PURCHASE ORDER ATTACHMENT TQA-32F-00

FIRST ARTICLE INSPECTION/TEST REQUIREMENTS (FAIT): FAIT PLAN SUBMITTED FOR APPROVAL

Purpose:
The purpose of an FAIT is to verify that planning, work instructions, material processing systems and controls, tools and fixtures, inspection/test equipment, and personnel capability will produce an item in compliance with applicable purchase order, work statement, and specification requirements.

General Requirements:

1.1 The Supplier will develop an FAIT plan which documents how they will perform the FAIT requirements stated here. The FAIT shall be done on both the RMS TDP and all Supplier's build to print items, and it **shall not be initiated prior to RMS signature approval of the plan.**

1.2 The FAIT process shall be completed on the first item from the first production lot to complete the total manufacturing process. The size of the first production lot will not exceed the lesser of one sixth of the P.O. quantity or 50 ship sets, unless otherwise approved by RMS. Remaining production lots shall not be initiated until the FAIT has been completed and approved by RMS.

1.3 Items such as QPL parts, standard bolts, nuts, washers, etc., are not considered items manufactured by the Supplier. Supplier certification of conformance on file is acceptable**.**

1.4 Any proposed deviation to these FAIT requirements shall be submitted in writing to the Raytheon Buyer and approved by RMS.

1.5 For parts that require TQA-01-xx or TQA-03-xx, a Raytheon Field Engineer (FE) may witness and/or participate in the supplier FAIT.

1.5.1 The Supplier shall advise the FE seven (7) working days in advance of the scheduled FAIT.

1.5.2 When the FAIT is witnessed by the FE or designate at the Supplier's facility, the FE or designate will ensure the FAIT is performed per the requirements of this document.

1.5.3 The Supplier will perform the FAIT and submit the FAIT Report (FAITR – see Attachment below) with the identified FAIT item to the FE or designate. A copy of the approved FAITR must be on file at RMS prior to the start of the next manufacturing lot.

1.6 For parts that do not require TQA-01-xx or TQA-03-xx, FAITR shall be submitted to RMS along with the shipment of the first Production lot. The actual part(s) inspected must:

A. Accompany the shipment of the first Production lot.

B. Be conspicuously marked and easily retrieved from the shipment.

C. Be identified by cavity, either on the part or on the package when produced by a multi-cavity die or mold. Supplier remaining manufacturing runs shall not be initiated until the FAITR has been completed and Supplier has received an approved FAITR from RMS.

1.7 When drawing attributes are changed or added, the Supplier will complete a Delta FAIT for the first production part of the new configuration and process it in accordance with the requirements of this procedure.

1.8 First Article Testing - If an ATP/LAT (Acceptance Test Procedure/Lot Acceptance Test) is imposed, all testing shall be verified to RMS-approved procedures. Testing, at a minimum, shall consist of box level unless otherwise specified by RMS. When automated test equipment is used, a copy of the automated printout must be attached to the FAITR.

1.9 The Supplier is required to notify RMS of any change of significance that may require another FAIT to be conducted on the first production item manufactured after such change. Such notifications shall be submitted to the Buyer. The following definitions will be used in evaluating the type and significance of the change:

A. Change of Facility/Processing Equipment:
A change in or to tools, test equipment, measuring, or aligning fixtures, processing tanks, or equipment, machinery, machine set-ups, other plant manufacturing equipment, etc., used to manufacture, process, assemble, inspect and/or test the item.

B. Change to Procedures:
A change in or to the methods, procedures, material, planning and/or sequencing used in or applicable to the manufacturing, processing, assembly, inspection and/or test of an item.

C. Change in Location:
A change in location of the site where some or all of the work on items is being performed. It may be as little as moving an assembly fixture. It may or may not involve a change in facilities, procedures, personnel and/or processing sources.

D. Change in Source or Processing:

Such changes may be from an outside processing source to within the Supplier's facility, from within the Supplier's facility to an outside processing source, from one outside processing source to another, or from Raytheon furnished material to Supplier procured material.

E. Interruption of Production:

A complete FAIT will be required prior to shipment of hardware if 6 months or more has elapsed since the last production item was produced.

Inspection / Validation Requirements:

2.1 In addition to inspection/test of all parameters in the technical data package, the following are to be considered an integral part of the FAIT. One item will be inspected to determine compliance, as applicable, of:

A. Configuration of the item/component, as built, complies with all requirements of the drawing/specification, the approved supplier drawing/ specification and the P.O. and work statement.

B. Accuracy and adequacy of planning.

C. Correct material and/or items were used during fabrication and/or assembly. Unless otherwise specified by P.O., engineering drawing or specification, verification of material by the Supplier must be in the form of physical and chemical analysis. Properly authorized certification from the manufacturer/distributor is acceptable.

D. Casting and forging FAIT samples shall be a completely processed item including heat treatment, straightening and nondestructive testing.

E. When required by specification, grain flow of forgings must be verified from a sample cut from the forging and/or analysis of grain flow photographs furnished by the Supplier.

