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1.0 PURPOSE

This document provides guidelines for compliance to the Production Part Approval Process (PPAP), which is an integral part of Advanced Product Quality Planning (APQP) as well as additional requirements for members of the NORDAM supply chain supplying products or services for the Airbus A320neo EBU2 program only. MN-TNG-QA-03 is a standalone document used to supplement the NORDAM Supplier Quality Manual and contains unique requirements for Airbus suppliers to NORDAM. This document invokes the requirements of AS9145 reserved by the NORDAM Supplier Quality Manual, MN-TNG-QA-02, §4.

2.0 SCOPE

This document contractually applies to members of the NORDAM supply chain providing components for the Airbus A320neo EBU2 program only. The NORDAM Contract and / or Purchase Order shall invoke this document and all the requirements within, where applicable.

3.0 RESPONSIBILITIES

All members of the NORDAM supply chain supplying products or services for Airbus programs are required to follow this procedure.

4.0 REFERENCES

AS9100 Quality Management Systems

AS9102 Aerospace First Article Inspection Requirement

AS9103 Variation Management of Key Characteristics

AS9145 Requirements for Advanced Product Quality Planning and Production Part Approval Process

AS13003 Measurement Systems Analysis Requirements for the Aero Engine Supply Chain

ASTM E2782 Standard Guide for Measurement Systems Analysis

MN-TNG-QA-02 NORDAM Supplier Quality Manual

AIAG PPAP Reference Manual

AIAG FMEA Reference Manual

AIAG APQP Reference Manual

AIAG MSA Reference Manual

AIAG SPC Reference Manual

SAE J1739 Potential Failure Mode and Effects Analysis in Design/Process

4.1 DEFINITIONS & ACRONYMS

Commercial Off The Shelf/Industry Standard Parts (COTS)	Commercially available items intended by design to be procured and utilized without modification (e.g., common fasteners).
Cpk	The capability index for a stable process, typically defined as the minimum of capability upper or lower indices (see AIAG SPC Reference Manual for further explanation).
Feature	Any characteristics, dimensions, notes, specifications, or embedded requirements found on the drawing or drawing related documents.
Intraclass Correlation Coefficient (ICC)	An assessment of consistency or reproducibility of quantitative measurements made by different observers measuring the same quantity.
Kappa	A statistical measure of inter-rater agreement for qualitative (categorical) items. It takes into account the agreement occurring by chance. (See AIAG MSA Reference Manual for further explanation)
Key Characteristic (KC)	An attribute or feature whose variation has a significant influence on product fit, performance, service life, or producibility; that requires specific action for the purpose of controlling variation. KCs may be identified by NORDAM and/or the Supplier. •KCs for a part, subassembly, or system are those selected geometrical, material properties, functional and/or cosmetic features; which are measurable, whose variation control is necessary in meeting Customer requirements and enhancing Customer satisfaction. •Process KCs are those selected measurable characteristics of a process whose control is essential to manage variation of part or system KCs. •Substitute KCs may be identified when a Customer-defined KC is not readily measurable within the production/maintenance setting and other characteristics may need to be controlled to ensure conformance. *Source: For further detail refer to AS9103.*
Critical Item (CI)	Those items (e.g., functions, parts, software, characteristics, processes) having significant effect on the product realization and use of the product; including safety, performance, form, fit, function, producibility, service life, etc.; that require specific actions to ensure they are adequately managed. Examples include: safety CIs, fracture CIs, mission CIs, Key Characteristics (KCs), and maintenance tasks critical for safety (*reference 9103 standard*).
Part Family	A group of similar parts that have similar features, material, manufacturing process steps and are used for similar applications.

Process Family — A manufacturing process applied using similar machines, with similar tools and fixtures, with similar set-ups and programs and used to produce similar features.

Submission Level — Defines the required documentation that shall be submitted to the appropriate NORDAM representative for review.

