

#### **DOCUMENT TEMPLATE QS-TP-10.7.2**

#### (TAILORED) FIRST ARTICLE TEST ((T)FAT) REPORT

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Msg.: W31P4Q-20-D-0023 HY70\_FY20-24\_GD-A013-###

Month DD, YEAR

Tactical Aviation and Ground Munitions Project Office

ATTN: SFAE-MSL-TA Redstone Arsenal, AL 35898

Subject: TAILORED FIRST ARTICLE TEST REPORT

Ref: (a) Contract Reference: SOW C-5.2.1 PROGRAM: Hydra-70 Rocket System

CONTRACT NUMBER: W31P4Q-20-D-0023

Enclosure: (1) CDRL No. A013-###

In accordance with Reference (a), Enclosure (1) is herein provided as evidence of the delivery of the CDRL A013 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

Deputy Program Manager

Jay Dichard

Hydra Program

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Document No. A013-### CAGE Code 05606

326 IBM Road, Building 862 Williston, VT 05495

Date <u>DD MMM YYYY</u>

# HYDRA-70 2.75-INCH ROCKET SYSTEM (HYDRA-70) FY20-24 PRODUCTION TAILORED FIRST ARTICLE TEST (TFAT) REPORT

**SUPPLIER NAME** 

# SUPPLIER LOCATION APPLICABLE DRAWING NUMBER AND TITLE TEST REPORT SUBJECT TEST DATE(S)

**DISTRIBUTION STATEMENT C** - Distribution Authorized to **U.S. Government Agencies and their Contractors**; Administrative and Operational Use, Export Controlled, 23 April 2020. Other requests for this document shall be referred to: Project Manager Tactical Aviation and Ground Munitions Project Office, ATTN: SFAE-MSL-TA, Redstone Arsenal, AL 35898.

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Prepared by:	Title:	Date:
Name of plan author	Quality Engineer	
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Name of PQE	Program Quality Engineer	
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Name of IPT Lead	Name of IPT Lead	
Name of Program Manager	Program Manager	
Duisso	Contract No. W21D4O 20 D 0022	

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.

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

#### Table of Contents

<u>Paragraph</u> <u>Pag</u>	<u> şe</u>
1 INTRODUCTION	.1
1.1 Test / Inspection Objectives	.1
1.2 Items Tested / Inspected	
1.3 Test / Inspection Requirements	.1
2 APPLICABLE REFERENCE DOCUMENTS	.1
3 TEST/INSPECTION REQUIREMENTS AND PROCEDURES	.2
4 TEST EQUIPMENT IDENTIFICATION	.2
5 TEST/INSPECTION FACILITY INSTALLATION AND SET-UP	.3
6 TEST/INSPECTION RESULTS AND ANALYSIS	.3
7 PRODUCTION LOT NUMBER EFFECT	.4
8 SUMMARY, CONCLUSION AND RECOMMENDATION	.4
List of Tables	
<u>Table</u> <u>Pag</u>	
Table I. Applicable Documents	2
List of Figures	
Figure Pierre 1 Text Flow Discourse	
Figure 1 Test Flow Diagram	2
List of Appendices	
<u>Appendix</u> <u>Pag</u>	<u>ge</u>
Appendix A. Master Test List Data Sheets.	5
Appendix B. Ballooned Drawing	5
Appendix C. Additional Supporting Documentation.	5

#### 1 INTRODUCTION

This Tailored First Article Test (TFAT) Report 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-80809B and Contract Data Requirements List (CDRL) A013.

This report contains the results associated with the execution of approved TFAT Plan A005-### and provides the test data to validate part number (P/N), drawing name and description of validation.

The tests and inspections are defined in the Test Flow Diagram (TFD), Master Test List (MTL), and any additional listed requirements.

#### 1.1 Test / Inspection Objectives

The TFAT satisfied its objective to perform the test/inspection IAW the test flow diagram and AS9102 Forms 1, 2, and 3. The results 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.

#### 1.2 Items Tested / Inspected

Delete lines that are not applicable. Black items are required.

Nomenclature: (e.g. drawing name)

NSN: (If there is an NSN for the test subject)

Model number or part number: (normally list the drawing number)

Serial or Lot number:

TFAT Lot Qty: (lot quantity manufactured for this validation)

Applicable engineering changes: (list only if not listed in applicable reference

documents)

Product item specification: (e.g. MIS-DTL spec or WS spec.)

