

Work Instruction

MES-NC OASIS Training (SMRRs)

MES-NC

Purpose

Use this procedure to submit an electronic nonconformance document.

Trigger

Perform this procedure when a nonconformance requires Sentinel Space Systems Program MRB disposition.

Prerequisites

OASIS user name and password with access to MES-NC

Menu Path

- OASIS; Manufacturing Execution System - NonConformance (MES-NC).

Application

MES-NC

Helpful Hints

For questions on usage, please contact MESNCOASISTagCreationSentinel@ngc.com
or contact your Northrop Grumman Buyer

Procedure

1. Start the process by selecting “Log In” from the OASIS homepage. Enter your user name and password.

MyOASIS login

NORTHROP GRUMMAN

OASIS Portal

Welcome to the Supplier Portal

My Tools

Get started managing various aspects of your connection to Northrop Grumman

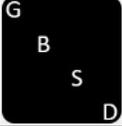
- Annual Certification ⓘ
- Approved Special Processor Listing ⓘ
- AssetSmart ⓘ
- E-2/C-2 EIDE ⓘ
- FileDrop ⓘ
- Hazard Identification & Tracking System (HITS) ⓘ
- Industrial Supplies Web Site (USTG) ⓘ
- Integration Point/C-TPAT
- Managed File Transfer (MFT) ⓘ
- Manufacturing Execution System - NonConformance (MES-NC) ⓘ
- Material Acquisition Pull System ⓘ
- My Purchase Orders ⓘ
- One IES Teamcenter ⓘ
- PLSC2 ⓘ
- PPDDS ⓘ
- Quality Notification: Corrective Action Request (eCAR) and Supplier Information Request (eSIR) ⓘ
- Quality Tool Inspection System (QTIS) ⓘ
- Request for Change or Information ⓘ
- Ryder ⓘ
- SEKO ⓘ
- SIR ⓘ
- SQUID UII Number Download ⓘ
- Standard Notes ⓘ
- Supplier Delivery Management System (PO/CO Stating) ⓘ
- Supplier Information Form ⓘ
- Supplier Scorecard ⓘ
- Supplier Technical Product Data ⓘ
- Tax Resale Exemption Certificates ⓘ
- Technical Data Retrieval System (TDRS) ⓘ
- Tooling Material/Supplies Procurement Supplier Site (TMS-Web) ⓘ
- Tooling Request for Quotation (TRFQ) ⓘ
- Tooling Supplier Website (TSW) - PLACE ⓘ
- UID Drop Application Request ⓘ

This screen requires a MyOASIS User Name and Password. If you do not have one or yours is not working, please contact the appropriate person by clicking on this button from the OASIS homepage.

Contact button

[> Contact Suppliers Support](#)

MES NC Home Page

User: BIRENBAUM, ADAM C [US] (SP)	Supplier Code: 90020286 Test Supplier Company				
El Segundo Palmdale New Town, ND	 F/A-18 HORNET	 B-2 SPIRIT	 F-35 JOINT STRIKE FIGHTER	 F-5B/T-38 TIGER/TALON	 STS-12
Rancho Bernardo	 RQ-4B GLOBAL HAWK	 BQM-74/34 TARGETS	 X-47B J-UCAS	 CHUKAR TARGETS	
Moss Point	 MQ-8 FIRESOULT				
Space Park					
St. Augustine Bethpage Melbourne	 E-2C HAWKEYE	 E-2D ADVANCED HAWKEYE	 EA-6B PROWLER	 EA-18G GROWLER	
	 E-8C - JSTARS	 LEMV	 AN/AES1 - ALMDS		
GBSD					

2. Select the Site based on product.



Product and Site can be determined by locating the Project ID on the NGSP PO line item, and then looking it up on the Definitions and Project ID document on OASIS.