PPAP File — A collection of data and documents at the Supplier's location documenting compliance to PPAP requirements for each part number. The file contains living documents, maintained and updated by the Supplier for the life of the part. This includes any supporting documentation for any level of its supply chain.

PPAP Package — A submission by the Supplier containing evidence that the PPAP Elements corresponding to the required submission level have been satisfied which is provided to the NORDAM representative for review and disposition. The package represents the PPAP File at the point of submission.

Acronyms

APQP	Advanced Product Quality Planning
COTS	Commercial Off the Shelf/Industry Standard Parts
DFMEA	Design Failure Mode and Effects Analysis
FAIR	First Article Inspection Report
Gage R&R	Gage Repeatability & Reproducibility
ICC	Intraclass Correlation Coefficient
IPS	Initial Process Studies
KC	Key Characteristic
KPC	Key Product Characteristic
MSA	Measurement Systems Analysis
NDT	Nondestructive Test
P/T	Precision-to-Tolerance
PFMEA	Process Failure Mode and Effects Analysis
PO	Purchase Order
RCCA	Root Cause Corrective Action
RDC	Request for Document Change
RPN	Risk Priority Number
SPRD	Supplementary Product Requirement Document(s)
SPC	Statistical Process Control
SQM	Supplier Quality Manual
TPM	Total Productive Maintenance
PPAP	Production Part Approval Process

VPC Vendor Part Configuration

5.0 PROCEDURE

Section A – APQP / PPAP

APQP

Members of the NORDAM supply chain supplying products or services for Airbus programs are required to implement Advanced Product Quality Planning processes (APQP). APQP requirements are detailed in AS9145 Requirements for Advanced Product Quality Planning and Production Part Approval Process.

QUALITY ASSURANCE PLAN

Members of the NORDAM supply chain supplying products or services for Airbus programs are required to implement a Quality Assurance Plan (QAP) for the program. The QAP requirements are detailed in ISO10005 Quality Management Systems – Guidelines for Quality Plans.

APQP/PPAP Plan

Upon notification of an APQP / PPAP requirement and prior to the start of manufacturing, a NORDAM representative will schedule a meeting with the supplier to create an "APQP Plan". As a team, the supplier and NORDAM will work together to determine the scope of the APQP project. An APQP Plan should contain the following:

- **Applicability** – Which of the APQP elements apply to the supplier (for example, only Design Responsible suppliers are required to complete a DFMEA).
- **Sub-Tier Applicability** – Determination of applicability to sub-tier suppliers. Those supplying detail components to support assembly at the supplier's facility may require a PPAP package of their own.
- **Alternative Methods of Compliance** – Any alternative techniques used by the supplier will be evaluated and described in the APQP Plan (i.e. short run SPC).
- **Definition of Process Variations** – Determination of the "process variations" that will be targeted during Initial Process Capability Studies (element 7) and when selecting parts for Dimensional Reporting (element 9).
- **Identification of Part Families** – Identification of parts that will be grouped into families for certain elements to eliminate redundancy (items marked with * on the Approval Criteria table in section 8)
- **Timeline** – Estimation of the timeline for completion of APQP items and identification of target dates for PPAP Submission.
- **Maturity Reviews** – The supplier shall participate in maturity reviews of the APQP elements. Maturity review timing will be documented in the APQP plan.

The APQP Plan shall be maintained in the APQP File. Any changes to the APQP Plan shall be approved by NORDAM.

Note: *The APQP Plan should show development of the APQP Elements (e.g. Process Flow Diagrams, DFMEA, PFMEA and Control Plans) as early as possible in the part design and manufacturing process development phases.*

PPAP File

The Supplier shall create a part number specific PPAP File documenting its development of the PPAP Elements early in design and/or process development. The supplier shall maintain these records for a minimum of 10 years after the last production shipment. Purchase order, LTA, or regulatory requirements take precedence if there is a conflict related to record retention.

