



INSTRUCTION GUIDE FOR NCAMP FORM 168-1 INSPECTION VERIFICATION RECORD

PURPOSE

This form should be completed and signed by the company or laboratory performing the tasks (e.g. panel fabrication and specimen fabrication) and an NCAMP AIR under the following circumstances:

1. Inspection and inspection verification on test panels created for a material qualification and/or equivalency program utilizing a material which could be used on an aircraft. The company (typically an aerospace company fabricating test panels) will state that the test panels have been fabricated in accordance with applicable requirements of test plan and material & process specifications. The NCAMP AIR will conduct inspection verification in accordance with the instructions that accompany NCAMP Form 168-10 Request for Inspection Verification. The company and/or NCAMP AIR will document the deviations, if any, in NCAMP Form 168-1. The NCAMP AIR will sign and return NCAMP Form 168-1 to NCAMP.
2. Inspection and inspection verification on test specimens (including fastener torque verification when necessary) for a material qualification and/or equivalency which could be utilized on an aircraft. The laboratory will state that the test specimens are in accordance with applicable requirements of test plans. The NCAMP AIR will conduct inspection verification in accordance with the instructions that accompany NCAMP Form 168-10 Request for Inspection Verification. The company and/or NCAMP AIR will document the deviations, if any, in NCAMP Form 168-1. The NCAMP AIR will sign and return NCAMP Form 168-1 to NCAMP.

If certain inspection tasks have been performed by qualified personnel and records of the inspection are available for verification, the AIR may elect to perform verification on the inspection record and need not repeat the entire inspection tasks again, at the sole discretion of the AIR.



INSTRUCTIONS

1. List the NCAMP assigned project number along with date of the Request for Inspection Verification, as applicable.
2. List the company or test laboratory performing the tasks.
3. List the date the inspection began.
4. List the date the inspection ended.
5. Assign consecutive numbers for each item inspected.
6. List the technical name i.e., test panel name, test specimen number, etc..
7. List the name or description of the test plan, material and process specifications, and corresponding table reference and test standard.
8. List the revision level and date of the test plan or specification described in Block 8.
9. List the number of items that were determined satisfactory or unsatisfactory. Do not record individual characteristics. **NOTE:** (An item is a single article or unit containing one or more dimensional characteristics or features.)
10. Enter comments in this block that will support any information given in Blocks 8 through 12. i.e., unsatisfactory conditions, corrective actions taken, reference to other item numbers listed, specimen name, type of inspection accomplished, comments, etc...

NOTE: Unsatisfactory conditions are corrected in one of two ways:

Method 1: If action is presented to correct or justify an unsatisfactory condition, the action will be documented in the record as a signature of an Authorized Engineering Representative (after consultation with participating MAB members, if needed). Typically this action will be to use the item as-is or after satisfactory rework. NCAMP keeps an electronic copy of the form for its record and it is included in the NCAMP final report.

Method 2: If the items are not capable of being used as-is, the items deemed unsatisfactory will not be tested and if possible, reworked or new specimens will be used in their place after inspection.



Example 1: Completed NCAMP 168-1 Form for Test Panels Inspection

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This info can be found in the designated Test Panel Fabrication NCAMP Form 168-10 provided for each program

