware from the Item
 - Record of the date when the Test equipment is connected
 - Each major test event
 - Packing, unpacking and shipping operations. Shipping document number must be referenced.
 - Aborted test procedure or test equipment breakdown
 - Installation or removal of Software to the hardware or test equipment.

Seq. No.	Location	Historical Events/Designation of Actions	Reference/ Doc. Number	NCR "X"	Test "X"	Other "X"	Date (yyyy/mm/dd)	Signature/ Stamp
----------	----------	--	------------------------	---------	----------	-----------	-------------------	------------------

Operating Time/Cycles Record

These lists are used to track limited operating life by time of use or cycles.

Seq. No.	Location	*Operating Time			Authorizing Document, MIS and Operation Number	Date (YYYY/MM/DD)	Signature Stamp
		Single	Cumulative	Remaining			

List of Open Work

A list of any open work on the Item.

Examples:

- Open manufacturing or test operations.
- Open documentation like drawings, reports.
- Open non-conformances (if agreed with customer).

Seq. No.	Identification No.	Description of Open Work/Test/Documentation	Closed Q.A. Buy-Off		Remarks
			Date (yyyy/mm/dd)	Signature	

Notes and Comments

General notes and information relevant to build but not discussed in other sections, like:

- Explanation of changes to EIDP i.e. explain change "A"
- Applicable deliverable documents.
- Ding map
- Traceability comments
- Material substitution requests

Connector Mate/De-mate Record

- This form will be used to record each mate and demate of each limited life connector on an assembly
- The requirement will include mate/demates to both flight/deliverable hardware and to slave connector savers when used
- The record will be filled in the order of mate/demate occurrences
- Each entry will quote the production order operation number or test procedure and operation.



Seq. No.	Connector No.	Mate or Demate	Authorizing Document, MIS and Operation Number	Remarks	Date (YYYY/MM/DD)	Signature/ Stamp
-------------	---------------	-------------------	--	---------	----------------------	---------------------

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PE142-D

Printed copies are uncontrolled.



List of Serialized Components

- This list only includes the components and subassemblies in the build that are serialized that appear in the As-Built record.
- Assemblies and detailed parts that are serialized.

Seq. No.	Item Number	Nomenclature	Serial No.	Manufacture	Traceability/Doc. No.	Remarks
----------	-------------	--------------	------------	-------------	-----------------------	---------

As-Built Configuration List

- A mapping of the As-Designed Bill of Material to the As-Built configuration
- As-Design Drawing revision and quantity is obtained from the Parts List/BOM. If there are unincorporated ECNs, they are to be listed in the As-Built ECN column.
- Traceability is recorded of the As-Built Item. If there are multiple lots, both are included and the quantity listed to match the build. Unit of Measure must be provided if applicable.
- If there is a Part Number or revision or quantity mismatch, the rationale must be listed. Examples are such as Incorporated ECN, Deviations or Waivers, Non-conformances, Material Substitution Requests (MSR)
- Lot information traceable to OEM must be provided.
- Heat number should be provided if applicable.
- COC number must be provided if there is no lot information.

FIND No.	Part Number	Nomenclature	S/N	Part As-Built Rev	Part Index Rev	As-Built Drawing			As-Design Drawing (NDI)			Traceability	Concessions (i.e. RFW/RFD, DN's, MRR, etc.)
						Rev	ECN	Qty	Rev	ECN	Qty		

Drawings

This section lists the assembly and interface drawings

- List only the drawings that are necessary to outline any external interfaces.
 - This may include:
 - MDA Space SCD
 - Supplier's Interface Drawing
- These documents are to be included in the EIDP:
 - Include Parts List, Part Index (PI) and Numerical Drawing Index (NDI), if relevant
 - The document number, Title, Revision and any notes on the importance of the document are to be included.

List of Request for Deviation/Waivers

All Request for Deviations, Waivers and Material substitution requests must be reported.

List of Nonconformances/Failure Analysis Reports

Any Non-Conformances dispositioned by MDA Space during build must be reported.

List of Non-Flight or Temporary Installed Hardware

All List of Non-flight or temporary installed hardware list must be reported here.