The Supplier shall collect supporting data to demonstrate that it has met the requirement of each PPAP Element and include it in the PPAP File as the data is produced. For all elements of PPAP data collection, evaluations, analysis and assessments shall be completed with the tools, machines, instructions, methods, operators and processes used in delivering production parts. Data from non-production tooling or processes may only be used in the PPAP File when approved and documented in the PPAP Plan.

The Supplier shall maintain the PPAP File as living documents and continually review and update the PPAP File to reflect the current process based on any change to the design or process. Where evidence of process instability occurs after PPAP approval (SPC data, yield, non-conformances, escapes etc.), a review and analysis of applicable PPAP Elements shall be completed as part of the root cause and corrective action activity to determine the impact on these elements. Updates shall be incorporated and implemented where appropriate.

If any of the following changes occur after Full Approval is obtained, submission of MN-TNG-QA-03 Form 3 “Change Notification” shall be required:

- A change in design characteristics affecting fit, form, or function of the part.
- A change in manufacturing source(s), process(s), inspection method(s), locations of manufacture, tooling or materials.
- A change in numerical control program or translation to another media that can potentially affect fit, form or function.
- A natural or man-made event, which may adversely affect a manufacturing process.
- A lapse in production for two years shall require an update for any PPAP Elements that may be impacted by the inactivity or as specified by the Customer.

Disposition of MN-TNG-QA-03 Form 3 Will require new form name if NORDAM std. is followed. And shall be obtained prior to shipping production parts after the implementation of any such changes.

Note: *This requirement is in addition to all other change notice obligations (AS9102, NORDAM Supplier Quality Manual, Contract and Purchase Order)*

SUBMISSION & DISPOSITION of PPAP Package

The Supplier shall complete MN-TNG-QA-03 Form 1 to reflect the status of the PPAP File at the time of submission (the “PPAP Package”). By signing this form, the Supplier is certifying that the form is current, complete and accurate.

The default is Submission Level 3 unless otherwise specified by the NORDAM representative.

Submission Levels	Required Documentation
Level 1	MN-TNG-QA-03 Form 1 only
Level 2	MN-TNG-QA-03 Form 1 with limited supporting data
Level 3	MN-TNG-QA-03 Form 1 with complete supporting data for all Elements submitted to appropriate NORDAM representative
Level 4	MN-TNG-QA-03 Form 1 with complete supporting data for all Elements reviewed by

	a NORDAM representative at the Supplier's manufacturing location

Regardless of the Submission Level, the Supplier shall complete and maintain documentation for all applicable PPAP Elements in its PPAP file.

Before the first production part is shipped, the Supplier shall submit MN-TNG-QA-03 Form 1 with the PPAP Package to the appropriate NORDAM representative for formal disposition. The Supplier shall include the MN-TNG-QA-03 Form 1 from all applicable levels of its supply chain in the PPAP package. Submission date shall be agreed upon and documented in the APQP Plan.

Shipment of production products by the supplier is not allowed without an approved PPAP File. In very limited circumstances, a written request for deferral must be submitted to the appropriate NORDAM Quality Engineer to authorize the shipment of production parts prior to achieving Interim or Full Approval.

Note: *The Supplier should allow sufficient time to permit timely review and disposition. This should be established in the PPAP plan.*

The Supplier will receive a signed copy of MN-TNG-QA-03 Form 1 from the NORDAM representative with disposition based on the following criteria:

Element #	Element Name	Full Approval	Interim A	Interim B
1	Design Records	X	X	X
2	Design Risk Analysis (DFMEA); Only applicable to design organizations	X	X	X
3	Process Flow Diagram	X	X	X
4	PFMEA	X	X	X
5	Process Control Plan	X	X	X
6	Measurement Systems Analysis	X	X	P/T Ratio > 0.20*
7	Initial Process Capability Studies	X	Cpk > 1.0	Insufficient Data
8	Packaging, Preservation, and Labeling Approval	X	X	X
9	Dimensional Reports (FAIR)	5 Dimensional Reports w/ zero non-conformances	At least 2 Dimensional Reports completed	At least 1 Dimensional Report completed
10	Customer PPAP Requirements	X	X	X
11	PPAP Approval Form	X	X	X

X - Full Compliance to element requirement, no open actions exist.
* - Submitted but open actions or mitigation plans exist and are approved by the appropriate NORDAM representative.