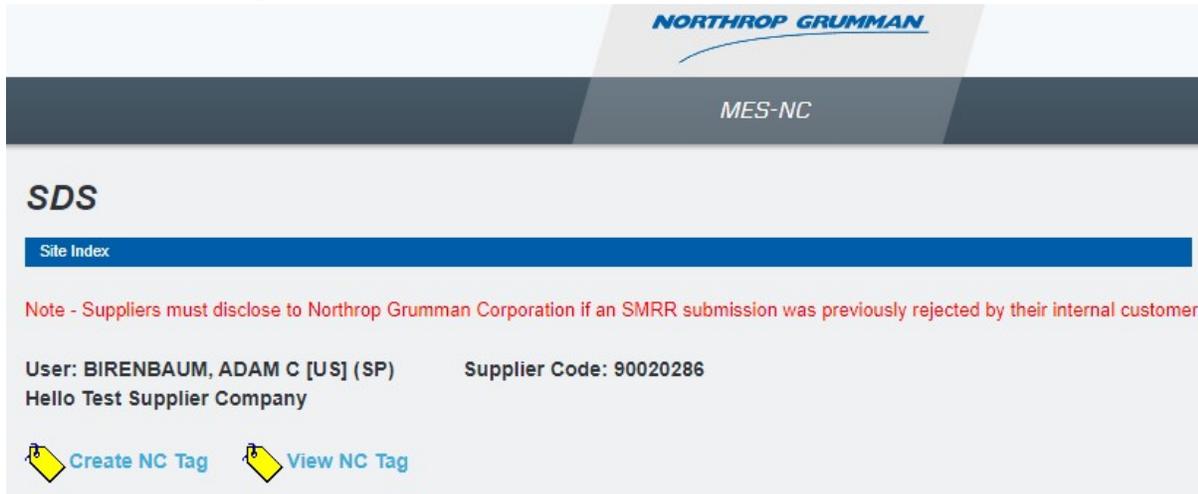
Possible error, when logging in

The screenshot shows a web browser window with the address bar displaying `https://myoasis.northgrum.com/mesnct/home.jsp?site=xrbl`. The page content includes the Northrop Grumman logo and a large "Error!" heading. Below the heading, a red error message reads: "The following error occurred: com.ibm.websphere.ce.cm.StaleConnectionException: No more data to read from socket". A blue link labeled "Return to home page" is positioned below the error message.



If the above error is encountered, click on the refresh icon and it will load.

MES NC Home Page



SDS

Site Index

Note - Suppliers must disclose to Northrop Grumman Corporation if an SMRR submission was previously rejected by their internal customer.

User: BIRENBAUM, ADAM C [US] (SP) Supplier Code: 90020286
Hello Test Supplier Company

 Create NC Tag  View NC Tag

3. Select **Create NC Tag** to initiate a tag or **View Existing Tag** to see previously submitted tags.



The following steps have tables with a column titled '**R/O/C**'. The definitions are:

R = Required

O = Optional

C = Conditional

Additionally, all required fields are identified with an asterisk on the screen

Create Non Conformance Tag -

The screenshot shows a web form titled "Create NonConformance Tag" within the "SDS" system. The form is for "Test Vendor 2" and includes the following fields:

- High Priority
- Supplier Name: Test Vendor 2
- Supplier Address: 1234 South Rd, Centreville VA 20120, 20120 US
- Supplier Code: 0090020286
- *Part Number: (empty)
- *Purchase Order No: (empty)
- Item No (PO Line Num): (empty)
- *Sales Order / Network: (empty)
- *Project ID: GBSDX
- *Production Lot Size: (empty)
- *No of Pieces Submitted: (empty)
- Supplier Contact Info:
 - *Name: BIRENBAUM, ADAM C.[US] (SP)
 - *Phone: 385-442-1240
 - *Fax: Fax
 - *E-Mail: Adam.Birenbaum@ngc.com

Callout boxes provide additional instructions:

- "Northrop Grumman" Purchase Orders ONLY. For all others, contact your Customer Contracts Administrator for direction
- Note: Enter Project ID from your NGC Purchase Order

4. As required, complete the following required fields:

Field Name	R/O/C	Description
Part Number	R	Enter the SP Part Number from the PO. Example: K0323NP123456-1234 Note: PO part number may be substituted with <u>detailed part number</u> with MRB Chair authorization. Contact your Northrop Grumman Supplier Quality Engineer to obtain MRB Chair authorization.
PO Number	R	Enter the SP PO Number. Example: 12345678 Note: "Northrop Grumman" Purchase Orders ONLY. For all others, contact your Customer Contracts Administrator for direction.

*Title: MESNC Strategic Deterrent Systems for Sentinel
Program Training (SMRRs) - Supplemental
Guideline*

Field Name	R/O/C	Description
Item No (PO Line Num)	R	Enter the PO Line Item number Example: 1

PO view of Sales Order/ Network

Item	Material/Description	Contract	Delivery Date	Quantity	UM	Net Price	Extended Amount
1	K0323NP123456-1234 SHIM				0 EA	127.50	765.00

Priority Rating: DOA1

Shipping Instructions: SCATS

Material Revision Level: K0323NP123456-1234, B01

SQAR CODE:

E

MATERIAL TEXT:

Go to OASIS and Retrieve the Appropriate Technical Data Package (TDP)

PROJECT ID: **GBSDX - GBSD**

US Government Prime Contract Number: N00019-13-C-9999

CHARGE NUMBER TEXT:

CONTRACT:N00019-13-C-9999

NETWORK: **KB2260701**

ACTIVITY:3360

QUANTITY: 1.000

CONTRACT:N00019-13-C-9999

Sales Order/ Network (Go Num) Network	R	Enter the Network from the PO line item (see picture above, underlined in red) Example: KB2260701
Project ID	R	Select the Project ID from PO (see picture above) Example: GBSDX
Production Lot Size	R	Enter the number of parts on the shop order or your lot size Example: 1
No. of Pieces Submitted	R	Enter the total quantity of discrepant parts being submitted for NGSP Material Review Example: 1

*Title: MESNC Strategic Deterrent Systems for Sentinel
Program Training (SMRRs) - Supplemental
Guideline*

