

DOCUMENT TEMPLATE QS-TP-10.7.3

FIRST PIECE INSPECTION (FPI) PLAN

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Please refer to QS-GD-10.7.2 Plan and Report Completion Guide for more information on using this template.

HYDRA-70 2.75-INCH ROCKET SYSTEM (HYDRA-70)

FY 20-24 PRODUCTION

FIRST PIECE INSPECTION (FPI) PLAN

SUPPLIER NAME

SUPPLIER LOCATION

APPLICABLE DRAWING NUMBER AND TITLE

TEST PLAN SUBJECT

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Prime Contract No: W31P4Q-20-D-0023

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The following is required prior to implementation of this FPI change into production hardware :

Engineering Change Proposal (ECP) / Contract Modification

Comments:

The FPI change shall not be implemented until receipt of approved indicated documentation.

A014P-###
DD MMM YYYY

DOCUMENT CHANGE LOG		
REVISION	DATE	PARAGRAPHS AFFECTED
-	DD MMM YYYY	Initial Issue

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1. INTRODUCTION

This First Piece Inspection (FPI) plan was created in preparation for the FPI report in accordance with (IAW) contract W31P4Q-20-D-0023 Statement of Work (SOW) paragraph C-5.2.2, Data Item Description (DID) DI-MISC-80809B and Contract Data Requirements List (CDRL) A014. This plan is not a CDRL requirement.

This document provides the information required to validate **part number (P/N), drawing name and description of validation.**

This change does not affect critical items. Or This change affects critical items. As such, the Critical Characteristic Control Plan needs review. Updates, if required, will be noted in the report.

All FPI samples, including all sub-components, will be fully conforming and compliant with all Technical Data Package (TDP) requirements. *<Note: If nonconforming or noncompliant material is planned to be used in the validation, then a FAT or TFAT will need to be performed to get ARSGM approval.>* FPI samples will be retained, at a minimum, until the report is approved.

The tests and inspections are defined in the test flow diagram, Master Test List, and any additional listed requirements.

2. APPLICABLE DOCUMENTS

The document baseline for applicable specifications and Industry Standards can be found on AS9102 Form(s) 2 Blocks 6 and 12 and AS9102 Form(s) 3 Block 6. Baseline documents not found in these areas are contained in Table I.

Where ASME Y14.5 or ASME Y14.100 is stated on a drawing, the current revision may not be applicable and the revision inclusive of the drawing practice/symbology shall be used.

Table I. Applicable Documents

DOCUMENT NUMBER	TITLE	REV	CNs*	NORs

*Change notices are for GD-OTS and GD-OTS supplier use only.

Any documentation with a more restrictive distribution statement than the Distribution Statement C indicated on the cover page is not included in this plan.

3. FLOW DIAGRAM AND TEST PROGRAM APPROACH

The test flow diagram, Figure 1, identifies the tests to be conducted for the test program in the order to be performed.

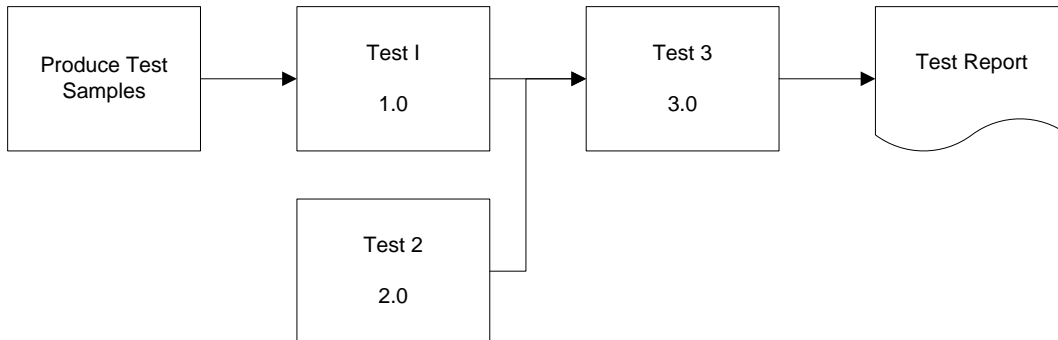


Figure 1. Test Flow Diagram

Each test/inspection will be performed one cycle for each sample. The accept/reject number will be accept on 0, reject on 1 unless otherwise indicated in the governing specifications.

