ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeal of)	
Hanley Industries, Inc.)))	ASBCA No. 56584
Under Contract No. W52P1J-05-C-0076)	
APPEARANCE FOR THE APPELLANT:		Ryan K. Manger, Es Manger Law, LLC St. Louis, MO
APPEARANCES FOR THE GOVERNMEN	NT:	Raymond M. Saund Army Chief Trial

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OPINION BY ADMINISTRATIVE JUDGE PAUL

This is a timely appeal of a contracting officer's (CO's) decision terminating appellant Hanley Industries, Inc.'s (Hanley's) supply contract for default. The Contract Disputes Act of 1978, 41 U.S.C. §§ 7101-7109 is applicable. In a decision promulgated on 29 November 2012, the Board denied the government's motion for summary judgment. 13 BCA ¶ 35,195. Familiarity with that decision is presumed. Subsequently, a five-day hearing was held in St. Louis, Missouri.

FINDINGS OF FACT

1. On 29 September 2005, the U.S. Army Sustainment Command (Army) issued Contract No. W52P1J-05-C-0076 to Hanley to supply 37,718 MK45-1 Electric Primers (R4, tab 1 at 1-3). The MK45 primer initiates the propelling charge for shells fired from U.S. Naval warships (compl. and answer ¶ 2). 13 BCA ¶ 35,195 at 172,685. The firm-fixed-price contract had a total contract amount of \$1,870,812.80 with a unit price of \$49.60 for each of the primers. The negotiated contract included four option years with unit prices as follows: FY06, \$49.63; FY07 \$51.30; FY08 \$53.04; and FY09, \$54.84. (R4, tab 1 at 1-3)

2. The contract incorporated standard FAR and DFARS clauses by reference, including FAR 52.249-8, DEFAULT (FIXED-PRICE SUPPLY AND SERVICE) (APR 1984) (R4, tab 1 at 36). The contract specifically provided that FAR and DFARS clauses which

were incorporated by reference, "the full text of which will be made available upon request, [have]...the same force and effect as if set forth in full text" (*id.* at 15).

3. The contract included, in full text, the Local 52.246-4506, STATEMENT OF WORK FOR STATISTICAL PROCESS CONTROL (FEB 1999) clause, also known as SPC. That clause described in great detail Hanley's responsibilities including its "commitment to continuous process improvement." Various subsections of the clause set forth requirements for, *inter alia*, "SPC Training," "Manufacturing Controls," "Determination of SPC Use," "Process Stability and Capability," "Control Chart Policy," "Vendor/Subcontractor Purchase Controls," "SPC Audit System," "SPC Records," and "Control of Process/Operation Parameters or Characteristics" (*id.* at 8-10).

4. Also included in the contract was the Local 52.209-4511, FIRST ARTICLE TEST (GOVERNMENT TESTING) (MAY 1994) clause, which provided:

a. The first article shall consist of: ONE HUNDRED THIRTY MK 45 MOD 1 PRIMERS AND 5 EACH OF EVERY COMPONENTS PART AND SUBASSEMBLY (LESS EXPLOSIVE COMPONENTS) PER MIL-P-18714 REV D, AMENDMENT 1 AND ADL 10001-2434755K; which shall be examined and tested in accordance with contract requirements, the item specification(s), the Quality Assurance Provisions (QAPS) and drawings listed in the Technical Data Package.

b. The first article shall be delivered to: SEVENTY-FOUR COMPLETE MK 45 MOD 1 PRIMERS TO: NAVAL SURFACE WARFARE CENTER, DAHLGREN DIVISION, 17320 DAHLGREN ROAD, DAHLGREN, VA 22446-5100/FITY [sic]-SIX COMPLETE PRIMERS AND FIVE EACH OF EVERY COMPONENT PARTS AND SUBASSEMBLY (LESS EXPLOSIVE COMPONENTS) TO: NAVAL SURFACE WARFARE CENTER, IDIAN [sic] HEAD DIVISION, 101 STRAUSS AVENUE, INDIAN HEAD, MD 20640. The first article shall be delivered by the Contractor Free on Board (FOB) destination except when transportation protective service or transportation security is required by other provision of this contract. If such is the case, the first article shall be delivered FOB origin and shipped on Government Bill of Lading. c. The first article shall be representative of items to be manufactured using the same processes and procedures as contract production. All parts and materials, including packaging and packing, shall be obtained from the same source of supply as will be used during regular production. All components, subassemblies, and assemblies in the first article sample shall have been produced by the Contractor (including subcontractors) using the technical data package provided by the Government.

d. Prior to delivery, each of the first article assemblies, subassemblies, and components shall be inspected by the Contractor for all contract, drawing, QAP and specification requirements except for any environmental or destructive tests indicated below: N/A. The Contractor shall provide to the Contracting Officer at least 15 calendar days advance notice of the schedule date for final inspection of the first article. Those inspections which are of a destructive nature shall be performed upon additional sample parts selected from the same lot(s) or batch(es) from which the first article as selected. Results of contractor inspections (including supplier's and Vendor's inspection records when applicable) shall be verified by the Government Quality Assurance Representative (QAR). The QAR shall attach to the contractor's inspection report a completed DD Form 1222. One copy of the contractor's inspection report with the DD Form 1222 shall be forwarded with the first article; two copies shall be provided to the Contracting Officer. Upon delivery to the Government, the first article may be subjected to inspection for all contract, drawing, specification, and QAP requirements.

e. Notwithstanding the provisions for waiver of first article, an additional first article sample or portion thereof, may be ordered by the Contracting Officer in writing when (i) a major change is made to the technical data, (ii) whenever there is a lapse in production for a period in excess of 90 days, or (iii) whenever a change occurs in the place of performance, manufacturing process, material used, drawing, specification or source supply. When conditions (i), (ii), or (iii) above occurs, the Contractor shall notify the Contracting Officer so that a determination can be made concerning the need for an additional first article sample or portion thereof, and instructions provided concerning the submission, inspection and notification of results. Costs of the first article testing resulting from production process change, change in the place of performance, or material substitution shall be borne by the Contractor.

f. Rejected first articles or portions thereof not destroyed during inspection and testing will be held at the government first article test site for a period of 30 days following the date of notification of rejection, pending receipt of instructions from the Contractor for the disposition of the rejected material. The Contractor agrees that failure to furnish such instructions within said 30 day period shall constitute abandonment of said material by the Contractor and shall confer upon the Government the right to destroy or otherwise dispose of the rejected items at the discretion of the Government without liability to the Contractor by reason of such destruction or disposition.

(R4, tab 1 at 15-16)

5. In addition, the contract contained the Local 52.245-4537, ACCEPTANCE INSPECTION EQUIPMENT (AIE) (FEB 2002) clause, which stated:

a. Acquisition, maintenance, and disposition of Acceptance Inspection Equipment (AIE) shall be in accordance with ANSI/NCSL Z540-1 or ISO 10012-1. AIE shall be used to assure conformance of components and end items to contract requirements. AIE shall include all types of inspection, measuring, and test equipment whether Government furnished, contractor designed, or commercially acquired, along with the necessary specifications, and the procedures for their use.

b. The Contractor shall provide all Acceptance Inspection Equipment (AIE) necessary, except for the Government Furnished Equipment (GFE) listed in paragraph (g.8). The GFE shall be provided in accordance with the Government Property clause of this contract. The Contractor is responsible for contacting NSWC Corona at least 45 days in advance of the date the GFE is required to schedule delivery. Government furnished AIE shall not be used by the contractor or his subcontractor in lieu of in-process or work gages.

c. Contractor AIE designs, specifications, and procedures for Critical, Major, Special, and Minor characteristics shall be submitted to the Government for review and approval in accordance with the Contract Data Requirements List, DD Form 1423. All Contractor AIE documentation requiring Government approval shall contain sufficient information to permit evaluation of the AIE's ability to test, verify or measure the characteristic or parameter with the required accuracy and precision. Contractor designed AIE requiring Government approval shall be made either in accordance with the equipment drawings specified in section C of contract (Description/Specification Section), or in accordance with any other design documentation provided that it is approved by the Government. The Government will approve the AIE documentation or provide requirements for approval within 45 days of receipt. The Contractor shall be responsible for any delays resulting from late submission of AIE documentation to the Government for approval, and any delays resulting from the submission of inadequate or incomplete AIE documentation.

d. The contractor must ensure that all AIE is approved and available for use prior to First Article Submission, if First Article is required, or prior to initiation of production under this contract.

e. Resubmission of AIE design, specification, and procedure documentation for approval on a follow-on contract is not required provided inspection characteristic parameters specified in the current technical data package and the previously approved AIE documentation remain unchanged. The contractor shall provide the contract number and identify previously approved AIE documentation that meets the above prerequisites. f. The Government reserves the right to disapprove at any time during the performance of this contract, use of any AIE not meeting the requirements of the approved design, specification, or procedure documentation.

g. Navy Special Interface Gage Requirements (NSIG)

1. The Navy Special Interface Gages listed under this clause will be forwarded to the Contractor for joint use by the Contract Administration Office (CAO) and the Contractor.

2. The Contractor may substitute contractor designed and built AIE for the NSIG noted as applicable in paragraph (g)(8). However, the designs require Government approval and the contractor AIE hardware requires Government certification. AIE designs shall be submitted in accordance with paragraph (c). The contractor shall notify NSWC Corona prior to submission of AIE for certification. Two copies of each Government approved contractor AIE drawing shall accompany the contractor AIE hardware sent to the Government for certification. The Government shall perform the contractor AIE certification, return the hardware and provide notification of acceptance or rejection to the Contractor within 45 days of receipt of the contractor AIE. The contractor shall be responsible for any delays resulting from late submission of documentation or hardware. The Contractor shall also submit the calibration periods for each contractor AIE for approval. The Government shall affix Calibration stickers to the contractor AIE for Quality Assurance Representative (QAR) identification.