Interim Approval indicates a gap between the PPAP requirements and the Supplier's current status. All PPAP Package submissions that do not receive "Full Approval" from the NORDAM representative shall contain a plan to achieve closure of any open item(s) including the commitment of actions, target dates and owners to achieve "Full Approval".

If the disposition is "Not Approved", the Supplier shall complete any required actions and resubmit MN-TNG-QA-03 Form 1 with the revised PPAP package to obtain an Interim or Full Approval.

Upon completion of open action items, the Supplier shall resubmit the PPAP Package and obtain a formal "Full Approval" disposition from the NORDAM representative.

PPAP ELEMENTS

1. Design Records
2. Design Failure Mode and Effects Analysis*
3. Process Flow Diagram*
4. Process Failure Mode and Effects Analysis*
5. Process Control Plan*
6. Measurement Systems Analysis*
7. Initial Process Capability Studies
8. Packaging, Preservation and Labeling Approval*
9. Dimensional Reports (FAIR)
10. Customer PPAP Requirements
11. PPAP Approval Form

*Element may be satisfied using a part or process family methodology but all unique characteristics shall be evaluated and accounted for by part number. Part families shall be defined in the PPAP Plan.

Note 1: *The numbering sequence of PPAP Elements does not reflect the order of execution.*

Note 2: *All product and process KCs (along with any supplier identified KCs) will be reflected in PPAP Elements 2, 3, 4, 5, 6 and 8.*

Element 1 – Design Records

The Supplier shall ensure the product is manufactured to a production released design definition and the drawing revision aligns with the PO requirement.

The Supplier shall include a copy of the verified product drawings in the PPAP File. Where digital product definition is applicable, the revision of the model shall be verified and documented in the PPAP File.

Design responsible suppliers shall include their current drawing, bill of material and the associated NORDAM drawing/specification in the PPAP File.

Applicable internal and external specifications shall be readily available.

Element 2 – Design Failure Mode and Effects Analysis

Design Responsible Suppliers shall ensure that a Design Failure Modes and Effect Analysis (DFMEA) related to performance, durability, reliability, assembly and manufacturability is executed and appropriate mitigation activities are identified, prioritized and completed. See SAE J1739 and the AIAG FMEA Reference Manual for guidance.

Product Key Characteristics (KCs) resulting from the DFMEA shall be identified in the Design Records (Element 1) and the Control Plan (Element 5).

The Supplier shall include the DFMEA in the PPAP File. Build-to-Print Suppliers shall review the NORDAM engineering definition for applicable KCs.

Note: *DFMEAs may be derived from part families as long as any unique product characteristics have been reviewed and included. Part families shall be defined in the PPAP Plan.*

Element 3 - Process Flow Diagram

The Supplier shall create a Process Flow Diagram to facilitate the development of a robust PFMEA and Control Plan. The process steps in this diagram should originate from the production planning.

Each process step shall be numbered (i.e. 10.00, 10.01…20.00, 20.01), corresponding to the operation numbers in the planning.

The Process Flow Diagram shall include:

- Production process steps and sequences from issuing material from stock to shipment of end product
- Standardized flowchart symbols
- Alternate process paths and formal rework loops (if applicable)
- Outside operations
- Transportation and handling
- Identification of steps that impact Product or Process KCs
- Key Product Outputs – Significant product related characteristics that can affect safety, regulatory compliance, appearance, function, performance, reliability, or subsequent product manufacturing. They are a direct output of a given manufacturing operation.
- Key Process Inputs – Unique process related characteristics that can affect the ability of the manufacturing process to meet Significant Product Characteristics. These are inputs to a given manufacturing operation.