Supplier Contact Info		
Name	R	Enter the name of person to contact if there is a question from NGSP MRB Example: John Smith
Phone	R	Enter the phone number of person to contact if there is a question from NGSP MRB Example: (999) 999-9999
Fax	R	Enter the FAX number of person to contact if there is a question from NGSP MRB or if documents need to be transmitted Example: (888) 888-8888
E-Mail	R	Enter the email of person to contact if there is a question from NGSP MRB or if documents need to be transmitted Example: jsmith@somewhere.com

Create Discrepancy #1

Site Index > SDS

Create Discrepancy (part#: K0323NP123456-1234)

*Part No	<input type="text" value="K0323NP123456-1234"/>
Serial No	<input type="text" value="Part Serial Number"/>
Lot No / LDC	<input type="text" value="Part Lot Number"/>
*Sheet / Paragraph	<input type="text" value="Sheet"/>
*Zone	<input type="text" value="Zone"/>
*Qty Rej / Def	<input type="text" value="Qty Rej/Def"/>
*Process Code	<input type="text"/>
*Defect Code	<input type="text"/>
*Disc Text	<div style="border: 1px solid #ccc; height: 40px; width: 100%;"></div>

5. As required, complete/review the following fields:

Field Name	R/O/C	Description
Part No.	R	<p>This field will be filled with the part number from the first screen. If the discrepant part is different, then enter it here.</p> <p>Each discrepancy may have a different part number, as long as it is a detail of the PO part number on the first screen</p>
Serial No.	O	<p>Enter serial number; if applicable</p> <p>This field is small. If you are submitting the same nonconformance for all serial numbers, then put the serial numbers in Disc. Text.</p> <p>If each serial number has a different discrepancy, then load serial numbers individually; per discrepancy. Note: there will be an opportunity to add more discrepancies after completing this page of fields</p> <p>Example: S0001</p>
Lot No. / LDC	O	<p>Enter Lot Number; if applicable</p> <p>If multiple lots, see comments on Serial Number above for input strategy.</p> <p>Example: 444444</p>

Create Discrepancy #1

Site Index > SDS

Create Discrepancy (part#: K0323NP123456-1234)

*Part No	K0323NP123456-1234
Serial No	Part Serial Number
Lot No / LDC	Part Lot Number
*Sheet / Paragraph	Sheet
*Zone	Zone
*Qty Rej / Def	Qty Rej/Def
*Process Code	<input type="text"/>
*Defect Code	<input type="text"/>
*Disc Text	<div style="border: 1px solid #ccc; height: 80px; width: 100%;"></div>

6. As required, complete/review the following fields:

Field Name	R/O/C	Description
Sheet/ Paragraph	R	Enter the drawing sheet number where discrepant dimension appears Example: 1 Note: Enter N/A if not applicable
Zone	R	Enter drawing zone of above sheet Example: 2B Note: Enter N/A if not applicable
Qty Rej / Def	R	Enter quantity of parts for this discrepancy. Remember the input strategy being used, one per or multiple parts Example: 1
Process Code	R	Select the appropriate category Example: Material Handling

**Title: MESNC Strategic Deterrent Systems for Sentinel
Program Training (SMRRs) - Supplemental
Guideline**

Field Name	R/O/C	Description
Defect Code	R	Select the appropriate defect code from the pull down list using the defect definitions provided. Example: External NG Supplier
Disc. Text	R	Enter the discrepancy using the Should Be per drawing dimension and Note: Appendix A contains requirements on Discrepancy Definition and Information Needed for NG engineering to perform the analysis and disposition determination.

7. Click on  for the first discrepancy.

View of an on-line tag of Discrepancy #1

Disc# 1




Supplier Material Review Report		Aerospace Systems Sector	1) SMRR No. 0	2) Sheet 1 of 1	2a) Revision
3) Supplier 1234 South Rd Test Vendor 2 -Centreville VA 20120 20120 US		3a) Supplier Code 0090020286		4) Date	
5) Part K0323NP123456-1234		5) Complete part name		7) Serial No	
8) PO No 12345678	8a) Item No 1	9) Purchase order delivery date	10) Proj No KB2260701	11) Model SMRR/SMRR	12) Vehicle No 00000
13) Production Lot Size 1	14) No of Pieces Submitted 1		15) Government Inspection	16) Material Location	17) Crit Code
18) Description Part No: K0323NP123456-1234 Lot / LDC: Sheet/Paragraph: N/A Zone: N/A Qty/Req: 1 Qty/Def: 1 Supplier E-Mail: Adam.Birenbaum@ngc.com Text: IS: Hole on K0323NP123456-1234 Shim is oversized to .198". S/B: .192 +/- .004" See Attachments for photos					
23) Disposition Text					
25) Corrective Action					
29) Disposition Accomplished (Supplier Inspection Supervisor)					

8. Click on the appropriate button to create each additional discrepancy (repeat steps 5 & 6) as required or remove one with the Remove Discrepancy button.

Click on the Finish button when you are done entering data.

mesnc.amer.myngc.com says

You are about to submit a nonconformance request, do you wish to continue?



System message displays. Click OK to continue.

