

REQUEST FOR DEVIATION / WAIVER (RFD/RFW)

1. DATE (YYMMDD)
011130

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 2 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Depart of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.

2. PROCURING ACTIVITY NUMBER
L156146

PLEASE **DO NOT** RETURN YOUR COMPLETED FORM TO EITHER OF THESE ADDRESSES. RETURN COMPLETED FORM TO THE GOVERNMENT ISSUING CONTRACTING OFFICER FOR THE CONTRACT/

3. DODAAC

4. ORIGINATOR
a. TYPED NAME (First, Middle Initial, Last)
General Dynamics
Armament Systems

b. ADDRESS (Street, City, State, Zip Code)
291 NORTH STREET
SACO, ME 04072

5. (X one)
 DEVIATION WAIVER
6. (X one)
 MAJOR MINOR CRITICAL

7. DESIGNATION FOR DEVIATION / WAIVER

a. MODEL/TYPE
.50 CAL M.G.

b. CAGE CODE
26978

c. SYS. DESIG.
M2

d. DEV/WAIVER NO.
0155-W-0001

8. BASELINE AFFECTED
FUNCTIONAL PRODUCT ALLOCATED

9. OTHER SYSTEMS/CONFIGURATION ITEMS AFFECTED
YES NO

10. TITLE OF DEVIATION / WAIVER
M2 Rear Sight Assemblies

11. CONTRACT NO. AND LINE ITEM
DAAE20-99-D-0155/0001 CLIN 0005AB

12. PROCURING CONTRACTING OFFICER
a. NAME (First, Middle Initial, Last) Kristan Mendoza
b. CODE AMSTA-LC-CSCA c. TELEPHONE 99-762-0220

13. CONFIGURATION ITEM NOMENCLATURE
.50 CAL M.G. M2

14. CLASSIFICATION OF DEFECT NO.
a. CD NO. b. DEFECT NO. c. DEFECT CLASSIFICATION
 MINOR MAJOR CRITICAL

15. NAME OF LOWEST PART / ASSEMBLY AFFECTED
Assembly, Rear Sight

16. PART NO. OR TYPE DESIGNATION
12003047

17. EFFECTIVITY
NA

18. RECURRING DEVIATION / WAIVER
 YES NO

19. EFFECT ON COST/ PRICE
(\$)

20. EFFECT ON DELIVERY SCHEDULE
None if approved

21. EFFECT ON INTEGRATED LOGISTICS SUPPORT, INTERFACE OR SOFTWARE
None

22. DESCRIPTION OF DEVIATION / WAIVER
This Waiver requests approval to deliver 500 Rear Sight Assemblies where the material for some of the components is certified to specifications dated earlier or different than those required by the TDPL. See the following table for the specific situation for each of the parts.

23. NEED FOR DEVIATION / WAIVER The supplier of these components is using material purchased for a previous sight contract which had different requirements than the current contract. See the attached write-up in Block 22 for a further description of the need for this waiver. **NOTE: These parts are from the same production material as those covered by Waiver 0075-W-0020. This contract was omitted in error from the previous Request for Waiver.**

24. CORRECTIVE ACTION TAKEN
The supplier of the Sights has been directed to obtain conforming raw material for all future contracts.

25. SUBMITTING ACTIVITY

a. TYPED NAME (First, Middle Initial, Last) Sterlin C. Clockedile
b. TITLE Configuration Manager
c. SIGNATURE *Sterlin Clockedile*

26. APPROVAL DISAPPROVAL
a. RECOMMEND APPROVAL DISAPPROVAL

b. APPROVAL APPROVED DISAPPROVED
c. GOVERNMENT ACTIVITY

d. TYPED NAME (First, Middle Initial, Last) e. SIGNATURE f. DATE SIGNED (YYMMDD)

g. APPROVAL APPROVED DISAPPROVED
h. GOVERNMENT ACTIVITY TACOM-ARDEC, AMSTA-AR-CCL-F

i. TYPED NAME (First, Middle Initial, Last) Ronald E. Ebo
j. SIGNATURE *Ronald Ebo*
k. DATE SIGNED (YYMMDD) 2001/220

0155-W-0001

Continuation Sheet

Block 22. Description of Deviation/Waiver (Cont'd)