3. The NSIGs are provided for verification of selected interface dimensions and do not constitute sole acceptance criteria of production items or relieve the Contractor of meeting all drawing/specification requirements under the contract.

4. Items that fail to be accepted by the applicable NSIGS may be inspected by another means to determine acceptance or rejection, provided the alternate inspection method is acceptable to the government approval authority.

5. The Government shall not be responsible for discrepancies or delays in production items resulting through misuse, damage or excessive wear to the NSIGs.

6. Calibration and repair of the NSIGs shall only be performed as authorized by the Naval Surface Warfare Center (NSWC), Corona Division. Repair is at no cost to the Contractor unless repair is required due to damage to the gages resulting from Contractor fault or negligence. Damaged, worn, or otherwise unserviceable NSIGs shall be brought to the immediate attention of the CAO and NSWC Corona. The Contractor shall not make any adjustments, alterations or add permanent markings to NSIG hardware unless specified by the NSIG operating instructions or authorized by the Designated Technical Activity.

7. Within 45 days after final acceptance of all production items, the NSIGs shall be shipped to NSWC, Corona Division, ATTN: Receiving Officer, Bldg 575, Gage Laboratory, 1999 Fourth St., Norco, CA 92860-1915.

The following specifications are applicable:

(i) Shipping, MIL-STD-2073, "DOD Standard Practice for Military Packaging"

(ii) Marking, MIL-STD-129, "Marking for Shipment and Storage".

8. The following NSIGs shall be provided and are mandatory for use except as noted by an (x) for paragraph (g.2) applicability.

Para.								
g.2								
applies	Drawing	Rev	Char	NSIG	Qty	Dimensions	Weight	Value
	685477	N	M105	6117015	3	1.75x1	2lb	\$1,000
				Pitch Dia.		.7286		
			M106	6117009	3	1.75x3	2lb	\$1,500
				o dia.006				
			M107	6117015	3	1.75x1	2lb	\$1,000
				o dia.005				
	1275047	N	M107	3030384	3	10x10x12	60lb	\$4,200
				o dia.001				
			M108	3236972	3	3x5	5lb	\$2,000
				o dia.002				
			M110	3030939	3	3x3x3	2lb	\$190
			M111	3236972	3	3x5		\$2,000
				o dia.002				
			M121	3236972	3	3x5	5lb	\$2,000
				o dia.005				
			M122	3236973		1x2.5	1lb	\$200
				o dia.005		1		
			M118	6117014	3	.75x1.12	1lb	\$200
				o dia.005				
	2434755	M	M104	3030396	3	1x1x3	1lb	\$200
			.000 Min					
			M105	3030936	3	1x1x3	1lb	\$200
			.018 MAX					

(R4, tab 1 at 16-17)

6. Also contained in the contract was the Local 52.246-4506, STATISTICAL PROCESS CONTROL (SPC) (FEB 2004) clause, which provided:

a. In addition to the quality requirements of the technical data package, the Contractor shall implement Statistical Process Control (SPC) in accordance with a government accepted SPC Program Plan. Control chart techniques shall be in accordance with the American National Standards Institute (ANSI) B1, B2 and B3. Alternate SPC charting methods may be proposed and submitted to the Government for review.

b. The SPC Program Plan developed by the contractor shall consist of a general plan and a detailed plan. The plans shall be structured as delineated on the Data Item Description referenced in the DD Form 1423. The general and the detailed plans shall be submitted to the government for review per DD Form 1423 requirements. Notification by the Government of acceptance or nonacceptance of the plans shall be provided in accordance with the timeframes specified on the DD Form 1423. Once a general plan for a facility has been approved by this Command, the approval remains in effect for subsequent contracts as long as the contractual requirements remain substantially unchanged from contract to contract. Therefore, resubmission of a previously accepted general SPC plan is not required if current SPC contract clause and Data Item Description (DID) requirements are fulfilled. If this Command has previously accepted the general SPC plan under essentially the same SPC contractual requirements, so indicate by providing the Contracting Officer with the following information:

Date of Acceptance

Contract Number(s)

c. The contractor is responsible for updating the general plan to current SPC contractual requirements. If errors or omissions are encountered in a previously accepted SPC general plan, opportunities for improvement will be identified by the Government, and corrective action shall be accomplished by the contractor.

d. A milestone schedule will be submitted for those facilities that do not have, or have never had, a fully implemented SPC program and will not have a fully operational SPC program once production is initiated. The milestones shall provide a time-phased schedule of all efforts planned relative to implementation of an SPC program acceptable to the Government. A milestone schedule shall include implementation start and complete dates for those SPC subjects addressed in Part II of this clause. The milestone schedule shall only include those actions that cannot be accomplished prior to first article or the initiation of production, if a first article is not required. Milestones shall be developed for each commodity identified for SPC application. Milestones shall be submitted through the Government Quality Assurance Representative to the Contracting Officer for review and acceptance. Any deviations from the accepted milestones, to include justification for such deviations, shall be resubmitted through the same channels for review. The Government reserves the right to disapprove any changes to the previously accepted milestones. Notification by the Government of the acceptance or non-acceptance of the milestones shall be furnished to the Contractor by the Contracting Officer.

e. The Contractor shall review all process and operation parameters for possible application of SPC techniques. This review shall include processes and operations under the control of the prime contractor and those under the control of subcontractor or vendor facilities. A written justification shall be included in the detailed plan for each process and operation parameter that controls or influences characteristics identified as critical, special, or major which have been deemed impractical for the application of SPC techniques. A pamphlet on application of SPC for short production runs is available through the Contracting Officer.

f. Statistical evidence in the form of control charts shall be prepared and maintained for each process or operation parameter identified in the detailed plan. These charts shall identify all corrective actions taken on statistical signal. During production runs, control charts shall be maintained in such a manner to assure product is traceable to the control charts. At the conclusion of the production run, a collection of charts traceable to the product, shall be maintained for a minimum of three years. The control charts shall be provided to the Government for review at any time upon request.

g. When the process or operation parameter under control has demonstrated both stability and capability, the Contractor may request, in writing, through Administrative Contracting Officer (ACO) and Contracting Officer (CO) channels to the Product Assurance and Test Directorate, that acceptance inspection or testing performed in accordance with contract requirements be reduced or eliminated. Upon approval by the CO, acceptance shall then be based upon the accepted SPC plan, procedures, practices and the control charts.

h. The Government will not consider requests for reduction or elimination of 100% acceptance inspection and testing...if any one of the following conditions exists:

(1) The existing process currently utilizes a fully automated, cost effective, and sufficiently reliable method of 100% acceptance inspection or testing for an attribute-type critical parameter or characteristic.

(2) The Contractor utilizes attribute SPC control chart methods for the critical parameter or characteristic.

(3) The critical parameter or characteristic is a first order, single point safety failure mode (nonconformance of the critical parameter or characteristic in and of itself would cause a catastrophic failure).

i. The Government will only consider reduction or elimination of the 100% acceptance inspection or test requirement for other critical parameters or characteristics if either of the following conditions is met:

(1) The process is in a state of statistical control utilizing variable control chart methods for the critical parameter or characteristic under control and the process performance index (Cpk) is at least 2.0. The Contractor shall maintain objective quality evidence through periodic audits that the process performance index is being maintained for each production delivery.

(2) The critical parameter or characteristic is conclusively shown to be completely controlled by one or more process or operation parameters earlier in the process, and those parameters are in a state of statistical control utilizing variable data, and the product of the probability of the conformance for each earlier parameter associated to the critical characteristic is better than or equal to a value equivalent to that provided by a Cpk of at least 2.0. The Contractor shall maintain objective quality evidence through periodic audits that the process performance indexes are being maintained for each production delivery.

j. For characteristics other than critical, requests for reduction or elimination of acceptance inspection and testing shall be considered when the process performance index is greater than or equal to a Cpk of 1.33 for variables data. Requests shall be considered for attributes data when the percent beyond the specification limits is less than or equal to .003 (Cpk=1.33).

k. Process or operation parameters under reduced or eliminated inspection or testing that undergo a break in production less than 6 months in length, may continue to operate under reduced or eliminated inspection or testing provided there has been no degradation below a Cpk of 1.33 (2.0 for criticals). Any break in production greater than 6 months shall require resubmission of the request for reduction or elimination of inspection or testing through the same channels cited in paragraph (g) above.

1. Not used.

m. Immediately following a change to a process or operation parameter under reduced or eliminated inspection, the process capability (Cp) or process performance indexes (Cpk) shall be recalculated and documented for variable data; the grand average fraction defective shall be recalculated for attribute data. If any of these values have deteriorated, immediate notification shall be made to the Government along with the associated documentation. Return to original inspection and test requirements may be imposed as stipulated in paragraph n below.

n. The Government reserves the right to withdraw authorization to reduce or eliminate final acceptance inspection or testing and direct the Contractor to return to original contract inspection or test procedures at any indication of loss of process control or deterioration of quality.