1. Project Number/Request Date:		NCAMP Project No		MM/DD/YEAR	
2. Company/Test Laboratory Company Name, Address		Designated Test Panel Fabrication NCAMP Form 168-10. Provided by NCAMP		3. Beginning Date: MM/DD/YEAR	
4. Ending Date: MM/DD/YEAR		5. Item No.		6. Nomenclature of Item Inspected	
7. Test Plan, M&P Specification, and Corresponding Table Reference and Test Standard		8. Revision and Date		9. No. of Items Determined	
				SAT. UNSAT.	
10. Comments					
I	Reviewed NCAMP's test document	NTP XXXXEX, Designated test plan no.	MM/DD/YEAR	1	Provided by NCAMP
II	Reviewed NCAMP Form 168-10 RIV	NCAMP Form 168-10 NPN XXXXXX	MM/DD/YEAR	1	Test Panels - FOR TEST ONLY
1	NTPXXXXEX-XXX-XXX-XXX-WT-X-XX1-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
2	NTPXXXXEX-XXX-XXX-XXX-WT-X-XX2-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
3	NTPXXXXEX-XXX-XXX-XXX-WC-X-XX1-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR		1
4	NTPXXXXEX-XXX-XXX-XXX-WC-X-XX2-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
5	NTPXXXXEX-XXX-XXX-XXX-FT-X-XX1-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
6	NTPXXXXEX-XXX-XXX-XXX-FT-X-XX2-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
7	NTPXXXXEX-XXX-XXX-XXX-FC-X-XX1-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
8	NTPXXXXEX-XXX-XXX-XXX-FC-X-XX2-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
9	NTPXXXXEX-XXX-XXX-XXX-IPS-X-XX1-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
10	NTPXXXXEX-XXX-XXX-XXX-IPS-X-XX2-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
11	NTPXXXXEX-XXX-XXX-XXX-SBS-X-XX1-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
12	NTPXXXXEX-XXX-XXX-XXX-SBS-X-XX2-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
13	NTPXXXXEX-XXX-XXX-XXX-OHT1-X-XX1-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
14	NTPXXXXEX-XXX-XXX-XXX-OHT1-X-XX2-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
15	NTPXXXXEX-XXX-XXX-XXX-OHC1-X-XX1-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
16	NTPXXXXEX-XXX-XXX-XXX-OHC1-X-XX2-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
17	NTPXXXXEX-XXX-XXX-XXX-CA11-X-XX1-1	NTP XXXXEX, Appendix 2	MM/DD/YEAR	1	
IV	Inspection verification performed at Name of the Company / Test Lab			16 TOTAL	1 TOTAL

Add a note for AER disposition if there is any UNSAT. (Panel fabrication which deviated from NCAMP Process Specification and/or NCAMP Test Plan)

The panel name should be listed as what is label on the test panel. A list of all test panel names can be found in Appendix 2 of the test plan.

Corresponding table / appendix reference of the test plan

Revision and Date of the test plan

No. of Total Test Panels for SAT.

No. of Total Test Panels for

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I hereby claim that (to be completed by the company/lab performing the tasks):

- A. The specimens have been machined according to the corresponding test standard. The fasteners, if available, have been torqued according to the test plan requirement.
- B. The test panels have been fabricated in accordance with appropriate test plan and M&P specifications as mentioned above.
- C. Remarks: _____

Print Name, Sign, and Date: Name, Signature and Date (MM/DD/YEAR) of the person who completed the paperwork

I have verified that (to be completed by AIR):

- A. The specimens have been machined according to the corresponding test standard. The fasteners, if available, have been torqued according to the test plan requirement.
- B. The test panels have been fabricated in accordance with appropriate test plan and M&P specifications as mentioned above.
- C. Remarks: _____

Print Name, Sign, and Date: Name, Signature and Date of the person who inspected the test panels (designated AIR)

If unsat exists, AER may decide to use the item(s) as-is or after satisfactory rework. Describe the corrective action or justify the unsat:

 Print Name of AER, Sign, and Date: Name, Signature and Date of the designated AER who disposition the UNSATs (if applicable)



Example 2: Completed NCAMP 168-1 Form for Test Specimens Inspection


This info can be found in the designated Test Specimens NCAMP Form 168-10 provided for each program