List of Test Procedures/Results

- List of Acceptance Test procedures, Inspection procedures must be provided along with Revision.

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- Test reports and Inspection results must be provided.

End Item Weight

Report End Item Weight along with Unit of measurement and picture of weight measurement.

Shipping Documents

These lists are used to track the shipping documents required for shipping.

Document No.:		Section:	Issue:	Date (yyyymmdd):	Change:	Date (yyyymmdd):
Ident. No.:		Serial No.:		Nomenclature:		
Seq. No.	Identification No.	Nomenclature/Description of Notes and Comments				Remarks

Certificate of Cleanliness

Certificate of Cleanliness must be reported by Supplier.

Document No.:		Section:	Issue:	Date (yyyymmdd):	Change:	Date (yyyymmdd):
Ident. No.:		Serial No.:		Nomenclature:		
Seq. No.	Identification No.	Nomenclature/Description of Notes and Comments				Remarks



4. Handling, Packaging and Storage Requirements

4.1 MDA Space Property

When articles and items on a provided purchase order to supplier are MDA Space Property (e.g. any material and/or equipment). Supplier shall have a system of internal controls to manage (control, use, preserve, protect, repair and maintain) MDA Space Property in its possession. Supplier shall initiate and maintain the processes, systems, procedures, records, and methodologies necessary for effective and efficient control of MDA Space Property.

Supplier's responsibility extends from the initial acquisition and receipt of property under the PO, through stewardship, custody, and use until formally relieved of responsibility by authorized means, including delivery, consumption, expending, sale (as surplus property) or other disposition, or via a completed investigation, evaluation, and final determination for lost property. This requirement applies to all MDA Space Property under Supplier's accountability, stewardship, possession or control, including its sub-tier vendors.

4.2 Handling and Packaging Requirements

The Supplier shall ensure that packaging of items is sufficient to prevent any corrosive damage, or any physical damage caused by shipping/handling, and shall comply with the following:

- 1) Handle items with care to prevent damage, and take necessary precautions to prevent electrostatic discharge (ESD)
- 2) Label packaging indicates that it contains electrostatic sensitive components, ensuring that handlers and recipients are aware of the special requirements
- 3) Protect Item(s) from foreign objects (FOD), contamination, and humidity by taking necessary measures, such as using desiccants and humidity indicators
- 4) Double-bag Item(s) when applicable, with a desiccant and humidity indicator in the outer bag, and ensure the inner bag is zip-locked and the outer bag is sealed
- 5) Submit alternative packaging proposals to MDA Space for review and approval during the RFQ process, and obtain written approval before proceeding
- 6) Provide detailed information about alternative packaging methods, including materials and procedures, to ensure that MDA Space can assess their suitability and provide approval
- 7) Ensure that all packaging materials and methods meet MDA Space's requirements and standards for protecting electrostatic sensitive Item(s). Examples include but are not limited to microcircuits, transistors, diodes, oscillators, fixed film resistors (RLR and RM series), all electronic assemblies and electronic sub-assemblies
- 8) IC'S, hybrid circuits, transistors, diodes and thin film resistors require protection from electrostatic discharge. Packaging materials used must be anti-static
- 9) Note: The use of pink poly is not acceptable, and any alternative packaging methods must be approved in writing by MDA Space before implementation

Additional guidelines provided in Tables 4.2-1 and 4.2-2 below.

Table 4.2-1: Packaging Materials

Packaging Type	Guideline
Desiccant	MIL-D-3464T Type I and II
Humidity Indicator	MS20003-2
Standard Heat-Sealable Polymer Film	Any polymer film material (of at least 0.004" thickness is preferred), with no coating
Standard Re-closable Bag	Any polymer film material (of at least 0.004" thickness is preferred), with no coating
Static-Shielding, Heat-Sealable Polymer Film	ESD-Safe (dissipative), Heat Sealable

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Static-Shielding re-closable bags	ESD-Safe (dissipative), Shielded Bags
Standard Gloves	Any polymer glove which is powder-free
Static-Shielding Gloves	ESD-Safe (dissipative), clean room, Nitrile
Connector Caps	ESD-Safe (dissipative)

Table 4.2-2: QTY of Desiccant Required Based on Size of Bag (Guideline)