(R4, tab 1 at 17-19)

7. In addition, the contract included the Local 52.246-4530, SUBMISSION OF PRODUCTION LOT SAMPLES (GOVERNMENT TESTING) (MAY 1994) clause, which provided:

a. A lot acceptance test sample is required to be submitted by the Contractor from each production lot tendered to the Government for acceptance. This sample shall consist of: ONE HUNDRED FIVE MK 45 MOD 1 PRIMERS PER MIL-P-18714 REV D, AMENDENT 1 AND ADL 10001-2434755K. The sample units shall be delivered by the Contractor Free on Board (FOB) destination, except when transportation protective service of transportation security is required by other provision of this contract. When such is the case, the sample units shall be delivered FOB origin and shipped to the test facility identified below on a Government Bill of Lading for the following tests:

TEST

AS SPECIFIED IN TABL 1 OF MIL-P-18714 REV D W/AMEND 1 DETAIL STRIP, BLACK POWDER AND PACKING

REQUIREMENTS

RADIOGRAPHIC, ELECTRICAL RESISTANCE, FUNCTIONAL, BALLISTIC

SAMPLE-

FORTY-NINE MK 45 MOD 1 PRIMERS TO NSWC DAHLGREN AND FIFTY-SIX MK 45 MOD 1 PRIMERS TO NSWC INDIAN HEAD

TEST FACILITY:

NAVAL SURFACE WARFARE CENTER, DAHLGREN DIVISION

17320 DAHLGREN ROAD DAHLGREN, VA 22446-5100

NAVAL SURFACE WARFARE CENTER, INDIAN HEAD DIVISION 101 STAUSS AVENUE INDIAN HEAD, MD 20640

b. When the production lot sample consists of components parts which require uploading at a Government Load, Assemble, and Pack (LAP) facility, and a shipping address is provided below, the contractor shall ship the sample units as specified above directly to the LAP facility. The LAP facility, upon completion of the uploading, will be responsible for shipping the samples to the tests facility indicated above in paragraph (a).

LAP FACILITY: N/A

c. The sample units shall be randomly selected from the entire lot by or in the presence of the Government Quality Assurance Representative. Unless otherwise specified, the sample units are considered to be destructively tested and are in addition to the units deliverable under the contract.

d. Prior to selection of the sample units, the lot shall have been inspected to and meet all other requirements of the contract. A sample shall not be submitted from a lot rejected for nonconformance to the detailed requirements of the specifications) and drawing(s) unless authorized by the Contracting Officer.

e. Unless authorized by the Contracting Officer, the lot from which the samples are drawn shall not be shipped until official notification has been provided by the Contracting Officer that the tested units have satisfactorily met the established requirements. Final acceptance of the lot shall not proceed until such notification has been provided.

f. If the production lot sample contains samples for ballistic testing, the test samples shall be identified as such on the outer packs and the applicable Ballistic Test Request (BTR) number shall be stenciled on all outer packs and included on all shipping documents.

g. The Contracting Officer shall by written notice to the Contractor within 45 days after receipt of the sample units by the government, approve, disapprove, or conditionally approve the lot acceptance sample.

h. If the production lot sample fails to meet applicable requirements, the Contractor may be required at the option of the Government, to submit an additional production lot test sample for test. When notified by the Government to submit an additional production lot test sample, the Contractor shall at no additional cost to the Government make any necessary changes, modifications, or repairs and select another sample for testing. The additional test sample shall be furnished to the Government under the terms and conditions and within the time specified in the notification. The Government shall take action on this test sample within the time limit specified in paragraph (g) above. All costs associated with the additional testing shall be borne by the Contractor.

i. If a ballistic test sample fails to meet contractual performance or functional requirements, the Contractor shall reimburse the Government for transportation costs associated with the failing sample, including the cost of transportation protective service and transportation security requirements when such security is required by other provision of this contract. An exception to this requirement for reimbursement of Government transportation costs will occur if the Government determines that the functional test samples failed to meet contractual performance requirements through no fault of the contractor.

j. If the Contractor fails to deliver any production lot test sample(s) for test within the time or times specified, or if the Contracting Officer disapproves any production lot test sample(s), the Contractor shall be deemed to have failed to make delivery within the meaning of the Default clause of this contract. Therefore, this contract may be subject to termination for default. Failure of the Government in such an event to terminate this contract for default shall not relieve the contractor of the responsibility to meet the delivery schedule for production quantities.

k. In the event the Contracting Officer does not approve, conditionally approve, or disapprove the production lot test sample(s) within the time specified in paragraph g above, the Contracting Officer shall equitably adjust the delivery or performance dates, or the contract price, or both, and any other contractual provision affected by such delay in accordance with the procedures provided in the Changes clause. Failure to agree to any adjustment shall be a dispute concerning a question of the fact within the meaning of the clause of this contract entitled Disputes.

(R4, tab 1 at 19-20)

8. In addition, the contract contained the Local 52.246-4528, REWORK AND REPAIR OF NONCONFORMING MATERIAL (MAY 1994) clause. It stated:

(a) Rework and Repair are defined as follows:

(1) Rework - The reprocessing of nonconforming material to make it conform completely to the drawings, specifications or contract requirements.

(2) Repair - The reprocessing of nonconforming material in accordance with approved written procedures and operations to reduce, but not completely eliminate, the nonconformance. The purpose of repair is to bring nonconforming material into a usable condition. Repair is distinguished from rework in that the item after repair still does not completely conform to all of the applicable drawings, specifications or contract requirements.

(b) Rework procedures along with the associated inspection procedures shall be documented by the Contractor and submitted to the Government Quality Assurance Representative (QAR) for review prior to implementation. Rework procedures are subject to the QAR's disapproval.

(c) Repair procedures shall be documented by the Contractor and submitted on a Request for Deviation/Waiver, DD Form 1694, to the Contracting Officer for review and written approval prior to implementation.

(d) Whenever the Contractor submits a repair or rework procedure for Government review, the submission shall also include a description of the cause for the nonconformance and a description of the action taken or to be taken to prevent recurrence.

(e) The rework or repair procedure shall also contain a provision for reinspection which will take precedence over the Technical Data Package requirements and shall, in addition, provide the Government assurance that the reworked or repaired items have met reprocessing requirements.

(R4, tab 1 at 21)

9. Also, the contract included the Local 52.246-4550, CRITICAL CHARACTERISTICS (FEB 2004) clause. It provided:

(a) The contractor's processes shall be designed to prevent the creation or occurrence of critical nonconformances. The contractor shall establish, document and maintain specific procedures, work and handling instructions and process controls relating to any critical characteristics.

(b) The contractor shall assure his critical processes are robust in design such that product and performance are relatively insensitive to design and manufacturing parameters. A robust design anticipates changes and problems. Robust processes shall be designed to yield less than one nonconformance in one million.

(c) An inspection/verification system shall be employed that will verify the robustness of your critical processes. Maximum use should be made of automated inspection equipment to accomplish verification of product quality. Mistake proofing techniques of your material handling and inspection systems are encouraged.

(d) Previous Practices/Special Characteristics. As a result of previous practices, the governments technical data

may refer to Critical (not annotated with I or II) and Special characteristics. Characteristics classified as Critical (not annotated with a I or II) shall be subject to all requirements herein associated with Critical (I) characteristics and level I Critical nonconformances. Unless otherwise stated in Section C, characteristics classified as Special shall be subject to all requirements herein associated with Critical (II) and Level (II) Critical nonconformances.

(e) Contractor Identified Critical Characteristics List (CICCL). Not including critical characteristics defined in the governments technical data (drawings, specifications, etc.), the contractor shall identify and document all material, component, subassembly and assembly characteristics whose nonconformances may result in hazardous or unsafe conditions for individuals using, maintaining or depending upon the product. All additional critical characteristics identified by the contractor shall comply with the critical characteristic requirements of the technical data package, supplemented herein. The contractors additional critical characteristics shall be classified as Critical (I) or Critical (II), and shall be reviewed and approved by the procuring activity prior to manufacturing (DI-SAFT-80970A). The following definitions are provided.

<u>Level I critical nonconformance</u>. A nonconformance of a critical characteristic that judgment and experience indicate would result in hazardous or unsafe conditions for individuals using, maintaining or depending upon the product; or a nonconformance that judgment and experience indicate would prevent performance of the tactical function of a weapon system or major end item.

The following (as a minimum) are classified as Level I critical nonconformances:

(1) A nonconformance that will result in a hazardous or unsafe condition (often referred to as a single point failure).

(2) A nonconformance that will remove or degrade a safety feature (such as those in a safe and arm device or fuzing system).

(3) A nonconformance that will result in violation of mandatory safety policies or standards.

Level II critical nonconformance: A nonconformance of a critical characteristic, other than Level I. This includes the nonconformance of a characteristic that judgment and experience indicate may, depending upon the degree of variance from the design requirement, the presence of other nonconformances or procedural errors:

(1) result in a hazardous or unsafe conditions [sic] for individuals using, maintaining or depending upon the product, or

(2) prevent performance of the tactical function of a major end item.

(f) In the event that a Critical nonconformance is found anywhere in the production process, the contractor, as part of his quality system, shall have procedures in place to ensure:

(1) The nonconformance is positively identified and segregated so that there is no possibility of the item inadvertently reentering the production process. This control shall be accomplished without affecting or impairing subsequent defect analysis.

(2) The operation that produced the defective component or assembly and any other operations incorporating that component or assembly are immediately stopped.

(3) The government is immediately notified of the critical nonconformance (telephonically and electronic mail.) (DI-SAFT-80970A).

(4) Any suspect material (material in process that may contain the same defect) is identified, segregated and suspended from any further processing.

(5) An investigation is conducted to determine the cause of the deficiency and required corrective actions. A

report of this investigation shall be submitted to the government (DI-SAFT-80970A). The use of the DID report shall not delay notification to the government.

(6) A request to restart manufacturing or to use any suspect material associated with the critical nonconformance is submitted to the government (DI-SAFT-80970A). Restart of production shall not occur until the investigations are complete or upon authorization from the procuring contracting officer. All objective evidence of the investigations to date shall be available for review at the time of restart. Suspect materiel found to be nonconforming shall not be used without Government approval.

