# Purchasing Quality Clauses for Applied Composites - Lake Forest Providers

## Purpose
This document describes the general and special product quality requirements (clauses) that are used by Applied Composites - Lake Forest on the Purchase Order (Contract) or other formal agreement between a Provider and Applied Composites - Lake Forest. The purpose of this document is to clearly define for each purchase of products or services, all of the necessary and applicable technical and quality requirements with which the Provider is required to comply to meet Applied Composites - Lake Forest, Applied Composites - Lake Forest’s customer and/or regulatory and statutory requirements.

Unless otherwise specified on the contract, the following chart shall be used by the Provider to determine the applicable Purchasing Quality Clauses based on the commodity being contracted. Any exceptions to the applicable clauses shall be noted on the face of the purchase order issued.

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Includes</th>
<th>Applicable Purchase Quality Clauses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Materials</td>
<td>Prepreg, Metallics Stock material, Parts and Components (off the shelf items)</td>
<td>PQC-010, PQC-040, PQC-100, PQC-110, PQC-130, PQC-140, PQC-210, PQC-220, PQC-300</td>
</tr>
<tr>
<td>Calibration Services</td>
<td>Inspection, Measuring and Monitoring devices</td>
<td>PQC-010, PQC-060, PQC-100, PQC-300</td>
</tr>
<tr>
<td>Inspection and Testing</td>
<td>Nondestructive and Destructive Testing</td>
<td>PQC-010, PQC-020, PQC-030, PQC-040, PQC-050, PQC-060, PQC-130, PQC-140, PQC-150, PQC-190, PQC-200, PQC-220, PQC-250, PQC-280, PQC-290, PQC-300</td>
</tr>
<tr>
<td>Special Processing</td>
<td>Heat Treatment</td>
<td>PQC-010, PQC-050, PQC-100, PQC-120, PQC-130, PQC-140, PQC-150, PQC-160, PQC-170, PQC-180, PQC-220, PQC-290, PQC-300</td>
</tr>
<tr>
<td>Surface Treatments</td>
<td>Anodize and other surface treatment and coatings</td>
<td>PQC-010, PQC-050, PQC-100, PQC-110, PQC-120, PQC-130, PQC-140, PQC-150, PQC-180, PQC-210, PQC-220, PQC-280, PQC-290, PQC-300</td>
</tr>
<tr>
<td>Parts</td>
<td>Parts to print requirements (such as machined parts)</td>
<td>PQC-010, PQC-050, PQC-100, PQC-110, PQC-120, PQC-130, PQC-140, PQC-210, PQC-220, PQC-250, PQC-270, PQC-280, PQC-290, PQC-300</td>
</tr>
<tr>
<td>All Other</td>
<td>All other items with direct impact to product or process conformity</td>
<td>PQC-010</td>
</tr>
</tbody>
</table>
PQC-010

Provider Responsibilities

Delivery Certification: By delivering products or services to the Contract, the Provider certifies that such products or services are in compliance with all applicable requirements of the Contract, and objective evidence of compliance is available and will be furnished to Applied Composites - Lake Forest for review upon request.

Compliance to Contract Requirements: The Provider is responsible to verify and demonstrate compliance to all Contract requirements. Neither audit, surveillance, inspection and/or tests made by Applied Composites - Lake Forest, representatives of Applied Composites - Lake Forest, or representatives of Applied Composites - Lake Forest's customers, at Provider's facilities or at the facilities of the Provider's sub-tier sources, or upon receipt at Applied Composites - Lake Forest, relieves the Provider of the responsibility to furnish acceptable products or services that conform to all Contract requirements, nor does it preclude subsequent rejection by Applied Composites - Lake Forest or Applied Composites - Lake Forest's customers.

Control of Sub-tier Sources: The Provider, as the recipient of the Contract, is responsible for meeting all Contract specified technical and quality requirements, whether the Provider performs the work, or the work is performed by the Provider's sub-tier sources. When the Provider uses sub-tier sources to perform work on products and/or services scheduled for delivery to Applied Composites - Lake Forest, the Provider shall include (flow-down) on Purchase Orders or Contracts, to his sub-tier sources, all of the applicable technical and quality requirements of the Applied Composites - Lake Forest Contract, including when applicable the requirement to document and control 'key characteristics' and/or 'key processes', and to furnish certifications and test reports required by the applicable ‘PQC’ Clauses.

Flow Down of Prime Contractor Requirements - The Provider is responsible for their adherence to the quality system requirements of our customers (Prime Contractors) as stated within the purchase order (i.e., when ASQR-01 is noted on the purchase order, the provider is required to comply and to further flow down –as applicable-such requirements within their supply chain).

Right of Entry to Providers Facilities: During Contract performance, the Provider shall grant reasonable access to Provider’s facilities to representatives of Applied Composites - Lake Forest, Applied Composites - Lake Forest customers, US government and/or regulatory agencies for the purpose of evaluating Providers conformance to all Contract requirements. When applicable, the Right of Entry requirement shall be flowed-down by Provider to Providers’ sub-tier sources.

Providers shall have a program in place that ensures the awareness of their employees on their contribution to product or service conformity, their contribution to product safety, and the importance of ethical behavior.

