

V2500 - Requirements for Concessions and Deviation Permits

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For the attention of the Managing Director, Manufacturing Manager and Quality Manager

Dear Sir or Madam,

Scope/Applicability:

All suppliers within our aerospace supply chain that manufacture and/or supply parts for the V2500 series of engines.

Introduction:

As previously communicated via NTSs 394 and 403, since March 2017 the Fixed Process Approvals (FPAs) and the disposition of non-conformances and deviation permits of parts, modules and assemblies of V2500 engines are being performed by Pratt & Whitney Aero Engines International (PWAEI). All communication on such matters needs to be directed to Rolls-Royce Deutschland.

The actions listed below are applicable to all suppliers when submitting non-conformance (concessions) and Deviation Permit requests affecting V2500, to improve disposition time. Except when stated otherwise, the instructions of this NTS are additional to those from NTS 403.

Actions Required:

As explained in NTS 403, non-conformance and Deviation Permit requests affecting V2500 parts should be submitted to Agency.RRD-Concession@Rolls-Royce.com, using the SABRe template on the Global Supplier Portal. The email must identify in its title the supplier's unique document reference and whether it is a Concession or Deviation Permit, and also display "V2500" on the e-mail title. The document shall be completed in accordance with the 'Comments' contained in the template.

This NTS replaces the instructions previously given in NTS 403. The applicant must use the checklist on pages 2, 3 and 4 of this NTS, to ensure that the required information is available and clear before submission; otherwise the request is going to be rejected by PWAEI. Deviation Permits must also contain a milestone plan, with task descriptions and dates, to return parts delivery to blueprint condition.

Rolls-Royce is not going to check submissions for conformity, or completion of information.

Be aware that we will communicate any other future changes directly to you, if you are affected.

NTS Category:

General Information / Communication

Authorised by:

Matthias Haake
Chief Design Engineer - Regional Fleet

Checklist for V2500 concessions and deviation permits (3 pages)

CAI V2500/001 - Appendix 5
NTS xxx - Appendix

Quality Checklist V2500 Concessions and Deviation Permits

Issue 2
01.08.2017

Requirements for the front sheet				
1	Checking Feature	Description	Check	Remarks
1a	Clarify if the request is a Deviation Permit or a Concession			
1b	If the application is for an up-issue of an earlier concession, check that a reason for the up-issue is being provided.	The application must contain all information from the initial application.		
1c	Check that all information at the frontsheet is readable and complete			
1d	Check that set of box 1 ("document identification") is filled in completely and correctly.	<ul style="list-style-type: none"> - identification of customer - identification of supplier/subcontractor - document reference number - document issue - number of sheets 		
1e	"Identification of product affected" Check set of box 2 is filled in complete and correctly.	<ul style="list-style-type: none"> - model of product/number - part number including drawing issue for raw materials and forgings: on block 2.2, launch the part number of the end product, and launch in brackets the part number of the forging. - part description - part serial number, batch and effectivity - quantity for Deviation Permits, refer to item 1f of this checklist. - product number - work/purchase order number - assembly serial number - assembly drawing number 		Check if latest drawing issue is used. Quantity in boxes 2.5 and 3 must be identical, quantity should fit to stated serial numbers. Raise concession on part as it currently is (Assembly, sub-part, forging etc) For concessions affecting "NQF part numbers" and "half finished"/"semi-finished" part numbers, the Assembly Part numbers and how the deviation affects the end product must be informed.
1f	Quantity (item 2.5) Confirm number of parts affected	Deviation Permits (Waiver) - if the Deviation Permit requires to be limited by expiry date instead of number of parts, then write on block 2.5 the phrase "ref. Box 4" and estate on the first line of this box the expiry date requested, limited to a maximum of one year of production.		Deviation Permits: - if a Drawing Alteration or Change of Specification are the proposed corrective action for the Deviation Permit, then the originator must launch the number of parts equivalent of 6 months of production.
1g	"Description of Non-conformity" To check if box 3 is filled in complete and correctly.	<ul style="list-style-type: none"> - A clear and detailed description of the non-conformance. - ensure that all deviations are given correctly. - ensure that reference to previous concessions and actual item are given. - For concessions affecting raw materials and forgings ("NQF part numbers"), it must be informed how the deviation affects the end product. The customer of the forging must confirm in writing that is able to produce parts with the deviation described on the concession request. 		Provide complete description (Measurements, pictures, cut-ups etc).
1h	Check if the root cause analysis and corrective actions (if identified) are given on Box 4, or that a 3C or 8D is attached.	For Deviation Permits: - For Deviation Permits, an 8D report (preferred) or equivalent root cause/corrective actions document is mandatory. - Repeat DPs - those that require extension due to expiration of the existing one, not a repeat of the same issue – the originator may state estate "refer to the previous DP number [number of the previous DP] for root cause and corrective actions", though still attaching the investigation report from the previous DP. - Along with root cause and corrective actions, the originator must provide a timescale with high-level milestones (minimum 5) and correspondent completion dates, required by the originator to adequate production to drawing requirements. - Deviation permits which the solution is a drawing alteration, then the Originator must attach a DAR and clarify the reason why a manufacturing action is not possible.		Copy/paste of the root cause from an old concession is not acceptable. For Deviation Permits: on the milestone plan to return/adequate production to drawing requirements, the actions must be scheduled for completed by at least 20 days before the expiry of the Deviation Permit. - 8D reports submitted for DPs may be in progress, hence not fully complete and closed.