(g) The contractor may develop alternative plans and provisions relative to government or contractor identified Critical level (I) and Critical Level (II) characteristics. The provisions shall be submitted to the government for advanced approval and shall address the following:

(1) Complete explanation of potential failure mode(s) together with supporting historical and statistical data.

(2) Pre-established plan of action (POA) to be taken when a critical nonconformance occurs and a description of controls to ensure there is no possibility of the nonconforming item inadvertently entering the production process.

(3) Means of tracking nonconformance rate, investigative results and corrective actions taken.

(4) Method to immediately verify that a produced critical nonconformance is consistent with the identified failure mode(s) and does not exceed the historical nonconformance rate. The contractor can resume production without specific government approval based upon the pre-approved alternate plans and provisions for Critical (I) characteristics and level (I) Critical nonconformances and Critical (II) characteristics and level (II) Critical nonconformances. (h) If a critical nonconformance is discovered during further processing or loading, the original manufacturer who introduced the critical nonconformance shall bear responsibility for the nonconformance.

(i) The Government Quality Assurance Representative will perform the surveillance actions necessary to ensure compliance with this clause.

(R4, tab 1 at 22-23)

10. The version of the contract contained at tab 1 of the Rule 4 file contains the full text of the CRITICAL CHARACTERISTIC clause. The document at tab 1 contains the CO's electronic signature but is not signed by the contractor. (R4, tab 1 at 1) A virtually identical copy of the contract appears at tab 313 of the Supplemental Rule 4 file. This copy is manually signed by both parties and incorporates the clause by reference. (R4, tab 313 at 1, 22) In addition, a copy of the solicitation, which was also signed by the contractor, included the full text of the clause (R4, tab 255 at 1, 21-22).

11. The contract also included DFARS 252.223-7007, SAFEGUARDING SENSITIVE CONVENTIONAL ARMS, AMMUNITION, AND EXPLOSIVES (SEP 1999), which provided:

(a) Definition. "Arms, ammunition, and explosives (AA&E)," as used in this clause, means those items within the scope (chapter 1, paragraph B) of DoD 5100.76-M, Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives.

(b) The requirements of DoD 5100.76-M apply to the following items of AA&E being developed, produced, manufactured, or purchased for the Government, or provided to the Contractor as Government-furnished property under this contract:

NOMENCLATURE 1390-00-877-5245

NATIONAL STOCK NUMBER primer, Electric

SENSITIVITY/CATEGORY IV (c) The Contractor shall comply with the requirements of DoD 5100.76-M, as specified in the statement of work. The edition of DoD 5100.76-M in effect on the date of issuance of the solicitation for this contract shall apply.

(d) The Contractor shall allow representatives of the Defense Security Service (DSS), and representatives of other appropriate offices of the Government, access at all reasonable times into its facilities and those of its subcontractors, for the purpose of performing surveys, inspections, and investigations necessary to review compliance with the physical security standards applicable to this contract.

(e) The Contractor shall notify the cognizant DSS field office of any subcontract involving AA&E within 10 days after award of the subcontract.

(f) The Contractor shall ensure that the requirements of this clause are included in all subcontracts, at every tier

(1) For the development, production, manufacture, or purchase of AA&E; or

(2) When AA&E will be provided to the subcontractor as Government-furnished property.

(g) Nothing in this clause shall relieve the Contractor of its responsibility for complying with applicable Federal, state, and local laws, ordinances, codes, and regulations (including requirements for obtaining licenses and permits) in connection with the performance of this contract.

(R4, tab 1 at 40)

12. The Security Statement of Work (SSW) outlined the physical security requirements of DoD 5100.76-M which were referenced in DFARS 252.223-7007. It was attached to the contract as Attachment 9. It required that the "command will make a Suitability Determination of structural adequacy on production and storage facilities used by the contractor." It also stated that the "contractor shall implement a control system that ensures accountability and control of storage structure locks and keys." Moreover, the SSW required that "[d]uring periods when the production line is unattended, the

contractor shall remove sensitive A&E [ammunition and explosives] to approved storage areas or protect the production line." (R4, tab 1 at 46, 50-51)

13. The contract also contained an extensive Automated Data List (ADL) which set forth various technical requirements (R4, tab 1 at 62-76). Included was military specification MIL-T-15119A which governed the round, seamless alloy steel tubing to be used in the production of the primers (id. at 65). Paragraph 4.3 of the specification stated: "A lot shall consist of homogeneous tubing produced from the same heat and the same heat treatment" (R4, tab 2 at 93). Dr. Christopher Ramsay, appellant's expert witness, defined a "heat lot" as "that original batch of steel that comes out of the electric arc furnace" (tr. 2/194-95). His testimony was corroborated by Mr. Jerry Hahin, a U.S. Navy engineer, who testified that a "heat lot" was "basically one steel billet that is sent through the heat treater at a steel mill." For purposes of this contract, Mr. Hahin further distinguished a "heat lot" from a "production lot." Here, a production lot was a lot of finished primers. He also confirmed that the specification required that there be only one heat lot per production lot. (Tr. 3/152-53) Paragraph 6.1 of the specification was titled "Intended use" and provided: "The seamless alloy steel tubing covered by this specification is manufactured into primer tubes subjected by explosive charges to high internal gas pressures of short duration." Paragraph 3.7 stated: "The tubing shall not break or permanently increase in diameter more than 0.003 inch when subjected to the hydrostatic test of 4.9." The latter paragraph described this test in some detail:

> All tubing shall be subjected to the minimum hydrostatic pressure specified in the contract or purchase order (see 6.2). The test shall be performed on tubing lengths up to 12 feet. The outside diameter of each test length shall be gaged in the same location before and after application of the specified pressure. Failure of the tubing to meet the requirements of 3.7 shall be cause for rejection of the lot.

Paragraph 6.2 required that the "[p]rocurement documents," *inter alia*, "should specify" the "[h]ydrostati[c] test pressure (see 4.9 and 6.3)." Paragraph 6.3 of the specification detailed the "[h]ydrostati[c] test fiber stress" in these terms:

It is intended that the tubes covered by this specification be subjected by the hydrostatic pressure test to a fiber stress no greater than 75,000 pounds per square inch as calculated from the following formula:

$$S = P \frac{b^2 + a^2}{b^2 - a^2}$$

- S = Fiber stress in pounds per square inch
- P = Hydrostatic test pressure in pounds per square inch
- a = Outside radius of the tube in inches

b = Inside radius of the tube in inches.

(R4, tab 2 at 92-95)

14. With respect to quality control, Hanley was also required to comply with ISO 9001-2000 (R4, tab 1 at 20-21). However, it submitted a quality control program pursuant to MIL-Q-9858A which Mr. Hahin found "to be adequate as a reasonable alternative to ISO 900[1-]2000 for this contract" (tr. 3/212).¹ Paragraph 1.2 of MIL-Q-9858A stated:

This specification requires the establishment of a quality program by the contractor to assure compliance with the requirements of the contract. The program and procedures used to implement this specification shall be developed by the contractor. The quality program, including procedures, processes and product shall be documented and shall be subject to review by the Government Representative. The quality program is subject to the disapproval of the Government Representative whenever the contractor's procedures do not accomplish their objectives. The Government at its option, may furnish written notice of the acceptability of contractor's quality program.

In addition, paragraph 3.4 of the specification provided:

The contractor shall maintain and use any records or data essential to the economical and effective operation of his quality program. These records shall be available for review by the Government Representative and copies of individual records shall be furnished him upon request. Records are considered one of the principal forms of objective evidence of quality. The quality program shall assure that records are complete and reliable. Inspection and testing records shall, as a minimum, indicate the nature of the observations together

¹ Paragraph 1.5 of MIL-Q-9858A stated in part: "ISO 9001 and ANSI/ASQC Q9001 are alternative model quality system requirements to this specification" (R4, tab 4 at 1).

with the number of observations made and the number and type of deficiencies found. Also, records for monitoring work performance and for inspection and testing shall indicate the acceptability of work or products and the action taken in connection with deficiencies. The quality program shall provide for the analysis and use of records as a basis for management action.

(R4, tab 4 at 112-14)

15. Pursuant to MIL-Q-9858A, Hanley forwarded a Quality Assurance Program to the government in January 2004. The manual was approved in March 2004. (R4, tab 316 at 1) Hanley stated the purpose of the manual in these terms:

The QA Program Manual is designed to assure adequate controls throughout all areas of contract performance. Hanley will insure all supplies and services under contract, regardless where manufactured or performed, shall be controlled at all points necessary for conformance to contractual requirements. This program will provide for the prevention and ready detection of discrepancies and for timely and positive corrective action. Hanley will document evidence of quality conformance and make such documentation available to the Government representative.

This program will delegate authority, responsibility, and accountability for decisions affecting quality in clear and precise manner, which assures the proper functioning of the quality program. By delegating, Hanley intends to promote prevention or early detection of quality failures to reduce correctives action costs.

Additionally, Hanley will collaborate and coordinate closely with DOD contract and administrative personnel to ensure contract compliance.

(*Id.* at 5)

16. Paragraph 5.2 of the manual was entitled "PURCHASING DATA." It stated:

Prior to the issuance of any Hanley purchase order for services or materials a Hanley "Purchase Order Request" form will be completed defining the article or services to be procured. The QA Manager examines and approves all purchase orders to insure that they define the articles or services to be procured. All Purchase Order Request [sic] may include the following items:

1) The applicable Government contract number, name and address of the subcontractor and the consignee.