Prevention of Counterfeit Parts: Providers shall plan, implement and control processes that are appropriate for the prevention of counterfeit or suspect counterfeit part use and their inclusion in product(s) delivered to Applied Composites - Lake Forest or its customers. Counterfeit prevention should consider:

- Training of appropriate persons in the awareness and prevention of counterfeit parts;
- Application of a parts obsolescence monitoring program;
- Controls for acquiring externally provided product from original manufacturers, authorized distributors, or other approved sources;
- Requirements for assuring traceability of parts and components to their original authorized manufacturer;

• Verification and test methodologies to detect counterfeit parts;
• Monitoring of counterfeit parts reporting from external sources;
• Quarantine and reporting of suspect or detected counterfeit parts.

**Government and Regulatory Requirements**

If any of the work to be performed under this Agreement is performed in the United States, Seller shall, via invoice or other form satisfactory to Applied Composites, certify that the Products or Services covered by the Order were produced in compliance with Sections 6, 7, and 12 of the Fair Labor Standards Act (29 U.S.C. 201-219), as amended, and the regulations and orders of the U.S. Department of Labor issued there under. In addition, the following FAR clauses are incorporated herein by this reference except “Contractor” shall mean “Seller”. Other Government clauses, if any, are incorporated herein either by attachment to this document or by some other means of reference. The Seller shall include these FAR clauses in subcontracts that support this Agreement.

**FAR 52.244-6** Subcontracts for Commercial Items (JUN 2016)

**FAR 52.209-06** PROTECTING THE GOVERNMENT’S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMMENT (OCT 2015)

**FAR 52.222-50** Combating Trafficking in Persons (MAR2015) except as modified below:

→ The term “Contractor” shall mean “Seller”, except the term “prime contractor” shall remain unchanged.

→ The term “Contracting Officer” shall mean “Contracting Officer” and the Buyer’s Authorized Procurement Representative in paragraph (d)(1). Paragraph (d)(2) shall read as follows: “If the allegation may be associated with more than one contract, the Seller shall inform the contracting officer, the agency Inspector General, and the Buyer’s Authorized Procurement Representative for each affected contract”.

→ The term “the Government” shall mean “the Government Buyer” in paragraph (e)(1). The term “termination” shall mean “cancel” and “cancellation for default”, respectively, in paragraph (e)(6). Insert the following at the end of paragraph (e): “If the Government exercises one of the remedies identified in paragraph (e) against Buyer as a result of the Seller’s violation of its obligations under this clause, Buyer may impose an equivalent against the Seller”.

→ The term “Contracting Officer” shall mean “Contracting Officer and Buyer” in paragraph (f), except in paragraph (f)(2), where it shall mean “Contracting Officer or Buyer”. Paragraph (h)(2)(ii) shall read as follows: “To the nature and scope of the activities involved in the performance of a Government subcontract, including the number of non-United States citizens expected to be employed and the risk that the contract or subcontract will involve services or supplies susceptible to trafficking in persons.” –

→ The term “Contracting Officer” shall mean “Contracting Officer or Buyer” in paragraph (h)(4)(ii). The term “Contracting Officer” shall mean “Buyer” in paragraph (h)(5). In addition, the DFARS clauses listed below, are incorporated herein and made a part of the contract by this reference except that “Contractor” shall mean “Seller.” The Seller shall include these DFARS clauses in subcontracts that support this contract.
**DFARS 252.244-7000** SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (DOD CONTRACTS) (JUN 2013).

**DFARS 252.204-7012** Safeguarding Covered Defense Information and Cyber Incident Reporting (DEC 2015).

**DFARS 252.223-7008** Prohibition of Hexavalent Chromium (JUN 2013).

**DFARS 252.227-7015** Technical Data – Commercial Items (FEB 2014), applies if any technical data related to commercial items developed in any part at private expense will be obtained from Seller for delivery to the Government.

**DFARS 252.227-7037** Validation of Restrictive Markings on Technical Data (June 2013).

**DFARS 252-246-7003** Notification of Potential Safety Issues (JUN 2013).

**Document Control**

Seller acknowledges and accepts full and sole responsibility to maintain an ethics and compliance program appropriate for its business throughout the performance of this Agreement. AC strongly encourages Seller to model its program in accordance with the Federal Sentencing Guidelines, applicable guidance from enforcement authorities, and industry best practices.

**Document Control**

Applicability of Documents: All documents, including drawings and specifications from Prime Contractors, Applied Composites - Lake Forest, Industry, National, International, Federal, US Government and others, are applicable to and considered part of the Contract requirements when such documents are specified directly in the Contract or in documents referenced by the Contract. Unless otherwise specified by the Contract, all of the lower tier documents referenced in Contract specified documents are applicable to the Contract.

Document Revision Status: Unless otherwise specified by the Contract, the document revision in effect on the date of issue of the Contract, applies to the Contract.

Document Sources: Copies of Applied Composites - Lake Forest proprietary documents, or Applied Composites - Lake Forest customer proprietary documents, required by the Provider to comply with Contract requirements will be furnished to the Provider by Applied Composites - Lake Forest with the Contract. Copies of Industry, National, International or US Government documents and Standards are generally available on the internet or from commercial sources. The Provider is responsible for obtaining such documents, including current revision of such documents. Any problems experienced by the Provider in obtaining required documents should be brought to attention of the Applied Composites - Lake Forest Buyer.