The Supplier shall include the Process Flow Diagram in the PPAP File.

Note 1: *Process Flow Diagrams may be derived from part families as long as any unique processing steps and characteristics have been reviewed and included. Part families shall be defined in the PPAP Plan.*

Note 2: *The Supplier should consider the peak production rate as communicated by the NORDAM buyer to define the process flow.*

Element 4 - Process Failure Mode and Effects Analysis (PFMEA)

The Supplier shall ensure risks associated with the manufacturing or assembly process have been identified and mitigated using a PFMEA. See SAE J1739 and the AIAG FMEA Reference Manual for guidance.

The Supplier shall develop, document and maintain the part or assembly PFMEA and ensure consideration of the following:

- Process Flow Diagram alignment
- Product features, tolerances, KCs etc.

- Features identified in the DFMEA
- Supplier identified process KCs
- Product family quality history, including but not limited to non-conformances, escapes and lessons learned.

The Supplier shall include the PFMEA in the PPAP File.

Note: *PFMEAs may be derived from part families as long as any unique product characteristics and/or processing steps have been included. Part families shall be defined in the PPAP Plan.*

Element 5 - Process Control Plan

The Supplier shall ensure any manufacturing risks are adequately controlled by developing a Process Control Plan. The Process Control Plan shall be used to ensure sustained process control throughout the manufacturing life of the part and/or assembly. The Process Control Plan shall identify the product and process KCs (including those identified by the supplier), Key Process Inputs (KPIs) and associated controls.

The Process Control Plan shall include:

- Operation/process step where any product or process KC is measured
- Specification/tolerance for all product and process KCs
- Measurement system used
- Sample size and frequency
- Control method (type of control chart, set-up inspections, etc.)
- Reaction Plans
- Process Flow Diagram and PFMEA alignment

The Supplier shall include the Control Plan in the PPAP File.

Note: *Control Plans may be derived from part families as long as any unique product characteristics and/or processing steps have been included. Part families shall be defined in the PPAP Plan.*

Element 6 - Measurement Systems Analysis (MSA)

The Supplier shall ensure adequacy and applicability of the measuring systems and test equipment used to evaluate and monitor product and process. See the AIAG MSA Reference Manual and AS13003 for guidance.

The PPAP File shall contain copies of the Measurement Systems Analysis (including Gage R&R) conducted on all instruments and test equipment used for measuring all product and process KCs as well as gauges listed in the control plan. For custom designed gaging, evidence of inspection and acceptance testing (gage inspection, tooling reports, etc.) shall also be included in the PPAP File. Any Gage R&R studies shall have a Precision-to-Tolerance (P/T) ratio ≤ 0.20 unless a lower maximum ratio is specified in the PPAP Plan.

When P/T ratio is not achieved, or when other deficiencies are identified such as bias, stability, linearity, repeatability, reproducibility or discrimination, the Supplier shall provide a mitigation plan which ensures conformity of product. NORDAM acceptance of any mitigation plan is required.

Where attributes are used to assess feature acceptability (e.g. pass/fail criteria) the evaluation of measured variable data is not possible. The following criteria shall be used to determine acceptance of the measurement system:

Pass/Fail: Kappa >= 0.8. Ordinal: ICC >= 0.75.

Note: *MSA's may be derived from part families as long as any unique product characteristics and/or processing steps have been included. Part families shall be defined in the PPAP Plan.*

Element 7 - Initial Process Capability Studies

The Supplier shall conduct an initial capability study of the manufacturing processes used to produce all product and process KCs. The PPAP File shall contain documented evidence that initial process studies have been conducted for all product and process KCs, as well as any Supplier identified process KCs. In addition to capability metrics the supplier shall provide adequate data to support the validity of the metric, these requirements are detailed below.