MINIMUM QUANTITY OF DESSICANT REQUIRED FOR USE WITH FLEXIBLE IMPERVIOUS BARRIERS BASED ON SIZE IN INCHES																							
WIDTH IN INCHES	LENGTH IN INCHES																						
	3	4	5	6	7	8	9	10	11	12	14	16	18	20	22	24	30	36	42	48			
3	1	1	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	4	2	2			
4	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3	4	4	2	2	3			
5	1	1	1	1	2	2	2	2	2	2	3	3	3	4	4	4	2	2	3	3			
6	1	1	1	2	2	2	2	2	3	3	3	4	4	4	2	2	2	3	3	4			
7	1	1	2	2	2	2	3	3	3	3	4	4	2	2	2	2	3	3	4	4			
8	1	2	2	2	2	3	3	3	3	4	4	2	2	2	2	3	3	4	4	5			
9	1	2	2	2	3	3	3	3	4	4	2	2	2	2	3	3	3	4	5	5			
10	1	2	2	2	3	3	3	4	4	4	2	2	2	3	3	3	4	4	5	6			
11	2	2	2	3	3	3	4	4	2	2	2	2	3	3	3	3	4	5	6	6			
12	2	2	2	3	3	4	4	4	2	2	2	3	3	3	3	4	4	5	6	7			
14	2	2	3	3	4	4	2	2	2	2	3	3	3	4	4	4	5	6	7	8			
16	2	3	3	4	4	2	2	2	2	3	3	3	4	4	4	5	6	7	8	9			
18	2	3	3	4	2	2	2	2	3	3	3	4	4	4	5	5	6	8	9	10			
20	2	3	4	4	2	2	2	3	3	3	4	4	4	5	5	6	7	8	10	11			
22	3	3	4	2	2	2	3	3	3	3	4	4	5	5	6	6	8	9	11	12			
24	3	4	4	2	2	3	3	3	3	4	4	5	5	6	6	7	8	10	12	13			
30	3	4	2	2	3	3	3	4	4	4	5	6	6	7	8	8	10	12	14	16			
36	4	2	2	3	3	4	4	4	5	5	6	7	8	8	9	10	12	15	17	20			
42	2	2	3	3	4	4	5	5	6	6	7	8	9	10	11	12	14	17	20	23			
48	2	3	3	4	4	5	5	6	6	7	8	9	10	11	12	13	16	20	23	26			
NUMBER OF DESSICANT PACKETS REQUIRED																							
PACKET SIZE - 1/3 UNIT NUMBER OF PACKETS REQUIRED = 0.011 X WIDTH IN INCHES X LENGTH IN INCHES X 3																							
PACKET SIZE - 1 UNIT NUMBER OF PACKETS REQUIRED = 0.011 X WIDTH IN INCHES X LENGTH IN INCHES																							
ABOVE CALCULATION OF NUMBER AND SIZE OF DESSICANT PACKETS REQUIRED IS BASED ON FORMULA 1 GIVEN IN MIL-STD-2073-1D METHOD 50 FOR SEALED FLEXIBLE BAGS OR CONTAINERS WITH NO DUNNAGE WITHIN THE SEALED VOLUME. REFER TO MIL-STD-2073-1D METHOD 50 FOR SEALED FLEXIBLE BAGS OR CONTAINERS WITH NO DUNNAGE WITHIN THE SEALED VOLUME.																							

4.2.1 Packaging of Electrical, Electronic, Electromechanical and Circuit Card Assemblies

To help ensure the safe transport of Electrical, Electronic, Electromechanical (EEE) and Circuit Card Assemblies (CCAs), the Supplier should consider the following guidelines:

- 1) CCAs and EEE components shall be packaged in accordance with MIL-STD-1686, ANSI/ESD S20.20 and Handbook MIL-HDBK-263A
- 2) Package CCAs in rigid, static-shielding boxes
- 3) Encase items in electrically conductive or static dissipative packages, tubes, carriers, or conductive bags for shipment to protect against ESD
- 4) Fill boxes with filler materials, such as foam or bubble wrap, to prevent CCAs from moving freely and impacting the sides of the box