2) A clear, concise description of the supplies or services ordered.

3) Specification numbers, drawing numbers and revisions, and process requirements.

4) Packaging, shipping and preservation requirements.

5) Classification of defects or other inspection requirements.

6) Requirements for qualification or other Government or contractor approval.

7) Provisions for direct shipment from the subcontractor's or vendor's plant to Government.

8) Contractor or Government source inspection requirements.

Document changes will be controlled by procedures outlined in Chapter 4, section 4.1 Drawings, Documentation and Changes.

(R4, tab 316 at 20) Ms. Cheryl Nielsen, the CO for the contract, testified that item 6, "Requirements for qualification or other Government or contractor approval" required that quality clauses relating to Acceptance and Inspection Equipment (AIE), Statistical Process Control (SPC), and First Article Testing (FAT), would be included in purchase orders. In addition, item 8 required that "Contractor or Government source inspection requirements" were to be included in purchase orders as well. This alerted subcontractors that government inspectors could be required to conduct inspections at their facilities. (Tr. 5/13, 32-34) Ms. Nielsen's testimony was corroborated in part by paragraph 7.1 of Hanley's manual which provided: When Government source inspection is required, under authorization of the Government Representative the purchase order shall contain the following statement:

"Government inspection is required prior to shipment from your plant. When material is ready for inspection notify, if practical, ten (10) days in advance, the Government Representative who normally services your plant."

When under authorization of the Government Representative, copies of the subcontract are to be furnished directly by the subcontractor to the Government Representative at his facility rather than through Government channels, the purchase order shall contain the following statement:

"On receipt of this order, promptly furnish a copy to the Government Representative who normally services your plant, or, if none, to the nearest Government Inspection Office in your locality. In the event the Representative or office cannot be located, our purchasing agent should be notified immediately."

Government inspection shall not constitute acceptance nor shall it in any way replace contractor inspection or otherwise relieve the contractor of his responsibility to furnish an acceptable end item.

All applicable purchasing documents will be provided to the Government Representative at the supplier's plant upon request.

 $(R4, tab 316 at 28)^2$ Ms. Teresa S. Johnson, the government's product quality manager, testified that, despite the contract's various quality control provisions, Hanley failed to

² In addition, MIL-P-18714D, paragraph 4.1 stated: "Unless otherwise specified in the contract or purchase order (see 6.2), the contractor is responsible for the performance of all inspection requirements (examinations and tests) specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections

"push down" these requirements to its subcontractors. This resulted in various problems. (Tr. 4/126-27, 141-42)

17. Pursuant to the requirements of DoD 5100.76-M (*see* finding 12), the Defense Security Service (DSS) conducted a pre-award survey "to evaluate the protection afforded items of AA&E [Arms, Ammunition and Explosives]." DSS concluded that the two buildings proposed by Hanley as manufacturing sites for the primers were non-compliant. They had been built to an unknown standard, did not have the required "high security locks and hasps on the access doors," and lacked compliant key and locks procedures. In addition, privately owned vehicles were parked within 100 feet of the buildings. (R4, tab 289)³

18. On 9 December 2005, the CO informed Hanley that, inter alia, the deficiencies listed by DSS were endangering its "ability to perform this contract" (R4, tab 297). In a response of 20 December 2005, Hanley's president, Mr. T. Gaynor Blake, stated that Hanley had selected a different building within which to manufacture the primers and that any "deficiencies that are identified will be corrected or brought up to current requirements." He concluded that approval [by DSS] "will be requested upon completion and prior to use under this contract." (R4, tab 296) On 21 December 2005, the CO replied to Hanley's letter. Ms. Nielsen outlined the various inspections which DSS would have to conduct in order to approve use of the newly proposed building (R4, tab 298). On 16 February 2006, Ms. Darlene Jones, DCMA's administrative contracting officer (ACO), informed Hanley that its new site plan could not be approved "due to lack of detailed information regarding the proposed loading, assembly and packaging operations being performed" in its proposed building. She listed seven items "that were missing or not clearly stated." (R4, tab 299) Later that month, DCMA personnel conducted a site visit to review Hanley's "facility site plan and the set-up of the Mk 45 Primer Manufacturing operation." DCMA concluded "that very little progress was being made towards finalizing the site plan on the day of the visit." It made four "observations" regarding deficiencies and noted that "proper installation of all production equipment could not be verified" due to the building's renovation not being completed. (R4, tab 300) On 8 March 2006, the Army informed Hanley that its proposed use of military security locks manufactured by H.O. Boehme, Inc., did not comply with the requirements of DoD 5100.76-M. It noted that the regulation required use of high security locks. (R4, tab 306) On 17 April 2006, the Army informed Hanley that it had satisfactorily addressed the various deficiencies cited by DSS and that the Army was issuing "a favorable suitability determination" (R4, tab 302).

set forth in this specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements." (R4, tab 3 at 5)

³ DSS also noted that Hanley's facility had not previously been involved with the requirements of DoD 5100.76-M (R4, tab 289).

There is no persuasive evidence demonstrating that government officials overreached in their efforts to require Hanley to comply with the requirements of DoD 5100.76-M.

19. At the hearing, Mr. Blake, Hanley's president, generally described the production process for the MK45-1 primer as follows:

There are three subassemblies that go together at the final assembly. So I'll talk about each of the subassemblies separately.

This is the primer stock or head stock. This part gets a[n] insulator pressed into here, and it's staked in. If you know what staking is, it's where you take a metal punch and push into the metal, and it squeezes metal and it grips the insulator that goes in there. Then that insulator is drilled, that's subassembly.

Course before you can do that, of course you have to purchase the parts and they have to all go through your receiving inspection.

This is the tube and this tube is still open. This tube is made from the 12 foot length of tubing that we talked about earlier.^[4] And these holes are cross drilled in it. And there's a counterbore on this end, smooth on the inside, it's threaded on the outside and there's a groove on the inside of this end.

We buy that tube, it goes through receiving inspection and we put the paper liner in it, which you can see showing through the holes. And then we fill all these holes with purple laquer [sic] and that's going to seal them against moisture. Then that subassembly is set aside.

Well no, I'm sorry I missed this, the brass plug gets pressed into there. And you can see it won't go in there without a tremendous amount of a force. So that becomes this subassembly then. The heart of the Mk45 gun primer is the igniter. And the igniter is an assemblage of brass and

⁴ The 12 foot long tubes were eventually cut into 2-foot lengths, the size of the completed primers (tr. 3/100-01).

plastic parts. That assembly, that parts pressed together and then it gets a fillet of red epoxy to seal it.

And then it gets slotted with a jeweler's saw. Into that slot we put a wire and we solder it in the left, right and the center. Such as there are two bridge wires on this unit. That's for redundancy if one of them would fail that there would still be another one that would do the job. That's assembled into this cup with a spacer and some black powder and it's got a closure foil on the top, and it's crimped. So that makes that subassembly.

At the final assembly then the igniter is put into the head stock and there's some sealant put in there. And then the tube is screwed onto the head stock and tightened up to a specified torque. And that crushes the igniter and makes a seal, that's the next step.

Then this is filled with black powder according to weight, which it comes up to about this full, somewhere in here. Then there's a paper cup pushed in and that paper cup then you pour varnish into here, which is going to seal around the edges of that cup.

You invert it let the excess varnish drip out, you let it dry. And then you put in another cup very similar to this one you put into the end, and seal that with varnish. Then it's ready for final inspection and testing.

(Tr. 1/51-53) Mr. Blake also testified that it did not manufacture any of the components; instead, it purchased all of them from various suppliers (tr. 1/53-54). Moreover, the government was aware of this fact, as it was stated in Hanley's proposal (R4, tab 256 at 3; tr. 1/54-55).

20. Much of the tubing which Hanley used in the FAT and the first production lot was purchased from Propellex, the prior contractor for the primers, and had been purchased by Propellex from Plymouth tubing. The tubes had been prepared for storage with oil and had been stored by Propellex in a closed warehouse for approximately a decade. All of the tubes had been hydrostatically tested and some of them had been drilled. (Tr. 2/7-8) Hanley also purchased several pieces of old production equipment from Propellex (tr. 1/71).

21. Regarding the production and machinery of the tubing, Mr. Blake testified:

The tubing comes from the mill with a certification of the chemistry of the steel. And the heat treating and the physical properties of the steel. Just like you purchase anything, there'll be a certification on it.

• • • •

So this tube then is 12 feet long and the first operation is to centerless grind it. Tubes these days are relatively straight and smooth but they have to be exceptionally straight and smooth to be able to go through the process. They go through what's called a Swiss machine. And if this tube had any bulges or irregularities in it, it would not feed properly through the Swiss machine.

So this centerless grinding operation is not required by the Government. It's a step that we did in order to improve the quality of the part.

(Tr. 1/55-56) Hanley thus expended time and energy on a process which it admitted was not required by the contract.

22. In December 2005, Hanley purchased additional Plymouth tubing from Gormac (R4, tab 315). Unlike the tubing which it had purchased from Propellex, this tubing had to undergo the entire machining process which Mr. Blake described in these terms:

So the tubing came in and Gormac had that tubing shipped to their supplier, which was Banner. Banner is a very large machining operation in that area and their only, well I say only, I don't know their only business. They're known for their centerless grinding, that's their specialty.

So we bought the tubing, had it shipped to Banner for Gormac. Gormac had it centerless ground and then the tube went to Gormac where it was hydrostatically tested. It's tested in 12 foot lengths, in a machine with a calibrated gauge that gives it 18,000 PSI, to ensure that no tube fails.

After the hydrostatic test the part would then go to Gormac's Swiss machine. And it would feed into the

machine. Does everybody know what a lathe is, it turns the metal horizontally.