Date of manufacture: (list date(s) validation samples were produced)

#### 1.3 Test / Inspection Requirements

Test / Inspection requirements are identified in the test flow diagram and the MTL.

#### 2 APPLICABLE REFERENCE 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.

Copy the table of Applicable Documents from the approved plan. Update as necessary and note the changes in this report.

**Table I. Applicable Documents** 

DOCUMENT NUMBER	TITLE	REV	CNs*	NORs

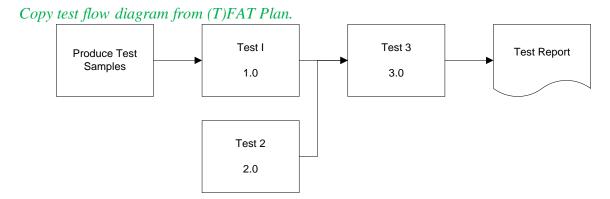
<sup>\*</sup>Change notices (CNs) are for GD-OTS and GD-OTS supplier use only.

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

#### 3 TEST/INSPECTION REQUIREMENTS AND PROCEDURES

The test flow diagram, Figure 1, identifies the tests conducted for the test program in the order to be performed. Test samples were selected from the production representative lot.

Any operation of the test item and any control conditions are described in the production work instructions.



**Figure 1 Test Flow Diagram** 

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 was performed one cycle for each sample. The accept/reject number is accept on 0, reject on 1 unless otherwise indicated in the governing specifications. The ballooned drawing has been included in Appendix # for reference.

#### 4 TEST EQUIPMENT IDENTIFICATION

Inspection and Test Equipment (ITE) used for this TFAT is specified on Form 3 in block 7b.

### A013-###

All test / inspection equipment, including equipment listed on the required test/inspection equipment list, were verified to be in calibration at the time of the test. Supporting calibration information is included in Appendix C.

#### OR

The GD-OTS witness verified all test / inspection equipment, including equipment listed on the required test/inspection equipment list, was in calibration at the time of the test.

ITE has been reviewed for applicability. There are no changes to the approved ITE therefore no ITE Validations were required.

#### OR

ITE has been reviewed for applicability. No Safety, Special, Critical, or Major Characteristics apply to this part.

#### 5 TEST/INSPECTION FACILITY INSTALLATION AND SET-UP

Testing took place at Supplier Name in Supplier City, State. No Government test facilities were used in this validation.

#### 6 TEST/INSPECTION RESULTS AND ANALYSIS

The completed data sheets are presented in AS9102 format in Appendix A: Form 1, Form 2 followed by all supporting certifications, test data, and Form 3. *If applicable, keep next sentence. If not, delete.* All data was captured electronically during the inspection. So, no handwritten Form 3s exist.

The first article samples were 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.) were reviewed for adequate detail and clarity to ensure product will be built correctly and in a repeatable manner. All parts manufactured for the validation are accounted for in section 1.2. TFAT samples will be retained, at a minimum, until the report is approved. Parts not used as validation samples will be used in production/scrapped/other.

Review of the certifications indicated that the product lot met all requirements of print Drawing Number Rev revision #, with TCN#(s)/NOR#(s).

All inspections on Form 3 for all processes meet the requirements of print Drawing Number Rev revision #, with TCN#(s)/NOR#(s) and were inspected in the planned quantities.

<Include any additional results or issues concerning the validation.>

<Include the following if the AS9102 FORMs have any red lines or corrections.>
The following red lines to the AS9102 forms for P/N ###### are changes from the approved (T)FAT Plan (A005-##) or are recording errors:

1. Change: Reason for Change:

2. Change: Reason for Change:

Actual recorded Test and Inspection data records are included in Appendix A. The results obtained are true and accurate. The test conductor, suppler management representative, GD- OTS witness, and Government witness signatures are included in the report.

#### 7 PRODUCTION LOT NUMBER EFFECT

Copy lot number interfix effect from the approved plan.

#### 8 SUMMARY, CONCLUSION AND RECOMMENDATION

All tests/inspections specified in the approved plan have been validated during the execution of test.

The TFAT results demonstrate the Part Number, Part Description, meets all validation requirements. GD-OTS approves this test report and recommends approval to incorporate the validated changes for the Part Description manufactured by Supplier/Facility Name in the Qualified Baseline.

#### 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		