Control & Release of Applied Composites - Lake Forest Furnished Documents. Proprietary documents furnished by Applied Composites - Lake Forest (Applied Composites - Lake Forest’s or Applied Composites - Lake Forest’s Customers) to the Provider are furnished solely for Provider to use during performance of work on the Applied Composites - Lake Forest Contract. Proprietary documents are Applied Composites - Lake Forest or Applied Composites - Lake Forest customer documents and may be furnished to the Provider in hard copy, electronic or other format. The Provider is responsible for controlling and maintaining such documents to preclude loss,
damage, alteration and/or deterioration. Unless authorized by Applied Composites - Lake Forest Buyer in writing, the Provider may not transmit or furnish any proprietary documents, or copies of such documents, to anyone outside the Provider's business organization except to a sub-tier source used by the Provider for performance of work on the Applied Composites - Lake Forest Contract. The Provider shall return to Applied Composites - Lake Forest all proprietary documents with the last delivery of products or services on the Contract.

Prohibited Practices
The following acts and practices are prohibited, unless approved by Applied Composites - Lake Forest in writing. Any violation by the Provider may result in disqualification of the Provider for future business with Applied Composites - Lake Forest:

Unauthorized Facility Changes: During performance on the Contract, the Provider shall give Applied Composites - Lake Forest written notice before relocating any production, inspection or processing facilities; or, transferring work between different facilities; or, when applicable, prior to initiating any changes in the source of major components procured by the Provider and designated for use in or for installation on products scheduled for delivery to Applied Composites - Lake Forest; or, making any other changes which may affect product quality, reliability or integrity. Such changes are subject to approval/disapproval by Applied Composites - Lake Forest. A change in ownership or a change in the individual designated as the management representative with respect to the Providers quality/inspection system shall be construed as a facility change and requires the Provider to notify Applied Composites - Lake Forest.

Unauthorized Repairs & Salvage: The Provider may not perform any repairs such as welding, brazing, soldering, plugging, or, use of paints, adhesives or plating, or use any standard or other repair practice or method, on parts damaged or found to be discrepant during performance of services contracted or processing of parts, or on defects in parts, unless such repairs are specifically permitted by the applicable drawing or specification, or are specifically authorized by Applied Composites - Lake Forest in writing for each occurrence. Unless specifically authorized by Applied Composites - Lake Forest, this prohibition also applies to reworking parts by removing plating (stripping) and re-plating. In those cases, where Applied Composites - Lake Forest authorized product repair, salvage or stripping has been accomplished, the Provider shall include on the packing list/shipper or on a separate attached document a list of the products that have been subjected to such Applied Composites - Lake Forest approved repair, salvage or stripping, and the method used.

Unauthorized Product Changes or Substitutions: The Provider may not make any changes or substitutions to any products or services required by the Contract, drawing, specification, standard, or other applicable document without prior written authorization by Applied Composites - Lake Forest. Authorization may be contingent on Applied Composites - Lake Forest conducting an on-site review of the proposed product or service changes at the Provider’s facilities, or the facilities of the Provider's sub-tier sources.

Altering Data on Documents. The use of any method that causes the original data on documents to be obliterated and unreadable (i.e. the use of correction fluids, correction tape, write-over, or other methods) to correct, modify or otherwise alter the data and/or entries on any certifications, test reports or other documents required by the Contract, is strictly prohibited.
Corrections may be made on inspection reports such as FAIR’s or processing certifications, providing it is clearly obvious that a correction was made and it is signed (initialed) or stamped by an authorized individual. Upon receipt at Applied Composites - Lake Forest, products or services represented by documents that show evidence that they have been corrected or altered in an unauthorized manner are subject to return to the Provider at Provider's expense.

**Purchase Order Changes & Their Effectivity**

Applied Composites - Lake Forest Initiated Changes: The Provider shall incorporate, at the specified and agreed upon effectivity points, all changes initiated by Applied Composites - Lake Forest and communicated to the Provider through a formal Purchase Order Change and/or amendment. Such changes may be in the form of revised drawings, specifications, tests, inspection or machining methods, etc., and may apply to products as well as to the Provider’s management and administrative systems. The Provider's business management system shall include appropriate controls and records, including controls at the Provider's sub-tier sources, which provide objective evidence that changes were incorporated as required by the Contract. Objective evidence may be in the form of date, lot, serial number, revision letter, or other positive identification. Such documented information is subject to on-site verification by Applied Composites - Lake Forest at the Provider's facilities or the facilities of the Provider's sub-tier sources.

Provider Initiated Changes: The Provider may not make any changes in product design, drawings, performance specifications, materials or processes without specific approval by Applied Composites - Lake Forest in writing prior to making such changes in products or data. When applicable, the Provider shall flow-down this requirement to the Provider's sub-tier sources. The Provider shall furnish a copy of the change prior to the initial delivery of products to Applied Composites - Lake Forest, so that Applied Composites - Lake Forest can verify that the change does not violate the above requirements.