1. Project Number/Request Date: NCAMP Project No. MM/DD/YEAR		2. Company/Test Laboratory Company Name, Address		3. Beginning Date: MM/DD/YEAR		4. Ending Date: MM/DD/YEAR	
5. Item No.	6. Nomenclature of Item Inspected	7. Test Plan, M&P Specification, and Corresponding Table Reference and Test Standard	8. Revision and Date	9. No. of Items Determined		10. Comments	
				SAT.	UNSAT.		
I	Reviewed NCAMP's test document	NTP XXXXEXX Designated test plan no.	MM/DD/YEAR	1		Provided by NCAMP Note: Test Panels provided by panel fabricator company name	
II	Reviewed NCAMP Form 168-10 RIV	NCAMP Form 168-10 NPN XXXXXX	MM/DD/YEAR	1		Test Coupons – FOR TEST ONLY	
III	Reviewed Support Documentation Supplied by panel fabricator company name	NCAMP Form 168-1	MM/DD/YEAR	1		Provided by panel fabricator company name Note: Test Panels Verification Inspection Documentation	
IV	Verify Certification of measuring equipment					List all measuring equipment used for the test specimens inspection - Type of equipment, S/N XXXX, next due MM/DD/YEAR - Type of equipment, S/N XXXX, next due MM/DD/YEAR - Type of equipment, S/N XXXX, next due MM/DD/YEAR - Type of equipment, S/N XXXX, next due MM/DD/YEAR	
V	Dimensional verification of lamina / laminate test coupons as follows:	NTP XXXXEXX Designated test plan no.				- Verification on sampling basis only	
VI	NOTES: All specimen ID's are prefixed by: NTPXXXXEX-XXX-XXX-XXX					- 1 – does not meet thickness variation across the length per ASTM D6641 (± 0.002") - 2 – does not meet parallelism with B per ASTM D5766 (± 0.003")	
1	Panel: WT-A-C1-1 Specimen: RTD-4, CTD-5, ETW-1	NTP XXXXEXX ASTM D3039, Table X	MM/DD/YEAR	16		- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5 - CTD-1, CTD-2, CTD-3, CTD-4, CTD-5 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6	
2	Panel: WT-A-C2-1 Specimen: RTD-2, CTD-4, ETW-5	NTP XXXXEXX ASTM D3039, Table X	MM/DD/YEAR	16		- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5 - CTD-1, CTD-2, CTD-3, CTD-4, CTD-5 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6	
3	Panel: WC-A-C1-1 Specimen: RTD-4, ETW-1	NTP XXXXEXX ASTM D6641, Table X	MM/DD/YEAR	11	1	- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5, RTD-6 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6 - AER Disposition required: See Note 1 for ETW-2 (0.0078")	

Annotations:
 - "Company that performed testing" points to the company name in section 2.
 - "Designated Test Specimen NCAMP Form 168-10. Provided by NCAMP" points to the test plan reference in section 7.
 - "Start date for specimens inspection" points to the beginning date in section 3.
 - "End date for specimens inspection" points to the ending date in section 4.
 - "No. of Total measuring equipments used for the test specimens inspection" points to the number of items determined in section 9.
 - "List all UNSAT requirements (if applicable)" points to the UNSAT column in section 9.
 - "The specimen naming format can be found in the test plan." points to the specimen ID in section 6.
 - "Test Panel ID List all inspected test specimens ID" points to the panel and specimen IDs in section 6.
 - "Test Plan no. ASTM reference, Mechanical Testing Test Matrix's Table no. of the test plan" points to the test plan reference in section 7.
 - "Revision and Date of the test plan" points to the revision and date in section 8.
 - "No. of Total Test Specimens of SAT for each test method" points to the SAT column in section 9.
 - "List all the test specimens for each test method/condition. Add a note for AER disposition if there is any UNSAT." points to the comments in section 10.




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 National Center for Advanced Materials Performance		Inspection Verification Record NCAMP Form 168-1			1. Project Number/Request Date: NCAMP Project No MM/DD/YEAR	
2. Company/Test Laboratory Company Name , Address			3. Beginning Date: MM/DD/YEAR		4. Ending Date: MM/DD/YEAR	
5. Item No.	6. Nomenclature of Item Inspected	7. Test Plan, M&P Specification, and Corresponding Table Reference and Test Standard	8. Revision and Date MM/DD/YEAR	9. No. of Items Determined		10. Comments
				SAT.	UNSAT.	
4	Panel: WC-A-C2-1 Specimen: RTD-2, ETW-5	NTP XXXXEXX ASTM D6641, Table X	- MM/DD/YEAR	12		- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5, RTD-6 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6
5	Panel: FT-A-C1-1 Specimen: RTD-1, CTD-3, ETW-5	NTP XXXXEXX ASTM D3039, Table X	- MM/DD/YEAR	16		- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5 - CTD-1, CTD-2, CTD-3, CTD-4, CTD-5 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6
6	Panel: FT-A-C2-1 Specimen: RTD-2, CTD-3, ETW-5	NTP XXXXEXX ASTM D3039, Table X	- MM/DD/YEAR	16		- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5 - CTD-1, CTD-2, CTD-3, CTD-4, CTD-5 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6
7	Panel: FC-A-C1-1 Specimen: RTD-4, ETW-1	NTP XXXXEXX ASTM D6641, Table X	- MM/DD/YEAR	12		- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5, RTD-6 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6
8	Panel: FC-A-C2-1 Specimen: RTD-2, ETW-5	NTP XXXXEXX ASTM D6641, Table X	- MM/DD/YEAR	12		- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5, RTD-6 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6
9	Panel: IPS-A-C1-1 Specimen: RTD-4, CTD-5, ETW-1	NTP XXXXEXX ASTM D3518, Table X	- MM/DD/YEAR	16		- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5 - CTD-1, CTD-2, CTD-3, CTD-4, CTD-5 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6
10	Panel: IPS-A-C2-1 Specimen: RTD-2, CTD-4, ETW-5	NTP XXXXEXX ASTM D3518, Table X	- MM/DD/YEAR	16		- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5 - CTD-1, CTD-2, CTD-3, CTD-4, CTD-5 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6
11	Panel: SBS-A-C1-1 Specimen: RTD-4, ETW-1	NTP XXXXEXX ASTM D2344, Table X	- MM/DD/YEAR	12		- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5, RTD-6 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6
12	Panel: SBS-A-C2-1 Specimen: RTD-2, ETW-5	NTP XXXXEXX ASTM D2344, Table X	- MM/DD/YEAR	12		- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5, RTD-6 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6