This screen has the MES-NC tag number, for future reference

Disc# 1 Create Same As Attachments

Supplier Material Review Report		Aerospace Systems Sector	1) SMRR No. 1800224	2) Sheet 1 of 1	2a) Revision
3) Supplier Test Vendor 2 - <small>1234 South Rd. Capeville, Va 20120 20120 US</small>		3a) Supplier Code 0090020286		4) Date 2022-07-06	
5) Part K0323NP123456-1234		6) Complete part name		7) Serial No	
8) Kit No. 12345678	9a) Item No. 1	9) Purchase order/delivery date	10) Proj No. KB2260701	11) Model SMRR/SMRR	12) Vehicle No 00000
13) Production Lot Size 1	14) No of Pieces Submitted 1		15) Government Inspection	16) Material Location	17) Crit Code
18) Description Part No: K0323NP123456-1234 Lot: LCC Sheet/Paragraph: N/A Zone: N/A Cylinder: 1 Qty/Def: 1 Supplier E-Mail: Adam.Birenbaum@ngc.com Text: INITIATOR: BIRENBAUM, ADAM C [US] (SP) PHONE: 9999999999 FAX: 8888888888 IS: Hole on K0323NP123456-1234 Shie is oversized to .198". S/B: .192 +/- .004" See Attachments for photos					
23) Disposition Text					
25) Corrective Action					
26) Disposition Accomplished (Supplier Inspection Supervisor)					

9. If you have attachments to submit, click **Attachments** to include sketches/graphical files. The file types allowed in MES-NC are; .gif, .bmp, .jpg, .tif, .tiff and .pdf.