**Certifications**

Certification Requirements: The Provider shall furnish all certifications, test reports and other documents (hereafter certifications), issued by the Provider or by the Provider’s sub-tier sources that are required by the specific “PQC” Clauses listed on the purchase order. The Provider is responsible to ensure that all certifications furnished by the Provider, or by the Provider’s sub-tier sources, are complete, legible and reproducible, accurate and in compliance with all Contract requirements. Applied Composites - Lake Forest reserves the right to return all products to the Provider at Provider's expense when the certifications that support the products are not properly executed.

Certification Content: All certifications shall, as a minimum include the following information and data:

- Name of the issuing organization (company),
- Clear definition of services or products being provided along with corresponding specifications and their current revision levels
- Part number and revision, including the provided Job Number
- Quantity processed and/or delivered
- Applied Composites - Lake Forest Purchase Order number
- Name and signature of the authorized official of the issuing organization.
- Clear description and applicable parameters for items with shelf life limitations (as applicable).

Acceptable & Authorized Signatures: All certifications and test reports shall include the typed or printed name and an acceptable signature of the authorizing company official. The following methods are the only Applied Composites - Lake Forest approved and acceptable methods for applying signatures to certifications: (a) actual
signatures rendered in ink by the signing official; (b) facsimiles of actual signatures such as rubber stamps; or (c) machine or computer graphics generated facsimile signatures. When quality or inspection stamps are used in lieu of signatures, such stamps shall clearly identify the issuing organization and the authorized individual to whom the stamp is assigned. The issue, use and control of such stamps shall be governed by documented procedures in the Provider’s Quality Management System.

Maintenance of Documented Information
Unless otherwise required by the Contract, the Provider shall maintain all documented information that provides objective evidence of compliance to the purchase order requirements for a minimum of ten (10) years after the last delivery of products and/or services on the purchase order. Such documented information includes drawings, specifications, work instructions, certifications and test reports and any other records generated in the course of procurement, manufacturing, testing, processing, inspecting, preserving, packaging and shipping products to Applied Composites - Lake Forest, and when applicable include records generated by the Provider’s sub-tier sources. Upon request, the Provider shall be capable of retrieving & delivering required records to Applied Composites - Lake Forest within forty-eight (48) hours or sooner from day of request by Applied Composites - Lake Forest. Prior to discarding, transferring to another facility, or destruction of such records, the Provider shall notify Applied Composites - Lake Forest in writing and allow Applied Composites - Lake Forest the opportunity to gain possession of such documented information including applicable records at the Provider’s sub-tier sources.

Nonconforming Products & Material Review
Any products found to be nonconforming to Applied Composites - Lake Forest drawings, specifications, Contract, or other applicable requirements either by the Provider or the Provider’s sub-tier sources, shall be identified, segregated and reworked or replaced with conforming products prior to delivery to Applied Composites - Lake Forest. Applied Composites - Lake Forest reserves the right to reject and return any nonconforming products to the Provider at the Provider’s expense.

Provider Material Review Authority
No Provider is granted Material Review authority. All nonconforming material shall be submitted to Applied Composites - Lake Forest for disposition in accordance with the following:

Submittal to Applied Composites - Lake Forest MRB for Disposition. Unless otherwise specified in the purchase order, in order for the Provider to submit nonconforming products to Applied Composites - Lake Forest’s Material Review Board (MRB) for disposition, the Provider shall submit a request to the Applied Composites - Lake Forest Buyer. When authorized by the Buyer, the Provider shall complete the required MRB forms that will be furnished, along with instructions for their completion, to the Provider by the Buyer. Applied Composites - Lake Forest MRB will not accept for review and disposition any products that can be reworked to meet drawing or specification requirements, or, are obviously scrap.

A ‘use-as-is’ or ‘repair’ (salvage) disposition by MRB does not relieve the Provider of the legal responsibility and liability for such products. The Provider may not ship to Applied Composites - Lake Forest any nonconforming products that have not been dispositioned by Applied Composites - Lake Forest MRB unless authorized by Applied Composites - Lake Forest in writing. When Applied Composites - Lake Forest MRB dispositioned products are delivered to Applied Composites - Lake Forest, the Provider shall reference on the packing list/shipper the serial number of the MRB document which describes the Applied Composites - Lake Forest MRB disposition.
When the Provider’s shipment includes products dispositioned by Applied Composites - Lake Forest MRB along with conforming products, the products dispositioned by Applied Composites - Lake Forest MRB shall be segregated and marked or tagged so as to permit easy identification upon receipt at Applied Composites - Lake Forest.

Provider Notification of Nonconforming Products Delivered to Applied Composites - Lake Forest. When the Provider has determined that nonconforming product(s) have been delivered to Applied Composites - Lake Forest, the Provider shall notify the Applied Composites - Lake Forest Buyer within twenty-four (24) hours of the initial discovery. The Provider shall use receipt acknowledged e-mail or other positive notification method. The notification shall include the following information:

- Provider name
- Applied Composites - Lake Forest Purchase Order or Contract number
- Part number, Job Number, and description
- Affected quantity and serial numbers (if known)
- Dates delivered (if known)
- Brief description of the nonconforming condition