Data shall be captured from a minimum of 25 consecutive parts representing process variation as described in the PPAP Plan. Any out-of-tolerance or out-of-control conditions shall be addressed by the Supplier.

Note 1: Process variation includes variability associated with piece to piece, setup to setup, machine to machine, time to time and lot to lot. Targeted process variations will be described in the PPAP Plan.

The Supplier shall use the following as acceptance criteria for evaluating initial Process Study results.

Results	Interpretation
Cpk ≥ 1.33	The process currently meets requirements. After approval, begin volume production and follow Control Plan.
1.00 ≤ Cpk < 1.33	The process is currently acceptable, but will require some improvement. Acceptable to submit for Interim Approval A. This may require changes to the Control Plan, if not improved prior to start of volume production.
Cpk < 1.00	The process does not currently meet the acceptance criteria. Contact the appropriate NORDAM representative for a review of the study's results.

Process capability indices shall only be calculated after the process is determined to be stable, in statistical control and the requirements of Element 6 (MSA) have been met.

The capability indices shall be calculated using the appropriate distribution that the process represents (normal, exponential, Weibull, etc.). Evidence of distribution must be provided.

Variable data shall be used wherever feasible. If using attribute data (pass/fail), complete a minimum of 45 consecutive observations over sufficient time to capture variability associated with, piece to piece, set up to set up, time to time, and lot to lot variation with no non-conformances detected.

Supplier is required to continue to monitor Cpk of product and process KCs throughout production to ensure process stability is maintained, Cpk **≥** 1.33. Any out of control conditions should be addressed accordingly. Evidence of process variation shall be submitted to NORDAM Quality Department on a quarterly basis. This report shall include the investigation of the most recent out of control point, if any.

Note 2: With prior agreement of the approach and source of data, use of short run SPC techniques (e.g. target, group, part family charts) may be allowed to meet the 25 part minimum requirement (where full

production run is less than 25 parts or 25 parts will take an unreasonable amount of time). Acceptance of alternate SPC techniques shall be documented in the PPAP Plan.

Element 8 - Packaging, Preservation and Labeling Approval

The Supplier shall verify that the production intended packaging is adequate to prevent damage during shipping. At a minimum, packaging shall meet the requirements of the NORDAM Supplier Quality Manual, as well as any other contractual documents.

The Supplier shall include in the PPAP File a photograph of the intended production packaging along with the procedure or industry standard used.

Element 9 - Dimensional Reports (FAIR)

The Supplier shall perform a 100% inspection on a minimum of 5 production parts. These parts will be strategically selected over a sufficient time to capture variability associated with piece to piece, setup to setup, machine to machine, time to time and lot to lot variation considering all unique process streams. Any out-of-tolerance, out-of-control or trending towards out-of-tolerance conditions shall be addressed by the Supplier.

MN-TNG-QA-03 Form 3 shall be used to record the results of each inspection. This record shall include 100% of the design features. Dimensions recorded in MN-TNG-QA-03 Form 3 should match those recorded in the AS9102 First Article Inspection Report (FAIR).

The PPAP File shall contain a copy of any approved FAIRs and Delta FAIRs, as well as the MN-TNG-QA-03 Form 3.

Note: *In-process gaging or automated inspection may be used to capture this data.*

Element 10 – Customer PPAP Requirements

When Airbus specifies additional PPAP requirements that are not included in MN-TNG-QA-03, the organization is to include those requirements in the PPAP file under element 10.

