GENERAL DYNAMICS
Land Systems

**First Article Inspection**
**Source Inspection**

# QCS-16 Cover Sheet Form Explanations Document

**(R) - Required. Mandatory information to be on the FAI**

**(CR) - Conditionally Required. Shall be completed when the data is available or enter "N/A" if not applicable. Do not leave blank.**

**1. (R) Part Number (GDLS):** Number of the FAI part as it appears on your GDLS Purchase Order or the detail part number being evaluated that is part of parent assembly part number.

**2. (R) Part Name:** Name of the FAI part as shown on your GDLS Purchase Order.

**3. (R) Print and/or Model Revision:** Latest print revision that is being used during the FAI part inspection. If the part has not been revised, indicate as such (e.g.,Rev -, Rev NR).

**4. (CR) Parent Assembly Part Number:** List the upper part assembly number here if the part number in found in cell 1. (R) Part Number) is part of an assembly.

**5. (CR) Serial Number:** Serial number of the FAI part; unique identifier assigned to a detail part, sub-assembly, or assembly by the organization or customer.

**6. (R) Lot Quantity / Quantity Inspected:** List the quantity of parts that were made in this lot of material. List the quantity of parts inspected as part of the lot sampling plan. (Ref. Mil-Std-1916 if needed)

For the QY11 clause and EQC4 clause the supplier will need to record the data for 1 of the first 5 pieces produced on form QCS-16-1.

For QY2 clause and QY14 clause the supplier will record the data for 5 pieces on the QCS-16-1.

For EQD2A clause the supplier will record the data for 1 piece on form QCS-16-1. The data for the remainder of the supplier's lot sampling plan can be recorded in the supplier's preferred format.

**7. (R) Audit Type & Sequence Number:** Reference number that identifies the FAI; this will be the GDLS Audit Sequence Number provided to the GDLS Field Service Representative after the supplier requests the audit.

**8. (R) GDLS P.O. Number/PO Revision:** GDLS purchase order number. The revision of the GDLS PO.

**9. (R) GDLS Quality Clauses:** List the quality clauses assigned to the part number shown on the GDLS PO. If your GDLS PO does not have any quality clauses listed please contact your GDLS Buyer to have the PO corrected.

**10. (R) Supplier Name:** Supplier Company Name that is performing the FAI.

**11. (R) City, State:** City and State of the supplier location the parts are being manufactured and inspected.

**12. (R) GDLS Supplier No. / Government Cage Code :** A unique number given by the customer to the organization (GDLS Oracle identification number) / U.S. given CAGE (Commercial And Government Entity) code.

**13. (R) Detail Part / Assembly FAI:** Check, as appropriate.

**14. (R) Full FAI / Partial FAI / QY12 FPI / EQD2A / Source No Stamp:** Check, as appropriate.

**Full FAI** (PO Clause QY11)is required when the part first ships to GDLS and will be required again if a part has not shipped to GDLS for more than 2 years.

**Partial FAI** (PO Clause QY11), provide the previously approved FAI part number, including revision level after Baseline Part Number.

Include the reason for the current partial FAI (e.g., changes in design, process, subtier supplier change, or manufacturing location change per the GDLS No Change Clause).

First Piece Inspection (PO Clause QY12) is required per the FPI Guide.

**Source Inspection** (PO Clause EQD2A) perform inspection using all forms in the FAI guide for every shipment of this part number to GDLS.

Source Inspection No Stamp - When a supplier does not have a stamp because of quality issues, stamp holder leaves company, new supplier, etc. Consult your GDLS SQA Regional Manager as to quantity of parts to record on the FAI documentation.

GENERAL DYNAMICS
Land Systems

**First Article Inspection**
**Source Inspection**

# QCS-16 Cover Sheet Form Explanations Document

**(R) - Required. Mandatory information to be on the FAI**
**(CR) - Conditionally Required. Shall be completed when the data is available or enter "N/A" if not applicable. Do not leave blank.**

**14. Continued**
**Baseline Part Number**: For a partial FAI, provide the previous FAI part number or approved configuration (including revision level) to which this partial FAI is performed. State the reason for the current FAI (e.g., changes in design, process, or manufacturing location). For a partial FAI based on similar parts (reference GDLS FAI Guide section, 4.6), provide the approved configuration FAI part number, including revision level.