The initial notification shall be followed by a formal “Disclosure Letter” delivered to the Applied Composites - Lake Forest Buyer within five (5) days of the initial notification. The Disclosure Letter shall include the following information:

a) complete description of the nonconforming condition(s)
b) the affected quantity of products (including serial numbers when applicable) and dates delivered to Applied Composites - Lake Forest
c) potential effect of the nonconformance on the performance, reliability, safety and/or usability of the product(s)
d) recommendations for Applied Composites - Lake Forest action including for products that Applied Composites - Lake Forest may have already delivered to its customers
e) immediate action taken by Provider to contain the nonconforming products
f) root cause analysis of the nonconforming condition
g) root cause corrective action plan and schedule
h) the plan and schedule for verifying the effectiveness of the corrective action In those cases where data (a) through (h) above is under investigation and incomplete, the Provider may request, from the Applied Composites - Lake Forest Buyer, authority to submit an interim disclosure letter. The interim letter shall include as much information as available and identify the due date for completion of the investigation and the date final disclosure letter that includes all (a) though (h) data will be submitted to Applied Composites - Lake Forest. Applied Composites - Lake Forest reserves the right to participate in the nonconforming product investigation at the facilities of the Provider or its sub-tier sources.

Re-Submittal of Products Previously Rejected by Applied Composites - Lake Forest. Products returned to the Provider by Applied Composites - Lake Forest and re-worked or replaced by the Provider and re-submitted to Applied Composites - Lake Forest shall be clearly identified as re-submitted products. The Provider’s packing list/shipper shall include a statement that the products delivered are:

- Replacement, or
Product Identification
The Provider shall identify all products delivered to Applied Composites - Lake Forest in accordance with the drawing, specification and/or purchase order requirements. Unless permitted by drawing and/or specification, steel stamping and engraving identification methods are prohibited, except on product identification nameplates or decals and on attached metal tags.

Preservation, Packaging and Shipment
Unless otherwise required by the purchase order, the Provider shall incorporate good commercial standard practices for the preservation, packaging and shipment to preclude damage to products during shipment to Applied Composites - Lake Forest or deterioration while in storage at Applied Composites - Lake Forest. Identification on packages shall include the contract number to which they apply.

PQC-020
Variation Management Program per SAE AS9103 – The Provider shall establish and maintain a Variation Management Program in compliance with the current requirements of SAE AS9103 - “Variation Management of Key Characteristics.” AS9103 requires the use of statistical methods to control manufacturing and processing operations. Provider's variation management program is subject to audit, verification and approval and/or disapproval by Applied Composites - Lake Forest designated representative(s).

PQC-030
Inspection & Test System per SAE AS9003 – The Provider shall establish and maintain an Inspection & Test System in compliance with the current requirements of SAE AS9003 - “Inspection and Test Quality System.” Provider's Inspection & Test System is subject to audit, verification and approval and/or disapproval by Applied Composites - Lake Forest designated representative(s).

PQC-040
Quality Management System per ISO 9001 – The Provider shall establish and maintain a Quality Management System in accordance with ISO 9001 that is certified by an accredited registrar, and is in good current standing. The Providers Quality Management System is subject to audit, verification and approval and/or disapproval by Applied Composites - Lake Forest designated representative(s).

PQC-050
Quality Management System per SAE AS 9100 – The Provider shall establish and maintain a Quality Management System in accordance with AS 9100 that is certified by an accredited registrar, and is in good current standing. The Providers Quality Management System is subject to audit, verification and approval and/or disapproval by Applied Composites - Lake Forest designated representative(s).

PQC-060
Requirements for Calibration Laboratories per ISO 17025 - The Provider shall establish, document and maintain a system that is in compliance with the current revision of document ISO 17025. The Provider's calibration system must have current accreditation by an accredited body of registration. The provider’s quality system is subject to audit, verification and approval and/or disapproval by Applied Composites - Lake Forest designated representative(s).
PQC-070

**In-Process Source Inspection** - Products to be delivered on this purchase order, require in-process source inspection, tests or both by an Applied Composites - Lake Forest Quality representative. The points in the manufacturing sequence at which in-process inspection is required will be specified in the Contract. The Provider shall notify Applied Composites - Lake Forest at least forty-eight (48) hours in advance of the time the product will be ready for in-process source inspection. Upon request, the Provider shall make available to the Applied Composites - Lake Forest representative any measuring and test equipment, facilities, records and personnel to facilitate the in-process source inspection.

PQC-080

Applied Composites - Lake Forest **Source Inspection** - Products to be delivered on this purchase order require final source inspection, tests or both by an Applied Composites - Lake Forest Quality representative, prior to delivery to Applied Composites - Lake Forest. The Provider shall notify Applied Composites - Lake Forest at least forty-eight (48) hours in advance of the time the products will be ready for final inspection. Upon request, the Provider shall make available to the Applied Composites - Lake Forest representative any measuring and test equipment, facilities, records and personnel to facilitate the final source inspection.

PQC-090

**Government Source Inspection (GSI)** - US Government Source Inspection (GSI) is required prior to delivery to Applied Composites - Lake Forest. Upon receipt of this Contract, the Provider shall promptly notify the US Government representative who normally services the Provider’s plant, in order that the US Government representative can accomplish appropriate planning for conducting source inspection at the Provider's facilities. If the Provider cannot locate the US Government representative to arrange for the required source inspection, the Provider shall notify Applied Composites - Lake Forest immediately. Upon request, the Provider shall make available to the US Government representative any measuring and test equipment, facilities, records and personnel to facilitate the Government source inspection.