MES-NC

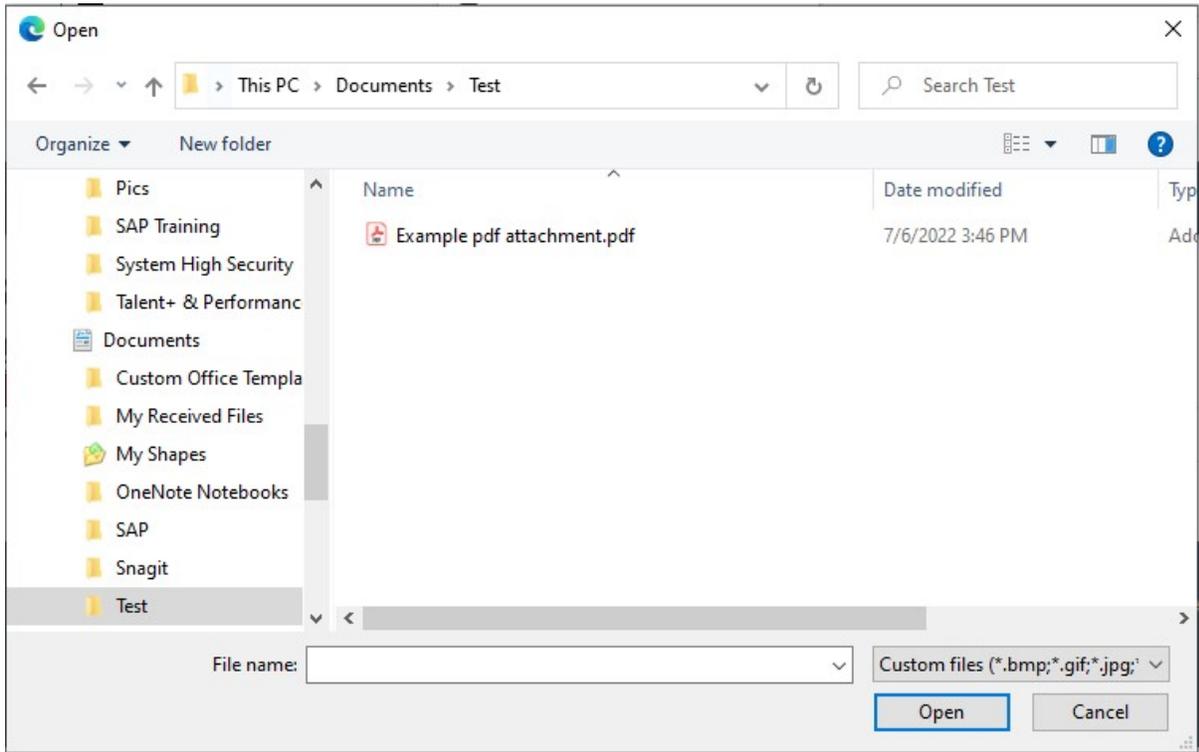
SDS

[Home](#) [Back](#) File: No file chosen

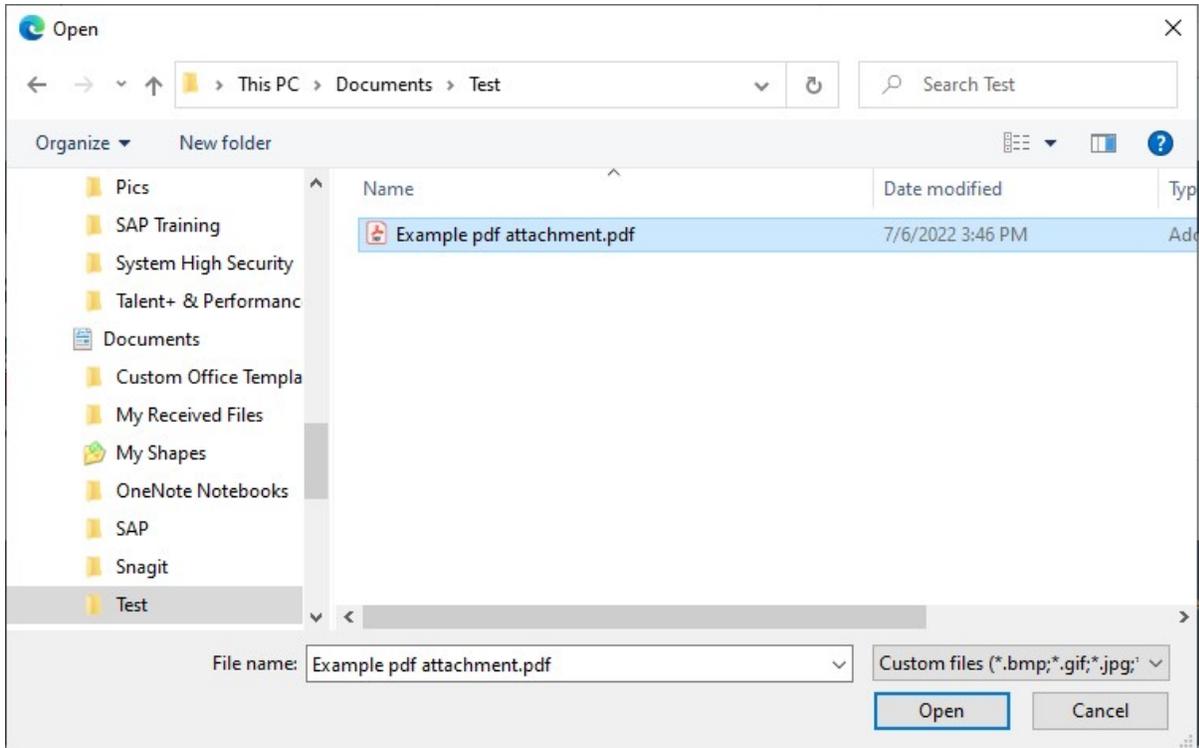
No.	File Name	Creator	Date	Size (bytes)	View	Delete

9.1 Click on Choose File

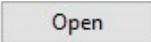
Choose file from your computer or server



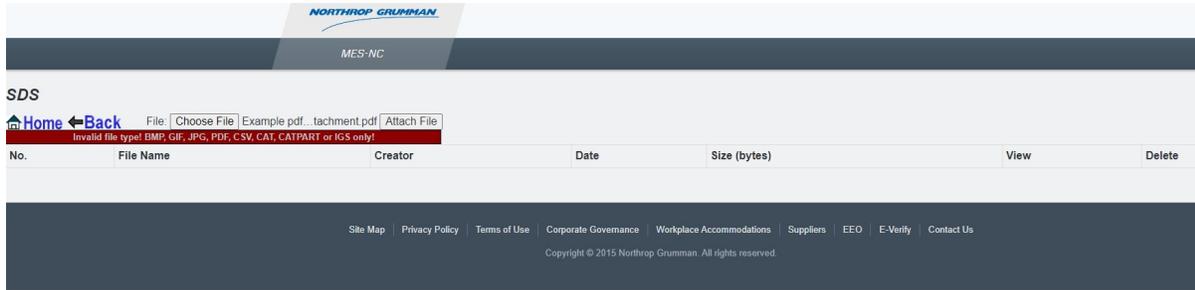
Choose file



Click on a file to attach,  Example pdf attachment.pdf

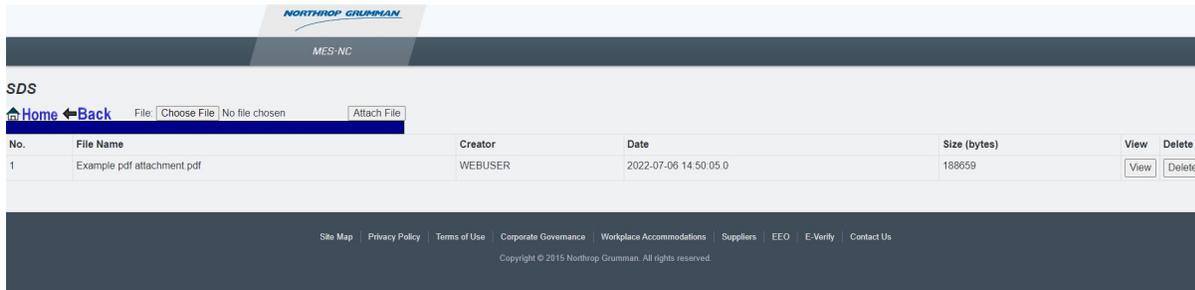
10. Click 

Attachments



11. Click

Upload Status will display when completed



12. Click To verify the correct file is attached. If any other files require attaching, repeat steps to add additional attachments.