F. Configuration is identified and controlled by P.O./Supplier Instruction Sheet (SIS).

G. Approved suppliers/processors were used and are identified.

H. Adequacy and availability of check gages/fixtures.

I. Capability of tooling to produce items.

J. All additional P.O. requirements are fulfilled.

Documentation of Discrepancies / Nonconformances:

3.1 All nonconformances will be documented to the appropriate supplier Material Review form and the document number noted in the FAITR remarks section. Note discrepancies in "Remarks" section of FAITR, and indicate cause of discrepancies (i.e., human error, tooling, planning, engineering, etc.).

3.2 **A DELTA FAIT WILL BE REQUIRED FOR ANY DISCREPANCY LISTED THAT CAUSES REJECTION OF THE FAIT.**

3.3 Discovery of any condition that precludes conformance to applicable requirements shall result in immediate supplier corrective action. Supplier shall not continue production without RMS approval. Nonconformance shall preclude acceptance and/or delivery without formal authorization.

3.4 RMS unapproved SDRL (Supplier Data Requirements List) items that do not directly affect product technical data package will not prevent shipment of first article.

3.5 The open SDRL items which do affect the product technical data package will be listed as discrepancies on FAITR and processed as a rejection. A delta FAI will be required after formal approval of listed SDRL items.

Reporting Requirements:

4.1 The Supplier will completely document the FAIT on the FAITR form (see Attachment below) as follows:

A. **Cover Sheet** - all identification data and a summary text of the completed FAIT shall be included.

B. **Detail Attributes and Assembly Attributes sections of the Cover Sheet** - shall be completed and signatures of both the inspector(s) completing the FAIT and Supplier management are required.

C. **Drawing Notes Check Sheet** - used for recording compliance with all the pertinent notes of the applicable engineering drawing, such as heat treatment, nondestructive testing, and all other special requirements of the drawing.

D. **Inspection Dimensional Check Sheet** - used for recording all the dimensions of the item as specified by the applicable engineering drawing. Recording of data must be in a permanent manner. White-out is not acceptable.

E. Corrective action for each nonconformance shall be documented in the FAITR including its effectivity stated by date and number of parts produced prior to incorporation.

4.2 The FE or designate will indicate concurrence of FAIT by signing, stamping, and dating the Cover Sheet

4.3 The Supplier is responsible for assuring all FAIT data, including material and process certification, is legible and is of the quality for clear reproduction.

4.4 Inspection stamps must be applied to each dimensional record of acceptance in the acceptance block. If the stamps are smeared and/or not legible, the Supplier's inspector must record his or her stamp number in permanent ink, initial, and date in the "Remarks" column adjacent to the illegible stamp. The following methods are not considered objective evidence of acceptance and will be rejected and corrective action requested:

A. Stamping the first and last inspection data input per page and drawing a connecting line to indicate acceptance for all inspections accomplished is not acceptable.

B. Check marks in lieu of inspection stamps are not acceptable.

FIRST ARTCILE INSPECTION/TEST REPORT (FAITR) COVER SHEET

Date: Page: Of:

☐ Source Inspection ☐ Receiving Inspection ☐ Factory Inspection

Supplier Name: Part No: PO:

Part Name: Drwg Rev: Serial No:

Additional Drawings/Specifications, including rev letters:

DETAIL ATTRIBUTES	ACCEPT NR	YES	NO	ASSEMBLY ATTRIBUTES	ACCEPT NR	YES	NO
Planning				Planning			
Material Verification				Detail Acceptance Verification			
Dimensional Inspection				Fastener Size, Type, Pattern			
Finish Requirements				Nut, Cam Locks, Misc Hardware			
Non Destructive Tests				Torque Requirements & Seal			
Functional Test				Interchangeability			
Identification				Functional Test			
Specification Compliance				Identification			
Supplier Data Reqrmt's Approval				Specification Approval			
Purchase Order Requirements				Purchasing Order & SDR Reqrmt's			
Tooling				Tooling			

All detail or assembly attributes shall be answered. Enter a check mark under "NR" (not required), "YES", or "NO".

Enter an "X" under "YES" when processes, identification, etc are verified by subsequent planning operations.

Remarks (Be specific. Make sketches if necessary. If more space is need for remarks, attach the paper(s) used to document them to this sheet.):

	Accept	Reject
Supplier Inspection:		
Supplier Engineer or Field Engineer:		
Supplier Management:		
Customer Witness (if applicable):		

FIRST ARTCILE INSPECTION/TEST REPORT (FAITR)
DRAWING NOTES CHECK SHEET

Date: Page: Of:
Part No:

Note No.	Requirement:	ACC.	REJ.	Remarks:

Additional Remarks:

FIRST ARTCILE INSPECTION/TEST REPORT (FAITR) Date: Page: Of:
Part No:

INSPECTION DIMENSIONAL CHECK SHEET

Item No.	Drwg Zone	Inspection Tool	Drwg Item	Tol	Actual Dim	ACC	REJ	Remarks