Quality Checklist
V2500 Concessions and Deviation Permits

1i	Inform precedence	Inform on the appropriate boxes, the number of previous concessions requested for the same type of issue, and if the concession is an up-issue. For Deviation Permits: - provide the precedent Deviation Permit, and the reason why a new one is being requested.		Example (Deviation Permits): Corrective actions on milestones plan delayed (provide reasons for delay) Drawing Alteration not completed by Design Organisation.
1j	Check if the responsible originator is given in box 6.			
2	General requirements			
	Checking Feature	Description	✓	Remarks
2a	Ensure all supporting documents are in English	This includes all documents, such as route cards, travellers, data cards and investigation reports.		If for regulatory requirements, a document is solely in local language, provide a translation in English for the items that are involved in the concession.
2b	When available, provide assessment statements with further substantiation.	Examples: - traceability calculation - understandable causes - Root cause investigation (not generic if the defect is new, or if the concession is an up-issue).		
2c	Ensure that all sent data is readable and in good / workable quality.	Text, diagrams, photographs, pictures, sketches, CMM reports etc.		
2d	Ensure that the correct drawing or specification issue is being used, and that non-conformances are in line with it.			
3	Geometric defects (including those affecting wall thickness)			
	Checking Feature	Description	✓	Remarks
3a	Provide the affected dimension	- Part number (if assembly). - Sheet and grid references (or balloon references when available) - Feature reference on drawing. For forgings and raw materials: - inform that only the forging/raw material is affected, and not the end product.		
3b	Provide information of the deviation (dimensional errors supply CMM report).	- Call nominal dimension and the tolerance on the drawing, and the actual dimension found on part(s) affected. - Every non-conformance of each part affected must be listed, including position, actual dimensions, and quantity (e.g. number of holes and location). - At position tolerance, include the direction of deviation with coordinates ("x", "y" or radial). - Provide wall thickness of the affected area. - At hole pattern, provide all measurements of the affected holes (hole pattern analysis). - Provide original CMM report as a .pdf file, or as a minimum provide a fully-readable CMM report. - Ensure that serial number(s) in the front sheet is (are) the same as on the CMM report. - For raw material issues, provide information about the process affected, i.e. since when the process is running, when was the last process change, and if there was any change to the specification. - For NDT issues/findings, inform the results of the previous batches, and of the subsequent batches if already produced, to the one affected by the concession request.		
3c	Check the exact area affected by a deviation on thickness.	Drawing, picture, sketch.		

Quality Checklist
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4 Non-conformances affecting cosmetic / surface defects			
	Checking Feature	Description	Remarks
4a	Inform the exact position of the defect on the part.	Indicate the position affected on the part drawing and on the detail view of the area.	
4b	Specify all dimensions of the defect.	- Length, width, depth (attention: statements of defects as having "no depth" and/or "no width" are not acceptable and will be rejected). - state if raised material is present. If any is present, then provide dimensions. - Show the distance to close areas (e.g. bolt holes, end of flange etc).	
4c	Provide a colour picture of the defect, with scale (mandatory step).	Position of the picture taken must be clear, showing a general picture of the area that clearly identifies the location affected on the part (e.g. flange, face, casting face etc), and a detailed picture to clearly see the defect. - Any part markings are to be photographed (p/n, s/n etc).	
4d	If defect is due to handling issue, inform inspections performed.	If NDT was performed, state that such was performed and results are acceptable per spec.	
5 Salvage and reworks			
	Checking Feature	Description	Remarks
5a	If salvage with reference number (e.g. standard process), ensure that the reference document is available for assessor.	- as digital data, or scanned copies of paperwork. - provide pictures "before" and "after" for the salvage performed (if already done).	Suppliers are only authorised to perform salvage if the DRC has provided written authorisation to proceed.
5b	If a welding salvage is performed, provide the welding report and data card.		Suppliers are only authorised to perform salvage if the DRC has provided written authorisation to proceed.
5c	If a repeat salvage, provide previous concession number.	As item 1i.	