13. When done attaching all files; Click

Title: MESNC Strategic Deterrent Systems for Sentinel Program Training (SMRRs) - Supplemental Guideline

SMRR

Disc# 1 Create Same As Attachments

Supplier Material Review Report		Aerospace Systems Sector	1) SMRR No. 1800224	2) Sheet 1 of 1	2a) Revision
3) Supplier Test Vendor 2 - 1234 South Rd Centreville VA 20120 20120 US		3a) Supplier Code 0090020286		4) Date 2022-07-06	
5) Part K0323NP123456-1234		6) Complete part name		7) Serial No	
8) PO No 12345678	8a) Item No 1	9) Purchase order delivery date	10) Pkg No KB2260701	11) Model SMRR/SMRR	12) Vehicle No 00000
13) Production Lot Size 1	14) No of Pieces Submitted 1		15) Government Inspection	16) Material Location	17) Crit Code
18) Description Part No: K0323NP123456-1234 Lot / LDC: Sheet/Paragraph: N/A Zone: N/A QtyRej: 1 QtyDef: 1 Supplier E-Mail: Adam.Birenbaum@ngc.com Text: INITIATOR: BIRENBAUM, ADAM C [US] (SP) PHONE: 9999999999 FAX: 8888888888 IS: Hole on K0323NP123456-1234 Shim is oversized to .198". S/B: .192 +/- .004" See Attachments for photos					
21) Disposition Text					
25) Corrective Action					
29) Disposition Accomplished (Supplier Inspection Supervisor)					



Now would be a good time to print the document for future reference. The document will not be viewable once NGSP starts working on it and until disposition has been completed.

SDS

Site Index > SDS > Load NC

Disc# 1 Create Same As Attachments

Supplier Material Review Report		Aerospace
3) Supplier Test Vendor 2 - 1234 South Rd Centreville VA 20120 20120 US		
5) Part K0323NP123456-1234		6) Complete part name
8) PO No 12345678	8a) Item No 1	9) Purchase order delivery date
13) Production Lot Size 1	14) No of Pieces Submitted 1	
18) Description Part No: K0323NP123456-1234 Lot / LDC: Sheet/Paragraph: N/A Zone: N/A QtyRej: 1 QtyDef: 1 Supplier E-Mail: Adam.Birenbaum@ngc.com Text: INITIATOR: BIRENBAUM, ADAM C [US] (SP)		

14. If needed, click [Create Same As](#) to start creating a new SMRR with already populated information from the already submitted SMRR

SDS

Site Index > SDS

Create NonConformance Tag

High Priority

Supplier Name	Test Vendor 2
Supplier Address	1234 South Rd Centreville VA 20120 20120 US
Supplier Code	0090020286
*Part Number	K0323NP123456-1234
*Purchase Order No	12345678
Item No (PO Line Num)	1
*Sales Order / Network	KB2260701
*Project ID	GBSDX
*Production Lot Size	1
*No of Pieces Submitted	1

Supplier Contact Info

*Name	BIRENBAUM, ADAM C [US] (SP)
*Phone	Phone
*Fax	Fax
*E-Mail	Adam.Birenbaum@ngc.com

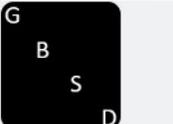
[Next](#)

MES NC Home Page

User: BIRENBAUM, ADAM C [US] (SP)

Supplier Code: 90020286
Test Supplier Company



<p>El Segundo Palmdale New Town, ND</p>	 F/A-18 HORNET	 B-2 SPIRIT	 F-35 JOINT STRIKE FIGHTER	 F-5B/T-38 TIGER/TALON	 STS-12
<p>Rancho Bernardo</p>	 RQ-4B GLOBAL HAWK	 BQM-74/34 TARGETS	 X-47B J-UCAS	 CHUKAR TARGETS	
<p>Moss Point</p>	 MQ-8 FIRESOULT				
<p>Space Park</p>					
<p>St. Augustine Bethpage Melbourne</p>	 E-2C HAWKEYE	 E-2D ADVANCED HAWKEYE	 EA-6B PROWLER	 EA-18G GROWLER	 E-8C - JSTARS
<p>GBSD</p>	 LEMV				
	 AN/AES1 - ALMDS				
					

The following are instructions for viewing a previously submitted tag and statuses.
Click the Site where tag was submitted.

NORTHROP GRUMMAN

MES-NC

SDS

Site Index

Note - Suppliers must disclose to Northrop Grumman Corporation if an SMRR submission was previously rejected by their internal customer.

User: BIRENBAUM, ADAM C [US] (SP) Supplier Code: 90020286
Hello Test Supplier Company

Create NC Tag View NC Tag

15. Click "View NC Tag"

NORTHROP GRUMMAN

MES-NC

SDS

Site Index > SDS

Tag No

Create Date

Part No

Close Date

16. Enter Tag Number or click search button search all active tags

Search Results

SDS

Site Index > SDS

Tag No
 Create Date

Part No
 Close Date

Hide Closed/Voided

Tag No	Priority	Status	Create Date	Model	Part No	Close Date
1800224		II	2022-07-06	SMRR/SMRR	K0323NP123456-1234	
1800214		VD	2022-05-09	SMRR/SMRR	IDSJFJFDJ	
1800210		VD	2022-04-19	SMRR/SMRR	K0308NE000016-1001	
1800209		VD	2022-04-19	SMRR/SMRR	FOR TESTING PURPOSES	
1800206		VD	2022-04-11	SMRR/SMRR	858760-01	
1800205		VD	2022-04-07	SMRR/SMRR	100 KN PROLINE TESTING SYSTEM	
1800204		VD	2022-04-07	SMRR/SMRR	123	
1800203	High	VD	2022-04-07	SMRR/SMRR	TEST	
1800202	High	VD	2022-04-07	SMRR/SMRR	PRODUCTION TESTING	
1800201		VD	2022-04-05	SMRR/SMRR	M70166 TEST	

17. Select tag to review

Title: MESNC Strategic Deterrent Systems for Sentinel Program Training (SMRRs) - Supplemental Guideline

Tag is displayed

SDS

Site Index > SDS > Lead NC

Disc# 1 Create Same As Attachments

Supplier Material Review Report		Aerospace Systems Sector	1) SMRR No 1800224	2) Sheet 1 of 1	2a) Revision
3) Supplier 1234 South R Test Vendor 2 - Charlottesville VA 2012 - 201234 US		4) Supplier Code 0090020286		5) Date 2022-07-06	
6) Part K0323NP123456-1234		8) Complete part name		7) Serial No	
9) PO No 12345678	10a) Item No 1	9) Purchase order delivery date	10) Proj No KB2260701	11) Model SMRR/SMRR	12) Vehicle No 00000
13) Production Lot Size 1	14) No of Pieces Submitted 1	15) Government Inspection	16) Material Location	17) Ctlr Code	
18) Description Part No: K0323NP123456-1234 Lot / LDC: Break/Program: N/A Zone: N/A QtyReq: 1 QtyDel: 1 Supplier E-Mail: Adam.Birenbaum@ngc.com Text: INITIATOR: BIRENBAUM, ADAM C [US] (SP) PHONE: 9999999999 FAX: 8888888888 IS: Hole on K0323NP123456-1234 Shim is oversized to .198". S/B: .192 +/- .004" See Attachments for photos					
23) Disposition Text					
25) Corrective Action					
26) Disposition Accomplished (Supplier Inspection Supervisor)					



When a tag has a disposition applied it will be displayed in the Disposition Text field

Definition of tag status for each tag is displayed. An error will occur stating 'cannot load' for any status as indicated below with a No.

Code	Definition	Viewable by supplier	Acceptable to Ship
II	Inspection Initiate	Yes	No
MC	Manufacturing concurrence	No	No
PR	Preliminary Review	No	No
MR	Material Review	No	No
EN	Engineering Material Review	No	No
CU	Customer	No	No
MF	Manufacturing rework	Yes	No
CL	Closed	Yes	Yes
IS	Inspection supersede	No	No
VD	Void	Yes	No
ID	Interim Disposition	Yes	No
SI	Special Installation	No	No



Note: supplier is only authorized to ship with a CL "Closed" status unless directed by MRB and/or Buyer

Result

You have a permanent record in OASIS/ MES-NC for this nonconformance. You may inquire this record at any time.

Comments

None

Appendix A - Requirements on Discrepancy Definition and Information Needed

Requirements for Discrepancy Definition:

Clear, detailed “Is” and “Should be” statement regarding what the discrepancy entails with specific location, dimensions, tolerances, and units. The “Should be” statement shall reference the applicable requirement(s) such as drawing dimension, datum, notes, and specifications to which the “Is” statement is nonconforming.

The description of the discrepancy should stand on its own without needing to review any other document to understand the problem. However, the descriptions may refer to another document to explain/clarify the discrepancy.

- The “Is” condition must contain:
 - The part number(s) affected.
 - The part number revision(s).
 - The part nomenclature(s) affected.
 - Criticality of part(s) if applicable (fracture critical, safety critical).
 - The type of discrepancy (i.e. critical, major, minor).
 - The “size” of the discrepancy.
 - Use one or more of the following to describe location of discrepancy:
 - X, Y, Z or range of coordinates for each discrepancy. Also, to be entered in X, Y, Z fields of the form header (when applicable).
 - If the drawing does not show X, Y, Z locations, use drawing sheet and zone. On those drawings that have alphanumeric grids or coordinates, enter the appropriate locations for the discrepancy.
 - Describe the location for each discrepancy (i.e., give measurements from a “landmark” on Part/Assembly to the discrepancy).

EXAMPLE: The discrepancy is two (2) inches down from the forward edge, five (5) inches inboard from the outboard edge on the inner mold line in the discrepancy at any time.