You feed it into the machine and the machine would then drill the holes and put the counterbore in the end, thread this end and cut off this end. The part is essentially done, then it goes to plating which will make the diameter just a little bit larger. The plating does have a measurable thickness.

Then after inspection steps it would be, there's a cap that goes on the thread. I thought I had it here, but there's a plastic cap that goes on the thread to protect it during shipping and then it comes to Hanley.

(Tr. 1/57-58)

23. Pursuant to Local 52.209-4511 which was included in the contract (finding 4), Hanley was required to produce a first article for testing (FAT). The first article comprised 130 primers, as well as "5 EACH OF EVERY COMPONENT PART AND SUBASSEMBLY (LESS EXPLOSIVE COMPONENTS)" (*id.*). Ms. Teresa S. Johnson, the Army's product quality manager, was involved in Hanley's two FATs (tr. 4/125-26, 129). The first FAT was conducted in August 2006, and the second FAT took place in December 2006 (R4, tab 321; tr. 5/177-78). There were several issues with respect to Hanley's first FAT, according to Ms. Johnson. There were "some failures of the primer tube." In addition, there were "some gauges that...were either not available or we had to go and get them calibrated." Finally, there were parts that were "not clearly marked" (*see* finding 5; tr. 4/130). With respect to the primer tubing, Ms. Johnson testified:

> I remember that I checked that part myself. I also remember that in the tubes, the holes has [sic] to be straight across from the other side and you have to put a pin through it, whatever gauge identified. But the primer tubes that I looked at the first day the pin wouldn't go through the holes.

(Tr. 4/130-31) Ms. Johnson testified further regarding Hanley's deficiencies:

Instead of failing Hanley because we had been working together and trying to get through with this, we allowed Hanley to provide us with five original, ten was [sic] the from a new producer they had to identify they were going to go to a new producer. They gave us ten tubes and the agreement was they would give us ten tubes at the point of introducing the tube and all the assembly up to completion. However we would allow them to keep the ballistics samples that they had built up with the original and that they would use these tubes. And when they got those ready, when we would come back and look at it and they would not use the tubes that they had already produced for production for the first first [sic] article.

(Tr. 4/131)

24. Ms. Johnson's testimony regarding Hanley's FAT deficiencies was corroborated by a letter forwarded to the contractor by the CO, Ms. Nielsen, on 10 August 2006:

Reference Contract W52PlJ-05-C-0076, First Article Testing (FAT) for the Electric, Primer MK45-l on 1 Aug 2006.

After reviewing the results of your FAT, there are areas of concern that need to be addressed prior to the return of the team for the completion of the First Article test. The following comments are recommended for your use to assist Hanley Industries in completing the FAT:

1. Request Hanley post work instructions at the site where the work is to be performed.

2. Develop Inspection Instructions. (Gage usage, number of samples, identify what characteristic is being checked, and directions on how to perform the inspection, etc)[.]

3. Ensure all characteristics are listed on data sheets. Example M101 and M102 are missing from PN 2847020.

4. Clarify CofC's.

5. Request Hanley position all gages that will be used in production where they will he used during the process. Ensure non-necessary gages are not included. 6. Ensure correct gages are called out on the inspection sheets. Example PN 1275047 M110 Hanley sheet calls out 3236973, contract calls out 3030939.

7. Verify receipt of or request Gage 3030396.

8. Obtain AIE approval for characteristics not inspected/listed at FAT.

9. Submit and get approval for Gage modifications and additions including those for checking radius. If gages are modified, change drawing to reflect the modification and add a revision level to the drawing or a dash number to indicate a change. Document change in calibration system.

10. Ensure all gages are calibrated and have a current sticker. Ensure calibration records are available. When calibrating gages, document gage dimensions being checked and calibration standard[.]

11. Ensure gage identification is not duplicated for two or more gages. Example PN 685475 there were two gages #685475-1, one was incorrectly marked. Had .7489 diam stenciled on the side.

Reference a new supplier of the primer tube:

12. Have available for inspection the 10+ primer tubes and associated data at the component level from the new supplier as agreed.

13. Have available for inspection all assemblies and sub assemblies and associated data containing the primer tube as agreed.

14. Ensure all certs are available for the new primer tube with emphasis on hydrostatic testing cert as agreed.

In reference to the new supplier of the primer stock insulator drawing number 451563.

15. Have available for inspection the primer stock insulator and associated data at the component level from the new supplier.

16. Have available for inspection all assemblies and sub assemblies and associated data containing the primer stock insulator.

17. Ensure all certs are available for the new primer stock insulator.

In lieu of failing your FAT test, the Government and Hanley Industries agreed that FAT Testing should be delayed to allow Hanley Industries additional time to correct the items listed above. Therefore, this delay in FAT testing is not due to any fault of the Government and the Government is not responsible for any additional costs that are derived from this delay. The test samples that are being sent out to NSWC, Dahlgren Division, for testing are at Hanley's risk. The Government assumes no responsibility if these samples fail their first article test. If the FA testing being conducted at Hanley Industries or NSWC, Dahlgren Division, fails for any reason, a new FAT test will be required at Hanley's cost.

Also, Hanley Industries needs to provide this office the date when the Government can complete FA testing on the identified areas of concern.

Thank you for your cooperation in this matter. Please reply to the above comments NLT 24 August 2006.

(R4, tab 321)

25. The references by both Ms. Wilson and Ms. Johnson to a "new supplier" referred to the fact that the Army concluded that, during inspection of the FAT tubing, the pin would not go through the holes because of rust. This apparently resulted from the fact the Propellex tubes had sat in storage for approximately a decade. (Tr. 4/133-34) Accordingly, the Army determined that Hanley should seek a new supplier for the second iteration of the FAT. Hanley complied and purchased new tubing directly from Plymouth (*id*.). These tubes passed the second iteration of the FAT in December 2006 and accordingly, were approved for production (tr. 1/96, 5/179-80; finding 22).

26. It was only much later that the Army surmised that Hanley used the rejected Propellex tubing in its production lots. Ms. Johnson, accompanied by other government employees, traveled to Gormac's facilities. Their trip report stated, in part:

Gormac claimed that 8800 pieces were delivered to them from Hanley in various states and stages. These pieces were primer tubes which Gormac "reworked." The delivered primer tubes were cut to length with holes already cut out. Some of the pieces required cleaning and additional work, however; all the pieces received machining of threads. These pieces were not hydrostatically tested by Gormac.

(R4, tab 159 at 2) The only identified tubing which had been previously hydrostatically tested and required cleaning and rework was the lot which Hanley had purchased from Propellex and which had been rejected by the government in the first iteration of the FAT. Setting aside the fact that the Propellex tubes had been rejected, the only way Hanley could use the tubes in a production lot was to comply with the rework requirements of FAR 52.246-4528, REWORK AND REPAIR OF NONCONFORMING MATERIAL (MAY 1994). (Findings 8, 20, 22; tr. 4/134-35) Based upon these facts, the Board concludes that Hanley used the reworked and rejected tubes which it had purchased from Propellex in its production lots.⁵

27. Hanley did not deliver the primers comprising production lot 1 in a timely manner. Therefore, through a series of contractual modifications, culminating in modification No. P00005, the Army extended the delivery date for production lot 1 to 2 February 2007 (R4, tab 1 at 4, tab 7 at 130, 132, tab 9 at 143, 145, tab 10 at 152). Modification No. P00005 provided:

SECTION A - SUPPLEMENTAL INFORMATION

1. The purpose of this modification is the following:

a. Extend the contract Delivery Schedule as depicted in Section B of this modification.

b. Increase the contract progress payment limitation for allowable contract incurred costs.

⁵ There is no record evidence demonstrating that Hanley complied with the rework clause with respect to the Propellex tubing (findings 8, 24).

2. The Delivery Schedule is hereby revised IAW the Contractors [sic] proposed delivery schedule dated November 7, 2006, which is incorporated into Section B of this contract.

3. Clause HS6002, FAR 52.242-4506 Progress Payment Limitation Incurred Costs, for the limitation of the Progress Payment percentage for incurred allowable costs is changed from 10% to 20%.

4. As consideration for this extension/progress payment percentage increase, the contractor offer [sic] to extend the period of performance for exercising the evaluated option for Fiscal year 2006 by 6 months. This extended FY06 option period is from September 29, 2006 to March 28, 2007 and the unit price for FY06 Evaluated Option remains as initially quoted in the basic contract.

5. In consideration for this extension/progress payment percentage increase agreed to herein as complete equitable adjustment for these contract adjustments, the contractor hereby releases the Government from any and all liability under this contract for further equitable adjustments attributable to such facts or circumstances giving rise to those contract adjustments.

6. All other terms and conditions of this contract remain unchanged and in effect.

(*Id.* at 151)

28. Through Modification No. P00005, the Army, in return for consideration from Hanley, increased the progress payment percentage (R4, tab 10). An issue later arose as to whether the CO had stopped progress payments. In an email forwarded to the Army on 26 September 2007, Mr. Blake went so as far to state: "Cheryl [Nielsen] had previously stopped our progress pay." He went on to write: "I CANNOT OVEREMPHASIZE THE IMPORTANCE OF THIS MATTER." (Ex. A-13 at 1) However, Ms. Nielsen testified that she had never stopped Hanley's progress payments. In addition, she stated: "I wouldn't say that it's a stopping of progress payments like they were due to get a progress payment, as much as it was [sic] they weren't showing progress to get a payment" (tr. 5/137-39). Based upon the number of modifications to this contract which extended delivery dates, the Board concludes that whatever problems Hanley allegedly encountered

in receiving progress payments on this contract resulted from its own inability to make progress rather them from any unilateral actions on the Army's part.