**15. (R) Part Number and Print Revision:** List all sub-assemblies and detail parts that are used in the manufacturing of the FAI part number listed in box 1. If this is a detail part without any sub components just list N/A. Additional sheets may be required.
**16. (CR) SCR/CCR:** Sterling Heights Change Request (SCR) / Canadian Change Request (CCR) list all change requests used for the manufacture of the FAI part number listed in box 1 and/or box 13.
**17. (CR) Quality Assurance Requirement (QAR)/Quality Assurance Provision (QAP):** List all QAR/QAP used for the manufacture of the FAI part number listed in box 1. **NOTE: All requirements found within the QAR/QAP should be ballooned and added to QCS-16-1 Inspection Data and QCS-16-3 Materials & Processes documentation as required to show conformance.**
**18. (CR) Mil Specification(s):** List any Military specifications noted on the print used for the manufacture of the FAI part number listed in box 1.
**19. (CR) Other (e.g.: Deviation, TRA, Ordering Data):** List any other supplement documentations that were used for the manufacture of the FAI part number listed in box # 1.
**Summary:** Check all appropriate areas as required per the technical data package when the documentation has been reviewed and found to be acceptable per the print requirement, quality clause, approved supplier list.
**20. (CR) Part Identification / Marking:** Check this box when the part marking has been reviewed and found to meet the requirements of the TDP. Provide a photo of how the part is being marked when part marking is listed in the technical data package.
**21. (CR) Software Approval Letter Validation:** If a software approval letter is required review that it has been reviewed and approved from GDLS Quality Engineering and Test group. Review requirements for Software Approval in the GDLS PQA3000.
**22. (CR) High Strength Fastener(s):** Review and verify that the manufacturer of high strength fasteners is a supplier on the GDLS approved supplier list. You can request the approved supplier list for High Strength Fasteners from your GDLS Buyer or SQA Regional Manager.
**23. (CR) Weld Process Approval Letter/Date of Approval:** If a Weld Process Approval Letter is required per the Quality Clauses as noted on the GDLS PO please review and verify the supplier has the approval from the GDLS authority. The welding quality clause will list the requirements and where to send the requirements for approval. List the date the Weld Process Approval was given. **NOTE: Weld Process Approval Letters are good for 3 years from the date of approval. Resubmittal of the weld process package is required prior to part shipment when the 3 years has expired. See the PQA3000 for additional information.**
**24. (CR) Brazing / Soldering Approval Letter Validation:** Check this box if a soldering approval letter is required and the operators certified to perform the soldering.
**25. (CR) Non-Destructive Testing Validation:** If NDT is required as per the Technical Data Package (TDP) please review the certification of the NDT operator to verify he/she is approved to the proper level required to perform the NDT per the TDP.

GENERAL DYNAMICS
Land Systems

**First Article Inspection**
**Source Inspection**

# QCS-16 Cover Sheet Form Explanations Document

**(R) - Required. Mandatory information to be on the FAI**
**(CR) - Conditionally Required. Shall be completed when the data is available or enter "N/A" if not applicable. Do not leave blank.**

**26. (CR) Critical Safety Item Inspection Validation:** If a part is considered a Critical Safety Item verify parts are inspected per Quality Clause QK16 and/or acceptance testing per the requirements as noted within the Technical Data Package. CSI parts are identified per a note on the print, within the QAR/QAP. See PQA3000 for added information on CSI parts.

**27. (O) Remarks:** List any additional information from sections above, or additional comments from the audit.

**28. (R) FAI STATUS PASS:** If all requirements have been met for all requirements of the First Article Inspection the PASS box can be checked.
**29. (R) FAI STATUS FAIL:** If any requirements within the First Article Inspection have failed to meet the Technical Data Package requirements then the audit will FAIL and this box will be checked. **All nonconformance's found during the audit will be listed on the NC Summary tab on form QCS 16-2**
**30. (R) Supplier Printed Name:** Supplier Representative for reviewing and validating the documentation prints name here.
**31. (R) Supplier Approval Signature & Date:** Supplier Representative for reviewing and validating the documentation signs name here.
**32. (CR) Stamp:** Supplier's Quality Representative with a GDLS Stamp will stamp here.
**33. (R) GDLS Printed Name:** GDLS Quality Representative for reviewing and validating the documentation prints name here.
**34. (R) GDLS Approval Signature & Date:** GDLS Quality Representative for reviewing and validating the documentation signs name here.
**35. (R) Stamp:** GDLS Quality Representative stamps here.

