

Terms and Conditions

Clause Number: Q647

Effective: 07/26/2018

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MAINTENANCE, REPAIR, OVERHAUL, FAA REGULATED AND CERTIFICATED REQUIREMENTS SPECIAL PROCESS DOCUMENTATION & VERIFICATION RECORDS

Seller's certificated repair station is required to keep documented objective evidence in the form of records as part of the maintenance, repair and overhaul statement of work per Boeing or other Original Equipment Manufacturer (OEM) repair data for the following:

1. Verifiable documented objective evidence of:
 - a. Pyrometric certification and control of ovens, autoclaves and other pyrometric equipment used for processing of parts, i.e., post plate baking, stress relieving, heat blanket repair and autoclave processing.
 - b. Equipment being calibrated over the range of usage for the equipment.
 - c. Periodic tool inspection for assembly tools to assure tool fitness for use and configuration.
2. Verifiable documented objective evidence that:
 - a. The required and actual data for chemical and temperature control requirements for chemical process solutions used during chemical processing and plating of product during repair and overhaul activities were within acceptable ranges during processing i.e. anodizing, chemical treatment of aluminum, cadmium plating, chrome plating, nital etch, rinse tanks etc.
 - b. The required and actual process acceptance criteria and testing that verify necessary processes were accomplished and within required repair data parameters during repair and overhaul of parts, i.e., hydrogen embrittlement testing using notched tensile specimens, Boeing plating porosity meter, adhesion testing, hardness testing, corrosion testing, appearance, etc.
 - c. Specified coating thicknesses for organic and inorganic coating post process are directly measured and within acceptable ranges as defined by repair data, i.e., chrome plate thickness, cadmium plating thickness, paint thickness, etc.
 - d. Adhesion testing (dry, wet or solvent tape adhesion testing) is required for all applications of organic coatings (primer, topcoat or surfacer) on metallic or non-metallic substrates per Standard Overhaul Practices Manual (SOPM), D6-5000 (special commercial airplane company finish codes or F-codes) or BAC/BSS specification requirements. When no requirement is specified for application of organic coating in the SOPM or Component Maintenance Manual (CMM) reference, the BAC/BSS reference or D6-5000 finish code requirements will be used for testing of organic coating adhesion.
3. Verifiable documented objective evidence of required and actual repair data for metal conditioning and machining including:
 - a. All shot peen required and actual parameters (manual and automated) as well as demonstration of intensity and saturation curves.
 - b. All alloy steel and chrome grind required and actual parameters including grinding machine identification, wheel material information (material type, grit size, hardness, bond and structure), feeds (cross, down), speeds (wheel and work), and records of required periodic wheel dressing.
 - c. Stress relieve oven identification as well as records of times and temperatures.

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- d. Records of testing for heat damage post machining or grinding including method used and result of inspection.
4. Verifiable documented objective evidence of required and actual repair data for non-metallic (composite & adhesive) repairs and modifications including:
 - a. Parts and materials used in repair or modification
 - b. "Out time" records for materials that demonstrate that time and temperature records from "out time" until cure are within material data requirements supplied by repair and or material OEM
 - c. Composite ply layup and orientation
 - d. Documented location and size of composite repair
 - e. Pre cure processing of composite repair (compaction and/or debulk)
 - f. Cure time, temperatures, pressures and vacuum parameters and post cure inspection data including composite repairs, adhesive applications requiring room temperature or elevated cures with or without vacuum or pressure.

If composite repairs are carried out for this purchase order, section 4 above, also outlined in the D6-86065, is required. Additionally, a plan must be in place within 3 months for full compliance to the requirements of D6-86065, with an implementation date not to exceed 18 months.

5. Verifiable documented objective evidence of required and actual inspection process parameters and methods for Nondestructive testing (NDT) inspections and the results of those inspections.
6. Verifiable objective evidence of Seller's ability to access and review Boeing and Boeing's agents purchase order notes and requirements.

Boeing requires that the provisions/requirements set forth above be included in Seller's direct supply contracts (contracted maintenance) as well as the obligation that they be flowed to the sub-tier supply chain. For purpose of this note, supply chain shall mean Seller's complete network of materials, equipment, information, and services integrated into products and services. It focuses on direct and lower-tier suppliers.

Seller shall make such records available to regulatory authorities and Boeing's authorized representatives. Seller shall retain such records as stated in the Q09 clause of this purchase order.