PQC-100

**Certificate of Conformance (C of C)** – With each delivery of products on this Contract, the Provider shall include on the packing list/shipper or on a separate attached document, a written statement titled “Certificate of Conformance” and is worded as follows:

“This is to certify that all products or services delivered on Purchase Order (number) and packing list/shipper (number) are in compliance with all requirements of the purchase order. Objective evidence to substantiate this certification will be made available for review upon request.”

Company Name: ______________________________________________________
Address: ______________________________________________________________
Authorized Person: __________________________ Date: __
Title: __________________________ Signature/Stamp: _______________

PQC-110

**Raw Material Verification Program** – The Provider shall develop, document and implement a raw material (stock material for parts or components) verification program that will ensure that material received from the Provider's sub-tier sources meets all applicable technical and quality requirements. The Provider's verification program shall include provisions for monitoring and periodic testing of raw material upon receipt to ensure that such material
meets all applicable requirements, and implement appropriate storage and controls to preclude commingling of different heat/lots or batches of material. Raw material testing shall be in accordance with specification requirements and may be performed by the Provider or a recognized testing laboratory. Provider’s verification program shall document the frequency of such tests and the test results. Records showing the results of the Provider’s material verification program and its effectiveness shall be available to Applied Composites - Lake Forest for review upon request.

**PQC-120**

Applied Composites - Lake Forest *Furnished Material* – Applied Composites - Lake Forest may furnish material, parts and/or components to the Provider for use in or on products to be delivered on, or for the realization of this purchase order. In such cases the Provider shall establish and maintain strict accountability for all Applied Composites - Lake Forest furnished material to ensure that it is properly used and accounted for. When material is furnished, the Provider shall establish required controls to ensure traceability of the material to the finished product and furnish material traceability records with the delivery of products to Applied Composites - Lake Forest. For components, unless individual component traceability is required by Contract, the Provider shall ensure that such components are used only on products to be delivered to Applied Composites - Lake Forest on the Contract. Unless otherwise specified by the Contract, the Provider shall return any unused Applied Composites - Lake Forest furnished material to Applied Composites - Lake Forest with the last delivery of products on the Contract.

**PQC-130**

**Traceability of Products to Raw Material** - For each lot of products incorporated or used during the realization of this contract, the Provider shall provide positive traceability of each individual product to the material certification/test report that represents the raw material from which each of the products was manufactured. Traceability on supplied material shall also be maintained by identifying the material job number, batch or PO number as originally provided by Applied Composites - Lake Forest from the certification/test report on tags attached to each product and/or on packaging (when used).

**PQC-140**

**Qualified Process Sources & Certifications**

All special processes must be performed by sources approved by the applicable Prime Contractor, Applied Composites - Lake Forest, or applicable Approved Providers Listing, as defined within the contract. Use of processes and/or process sources that have not been approved by the corresponding authority may result in return of all products to the Provider at the Provider’s expense.

- **Special Process**: A Special Process is the application of chemical, metallurgical, nondestructive or any other special manufacturing, heat treatment, joining or inspection processes, controlled by Federal, Military, US Government, Industry (i.e.: SpaceX, Boeing, General Electric, Airbus, UTC, Bell Helicopter, etc.), National, International, or other applicable specifications. All special processes shall be performed only by those sources currently approved for the specific process by the corresponding prime contractor. In addition, when required by an Applied Composites - Lake Forest customer, the Provider may be required to use customer approved special process sources. Upon request, Applied Composites - Lake Forest will provide the Provider with a list of the approved process sources.

- **Proprietary Process** – Prior to initial application of a process that is controlled by a proprietary
specification developed by the Provider or the Provider's sub-tier source, the Provider shall furnish a copy of the specification, or sufficient technical data to Applied Composites - Lake Forest (subject to normal proprietary rights consideration and nondisclosure agreement) so that Applied Composites - Lake Forest can determine whether adequate process controls exist to ensure that the proprietary process will yield products that meet all Applied Composites - Lake Forest technical and quality requirements. In addition, the Provider shall notify Applied Composites - Lake Forest when any changes to the proprietary process are planned so that Applied Composites - Lake Forest can evaluate the potential impact on product technical or quality requirements.

- **Process Certifications** - For all special processes required by the Contract or reference documents, the Provider shall furnish to Applied Composites - Lake Forest, with the delivery of products, the certification/test report issued by the company that actually performed the process. All certifications/test reports shall, as a minimum contain a complete description of the special process performed, including:
  - Process name, applicable specification and revision, type, class, grade, etc.,
  - When applicable, a statement that the process was performed by certified operator(s) and their qualification and certification status.

**PQC-150**

**Nadcap Accreditation** - Special processes shall only be performed by sources that are accredited and approved by the National Aerospace and Defense Contractors Accreditation Program (Nadcap). This requirement applies whether the process is performed by the Provider or by the Provider’s sub-tier sources. Use of sources not accredited by Nadcap shall result in return of products to the Provider at the Provider’s expense. For a list of Nadcap accredited sources contact the Applied Composites - Lake Forest Buyer.