29. On 30 April 2007, the Army executed bilateral Modification No. P00006 which extended the delivery date for production lot 1 for a fourth time to 12 October 2007 and also extended the delivery date for production lot 2 to 12 January 2008 (R4, tab 11 at 158).⁶ In addition, it exercised the options for periods two and three (*id.* at 157). Also, the modification incorporated three letters by reference which approved the FAT, and conditionally approved both Hanley's SPC plan and its AIE. Finally, it incorporated various requests for deviation (RFDs) and automated data list (ADL) into the basic contract (*id.*).

30. On 2 August 2007, the Army executed Modification No. P00007 which extended the delivery date for production lot 1 to 11 November 2007 and the delivery date for production lot 2 to 11 February 2008 (R4, tab 12 at 189, 191). Because of various problems with production lot 1, it was not accepted by the government until January 2008 (tr. 2/8-9).

31. On 19 November 2007, Mr. Larry Harris, the Defense Contract Management Agency (DCMA) quality assurance representative (QAR) forwarded to Hanley Corrective Action Request (CAR) 0076-002, which stated:

1) Reference: MIL-P-18714 D, Paragraph 4.7.1 "Radiographic". The primer shall be subjected to a radiographic inspection in accordance with MIL-STD-453. The primer shall be mounted in the VERTICAL position with the primer stock up...

It has come to our attention that Hanley Industries radiographed the primers of Lot 001 in a HORIZONTAL position.

2) Reference: MIL-STD-410E-Para 4.2 "Personnel" Paragraph 4.2. Personnel Qualification and Paragraph 5, Detailed Requirements. Paragraph 5.1.3 Level II individuals shall have the skills and knowledge to set up and calibrate equipment, conduct tests...evaluate and document results in accordance with procedures approved by the appropriate Level III...

⁶ The original delivery date for production Lot 2, as set forth in the contract, was 26 November 2006 (R4, tab 1 at 4).

Hanley Industries does not have X-Ray personnel qualified to Level II.

Please address all of the questions, A thru E, in the block above. [Ellipses in original]

(R4, tab 278) One of the purposes of the X-ray procedure referenced in the CAR was the assessment of black powder levels. Accordingly, the CO wrote the following letter to Hanley on 30 November 2007:

In conjunction with Corrective Action Request 0076-002 it has been determined that Lot 1 is now suspect of having low black powder weights. As a result, prior to Government acceptance of this lot, Hanley will need to 100% x-ray the lot to determine sufficient black powder is present in each primer at no additional cost to the Government. An x-ray and measurement of the black powder column height can provide objective evidence that the primers have the correct amount of black powder. Any primers that show a discrepant amount of black powder present must be removed from the lot. If Hanley choses [sic] not to conduct the x-ray screening proposed above, the Government will not accept the lot.

In order to complete this effort, Hanley is required to submit an X-ray screening procedure to be reviewed and approved by the Government. Enclosed are suggested procedures for reference to help Hanley formulate the x-ray screening procedures. The procedures are only suggestions and it is Hanley's responsibility to formulate new work plans and submit screening procedures to include timeline to finish screening process to the Government for approval.

Request screening procedure to be submitted to the Government no later than 4 December 2007.

(R4, tab 279)

32. On 29 November 2007, Mr. Harris rejected lot 1 through another CAR. He stated:

Deficiencies: Out of tolerance powder charge weights.

1) Reference: Drawing 2434755, Characteristic M107, class 2 black powder charge shall be 50.5-53.1 grams

Hanley Industries Variable Control Charts sample measurements of Lot 001 indicate that there are four primers in Lot 001 with low weights (50.2, 50.2, 50.1, 50.1).

Additionally, there is one measurement in Hanley's records that has been recorded over "white-out" and another recording that was originally recorded as 53.3 and then "marked over" to show 51.3. There are no explanations in your official records to indicate why those recordings were changed.

Major Characteristics are to be accepted on 1 and rejected on 2 nonconpliances.

Lot 001 is rejected.

(R4, tab 281) As of 26 December 2007, Mr. Hahin, the Navy's project engineer, did not consider this issue to be closed (R4, tab 284).

33. On 19 January 2008, Hanley forwarded an RFD to the government in which it requested approval to add Roberts Automatic Products, Inc., as a vendor for the primer stock.⁷ On 22 January 2008, Mr. Hahin responded as follows:

This RFD will be considered, however, I wan [sic] to remind Hanley that each lot of primers is to be homogeneous in accordance with MIL-P-18714, paragraph 4.5.1. Therefore, this deviation will only be considered if this new primer stock manufacturer is used for the entire lot 2 quantity.

(R4, tab 21 at 246-48) In another letter of that date, Mr. Hahin informed Hanley that its RFD was not acceptable in its current form. He suggested a number of corrections. (R4, tab 24 at 267)

⁷ The primer stock was a steel part distinguishable from the tubing itself (tr. 3/155-56).

34. Prior to this time period, Hanley had also concluded that Plymouth would no longer be a reliable supplier of the tubes themselves because it had raised its prices. Accordingly, Hanley resolved to purchase tubes for future production lots from another firm called Webco. It issued a purchase order to Webco's agent, Steel Trading Co., Inc., for 164,000 linear feet of tubing on 31 May 2007 (R4, tab 328). Just as it would later do with respect to the primer stock, Hanley was required to seek approval of its new tubing vendor through the mechanism of an RFD. However, even though it placed the Webco tubes into production, Hanley did not make such a request (tr. 1/57, 4/136, 5/27).

35. On 28 January 2008, Mr. Harris, the QAR, issued another CAR for Hanley's failure "to have required SPC data from vendors for each lot of component parts, and not conducting in-process SPC." He added:

> A recent inquiry about Lot-002 in-process SPC and SPC data from vendors indicates a repeat of major deficiencies in Hanley's SPC program. Specifically, contractor personnel were not fully aware that their SPC Detailed Plan required variable or attribute data (Xbar & R or P. Charts) from their vendors for 15 components. In addition, Hanley was required to perform in-process charting on eight component parts, and the primer during manufacture.

Mr. Harris requested that Hanley respond to the CAR by 5 February 2008. It did not respond in a timely fashion. (R4, tabs 52, 286; tr. 4/141; finding 6)

36. On 1 February 2008, the CO executed unilateral Modification No. P00010 which, in conjunction with Hanley's revised delivery schedule spreadsheet, established a new delivery date for production lot 2 of 22 April 2008 (R4, tabs 47, 48). Despite several extensions, Hanley never met this revised date (tr. 5/21).

37. On 5 February 2008, Hanley informed the government that four primer tubes had failed the spin gage test (R4, tab 53; finding 5). On 6 February 2008, Mr. Hahin responded to an inquiry from the CO by stating that this was a critical failure. He also stated that "Hanley in general do [sic] not seem to grasp the seriousness of critical defects." (R4, tab 56) Later that day, the CO forward an email to Hanley in which she stated:

This failure is considered a critical failure in accordance with the terms of your contract. As such, Hanley shall follow the requirements of the Critical Characteristics Clause of the contract. Hanley must cease production from the point of failure. Hanley shall investigate the cause of the failure and prepare a failure analysis and corrective action for Government review and approval. Upon Government approval of the failure analysis and corrective action, the Government will provide Hanley approval to restart production in writing.

(R4, tab 57) Correspondence between the government's engineers demonstrated that the gage failure was related to Hanley's SPC deficiencies. In an email of 4 February 2008, Mr. Wuorinen, the government's product quality manager, stated:

Mr. Harris said that the vendor's lot of primer stock will probably be rejected for failure of the inner threads to accept the go gage. The present CAR did cite failure to have the suppliers provide SPC charts with each shipment. SPC would have detected this attribute defect, and if managed as required, corrective actions implemented to immediately address the probable cause (s) to prevent further defective product.

(R4, tab 51)

38. On 6 February 2006, representatives of the government and Hanley met to discuss a variety of contractual issues. Hanley, *inter alia*, requested a two-week extension until 20 February 2008 to submit its revised SPC plan. (R4, tab 66 at 390)

39. On 11 February 2008, Hanley responded to the CO's email regarding the ring gage failure. It concluded: "The source of rejection is an oversize NOGO thread ring gage." (R4, tab 71 at 410) On 13 February 2008, Hanley proposed using certified gages from its supplier, Gormac, so that it could proceed with production (R4, tab 75 at 442). In response to an additional request from the government's engineers, Hanley responded that the root cause of the failure was that the "ring gage had become worn during the inspection process" (R4, tabs 77, 81 at 11). Further correspondence between the parties on this issue resulted in Hanley submitting a calibration certificate for the gages (R4, tabs 84-87).

40. On 14 February 2008, the CO wrote to Hanley to approve a conditional restart of production lot 2. She concluded by stating: "It should be noted that any delay to the current contract delivery schedule as a result of the information contained/reported on the

referenced Failure Analysis is considered to be the responsibility of Hanley Industries, Inc." (R4, tab 94)⁸

41. As of 27 February 2008, Hanley still had not submitted either a revised SPC plan or an updated AIE list despite several missed deadlines (R4, tabs 100, 131).

42. On 26 February 2008, Hanley informed the government that "high pressure testing at Gormac has caused [one] tube to rupture" (R4, tab 101). On that same day, the government responded as follows:

This is considered a critical per the Critical Characteristic clause of your contract. Therefore Hanley must complete a Failure Analysis and Corrective Action Report for Government approval before Hanley can utilize any Gormac tubes in their process. If the tubes that failed are of the same heat of steel as tubes Hanley is currently using in production, Hanley must immediately cease use of those tubes until Government approval of failure analysis and corrective action report.