GENERAL DYNAMICS
Land Systems

**First Article Inspection**
**Source Inspection**

# QCS-16-1 Inspection Data Form Explanations Document

**(R) - Required. Mandatory information to be on the FAI**
**(CR) - Conditionally Required. Shall be completed when the data is available or enter "N/A" if not applicable. Do not leave blank.**

***For the QY11 clause and EQC4 clause the supplier will need to record the data for 1 of the first 5 pieces produced on form QCS-16-1.***
***For QY2 clause and QY14 clause the supplier will record the data for 5 pieces on the QCS-16-1.***
***For EQD2A clause the supplier will record the data for 1 piece on form QCS-16-1. The data for the remainder of the supplier's lot sampling plan can be in the supplier's preferred format.***

**1. (R) Part Number (GDLS):** Number of the FAI part as it appears on your GDLS Purchase Order or the detail part number being evaluated that is part of parent assembly part number.
**2. (R) Part Name:** Name of the FAI part.
**3. (R) Print and/or Model Revision:** Latest print revision that is being used during the FAI part inspection. If the part has not been revised, indicate as such (e.g.,Rev -, Rev NR).
**4. (CR) Parent Assembly Part Number:** List the upper part assembly number here if the part number in found in cell 1. (R) Part Number) is part of an assembly.
**5. (R) Supplier Name:** Supplier Company Name that is performing the FAI.
**6. (CR) Serial Number:** Serial number of the FAI part; unique identifier assigned to a detail part, sub-assembly, or assembly by the organization or customer.
**7. (R) Audit Report#:** Reference number that identifies the FAI; this will be the GDLS Audit Sequence Number provided to the GDLS Field Service Representative.
**8. (R) Supplier Print & Sign:** Supplier will print and sign document as being accurate to inspections done per the FAI requirements.
**9. (R) Date:** Date when field 8 was signed
**10. (R) Item No.:** Unique assigned number for each characteristic within the technical data package. This number will correlate to the balloon print. (e.g., dimensions, print notes, etc.)
**11. (R) DWG Characteristics With Tolerance:** The specified requirement for the technical data package characteristic. (e.g., Nominal dimensions and tolerances, drawing, notes, specification requirements, etc.)
**12. (R) BP Zone:** Location within the technical data package that the Item No. is located. (e.g., drawing zone, model location, note, QAR/QAP item, etc.).
**13. (R) Supplier Actual Results:** List the measurement(s) taken for the technical data package characteristics. These measurements shall be recorded in the units specified within the technical data package.
When recording data for multiple features that are the same (e.g., 20x holes size, hole positions, etc.) it is required that each feature be identified and listed separately on the inspection report.
Variable data is to be recorded when the inspection technique used is read as variable data.
When qualified tooling (e.g.., radius gauges, thread gauges, pin gauges) is used as a go/no-go gauge record the results as an attribute (e.g., pass/fail).
**If a characteristic is found to be nonconforming, then that characteristic shall be recorded on the QCS-16-2 NC Summary. The lot will be quarantined and 100% of the lot will be inspected for conformance.**

GENERAL DYNAMICS
Land Systems

**First Article Inspection**
**Source Inspection**

# QCS-16-1 Inspection Data Form Explanations Document

**(R) - Required. Mandatory information to be on the FAI**
**(CR) - Conditionally Required. Shall be completed when the data is available or enter "N/A" if not applicable. Do not leave blank.**

**14. (R) Inspection Method:** List the type of equipment that was used to obtain the data.

**15. (CR) Gage / Fixture Number:** List the number associated with the gauge / fixture that was used to approve the parts to the technical data package. This number should correlate back to a calibration record. Any gage/fixture used to approve products for shipment to GDLS shall be calibrated and found to be within the recalibration date.