**PQC-160**

**Heat Treat Certifications** - With each delivery of products on this Contract, the Provider shall furnish a time/temperature certification that includes the following data: (a) part number and revision with corresponding Job/Lot traceability; (b) quantity heat treated; and (c) for each heat treatment cycle – the actual temperature range & duration of each heat treat cycle.

**PQC-170**

**Heat Treat Furnace Charts** - With each delivery of products on this Contract, the Provider shall furnish the original, or a legible copy, of the furnace temperature chart, which shows the part number, the date and the actual time the part was moved in/out of the furnace.

**PQC-180**

**Test Samples** - With each delivery of products on the Contract, the Provider shall furnish for verification testing by Applied Composites - Lake Forest one (1) additional product or suitable test sample produced from the same material lot and processed simultaneously with the lot of products delivered. When more than one lot of material was used, a sample is required for each lot of material. The sample shall be marked or tagged to identify the process that it represents (i.e. material, heat treat, anodizing, plating, etc.), and noted on the packing list/shipper.

**PQC-190**

**Nondestructive Test (NDT) Reports** – Unless otherwise specified by the contract, drawing or specification, NDT shall be performed on 100% of the lot of products. With each delivery of products on the Contract, the Provider
shall furnish a certified test report that shows that the required NDT (i.e. penetrant, radiographic, ultrasonic, etc.) test was performed on all delivered products. The test report shall be issued by the organization that actually performed the NDT and include:

- a complete description of the test, test name, specification, revision, type, method, etc.
- the acceptance criteria document number and revision, that applies to the NDT operation
- the number and revision level of the NDT procedure used, and
- when applicable, identity of the qualified/certified personnel who performed the NDT.

All products subjected to NDT and found to be acceptable shall be identified as required by the applicable NDT specification. When parts are serialized, the serial numbers shall be referenced on the NDT reports and certifications.

**PQC-200**

**Applied Composites - Lake Forest Approval of NDT Techniques** - Prior to conducting any nondestructive testing (NDT) required by drawing or specification on products scheduled for delivery on this Contract, the Provider shall prepare and submit to Applied Composites - Lake Forest for review and approval a detailed procedure describing the NDT to be performed. The Provider’s procedure shall include all necessary information including pictures or sketches, materials, tooling and/or equipment to be used. The procedure shall be: (a) identified with a control number; (b) reference the applicable NDT specification and revision with which it complies, and (c) include the name, signature and date of the qualified and certified technician who prepared and/or approved the NDT technique. Changes to Applied Composites - Lake Forest approved NDT techniques shall be submitted to Applied Composites - Lake Forest for approval prior to their use in production.

**PQC-210**

**Limited Shelf Life Materials** - With each delivery of materials on this Contract, that have a limited or specified shelf life, the Provider shall furnish the following data: (a) cure or manufacture date; (b) expiration date or shelf life; (c) lot or batch number, and (d) when applicable, any special storage requirements and handling procedures to be followed. The above information shall be marked on each container or certification and shall be in addition to normal identification requirements such as material name, part or code number, drawing, specification number and revision, type, size and quantity and other markings as applicable. For each delivery of limited shelf life materials on the purchase order the time lapse between the cure or manufacturing date of such materials, and the date of scheduled receipt by Applied Composites - Lake Forest, shall not exceed one fourth (1/4) of the total shelf life of the material without prior written waiver from Applied Composites - Lake Forest.

**PQC-220**

**FOD Control Program** – The Provider shall establish, document, and maintain a program to control and eliminate Foreign Object Damage (FOD) and/or contamination during the Provider’s manufacturing, assembly, test and inspection operations. When applicable, the Provider’s FOD control program shall include controls to preclude FOD or contamination at the Provider’s sub-tier sources. AS9146 may be used as a guide to establish and implement the Provider’s FOD program. The Provider’s FOD program is subject to on-site review and approval by Applied Composites - Lake Forest.

**PQC-230**

**1st Article Inspection at Source** - Inspection and/or testing and acceptance of 1st Article product by Applied Composites - Lake Forest is required prior to delivery of any products on this Contract. The 1st Article product shall be complete, documented per SAE AS9102 and ready for delivery to Applied Composites - Lake Forest. The Provider shall notify Applied Composites - Lake Forest at least forty-eight (48) hours in advance so that the
inspection and/or testing of the 1st Article product as well as review of supporting documentation can be scheduled and completed prior to the required product delivery date. Upon request, the Provider shall make available to Applied Composites - Lake Forest representatives any measuring and test equipment, facilities and/or personnel to facilitate the 1st Article inspection.

**PQC-240**

**1st Article Inspection at Applied Composites - Lake Forest** – The Provider shall submit a 1st Article product and supporting documentation, as required by current revision of SAE AS9102, for inspection and/or testing and acceptance by Applied Composites - Lake Forest prior to delivery of products on this Contract. The 1st article shall be completely processed in accordance with Contract requirements. When authorized by the Contract, the 1st Article product may be included as part of the initial quantity delivered on the Contract and included as part of the total Contract order quantity. In such cases, failure of the 1st Article product to meet Contract specified requirements may result in rejection and return of the delivered production quantity to the Provider at the Provider’s expense.

