GENERAL DYNAMICS
Ordnance and Tactical Systems

6/23/2023

DOCUMENT TEMPLATE QS-TP-10.7.1

(TAILORED) FIRST ARTICLE TEST ((T)FAT) PLAN

Latest template should be obtained from the SharePoint Subcontract Management collaboration page.

Black- Standard text. Only minor edits are allowed. All sections must be included.

Green = Fill in as appropriate.

File name format: A005-###-D0023-FAT-TFAT-Plan-Description----INI-DDMMMYY.docx

*(NOTE: File Names must be under 64 characters long and cannot contain spaces or the following invalid characters: ~ " # % & * : < >? / \ + { | } due to SharePoint file naming requirements.)*

Please review the document before submitting to GD-OTS approvers.

DELETE THIS PAGE PRIOR TO USE OF THE TEMPLATE.

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

GENERAL DYNAMICS
Ordnance and Tactical Systems

Msg.: W31P4Q-20-D-0023 HY70_FY20-24_GD-A005-###

Month DD, YEAR

Tactical Aviation and Ground Munitions Project Office
ATTN: SFAE-MSL-TA
Redstone Arsenal, AL 35898

Subject: TAILORED FIRST ARTICLE TEST PLAN

Ref: (a) Contract Reference: SOW C-5.2.1
PROGRAM: Hydra-70 Rocket System
CONTRACT NUMBER: W31P4Q-20-D-0023

Enclosure: (1) CDRL No. A005-###

In accordance with Reference (a), Enclosure (1) is herein provided as evidence of the delivery of the CDRL A005 covered by this letter and is complete as posted and requesting approval.

This report is available on the SharePoint web page at:
Hyperlink

Please contact me if you have any questions.

Sincerely,

Jay Dichard

Jay Dichard
Deputy Program Manager
Hydra Program

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GENERAL DYNAMICS
Ordnance and Tactical Systems

326 IBM Road, Building 862
Williston, VT 05495

Document No. A005-###
CAGE Code 05606

Date DD MMM YYYY

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

FY 20-24 PRODUCTION

TAILORED FIRST ARTICLE TEST (TFAT) PLAN

SUPPLIER NAME

SUPPLIER LOCATION

APPLICABLE DRAWING NUMBER AND TITLE

TEST PLAN SUBJECT

Prepared by:	Title:	Date:
Name of plan author	Quality Engineer	
Approved by:		
Name of PQE	Program Quality Engineer	
Name of SME (if applicable)	Subject Matter Expert	
Name of Subcontract Manager	Supplier Representative	
Name of IPT Lead	Name of IPT Lead	
Name of Program Manager	Program Manager	

Prime Contract No: W31P4Q-20-D-0023

Prepared for:
Tactical Aviation and Ground Munitions Project Office
ATTN: SFAE-MSL-TA
Redstone Arsenal, AL 35898

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

☐ Engineering Change Proposal (ECP) / Contract Modification

Comments:

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

THIS DOCUMENT CONTAINS A TOTAL OF 10 SHEETS

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

Table of Contents

List of Tables

List of Figures

List of Appendices

1. INTRODUCTION

This Tailored First Article Test (TFAT) plan was created in accordance with (IAW) contract W31P4Q-20-D-0023 Statement of Work (SOW) paragraph C-5.2.1, Data Item Description (DID) DI-NDTI-80566A and Contract Data Requirements List (CDRL) A005.

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 TFAT samples, including all sub-components, will be fully conforming and compliant with all Technical Data Package (TDP) requirements, except the following item(s). TFAT samples will be retained, at a minimum, until the report is approved.

<If there will be no nonconforming or noncompliant items used, delete the green text and table.>
The following components/sub-components to be used in this validation do not meet all of the requirements of the TDP. *<Describe the reason for using nonconforming/noncompliant samples.>*

<Insert Caption> Table x. Nonconforming/Noncompliant Items

Part Number	Nomenclature	Qty	Nonconformance/ Noncompliance	Validation Use

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

2. APPLICABLE DOCUMENTS

Table I identifies the document baseline for this validation and any outstanding changes that may affect the baseline.

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 (CNs) 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.

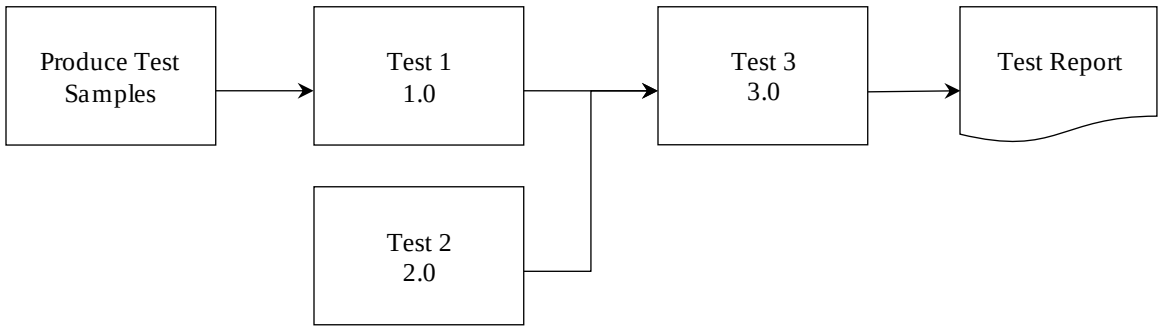

Figure 1. Test Flow Diagram

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 samples are defined in the MTL IAW documents listed in the applicable documents section.

The first article 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 Integrated Product Team (IPT) will be notified. Testing will resume in accordance with ARSGM PA recommendation. 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 MTL 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 TFAT 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

	Expected Completion
TFAT Plan Submittal to IPT	MMM 202x
TFAT Plan Approval	MMM 202x
Conduct TFAT-Start/Test Duration	MMM 202x / # day(s)
TFAT Report Submittal to IPT	MMM 202x
TFAT 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 calendar days notification, email is acceptable, prior to the scheduled TFAT date which includes production of the TFAT samples.

Table II. TFAT Roles and Responsibilities

	Government	GD-OTS	Subcontractor
Roles	▪ Test team member	▪ Test team lead ▪ Test manager	▪ Test conductor
Responsibilities	▪ Review/approve test plan ▪ Review test data ▪ Review/approve test report	▪ Review/approve plan before submittal ▪ Submit formal test plan ▪ Review/approve report before submittal ▪ Submit test report	▪ 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 Name
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

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		
Of the drawing		