**16. (CR) Engineering Changes / Deviations if Applicable:** List any associated engineering changes (CCR / SCR), Deviations, SQMR's, MRB's, TRA's used to approve the parts during the audit. You must have a copy of the approved document to review with the auditor. Review PO to verify any type of change is documented.

**17. (CR) Additional Data / Comments:** List any added data and/or comments in this section.

GENERAL DYNAMICS
Land Systems

**First Article Inspection**
**Source Inspection**

# QCS-16-2 NC Summary Form Explanations Document

**(R) - Required. Mandatory information to be on the FAI**

**(CR) - Conditionally Required. Shall be completed when the data is available or enter "N/A" if not applicable. Do not leave blank.**

***Any nonconformance (NC) found during the audit should be listed on the QCS-16-2. If the NC found is resolved using a SQMR, waiver/deviation, etc. and found to be acceptable then the issue should still be listed on the QCS-16-2 with the proper disposition type listed in section 17. of the form.***

**1. (R) Part Number (GDLS):** Number of the FAI part as it appears on your GDLS Purchase Order or the detail part number being evaluated that is part of parent assembly part number.
**2. (R) Part Name:** Name of the FAI part.
**3. (R) Print and/or Model Revision:** Latest print revision that is being used during the FAI part inspection. If the part has not been revised, indicate as such (e.g.,Rev -, Rev NR).
**4. (CR) Parent Assembly Part Number:** List the upper part assembly number here if the part number in found in cell 1. (R) Part Number) is part of an assembly.
**5. (R) Supplier Name:** Supplier Company Name that is performing the FAI.
**6. (CR) Serial Number:** Serial number of the FAI part; unique identifier assigned to a detail part, sub-assembly, or assembly by the organization or customer.
**7. (R) Audit Report#:** Reference number that identifies the FAI; this will be the GDLS Audit Sequence Number provided to the GDLS Field Service Representative.
**8. (R) GDLS P.O. Number:** Customer purchase order number.
**9. (R) FAI Date:** Date the original FAI took place.

**10. (CR) Reinspect Date:** Enter the date the FAI has been rescheduled for review of the nonconforming items.

**11. (CR) QCS 16-1 ITEM #:** Unique assigned number taken from form QCS 16-1.
**12. (CR) Drawing Number:** List the drawing number that nonconformance was found on.
**13. (CR) Blue Print Zone:** List the page number and the letter/number zone the feature can be found.
**14. (R) GDLS Specification / Drawing Requirement:** List the specification / drawing requirement as found in the technical data package. (e.g., dimensions, material, weld size, etc.)
**15. (R) Inspection Actual:** List that actual result found during the review / inspection of the parts.

**16. (CR) Requires Corrective Action:** If a corrective action is issued by GDLS Quality then list the CAR number here.

**17. (R) Disposition of NC:** List how the NC will be dispositioned. (e.g., rework, problem report/engineering change, waiver/deviation, SQMR, MRB)
**18. (R) Supplier Printed Name:** Supplier Representative for reviewing and validating the documentation prints name here.
**19. (R) Supplier Signature:** Supplier Representative for reviewing and validating the documentation signs name here.
**20. (CR) Stamp:** Supplier's Quality Representative with a GDLS Stamp will stamp here.
**21. (R) GDLS Printed Name:** GDLS Quality Representative for reviewing and validating the documentation prints name here.
**22. (R) GDLS Signature:** GDLS Quality Representative for reviewing and validating the documentation signs name here.
**23. (R) Stamp:** GDLS Quality Representative stamps here.

GENERAL DYNAMICS
Land Systems

**First Article Inspection**
**Source Inspection**

# QCS-16-3 Materials & Processes Form Explanations Document

**(R) - Required. Mandatory information to be on the FAI**

**(CR) - Conditionally Required. Shall be completed when the data is available or enter "N/A" if not applicable. Do not leave blank.**

**1. (R) Part Number (GDLS):** Number of the FAI part as it appears on your GDLS Purchase Order or the detail part number being evaluated that is part of parent assembly part number.