- 5) Place desiccant pouches or other packing materials in a way that avoids applying direct pressure on electronic components on the CCA
- 6) Position desiccant pouches beside the CCA assembly when contained in the static shielding box, rather than on top of it
- 7) Use a shield or protective covering to prevent padding materials from putting pressure on delicate structures on the CCA, such as fine-pitch lead-formed components or exposed tall pins
- 8) Ensure that the outer bag or packaging material is sufficiently long to accommodate the CCA assembly and desiccant pouches without applying pressure on the components
- 9) Protect CCAs from damage by using packaging materials that meet the requirements of this manual and are designed to prevent electrostatic discharge and physical damage

4.3 Storage Requirements

The Supplier shall store and protect all inventories used for in and for the manufacture of Items to keep free from contamination, moisture and corrosion when not in use.

The Supplier shall use proper safety, ESD control and, where appropriate, clean room practices when handling MDA Space hardware.

The Supplier shall ensure tooling, jigs, fixtures, and test or handling equipment are maintained in a state of cleanliness and repair sufficient to prevent FOD or contamination.

5. US and Canadian Government Property

5.1 US Government Property

When articles and items on a provided purchase order to supplier are US government property, the supplier shall have a system of internal controls to manage (control, use, preserve, protect, repair and maintain) U.S. Government property in its possession. The system shall be adequate to satisfy the requirements of Federal Acquisition Regulations (FAR) Clause 52.245-1, Government Property. In doing so, Supplier shall initiate and maintain the processes, systems, procedures, records, and methodologies necessary for effective and efficient control of U.S. Government property.

Supplier's responsibility extends from the initial acquisition and receipt of property under the PO, through stewardship, custody, and use until formally relieved of responsibility by authorized means, including delivery, consumption, expending, sale (as surplus property) or other disposition, or via a completed investigation, evaluation, and final determination for lost property. This requirement applies to all U.S. Government property under Supplier's accountability, stewardship, possession or control, including its sub-tier vendors.

U.S. Government property shall be stored separately and not co-mingled or combined with property of others. In accordance with Federal Acquisition Regulation Clause 52.245-1 subparagraph (vi) (A), "Loss, damage, destruction or theft", the Supplier shall investigate and furnish a written narrative of all incidents of loss, damage, destruction or theft to buyer as soon as the facts become known or when requested by the MDA Space buyer's team. Such reports shall, at a minimum, contain the following information: Date; The name, commercial description, manufacturer, model number, and national Stock Number (if applicable); Quantity; Unique Item Identifier (if available); Purchase Order number; Cause and Corrective action taken to prevent recurrence; Copies of all supporting documentation; Last known location.

5.2 Canadian Government Property

When articles and items on a provided purchase order to supplier are Canadian Government Property (e.g. any material and/or equipment). Supplier shall have a system of internal controls to manage (control, use, preserve, protect, repair and maintain) Canadian Government Property in its possession. Supplier shall initiate and maintain the processes, systems, procedures, records, and methodologies necessary for effective and efficient control of Canadian Government Property.

Supplier's responsibility extends from the initial acquisition and receipt of property under the PO, through stewardship, custody, and use until formally relieved of responsibility by authorized means, including delivery, consumption, expending, sale (as surplus property) or other disposition, or via a completed investigation, evaluation, and final determination for lost property. This requirement applies to all Canadian Government Property under Supplier's accountability, stewardship, possession or control, including its sub-tier vendors.

6. Non-Conformance Reporting

This section outlines the steps that must be taken by the Supplier when addressing a non-conformance, ensuring timely and effective communication and resolution.

6.1 Non-Conformance Report

In the event of the discovery of non-conformance, it is critical to promptly notify MDA Space and initiate the resolution process. The Supplier shall:

- 1) Notify MDA Space within twenty-four (24) hours to initiate the resolution process
- 2) Raise and submit a non-conformance report (NCR) to MDA Space, clearly describing the non-conformance, and recommending a disposition, if possible, for MDA Space's Material Review Board (MRB) consideration and action
- 3) The Supplier may use PE187 MDA Space's NCR form or its own NCR form to report a non-conformance, provided the following information is included:
 - a. Supplier Name
 - b. Non-conformance Number
 - c. Purchase Order/Contract Number
 - d. Status
 - e. Date Raised
 - f. Item Part Number
 - g. Item Description
 - h. Non-conformance Description
 - i. Supplier-recommended Disposition
 - j. Serial Number (If applicable)
- 4) Upon receipt of an NCR from the Supplier, MDA Space will review the non-conformance and provide disposition to the Supplier in writing.