- The “Should be” condition must contain:
 - The engineering/specification requirements include tolerance limits +/- that the part is being inspected to.
EXAMPLE: “should be [object/part/feature] at [XX +/- XX] per [engineering drawing/spec number].”
 - If the engineering/specification does not allow any deviation or tolerance for the type of discrepancy, then state so.
EXAMPLE: “should be no [name the type of discrepancy] per the engineering drawing/spec number.”
- Reference model, parts lists, specifications, opposite parts, metrology data, and file attachments as applicable.

- Identify multiple defects with the same “should be” conditions, in the body of the description, with Nonconformance (NC) number plus an alpha identifier beginning with “A” (i.e., NC 1A, NC 1B).
- Each description must address only one type of discrepancy.
- OPTIONAL: Identify segment at the bottom of the discrepancy text e.g. AVE, CLT, S&T, SEIT.
- Proposed disposition with appropriate justification, if supplier has design authority.
- Effectivity, if applicable
- Root cause and corrective action information.
- Vendor Name/Location
- If a first article inspection fails or if a discrepancy is found on a first article inspection part/assembly, identify as “Prior to First Article.”
- Do not use the word “APPROXIMATE or ESTIMATED” in sketches, photos, information, or dimensions in the description of the discrepancy at any time.
- Use DECIMAL for means of measuring, not fraction.
- Each drawing feature/dimension and/or specification requirement that is out of tolerance should be a new discrepancy.
- All additional information can be added after the description of the discrepancy as a “NOTE.” Previous NRs of similar conditions can be referenced after the description of the discrepancy as a “NOTE,” to aid in evaluation, but the nonconformance MUST NOT depend upon another document to explain the discrepancy.
- Rounding Methodology to be used for Nonconformances:
 - All linear dimensions and angular tolerances shall be per the tolerance specified in the Engineering Drawing title block, drawing notes/specifications, or contained within a controlled 3D model. When measuring equipment devices provide more decimal places than the engineering requirement, the measurement value will be rounded to meet the number of decimal places per engineering. Rounding Example: In this example the drawing requirement is 3 decimal places (.xxx). The measuring device used to measure a feature reports a 4th decimal place (.xxxx). Therefore, if the value of the fourth decimal place is between 0 and 4 inclusive, round down. If the value of the 4th decimal place is between 5 and 9 inclusive, round up. To illustrate this method...If the measurement value is .0154 then round down and the documented value would be .015. If the measurement value is .0155 then round up and the documented value is .016.

Requirements File Attachments and Sketches

Include the following with file attachments and/or sketches:

- Photograph of discrepancy on the product.
NOTE: If photographs are not allowed due to classified environments, contact the Northrop Grumman (NG) Supplier Quality representative.
 - Photo is to be in focus and clear with Global Views and Detail Views as applicable to include identification of related parts, subject discrepancies, and orientation.

- Show the dimensions from a “landmark” on the Part/Assembly and clearly identify the location of the discrepancy with arrows or markings on the attachment or picture. Identify the discrepancy.
Example: “NC1” or NC1A, NC1B.
- Label axis/orientation.
- As applicable, include caliper/scale (ruler) in the photo or any other similar tool that would help in analyzing and dispositioning the nonconformance.
- Sketch/screenshot of discrepancy on engineering definition.
 - Sketch/screenshot are to be clear.
 - Label axis/orientation.
 - Include scale as necessary.
- Any other files that are referenced in the discrepancy text or are beneficial to aiding the discrepancy definition.

Appendix A - Requirements on Discrepancy Definition and Information Needed

Additionally, for the defect types highlighted below the specific information needed is also key in expediting the proper disposition:

Defect Type	Defect-Specific Information Needed			
<u>HOLES</u>				
Extra Hole	Actual Size	Minimum Edge distance and Pitch distance		
Short edge distance	Minimum Edge distance and Pitch distance	Actual part thickness		
OOT Holes	Elongated or True and Round?	Actual Size (Max/Min for elongated)	Minimum Edge distance and Pitch distance	
Double Drilled Holes	Pitch distance or Max width if intersected		Minimum Edge distance and Pitch distance	
Deep countersink	Depth	Fastener	Actual part thickness	
<u>COMPOSITE SPECIFIC</u>				
Delamination	Length X Width X Depth	Distance to edges	Distance to nearest fasteners	
Fiber Splitting	Length X Width	Ply Depth		
Unbonds	Length X Width X Depth	Distance to edges	Distance to nearest fasteners	
Fiber orientation error	Ply type	Ply # affected and/or OML vs. IML		
Missing plies	Ply type	Ply # affected and/or OML vs. IML		
Torn Copper Mesh	Length X Width	Distance to edges	Distance to nearest fasteners	Is NDI acceptable?
Porosity	Length X Width	Depth, if determinable	dB level to penetrate, if subsurface	
<u>GENERAL</u>				
Gouges	Length X Width X Depth	Distance to edges	Distance to nearest fasteners	Is NDI acceptable?
Indentations	Length X Width X Depth	Distance to edges	Distance to nearest fasteners	Is NDI acceptable?
Misplaced parts	Amount and direction of mis-location	Edge distances and pitch distances		
Electrical Conductivity	Actual conductivity			
OOT Trim	Edge distances on affected fasteners			
Interference	Length X Width X amount of interference			