**2. (R) Part Name:** Name of the FAI part.

**3. (R) Print and/or Model Revision:** Latest print revision that is being used during the FAI part inspection. If the part has not been revised, indicate as such (e.g.,Rev -, Rev NR).

**4. (CR) Parent Assembly Part Number:** List the upper part assembly number here if the part number in found in cell 1. (R) Part Number) is part of an assembly.

**5. (R) Supplier Name:** Supplier Company Name that is performing the FAI.

**6. (CR) Serial Number:** Serial number of the FAI part; unique identifier assigned to a detail part, sub-assembly, or assembly by the organization or customer.

**7. (R) Audit Report#:** Reference number that identifies the FAI; this will be the GDLS Audit Sequence Number provided to the GDLS Field Service Representative.

**8. (R) Material Type, Special Process Name, Part Number:** List all material types, special process names, detail part numbers. Detail part numbers such as standard catalogue items, and Commercial Off The Shelf (COTS) parts can be listed here with the required information back to the certificate of conformance from the manufacturer of the part. Show the auditor the C of C to verify all requirements have been met for approval.

**9. (CR) Specification Number:** List the specification for the Material or Special Process listed in #8.

**10. (R) Manufacturer of Material / Special Process**: List the company name that manufactured the material or performed the special process. **(No Distributors) A C of C will only be accepted from a distributor when the C of C is from an authorized franchise distributor as designated by the manufacturer of the part.**

**11. (R) Certificate of Conformance Number:** List the C of C number as found on the items manufacturer C of C. If the C of C doesn't not have an identification number, the supplier will assign a lot specific number for tracking purposes.

**12. (R) Heat # / Lot # / Batch # / Date Code:** Record the heat #, Lot #, Batch # / Date code as needed to identify the material lot.

**13. (CR) Functional Test Procedure / Revision Level:** List any functional test procedure number and the revision of test procedure.

**14. (CR) Functional Test Acceptance Report Number:** List the functional test acceptance report number.

**15. (CR) Comments:** List any additional comments here.

**16. (R) SUPPLIER PRINTED NAME**: Supplier Representative for reviewing and validating the documentation prints name here.

**17. (R) SUPPLIER APPROVAL SIGNATURE & DATE**: Supplier Representative for reviewing and validating the documentation signs name here.

**18. (CR) STAMP**: Supplier's Quality Representative with a GDLS Stamp will stamp here.

**19. (R) GDLS PRINTED NAME:** GDLS Quality Representative for reviewing and validating the documentation prints name here.

**20. (R) GDLS APPROVAL SIGNATURE & DATE:** GDLS Quality Representative for reviewing and validating the documentation signs name here.

**21. (R) STAMP:** GDLS Quality Representative stamps here.

## Revision History

| | | |
|---|---|---|
| Feb. 13, 2020 | Ran spell check prior to posting on GDLS website. Minor updates made. | SJW |
| Oct. 15, 2020 | Update QCS-16-1 change EQD2A documentation to 1 piece recorded. | SJW |
| | Update QCS-16-2 - 17. added SQMR and MRB as examples of what to list as a disposition to a nonconformance that may have been found. | SJW |
| | Update the QCS-16-2 heading information to include the following: ***Any nonconformance (NC) found during the audit should be listed on the QCS-16-2. If the NC found is resolved using a SQMR, waiver/deviation, etc. and found to be acceptable then the issue should still be listed on the QCS-16-2 with the proper disposition type listed in section 17. of the form.*** | SJW |
| | Update QCS-16 #6 to reflect quantity of 1 piece recorded on QCS-16-1 for EQD2A. | SJW |
| | Update the QCS-16-2 #17 to include MRB, SQMR, waiver/deviations. | SJW |
| 10/26/2020 | Update all # 7 all sheets to reflect Audit Report and replace FAIR# per FAI worksheets. | SJW |
| 10/31/2020 | QCS16 #14 add QY12 / EQD2A / Source No Stamp & Definition | SJW |
| 8/25/2023 | Update from 1 yr to 2 yr break in production shipments | SJW |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |