QUALITY CLAUSES AND UNIQUE QUALITY REQUIREMENTS

The following Quality Clauses and Terms and Conditions apply when referenced on Purchase Orders from ZERO Manufacturing. If there are questions about these clauses, please contact your ZERO Supply Chain Representative.

GENERAL TERMS AND CONDITIONS—APPLICABLE TO ALL ORDERS

1 When "ZERO" is referenced in this document, it applies to "ZERO Manufacturing" only.

2 SUB-TIER SUPPLIER: "Sub-tier Supplier" is defined as any subcontractor of the prime Supplier identified on the ZERO Purchase Order.

3 UNIQUE QUALITY REQUIREMENTS: Applicable only when specified on the Purchase Order. See Page 2 of this document for details.

2G1 QUALITY SYSTEM: The Supplier shall implement and maintain an effective quality system that has been deemed satisfactory by ZERO. The quality system shall assure that all materials and services conform to purchase order requirements, be documented and provide for early detection of nonconformances. Records generated by the quality systems shall be made available for periodic review when deemed necessary or requested.

2G2 NONCONFORMING MATERIAL: The Supplier shall not ship or make any unauthorized repairs to product with the intent of delivering material that does not fully meet purchase order or product specification requirements. The Supplier shall notify ZERO Quality Assurance of potential nonconformances prior to shipment. Authorization to ship nonconforming material may be approved with prior notification and approval from ZERO Quality Assurance. Shipping of nonconforming material without written prior approval may disqualify Suppliers from additional procurement.

2G3 RESUBMISSIONS OF REJECTED MATERIAL: All material rejected by ZERO and subsequently resubmitted shall be identified as being previously rejected. The Supplier shall reference the ZERO NCM number on the packing slip and state whether the material had been reworked or reprocessed with the product. If material is subject to Government Source Inspection, it shall be resubmitted to the Government prior to delivery.

2G4 PRODUCT OR PROCESS CHANGES: Changes to product design, materials or processes, which affect form, fit, function, performance, quality, reliability or safety shall not be implemented without written approval by ZERO. The Supplier shall notify ZERO of changes to facilities or locations where the product has initially produced or when product may require a recall due to a change in product or process.

2G5 CORRECTIVE ACTION REQUESTS: When nonconforming materials received from Suppliers are detected at ZERO, corrective action will be required. Suppliers are expected to communicate how they intend to correct the immediate deficiency as well as what they intend to do to correct the root cause of the nonconformance and prevent recurrences. Failure to respond in a timely manner may cause a delay in payment and adversely affect the Supplier’s Quality Performance Rating.

2G6 PRESERVATION, PACKAGING, PACKING AND SHIPPING: Unless specific packaging instructions are called out on the purchase order, the Supplier shall assure that material to be shipped is clean, dry, and packaged in a manner that will afford adequate protection against corrosion, deterioration, and damage during transit.

2G7 LABELING: All containers shall be properly labeled describing, as a minimum, the contents of the container. Labels for liquids, such as solvents, and coating, Freon, mold release agents, etc., shall comply with all applicable OSHA and EPA regulations, The Code of Federal Regulation (CFR) and the Clean Air Act, Section 611.

2G8 RECORD RETENTION: Records shall provide objective evidence of inspection with applicable drawings and specifications. Record retention shall be as follows:

• ZERO Designed Product - 10 years.
• ZERO Customers Designed Product – 10 years.
• Commercial Off the Shelf Material - 5 - 10 years.

Records shall include corrective actions taken when applicable. These files shall be subject to review within 48 hours and made available to ZERO customers, when requested.

2G9 ENVIRONMENTAL REQUIREMENTS: Material furnished under this order shall be free from contamination by presence of mercury or any other toxic substance without prior approval from ZERO.

Use of Class 1 Ozone Depleting Substances (ODS) is prohibited. Class 1 Ozone Depleting Substances include, but are not limited to: Halogens, Chlorofluorocarbons (CFCs), Carbon Tetrachloride (Tetrachloromethane), Methyl Chloroform (1,1,1–Trichloroethane, and Methyl Bromide, etc. The Supplier shall inform ZERO of any products manufactured with or containing ozone depleting substances.

2G10 WORKMANSHIP: The Supplier shall ensure a consistently high quality of workmanship.

Workmanship is monitored to assure that purchase order and specification requirements are being maintained.

2G11 FOREIGN OBJECT DEBRIS PROGRAM: ZERO, Inc. is required to maintain a Foreign Object Debris (FOD) prevention program. Suppliers shall assure cleanliness of products provided to ZERO to the extent necessary to maintain compliance to this program. Delivered material must be clean and free from any material/debris, such as machined chips, burrs, grinding dust, forming materials, corrosion by-products, or any foreign material on surfaces to prevent FOD entrapment.

2G12 FLOW-DOWN OF REQUIREMENTS: The Supplier is responsible to ensure that all applicable requirements are flowed down to sub-tier Suppliers using the most recent process/ drawing revision.

2G13 CALIBRATION: The Supplier shall implement and maintain a system for the control and maintenance of measuring and test equipment in accordance ANSI/NCSL 2540-1 or equivalent. The Calibration System shall be documented, accountable, and traceable and provide for initial and re-calibration during the life of the equipment to traceable standards.

ZERO MANUFACTURING | 500 WEST 200 NORTH, NORTH SALT LAKE, UT 84054 USA | PHONE 801-298-5900 | FAX 801-415-1764 | www.zerocases.com

F24-0A013 Rev D 7/20/2016

2G14 ELECTROSTATIC DISCHARGE DAMAGE (ESD) PROTECTION: Components and assemblies that are susceptible to electrostatic discharge damage shall be handled and packaged to prevent ESD damage. All units which contain ESD sensitive devices shall be wrapped in a static shielding barrier in direct contact with and fully surrounding the unit. Containers shall be marked as containing ESD devices. (Reference DOD-STD-1686 or equivalent.)

2G15 RIGHT OF ENTRY: The Supplier shall reserve the right of entry for ZERO, ZERO customers and regulatory agency personnel, for access to any and all facilities where work is being performed or is scheduled to be performed, including those facilities of Supplier’s sub-tier Suppliers, in order to perform inspections, surveys or system surveillance as part of verification of conformance to the requirements. Supplier’s’ denial of access may result in disqualification of future procurement with ZERO. The Supplier shall include the provisions of these facility access requirements in its PO’s with sub-tier Suppliers.

This access shall provide, at no increase in price, cost or fee to ZERO, ZERO customers, or regulatory agencies, suitable facilities at Supplier’s and sub-tier Supplier’s manufacturing location to perform inspections, surveys, or surveillance.

2G16 ORDER OF PRECEDENCE: The order of precedence for documents shall be as follows:

1. Purchase order and attachments
2. Drawing/Specification
3. Customer Specification
4. ZG1 Right of Entry

When a drawing or specification is referenced, the applicable revision shall be the revision in effect on the date the purchase order was issued, unless specifically stated on the purchase order or within the drawing.

2G17 PART SUBSTITUTION: The substitution of parts is not authorized without ZERO written approval.

2G18 LANGUAGE REQUIREMENT: All data or correspondence shall be provided in English.

2G19 RAW MATERIALS: Where the Supplier supplies raw material (e.g. coils, sheets, rails, bars, rods, etc.) either directly to ZERO or to a sub-tier Supplier, the material user (e.g. in the form of machined or sheet metal products for ZERO (standard hardware items are specifically excluded from this paragraph), the Supplier shall assure that the material is manufactured and distributed by sources approved by ZERO's customer.

Note: All items delivered to ZERO must maintain Job/Lot traceability.

Suppliers of Raw Materials (e.g. coils, sheets, rails, bars, rods, etc.) shall provide every time a change is made, Certificate of Compliance with actual results of physical and chemical test reports. Material must be identified by heat lot and or heat treat, if applicable. Test reports must be traceable to the material lost supplied.

All purchase orders, which include a prime contract number, require compliance to DFARS 225.22-7014. Suppliers shall provide evidence of compliance, including flow down to all sub-tier Suppliers, with all associated documentation.

2G20 SEGREGATION OF LOTS: The Supplier will not co-mingle different date codes or production lots, nor combine resubmitted parts with new production parts. Parts may be submitted in one shipment provided the different date codes and lots are identified and segregated.

2G21 CERTIFICATE OF CONFORMANCE REQUIREMENTS: A Certificate of Conformance (C of C) shall be provided with each lot. The C of C shall include a statement that the items meet the requirements of the purchase order and/or specifications referenced on the drawing and/or purchase order. C of C's must include, as a minimum, the following information:

Supplier Name and Address
Zero Purchase Order Number
Part Number on Purchase Order
Part Revision on Purchase Order
Date Code(s) or Lot Number(s), as Applicable
C of C Signature and Date

2G22 CONTROL/ IDENTIFICATION OF ITEMS WITH LIMITED SHELF LIFE (expoxy, paint, rubber, adhesives, etc.):

Items with limited shelf life shall be marked on the item, package or container with the manufactured date, storage temperature, special handling requirements, and expiration date of the items. When items are packaged in a container, the cure date of the rubber is to be shown in lieu of the date of manufacture. All identification markings shall be placed in accordance with applicable specifications. ZERO will NOT ACCEPT material that has less than 90% of the useful life remaining (not applicable for adhesives, paints and inks), without written authorization from ZERO and/or ZERO's Customer.

2G23 LOTS HELD MORE THAN 24 MONTHS: Material, which has passed the Suppliers storage and safety requirements, and has been held by the Supplier for 24 months or more, shall be re-inspected and tested prior to shipment to ZERO. In case of a lot failure during re-inspection, the lots shall be subjected to 100% inspection for all failed characteristics. The Supplier shall notify ZERO regarding critical characteristic failures that may have been in prior lots shipped.

2G24 SAMPLING INSPECTION: When the Supplier is performing lot inspection sampling, instead of 100% lot inspection, then the sample plan shall not accept lots where the lots have known non-conformities (discrepancies). The use of a C = 0 sampling plan must be incorporated.

2G25 FIRST ARTICLE INSPECTION: Suppliers are required to perform First Article Inspection Report (FAIR) when any of the following conditions exist:

A. For all first production lot
B. First production lot after engineering changes and/or changes to manufacturing processes that may affect conformance to design. In most cases, the FAIR need only report those features changed.
C. If there has been a 24 months or greater lapse from the last production lot.

Suppliers will provide a FAIR to ZERO with shipment. ZERO recommends use of AS9102 format and may require it.

2G26 SUB-TIER SUPPLIER MANAGEMENT CONTROL: The Supplier shall implement and
maintain a program for the selection, approval, rating, and maintenance of sub-tier Suppliers. The program shall include provisions for effective root cause corrective action and when necessary, the Supplier’s Sub-tier Supplier Management System shall be utilized to manage the program. The program shall be consistent with the Buyer’s Quality Management System.  

ZG27 FRANCHISED/ LICENSED “DISTRIBUTOR” TRACEABILITY: Distributors shall ensure traceability of all purchased product to the original equipment manufacturer on the Certificate of Conformance for all material/ date code provided on the purchase order. Distributors shall not modify, rework or repair material shipped on this order. The original manufacturer must be identified for each lot/ date code on the Certificate of Conformance. In the case of bulk items, this may be accomplished by bag and tag method. The preferable method is for the Distributor to provide a copy of the Manufacturer’s certificate for the lot number being supplied, along with their Franchised Distributor certification.

ZG28 CONFIGURATION MANAGEMENT: The Supplier is responsible for providing for and implementing configuration management that will control all changes to deliverable products associated with this purchase order. All changes are subject to ZERO approval as follows:
1. CLASS I changes as defined in MIL-STD-481 must be submitted to ZERO prior to implementation. 
2. CLASS II – All changes that do not fall in CLASS I category. A copy of all CLASS II changes as defined in DOD-STD-480 must be forwarded to ZERO for review a minimum of 30 days prior to delivery of any equipment or product with the change incorporated. Engineering change documentation is to be submitted to ZERO purchasing/engineering review.
ZG29 COUNTERFEIT PARTS AND MATERIALS INFORMATION IN ZERO’S SUPPLIER PRODUCTS:
• Components and parts shall be procured only through Original Equipment Manufacturers (OEMs)/Original Component Manufacturers (OCMs) or their franchised dealer or distributors. 
• The Supplier shall verify the procurement source and associated certifying paperwork. 
• Appropriate incoming inspection test methods shall be used to detect potential counterfeit parts and materials. 
• The Supplier shall flow this requirement down to all sub-tier suppliers to prevent the inadvertent use of counterfeit parts and materials.