MDA Space may also raise an NCR to notify the Supplier of a non-conformance.

6.2 Root Cause and Corrective Action

An RCCA is an NCR elevation requirement to investigate the root cause with corrective action to prevent any reoccurrences of the non-conformance.



If the Item does not meet specifications and cannot be reworked in time to meet delivery requirements, a RCCA will be required from the supplier.

6.3 Supplier Corrective Action Request

NCRs will be monitored regularly by MDA Space to determine whether a Supplier Corrective Action Request (SCAR) is required.

A SCAR may be raised against the Supplier if deemed necessary based on the results of ongoing performance monitoring, non-conformances, identification of trends or the presence of any significant issues. The purpose of a SCAR is to:

- 1) **Investigate** failure mechanisms and root causes of non-conformances or performance issues
- 2) **Conduct** a thorough root cause analysis to identify underlying causes of problems
- 3) **Develop** and implement corrective actions to address identified issues
- 4) **Implement** preventive actions to prevent recurrence of similar issues
- 5) **Verify** the effectiveness of corrective and preventive actions
- 6) **Assess** the long-term sustainability of implemented actions to ensure lasting improvements

6.4 Containment

When a non-conformance is identified, MDA Space may request supplier to perform a containment action. Upon MDA Space's request, the Supplier shall implement immediate and effective containment actions to ensure that all Items are unaffected by the non-conformance. This requirement is in addition to the Supplier's standard inspection and quality control processes.

The Supplier shall:

- 1) **Establish additional inspection protocols** beyond routine quality checks to detect and isolate any nonconforming material
- 2) **Identify and segregate suspect or nonconforming material** throughout the entire value stream, including work-in-progress (WIP), finished Items, inventory, and Items in transit.
- 3) **Prevent the shipment of defective material** by implementing 100% inspection or other enhanced verification methods as appropriate.
- 4) **Document all containment actions**, including inspection results, disposition of non-conforming material, and corrective measures taken.
- 5) **Maintain traceability and accountability** for all containment activities, including those performed by sub-tier suppliers.

The Supplier's failure to comply with containment requirements may result in rejection of Item(s), removal from MDA Space's Approved Supplier List, or other contractual remedies.

7. Waivers, Deviations and Unauthorized Repairs & Reworks

Deviations and waivers accommodate the need to deviate from or to waive the requirements of an item without compromising its integrity. They result from an inability to meet MDA Space's requirements

A deviation is a specific written authorization granted prior to the design or manufacture of an item, to depart from a particular performance or design requirement for a specific number of units or a specific period.

A waiver is written authorization to accept an item which, during manufacture or after having been submitted for inspection, is found to depart from specified requirements, but nevertheless is considered suitable for use "as is" or after repair by an approved modification to an existing design.

7.1 Waivers and Deviations

The Supplier shall raise a Waiver/Deviation Request and submit it to MDA Space for written approval in the following circumstances:

- 1) If an alteration to an Item or part of the Item is required and deviates from the drawing requirements
- 2) If an alteration to a special process is required
- 3) For any component substitutions and/or material equivalencies (note: the material specification must match the requirements on the drawing if specified and the Supplier is not authorized to assume an alternative material will be acceptable)
- 4) The original material/process/part is no longer available, or economically viable
- 5) The Supplier's part number as originally specified is replaced by a new number
- 6) It may be necessary to reconcile one manufacturer's part number with that of another manufacturer

Once the Waiver/Deviation Request is reviewed, the outcome will be communicated with the Supplier. If the Waiver/Deviation Request is approved by MDA Space (in writing), the revised Contract will be provided to the Supplier. The Supplier shall attach a copy of the approved Waiver/Deviation Request to the relevant shipping documents.