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 National Center for Advanced Materials Performance		Inspection Verification Record NCAMP Form 168-1			1. Project Number/Request Date: NCAMP Project No MM/DD/YEAR	
2. Company/Test Laboratory Company Name , Address			3. Beginning Date: MM/DD/YEAR		4. Ending Date: MM/DD/YEAR	
5. Item No.	6. Nomenclature of Item Inspected	7. Test Plan, M&P Specification, and Corresponding Table Reference and Test Standard	8. Revision and Date - MM/DD/YEAR	9. No. of Items Determined		10. Comments
				SAT.	UNSAT.	
13	Panel: OHT1-A-C1-1 Specimen: RTD-4, CTD-5, ETW-1	NTP XXXXEXX ASTM D5766, Table X	- MM/DD/YEAR	13	3	- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5 - CTD-1, CTD-2, CTD-3, CTD-4, CTD-5 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6 - AER Disposition required: See Note 2 for RTD-3 (0.005"), CTD-2 (0.006") and CTD-5 (0.008")
14	Panel: OHT1-A-C2-1 Specimen: RTD-2, CTD-4, ETW-5	NTP XXXXEXX ASTM D5766, Table X	- MM/DD/YEAR	16		- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5 - CTD-1, CTD-2, CTD-3, CTD-4, CTD-5 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6
15	Panel: OHC1-A-C1-1 Specimen: RTD-4, ETW-1	NTP XXXXEXX ASTM D6484, Table X	- MM/DD/YEAR	11		- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6
16	Panel: OHC1-A-C2-1 Specimen: RTD-2, ETW-5	NTP XXXXEXX ASTM D6484, Table X	- MM/DD/YEAR	11		- RTD-1, RTD-2, RTD-3, RTD-4, RTD-5 - ETW-1, ETW-2, ETW-3, ETW-4, ETW-5, ETW-6
V	Inspection verification performed at Name of the Company / Test Lab City, State			218 TOTAL	4 TOTAL	FOR TEST ONLY: 222 total test specimens

No. of Total Test Specimens for SAT.
 (Items No. #1 to #16)

No. of Total Test Specimens for UNSAT.
 (Item No. #1 to #16)

No. of Total Test Specimens for SAT + UNSAT



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I hereby claim that (to be completed by the company/lab performing the tasks):

- A. The specimens have been machined according to the corresponding test standard. The fasteners, if available, have been torqued according to the test plan requirement.
- B. The test panels have been fabricated in accordance with appropriate test plan and M&P specifications as mentioned above.
- C. Remarks: _____

Print Name, Sign, and Date: _____ Name, Signature and Date (MM/DD/YEAR) of the person who completed the paperwork

I have verified that (to be completed by AIR):

- A. The specimens have been machined according to the corresponding test standard. The fasteners, if available, have been torqued according to the test plan requirement.
- B. The test panels have been fabricated in accordance with appropriate test plan and M&P specifications as mentioned above.
- C. Remarks: _____

Print Name, Sign, and Date: _____ Name, Signature and Date of the person who inspected the test specimens (designated AIR)

If unsat exists, AER may decide to use the item(s) as-is or after satisfactory rework. Describe the corrective action or justify the unsat:

Print Name of AER, Sign, and Date: _____ Name, Signature and Date of the designated AER who disposition the UNSATs (if applicable)