**PQC-250**

**1st Article Inspection Requirements (FAIR)** – The Provider shall perform a First Article Inspection (FAI) in accordance with the requirements of the current revision of SAE AS9102. Excess parts, remaining from a previous production lot, may not be used to fulfill the 1st Article requirements unless it is specifically approved by Applied Composites - Lake Forest in writing. The Provider shall furnish a copy of the completed 1st Article Inspection results with the initial delivery of products on the Contract.

**PQC-260**

**100% Inspection Report** – The Provider shall perform 100% inspection of all characteristics on all products delivered on this purchase order. The Provider's 100% inspection data shall show the part number and drawing revision and the actual values obtained during inspection versus the requirements of the applicable drawing or specification. When applicable, copies of material and/or process certifications shall be attached to the inspection report.

**PQC-270**

**Detailed Inspection Plan (DIP)** - When this clause is included in the purchase order, Applied Composites - Lake Forest will supply the Provider with blank forms and define the specific product inspection to be accomplished by the Provider on this Contract. The Provider shall perform the required inspections and record the actual results on the forms. The DIP shall include the name and signature of the Provider’s authorized representative responsible for quality and be included with each delivery of products on this Contract.

**Classification of Characteristics** - Classification of characteristics on the DIP is a means by which Applied Composites - Lake Forest Engineering conveys the potential seriousness of non-conformance of certain product characteristics. Classification of characteristics is not intended to indicate that other drawing requirements are not important or need not be met. The purpose is to establish a common basis for placing emphasis on the identified key characteristics during all phases of processing, inspection, and testing. Any characteristic found to be nonconforming during inspection is cause for rejection regardless of classification. On all products delivered on this purchase order, the Provider shall furnish an Inspection Report showing the actual results of inspection of all classified characteristics in accordance with the inspection requirements for each classified characteristic. The Provider's inspection report shall show the part number, drawing revision and the actual values obtained during inspection versus the requirements of the drawing
Purchasing Quality Clauses

PQC – Requirements for Providers

PQC-280
Final Inspection Report – Prior to delivery of products to Applied Composites - Lake Forest, the Provider shall perform final inspection on all products and document the results. The format of the report is optional; however, it shall show the actual inspection results obtained, versus the drawing or specification requirements. The Provider shall maintain the completed reports as part of Providers quality records. Upon request, the final inspection reports shall be made available to Applied Composites - Lake Forest, or Applied Composites - Lake Forest customers or regulatory agencies for review.

PQC-290
Product Serialization Requirements - Serial numbers for all products on this Contract have been assigned by Applied Composites - Lake Forest and are defined in the Contract or reference documents. The Provider shall apply the specified serial numbers on all products and record the serial numbers on all applicable documentation. The assigned serial numbers may not be altered or replaced without written authorization from Applied Composites - Lake Forest. The supplier is responsible for ensuring that traceability to the serial number is maintained throughout their processes and in accordance with specified requirements.

PQC-300
Traceability Requirements – The Provider shall establish and maintain traceability of all detail components used in the processing or completion of our parts as delivered on this Contract. Data (such as parts inventory or bill of material lists, that include lot numbers, job numbers or work orders., etc.) which provides traceability of each detail component, including sub-assemblies, to the raw material from which it was made, including all processing, testing and inspection operations performed during processing cycle shall be furnished with the delivery of products to Applied Composites - Lake Forest on this Contract.

PQC-310
Process FMEA Requirements - The Provider shall implement Failure Mode & Effects Analysis or a similar tool to use for identifying variation in processes, their effects and causes, and to develop solutions that will minimize/eliminate the effects of variation in products delivered on this Contract. The Provider’s process FMEA program shall be submitted to Applied Composites - Lake Forest for review and approval prior to start of work on the Contract. Risk Priority Numbers (RPN) and the resulting factors, shall be determined in accordance with

1.1 The risk factor scale used for the RPN rating calculations is as follows:

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Severity</th>
<th>Occurrence</th>
<th>Detection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No Impact to part</td>
<td>1 in 10,000</td>
<td>Most certainly detected</td>
</tr>
<tr>
<td>2</td>
<td>Rework to requirements</td>
<td>1 in 1,000</td>
<td>Detected by In-Process Inspection</td>
</tr>
<tr>
<td>3</td>
<td>Repair as allowed</td>
<td>1 in 100</td>
<td>Detected by Acceptance Criteria</td>
</tr>
<tr>
<td>4</td>
<td>Concession Request</td>
<td>1 in 10</td>
<td>May be detected at subsequent level</td>
</tr>
<tr>
<td>5</td>
<td>Scrap part</td>
<td>1 in 2</td>
<td>Cannot be detected</td>
</tr>
</tbody>
</table>

1.2 Once the risk factors for each class is determined, the resulting RPN rating is used to determine the actions to be taken, using the table below:

<table>
<thead>
<tr>
<th>RPN Rating</th>
<th>Action Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Uncontrolled if Printed
PQC-320

Process Control Plan Requirements - The Provider shall implement a Process Control Plan or a similar tool to use for identifying the controls in production processes, the applicable procedures and reaction plans, and to develop plans that will ensure the process controls to prevent variation in products delivered on this Contract. The Provider's process Control Plan program shall be submitted to Applied Composites - Lake Forest for review and approval prior to start of work on the Contract.

End of Document