7.2 Unauthorized Repairs & Reworks

Unless specifically approved in writing by the MDA Space Material Review Board (MRB), the Supplier shall not repair or rework any Item to meet MDA Space specification and drawing requirements.

8. Supplier Return Material Authorization (RMA)

If MDA Space initiates a return, the requesting party will request an RMA number from the supplier. For shipments leaving Canada, supplier must provide the Affidavit and Foreign Shipper Declaration and any required export-control approvals before the material is shipped.

The completed Affidavit and Foreign Shipper Declaration will be submitted to supplier; the supplier must provide MDA Space with a return shipping label to dispatch the item for return.

After the returned items are received, the supplier is responsible for issuing a Credit Note/Memo (or credit memo) to MDA Space for financial closure. Throughout the process the supplier should keep MDA Space informed of any delays, label issues, or documentation gaps to maintain compliance with MDA Space's reverse-logistics and audit requirements.

9. Supplier Performance, Ratings and Continuous Improvements

MDA Space will determine and apply criteria monitoring supplier performance, based on their ability to provide processes or products and services in accordance with requirements.

Suppliers are going to be regularly audited, and their quality and performance is monitored to ensure the supplier is maintaining a quality system consistent with the supplier's scope of approval. Supplier on time delivery is checked regularly by MDA Space who also communicate with suppliers to check on progress and delivery dates.

The metrics in Table 8-1 below are designed to measure the competency of the Process Control Methods in translating the inputs to outputs in a manner that meets the technical, quality, cost, and schedule requirements.

Table 9-1: KPI Metrics

Metric	Required Data	Involved Parties	Reasoning for Metric
Supplier Delivery Performance	Supplier Delivery compared to date on Purchase Order	Supplier, Purchasing	Supplier On Time delivery is critical for project schedule success
Supplier Quality Performance	Supplier quality i.e. number of non-conformances with supplier as cause, as percentage of PO line items issued (with regard also to disposition)	Supplier, Purchasing, Supplier Quality Engineering	Supplier quality performance is critical for project quality and schedule success

MDA Space suppliers are expected to provide high performance in the areas of quality, delivery, and competitiveness. These ratings are monitored and reviewed periodically with MDA Space's suppliers. Ratings are sent to suppliers for their review. It is the goal of MDA Space to have all suppliers achieve an excellent rating, by having a green status. Supplier development will be offered as necessary to achieve this goal. Supplier development can take the form of onsite visits, assistance in developing processes and procedures, etc.

MDA Space may also request the suppliers to acknowledge the non-conformance and agree to correct it. If there is no evidence of improvement being made by the supplier, MDA Space will issue a Supplier Corrective Action Request (SCAR) (Form PE237). This form is located at <https://bramptonpurdoc.mda.space/>



Appendix

Referenced Standards

AS5553	Counterfeit Parts Prevention Standard
AS9100	Aerospace Standard for Quality Management Systems
AS9102	First Article Inspection Standard
ISO 14644-1	International Organization for Standardization Cleanroom Standard (Class 8)
ISO 9001:2015	International Organization for Standardization for Quality Management Systems

List of Acronyms

CCA	Circuit Card Assembly
CMM	Coordinate Measuring Machine
COC	Certificate of Compliance (or Certificate of Conformity)
DPD	Digital Product Definition
ECN	Engineering Change Notice
EEE	Electrical and Electronics Engineering
EIDP	End Item Data Package
ESD	Electro-Static Discharge
FAI	First Article Inspection
FAIR	First Article Inspection Report
FOD	Foreign Object Debris
FPI	First Piece Inspection
GD&T	Geometric Dimensioning & Tolerancing
KPI	Key Performance Indicator
MDA	MacDonald, Dettwiler and Associates Inc.
MIP	Mandatory Inspection Point
MRB	Material Review Board
MSR	Material Substitution Requests
NCR	Non-Conformance Report
OEM	Original Equipment Manufacturer
PCI	Process Control Inspection
PCR	Process Control Requirement
PO	Purchase Order
QRS	Quality Record Submission

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QA	Quality Assurance
RCCA	Root Cause Corrective Action
SCAR	Supplier Corrective Action Request
SPC	Statistical Process Control
SQM	Supplier Quality Manual
WIP	Work In Progress