Suppliers shall ensure that all personnel performing such processes as welding, soldering and Non-destructive Evaluation or Testing are certified in accordance with the specifications contained on the drawings and purchase orders. Suppliers shall also ensure the associated equipment used is certified as appropriate.

Z14 NON-DESTRUCTIVE TEST REQUIREMENTS (NDT): Items requiring NDT inspection shall be submitted in accordance with applicable specifications and standards. The copy of the report shall accompany the material when delivered to ZERO, and the report shall be signed by the technician performing the service.

Z15 HEAT TREATING REQUIREMENTS: A cross-reference between heat treat lots and raw material heat numbers shall be maintained as applicable. Each traceable lot shall be treated in accordance with the applicable specification and shipped separately with a packing slip and mechanical analysis report.

Z16 FASTENER QUALITY ACT: The guidelines implemented in the Federal Fastener Quality Act of 1990 are in effect for this part number. Inspection, testing, and certification from an approved test facility shall be provided with each lot.

Z17 SPECIAL PROCESS APPROVED SUPPLIERS: Suppliers shall use Special Process Suppliers approved by ZERO CUSTOMER LISTED ON PURCHASE ORDER. (E.g. Boeing, Lockheed, Airbus, Honeywell, etc. and Government Agencies)

Z18 SERIALIZATION MARKING: Materials procured by this purchase order shall be uniquely identified. Individual serial numbers or number series shall be marked on the C of C.

Z19 GENERAL STATISTICAL PROCESS CONTROL (SPC): SPC shall be implemented and maintained by the Supplier. The Supplier’s SPC program shall be documented and include provisions for selection and identification of key characteristics and/or processes, statistically based control charting, demonstration of continuous improvement, management supervision, corrective action, training, and flow down to sub-tier Suppliers when the key characteristic and/or process is controlled by a sub-tier Supplier. The requirement for and establishment of SPC key characteristics and/or key processes may be based on similar parts or processes.

Z20 PART NUMBER SPECIFIC STATISTICAL PROCESS CONTROL (SPC): SPC shall be implemented and maintained for this part number. The requirement for and establishment of SPC key characteristics and/or key processes for this part number shall be unique for this part number and based on this part number only. The Supplier must be able to validate that this part number is controlled by individual control charts for the key characteristics and/or key processes selected.

Z21 KEY CHARACTERISTIC STATISTICAL PROCESS CONTROL (SPC): Reference AS9103. Variation reduction shall be implemented and maintained for the key characteristic identified by ZERO on the design drawing as part of this purchase order. Key characteristics using variable data shall demonstrate process control to a capability level of 1.67 Cpk for Critical and 1.33 Cpk for Major Characteristics. Key characteristics that do not meet projected Cpk’s shall have improvement plans developed.

Z22 DRAWING APPROVAL: A copy of the Supplier’s drawings shall be forwarded to ZERO Quality Assurance for review and approval prior to the start of fabrication. The Supplier shall maintain the approved configuration and revision of the drawing and shall not make any changes unless approved by ZERO.

Z23 PROCEDURES AND PROCESSES: A copy of the Supplier’s procedure/ processes, as identified by ZERO, shall be forwarded to ZERO Quality Assurance for review and approval prior to the start of fabrication. The Supplier shall maintain the configuration control (revision level) of the approved documentation and shall not make any changes without approval by ZERO.

Z24 UNIQUE PACKAGING REQUIREMENTS: Unique packaging is in effect for this order. See purchase order or contact ZERO for instructions.

Z25 UNIQUE PART NUMBER REQUIREMENTS: Contact your ZERO Procurement representative for assistance or a copy of the special instructions/ requirements.

Z26 BAR CODE REQUIREMENTS: Bar coding using standard bar code formatting is required for this part. The bar code must be readable upon receipt.