Element 11 – PPAP Approval Form

The Supplier shall:

- Verify all measurement and test results show conformance with NORDAM requirements
- Ensure all required documentation is available and maintained within the PPAP File
- Review all applicable data for content and accuracy before submitting the PPAP Package for approval
- Upon a satisfactory internal review, complete MN-TNG-QA-03 Form 1 and submit to the appropriate NORDAM representative for approval along with the necessary PPAP Package based on the Submission Level (Submission Level 4 may require an onsite review).
- Complete a separate MN-TNG-QA-03 Form 1 for each part number unless otherwise approved and documented in the PPAP Plan.
- Approve the submission of PPAP Packages and any deviations to the requirements of this procedure for all levels of its supply chain (if required by PPAP Plan).
- Include the MN-TNG-QA-03 Form 1 from all levels of its supply chain in the PPAP Package (if required by PPAP Plan).

Include the MN-TNG-QA-03 Form 1 from all levels of its supply chain in the PPAP Package (if required by PPAP Plan).

Section B – Visual Appearance

UNUSUAL VISUAL APPEARANCE

A product may meet all engineering and technical requirements yet display unusual visual appearance characteristics which may cause unnecessary concerns when observed at final assembly operations or during in-service inspection.

Examples may include, but are not limited to:
- Discoloration
- Uneven surface finish or condition
- Inconsistent surface preparation
- Inconsistent weld beads
- Evidence of rework / repair / touch-up

A visual acceptance standard shall be agreed with the supplier during the development phase of the program prior to start of series production. All products must meet engineering, technical, and visual acceptance standard requirements. Any unusual visual appearance which exceeds the agreed acceptance standard must be submitted as a non-conformance using the Non-conforming Material Process. Approval must be obtained prior to product shipment to NORDAM.

Section C – Non-Conformances

Non-Conformance Requirements

A Supplier that submits a concession for approval must also perform a root cause corrective action and document the non-conformance on an 8D. The Supplier must submit the 8D to NORDAM for review. Approval must be received, in writing, from NORDAM before the product can be shipped.

The Supplier shall submit any deviation or concession on the Airbus Supplier Concession Forms, and place the Airbus Allocation of Concession Outstanding Tag on the part / equipment.

Form:

FM1240668	Airbus Concession Form
FM1240670	Airbus Concession Continuation Form
FM1240671	Airbus Sketch Sheet
NSA9117-78	Airbus Allocation of Concession Outstanding Tag

Non-Conformances with Design Origin

In the event a design non-conformance is discovered, the NORDAM buyer shall be notified immediately for creation of an RDC (Request for Document Change).

A design nonconformance can be further described as a non-conformance in the released definition dossier (Model, specification, BOM, etc.) identified during work preparation, manufacturing, and assembly or testing: e.g., it is not possible to perform the required work (not manufacturable due to

tooling issue...); it is not possible to comply with requirements (Process Specifications, Drawing Notes, etc.).

The goal is to set in motion the process of addressing the non-conformance by implementing a validated and industrialized engineering technical solution to unblock production.

Section D – Quality Performance and Surveillance

Performance Metrics

Suppliers will be required to submit to NORDAM Quality Engineering monthly reports regarding their Quality Performance. Reports should include the month's metrics as well as charts showing the previous 12 months results.

Metrics required include:
- First Pass Yield (FPY) rate
- Scrap Rate
- Internal Rework Rate
- Other relevant metrics requested shall be provided on a case by case need

6.0 FORMS/RECORDS

FM1240668	Airbus Concession Form	
FM1240670	Airbus Concession Continuation Form	
FM1240671	Airbus Sketch Sheet	
NSA9117-78	Airbus Allocation of Concession Outstanding Tag	
MN-TNG-QA-03 Form 1	Part Submission Warrant	(Attached)
MN-TNG-QA-03 Form 2	Change Notice	(Attached)
MN-TNG-QA-03 Form 3	Dimensional Report	(Attached)

7.0 CHANGE HISTORY

REV DATE	REV LEVEL	DESCRIPTION OF CHANGE	CHANGED BY:
8/19/2019	IR	Initial Release	Bob Neubauer
9/12/2019	A	Added QSS-101 to History Document Number block in Title Block to show traceability.	Bob Neubauer