M2 REAR SIGHT ASSEMBLY
PART NUMBER 12003047
GDAS SACO P/N 1772

GOV'T P/N	DESCRIPTION	PROBLEMS FOUND	ACTION
12003048	REAR SIGHT BASE	Steel: spec ASTM A109-93 cert date -90	NOTE 1
12003049	WINDAGE SCREW BUSHING	Steel: Spec ASTM A331-95 cert to -81	NOTE 1
12003050	LEAF STOP	Steel: Spec ASTM A331-95 cert to -81	NOTE 1
6008809	WINDAGE SCREW KNOB	Steel: Spec ASTM A108-95 cert dated -90	NOTE 1
5013610	ELEV SCREW KNOB	Steel: Spec ASTM A108-95 cert dated -90	NOTE 1
12003249	LEAF	Steel: Spec ASTM A108-95 cert dated -73	NOTE 1
5163397	COMP SPRING	Steel: Spec ASTM A228-93 cert dated -86	NOTE 1
12003051	RISER	Steel: Spec ASTM A108-95 cert dated -90	NOTE 1
5013160	WINDAGE SCREW	Steel: Spec ASTM A108-95 cert dated -88	NOTE 1
5013167	WINDAGE SCALE SCREW	Steel: Spec ASTM A108-95 cert dated -88	NOTE 1
5013162	HEADLESS STRAIGHT PIN	Spec: W1 to ASTM A686 or 1095 to A576 Cert. to W1 and 1095 to ASTM A108	NOTE 2
5013155	WINDAGE CLICK PLUNGER	Spec: W1 to ASTM A686 or 1095 to A576 Cert. to W1 and 1095 to ASTM A108	NOTE 2
12003250	SLIDE	Casting to MIL-S-22141B: not listed on cert	NOTE 3
12003052	SPRING	Spec: ASTM A684, cert does not list spec	NOTE 4

DISTRIBUTION STATEMENT A : UNLIMITED

Block 22. Description of Deviation/Waiver (Cont'd)NOTE 1: ASTM Specification revision dates.

Part Numbers: 12003048, 12003049, 12003050, 5013610, 12003249, 5163397, 12003051, 6008809, 5013160, and 5013167.

For each of the listed parts, we have a situation where the part was produced from the correct ASTM steel but either the date on the certification or the revision level of the ASTM specification does not match the revision level asked for by the TDPL. The steel is not in question, but the date on the certification is. From past reviews of ASTM specification, I have determined that there is no significant difference between revision levels. This is especially true for carbon and low alloy steel chemistries. Unfortunately, in this case, I do not have copies of the specific documents and cannot make a revision to revision review. In these cases, the parts are made from the steel specified, but we cannot certify this steel to the ASTM specification revision required.

NOTE 2: Wrong ASTM Specification listed on certification.

Part numbers: 5013162 and 5013155.

These two parts are made from the same heat of steel. The print requirement for this steel is W1 per ASTM A686 or 1095 per ASTM A576. The original certification from Burgon Tool Steel shows the Grade as W1 Drill Road to ASTM A108. The original purchaser of this steel (F. C. Phillips) had the steel tested by an independent testing laboratory that certified the steel to AISI 1095. Unfortunately, they did not certify the steel to either ASTM specification on the print.

We have the following situation:

1. The steel is certified to W1 and 1095, both of which are listed on the print.
2. The steel is certified to ASTM A 108 (Cold Finished Carbon Steel Bars), which is not on the print.
3. The steel is not certified to ASTM A686 (Tool Steel, Carbon) or A576 (Hot Finished Carbon Steel Bars).

Both ASTM A108 and A576 are for Carbon Steel Bar. Both meet the requirements of ASTM A29 (General Requirements for Steel Bars...). The only significant difference between A108 and A576 is the finishing method. Cold versus Hot. After machining and heat treating, it would be impossible to tell the difference between the two steels. We have a situation where parts are made from the steel chemistry specified, but the certification does not match the print exactly in the ASTM callout.

DISTRIBUTION STATEMENT A: UNLIMITED

Block 22. Description of Deviation/Waiver (Cont'd)NOTE 3: Casting certification.

Part Number: 12003250.

The print calls for the casting to be made in accordance with MIL-S-22141; the certification does not reference this specification. A review of the chemical analysis of the heat shows it meets the chemical requirements of the specification.