4. TEST OBJECTIVES

The test/inspection objectives are to perform the test/inspection IAW the test flow diagram and AS9102 Forms 1, 2, and 3. This will validate the proposed change for incorporation into the Qualified Baseline to be used for production on contract W31P4Q-20-D-0023. Test success/failure criteria, test baseline, any required test duration, and quantity of test are defined in the Master Test List IAW documents listed in the applicable documents section.

The FPI samples shall be manufactured using the same facilities, production processes, methods and materials that will be used for production. Manufacturing process documentation (e.g. inspection documentation, work instructions, SOPs, machine settings, personnel training, etc.) will be reviewed for adequate detail and clarity to ensure product will be built correctly and in a repeatable manner. All parts manufactured for the validation will be accounted for in the report.

In the event that unforeseen test anomalies, deviations, discrepancies, or failures occur, testing will be placed on hold and the appropriate IPT will be notified. Examples include:

- Test instrumentation/equipment failure during test
- Improper test configuration
- Test result outside of listed requirement occurs
- Environmental conditions outside of required parameters

All required certifications are contained on AS9102 Form 2. Certifications listed will be reviewed for completeness.

5. MASTER TEST LIST (MTL)

The master test list can be found on AS9102 Form 3 for each part number in blocks 5, 6, 7, 7a, 7b, 7c, 7d, 8, 8b, and 8c located in Appendix A. All dimensions are in the units of measure specified on the governing prints. Each test/inspection will be performed one cycle for each sample. The accept/reject number will be accept on 0, reject on 1 unless otherwise indicated in the governing specifications. All characteristics test/inspections specified in the MTL will be validated during the execution of this plan.

Inspection and Test Equipment (ITE) to be used for this FPI is specified on Form 3 in block 7b. All measurement devices will be verified to be in calibration.

ITE has been reviewed for applicability. There are no changes to the baselined ITE therefore no ITE gage validations are required. OR There are no listed characteristics within the scope of this validation.

6. DATA REDUCTION, ANALYSIS AND PROCEDURE FOR VALIDATION OF TEST RESULTS

Actual test and inspection data records (actual recorded data) used shall be included within the report. The data records will be signed and dated by the person who performed the test or inspection. Actual signed data records may be supplemented with, but not replaced by, electronic spreadsheets to allow for data reduction.

The data records contained in AS9102 Forms 2 and 3 describe all data to be recorded. The data will be reviewed prior to the report submittal.

7. SCHEDULE ESTIMATE & MILESTONES

	<u>Expected Completion</u>
FPI Plan Approval	MMM 202x
Conduct FPI – Start / Test Duration	MMM 202x / # day(s)
FPI Report Approval	MMM 202x

8. PARTICIPATION

Government, Contractor, and Subcontractor participation roles and responsibilities are identified in Table II. The Government is invited to witness all test activities. The Government shall be given a minimum of 30 business days notification, email is acceptable, prior to the scheduled FPI date which includes production of the FPI samples.

Table II. FPI Roles and Responsibilities

	Government	GD-OTS	Subcontractor
Roles	<ul style="list-style-type: none">▪ Test team member	<ul style="list-style-type: none">▪ Test team lead▪ Test manager	<ul style="list-style-type: none">▪ Test conductor
Responsibilities	<ul style="list-style-type: none">▪ Review test data▪ Review test report	<ul style="list-style-type: none">▪ Review/approve test plan▪ Review/approve test report before submittal	<ul style="list-style-type: none">▪ Submit draft test plan▪ Collect test data▪ Conduct data reduction/analysis▪ Submit draft test report

9. LOCATION

Testing will take place at the following facilities:

Supplier
Supplier Address

No Government test facilities will be used in this validation.

10. SECURITY

There are no security requirements for this validation as all activities are unclassified.

11. PRODUCTION LOT NUMBER EFFECT

Option 1 - N/A The part does not use MIL-STD-1168 lot numbering.

Option 2 - The MIL-STD-1168 production lot number interfix will not increment as a result of the validation report approval.

Option 3 - The MIL-STD-1168 production lot number interfix will increment as a result of the validation report approval.

Appendix A. Master Test List Data Sheets

Number	Description	File
A1		

Appendix B. Ballooned Drawing(s)

Please check the Distribution Statement of the drawing(s) to be included. Do not include any document(s) that are of a more restrictive nature than the distribution statement of this plan.

Number	Description	File
B1		

Appendix C. Additional Supporting Documentation

Number	Description	File
C1		