NOTE 4: ASTM Specification not listed.

Part Number: 12003052.

The print calls for 1050 to 1074 steel per ASTM A684 (Cold Rolled High Carbon Steel Strip). The certification for this part is for 1074 cold rolled spring steel, but does not include a reference to the ASTM specification. The chemistry and rolling requirements of the steel meets the specification. In addition, the heat treatment of the parts produced the hardness within the required limits. The deficiency with the parts is the lack of the ASTM designation on the certification.

FAX NOTE: To Jim Pace
 FAX # (309)782-6139
 TEL # (309)782-8199

9/24/01

Jim, for your request to R. Durkin, the following is a list of the materials used in the parts of the rear sight assembly addressed in our request for waiver 0075-W-0020.

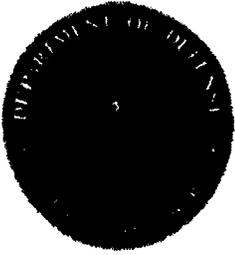
FROM:

Startin Clockadile
 GENERAL DYNAMICS ARMAMENT SYSTEMS
 SACO OPERATIONS
 SACO, MAINE

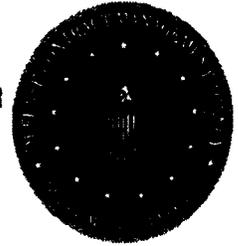
TEL # (207)286-3172

SUBJECT: M2 REAR SIGHT ASSEMBLY: PN 12003047

QTY P/R	DESCRIPTION	PERT MATERIALS	ACTUAL MATERIAL OR CRT	QTY P/R
12003048	REAR SIGHT BASE	Steel: ASTM A108-90 Temp 4 or 5	A108-90 Temp 4 or 5, or A811010	1774
12003049	WINDAGE SCREW BUSHING	Steel: 4140, 4150 to ASTM A331-96	4140/42 to ASTM A331-91	1775
12003050	LEAF STOP	Steel: 4140, 4150 to ASTM A331-96	4140/42 to ASTM A331-91	1777
6008809	WINDAGE SCREW NUTS	Steel: 1018 thru 1022, 1117, 1118, ASTM A108-96	1018 to ASTM A 108-90	1778
5013810	SLW SCREW NUTS	Steel: 1117, 1118 ASTM A108-96	1117 to ASTM A108-96	1780
12003049	LEAF	Steel: 1018 thru 1022 ASTM A108-96	1018 to ASTM A108-96	1781
5013182	HEADLESS STRIKET PIN	Spec: W1 to ASTM A486 or 1096 to A875	W1 & 1096 to ASTM A108	1783
12003050	SLIDE	Coating: IC6620 to MIL-9-23141B	Coating: IC6620	1787
5168967	COMP SPRING	Steel: ASTM A228-93	ASTM A228-96	1788
6013185	WINDAGE CLACK FLANGER	Spec: W1 to ASTM A486 or 1096 to A875	W1 & 1096 to ASTM A108	1790
12003051	NUTS	Steel: 1018 thru 1040 ASTM A108-96	1018 to ASTM A 108-90	1791
5013180	WINDAGE SCREW	Steel: 1117-1118 ASTM A108-96	1117 to ASTM A108-96	1794
5013167	WINDAGE SCALE SCREW	Steel: 1117-1118 ASTM A108-96	1117 to ASTM A108-96	1795
12003052	SPRING	Spec: 1074-1074 to ASTM A484	1074	1797



**DEFENSE CONTRACT MANAGEMENT AGENCY
DEFENSE CONTRACT MANAGEMENT AGENCY MANCHESTER
PEASE FIELD OFFICE BLDG 247
302 NEWMARKET STREET
PEASE ANGB, NH 03803-0157**



IN REPLY

REFER TO Don Jackson, QAR
General Dynamics Armament Systems
291 North St.
Saco, Me. 04072

Sept. 25, 2001

In reply to your request concerning GDAS request for a waiver for the materials used on the Rear Sight Assembly.(0075-W-0020). Material certifications presented represented material used in the manufacture of the parts in the early 1990's. The materials are all carbon steel (1095, 1074 steels ASTM 108) as specified. The only problem was that the ASTM's and Mil spec's specified have since been revised. The material specifications have not changed only the revision dates of the ASTM's or Mil spec.s. Chemical analysis was performed on all parts and found to meet requirements of current specifications.

Don Jackson



PRECISION CASTINGS OF TENNESSEE, INC.

P. O. BOX 8088 • GALLATIN, TENN. 37068
FACTORY ADDRESS 421 CALVERT DRIVE, GALLATIN, TENN. 37068
PHONE (615) 481-8080
FAX (615) 481-8881

Date APRIL 16, 1994
PCT No. 8884
Quantity 110
Packing Sls No. 21882
Customer Order No. 4949
Part No. 1322386
Heat No. 21128

Customer LIGHTHOUSE MFG. CO., INC.
2 CENTENNIAL DRIVE
FRABODY, MA 01906

Alloy Specification 0420

CHEMICAL ANALYSIS

C	Mn	P	S	N	OP	Mo	As	Co	Ti	REMARKS	W	Cu	Zn	Mg	Si	Al
.23	.08	.02	.01	.70	.00	.22	BASE									

MECHANICAL PROPERTIES

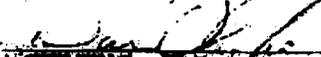
LOT NO	YIELD STRENGTH LB SQ IN	TENSILE STRENGTH LB SQ IN	ELONG IN 2 IN	HARDNESS	REDUCT ORG OF AREA PERCENT

Heat Treatment ANNEAL
X-Ray PER MIL-STD 2176 CLASS 2 GRADE C AND ACCEPTED
Penetrant Inspection HPI PER MIL-STD 2175 CLASS 2 GRADE C AND ACCEPTED
Surface Finish _____
Other REPORTS AND X-RAY FILM ENCLOSED WITH SHIPMENT

We hereby certify to the chemical analysis and mechanical properties reported herein and to the fact that they were determined in conformance with the specifications.

Drawn to and subscribed before me this 14TH day APRIL 1994

Precision Castings of Tennessee, Inc.


DONALD F. OBARSKI

QUALITY ASSURANCE DIRECTOR

PRECISION INVESTMENT CASTINGS

10/17/88 (REV) 10/17/88

10/17/88 (REV) 10/17/88



CERTIFICATE OF ANALYSIS

Burgin Tool Steel Co. Inc.

Two Mill Road • Box 1970 • Hampton, New Hampshire 03843

Customer's No.	Our No.	Date
R-7652	83049	3/25/56

S
O
L
D
T
O

F. C. Phillips Machine Co.
471 Washington St.
Stoughton, MA. 02072

Item No.	SIZE	GRADE
1.	3/16" Dia. x 12 ft.	SW-A-104 S-1 Drill Rod

#	Wt	Qty	Car	Mang	Phos	Sul	Si	Cr	Cu	Mn	Pb	Co	Ni
1.	51389	60 bars	1.03	.35	.009	.011	.28	1.4					

Class for analysis



PERFORMANCE STEEL WAREHOUSE **NO. 2741523**
 81/22/91 28077 3A 82/22/91

I. D. MACHINE INC.
118 BROADWAY
NEW YORK
TRUCK
 SHIP TO: **7815**

QTY	QUANTITY	PCS	PRICE	UNIT	TYPE OF MATERIAL	FINISH	EDGE	THICKNESS	LENGTH	WIDTH	WEIGHT
SC00	300				CR SPC STEEL 1074	ANNEALED			0.0350	0.8750	96.0
									1.001	1.005	30000
									0.881	0.885	30000

NOTE: QUANTITY-LBS IS QUANTITY ORDERED, NOT NECESSARILY SHIPPED. COIL NO. 7267101
 ORDER INSTRUCTIONS:

SHIP EXTRA CHARGES ORDER INSTRUCTIONS COIL NO.

477345 7267101 *spring*
 .750 .610 .010 .0095 .262 7267101

CHEMICAL ANALYSIS PHYSICAL PROPERTIES

Certification

Signature: *[Handwritten Signature]*
 Title: *[Handwritten Title]*



CERTIFICATION OF CONFORMANCE
 TO THE REQUIREMENTS OF THE
 AMERICAN SOCIETY OF MECHANICAL ENGINEERS
 SPECIFICATION FOR STEEL SHEET AND STRIP
 STANDARD SPECIFICATION FOR STEEL SHEET AND STRIP
 A 1008-82