(R4, tab 111)

43. On 27 February 2008, the contract specialist, Ms. Crosson, requested "Government personnel to visit Gormac on Tuesday 4 March 2008." She also requested "participation of Hanley personnel to accompany the Government to Gormac for the visit." (R4, tab 114) On 28 February 2008, Hanley informed the government: "Gormac is expecting your visit. Hanley will not be sending a representative." (R4, tab 121)

44. Despite the fact that government representatives were traveling to Gormac to investigate the circumstances regarding the burst tube, Hanley informed the government on 29 February 2008 that the ruptured tube was being forwarded to Hanley's shop for evaluation (R4, tab 127). On 3 March 2008, Mr. Wuorinen forwarded the following email to Hanley:

Please confirm if that tube is at Gormac or at your plant as soon as possible. We should have been informed about your plans to ship the tube last Tuesday. Now we have six team members going to Gormac today who will [be] conducting an

⁸ The CO also instructed Hanley "to identify the previous portion of lot 2 as a separate sublot" (*id*).

investigation. I was not able to participate in this visit due to training all week.

If it is at your facility, I recommend that any tests conducted do not destroy the site of the defect. It is extremely important to assure that the tube is not altered to the extent that it would significantly impede the Government's evaluation of your root cause analysis.

What tests do you plan on conducting on the tube? Spectrographic, atomic adsorption, scanning electron microsopicity (SEM), wet chemistry?

(R4, tab 133) On that same day, Hanley responded that the tube was scheduled to arrive at its shop "this morning" (R4, tab 134). The tube was inspected on 4 March 2008, and Hanley submitted its inspection report to the government on 5 March 2008. Hanley also stated that it had forwarded the tube to St. Louis Testing Laboratories for "Scanning Electron Microscope (SEM) analysis." (R4, tab 146)

45. During their visit to Gormac's plant on 4 and 5 March 2008, governmental representatives learned, for the first time, that Hanley "had switched its steel tube vendor from Plymouth to WEBCO" (tr. 4/136). Although Hanley had issued a purchase order to Webco in May 2007 and had received tubes from the new supplier in the January to February 2008 timeframe, it never informed the government of this fact (finding 34; tr. 3/116). Moreover, Plymouth Steel-not Webco-was the tube vendor for the first and the second FATs which had been approved by the government (tr. 2/5, 4/135; findings 22, 25). In addition, Plymouth Steel was also the vendor for production lot 1 which had been accepted by the government in January 2008 (tr. 2/5; finding 30).

46. Also during their visit to Gormac on 4 and 5 March 2008, the government's representatives discovered that Gormac was not conducting hydrostatic testing in accordance with the contract's requirements. On 17 March 2008, the CO forwarded the following email to Hanley:

Your source may have assured you that the hydrostatic tester was used on every tube, however, the issue lies with the fact that Gormac is not conducting the test in accordance with MIL-T-15119A. According to MIL-T-15119A, the dimensional portion of the hydrostatic test must also be completed on 100% of the tubes to satisfy the requirement that there be no more than .003 inches of permanent deformation. Gormac has only been conducting the dimensional portion of the test on 1 out of every 10 pieces. I have attached a copy of the record they provided the Government team at the approved visit for the dimensional test. This will be explained in our response to your restart request.

(Finding 13; R4, tab 161 at 169) Gormac's "Hydrotest Record," which the CO attached to her email, confirmed that it had measured only "1 pc each 10 pcs" (R4, tab 161 at 170).

47. During their visit, the government's representatives also concluded that Gormac was reworking tubes although Hanley had not sought permission to do so pursuant to the contract's requirements (finding 8; tr. 4/148-49). Finally, in violation of the contract's terms, the government's engineers were unable to inspect Gormac's hydrostatic testing machine which had been rented and returned to the vendor by Gormac (finding 5; tr. 4/146).

48. All of the tubes forwarded to Gormac had been subjected to centerless grinding by another of Hanley's vendors, even though this was not a contractual requirement (finding 21). A byproduct of this process was that the heat lot stamps engraved on the 12-foot sections of tubing by the steel mill were erased (tr. 4/145). Thus, the government's engineers were unable to confirm that each production lot was comprised of only one heat lot, as required by the contract (finding 13). In a situation where there was only one tube vendor, this might not have been a problem. But here both Plymouth and Webco had provided tubes to Hanley, and there was no way to differentiate the various heat lots (tr. 4/162).

49. Hanley's closure report for production lot 2 demonstrated that the problem was even more serious than it first appeared. Hanley stated that the tubes comprising production lot 2 contained four heat lots. (R4, tab 206 at 90) Mr. Hahin, the government engineer, testified that his analysis of Hanley's closure report revealed that there might even have been a fifth heat lot in production lot 2 (tr. 3/163-64).

50. The loss of traceability of the various heat lots was so severe that Dr. Ramsay, Hanley's expert, could not discern from which of the lots the tube which burst on 26 February 2008 had originated (tr. 2/199-200). On 10 March 2008, St. Louis Testing Laboratories forwarded their report to Hanley. They concluded:

> This analysis suggests that the subject failure condition was due to the presence of a lap that had split open during subsequent mechanical operations. The presence of cold working, rough textured fracture surface (with scale), and an

angled fracture along the exterior and interior surfaces of the tube supports this conclusion.

Laps are surface defects, which appear as seams and are caused by the folding over of hot metal fins that are rolled into the metal surface. The condition can become elongated during subsequent forming operations.

This analysis indicates the linear discontinuity observed on the exterior surface of the tube was due to mechanical gouging of the surface. The presence of a cold worked depression in the location of the discontinuity supports this conclusion.

(R4, tab 150 at 89)

51. On 11 March 2008, Hanley submitted its CAR for the tube failure (R4, tabs 154-57). It concluded that it had complied with the requirements of MIL-T-15119A and that the tubes conformed to specifications. It requested the CO's permission to restart production on 12 March 2008. (R4, tab 154 at 121)

52. On 17 March 2008, Hanley wrote to the CO:

In our recent phone call you stated that only 10% of tubes were hydrostatically tested by Gormac. Please check your source. Gormac assures us that EVERY tube is and has been hydrostatically tested.

(R4, tab 160) As we have found, the CO rejected this response (finding 46).⁹

53. On 19 March 2008, the DCMA QAR, Mr. Conover forwarded a CAR to Hanley in which he set forth several deficiencies as follows:

Contract Requirements:

1. 150-9000-2000 Paragraph 7.4.2, Purchasing Information

2. MIL-P-18714D, Primer, Electric, Mark 45 Mod 1, Paragraph 4.5.1, Lot formation. Production must consist of

⁹ Obviously, Hanley's testing costs would have been lower since Gormac was testing only 10 percent of the tubes (tr. 4/148).

not more than 20,000 homogeneous primers plus those required for inspection...and only one tubing heat treat lot.

3. MIL-T-15119A, Tubing, Round, Seamless Alloy Steel, Para 4.3, "A lot shall consist of homogeneous tubing produced from the same heat and the same heat treatment."

4. ED-STD-183A, (invoked by MIL-T-15119A Para 3.8)

Deficiencies:

1. Hanley Industries Issued purchase order #6082 to Gormac for the processing of Primer Tube PN 685475. The lot formation requirements and restrictions of MIL-P-18714D were not incorporated into the applicable purchase order nor was the required homogeneity of the lots maintained. There was no heat lot tracking/control at Gormac, nor was Gormac aware that only one heat lot was allowed per primer lot, required to maintain homogeneous lots. Lot 002 contains 1,800 sections of 12' tubes from 2 different heat lots, 37 pieces from heat lot 06N83 and 1526 from heat lot 540325. Thus, homogeneity was not maintained as required.

<u>Requirement:</u> MIL-P-18714D, paragraph 4.1 Responsibility for Inspection.

<u>Deficiency</u>: P.O. to Banner and Gormac requires delegation statement for Government source inspection (GSI). Request the clause stated below be included in all purchase orders from Hanley regarding this contract and any other P.O. requiring GSI.

When Government inspection is required, the contractor shall add to his purchasing document the following statement: "Government inspection is required prior to shipment from your plant. Upon receipt of this order, promptly notify the Government Representative who normally services your plant so that appropriate planning for Government inspection can be accomplished."

Requirements:

1. MIL-T-15119A, Paragraph 3.7, Hydrostatic Test. "The tubing shall not break or permanently increase in diameter more than 0.003 inch when subjected to the hydrostatic test of 4.9."

2. MIL-T-15119A, Paragraph 4.9, "The outside diameter of each test length shall be gaged in the same location before [and] after application of the specified pressure."

Deficiency:

Gormac only measured 1 out 10 (10%) of the tubes for an increase of .003 inch after the hydrostatic test instead of the required 100%.

Requirements:

1. ISO-9000-2000 Paragraph 7.4.2, Purchasing Information

2. MIL-T-1519A, Paragraph 3.7, Hydrostatic test (C1)

3. Contract W52P1J-05-C-0076, Section E-10, Critical Characteristics

Deficiency: The hydrostatic pressure test is a critical characteristic, inspected and tested at the subcontract level, and was not identified as such in the purchase order with Gormac. In addition, the applicable requirements of Section E-10 for controlling critical characteristics were not incorporated into the purchase order.

(R4, tab 173 at 208-09)

54. On 19 March 2008, the CO approved a conditional restart of the primer production. She wrote:

a. Hanley Industries Ruptured Tube Corrective Action Report, dated March 11, 2008.

b. Government visit to Gormac on March 4-5, 2008.

On February 26, 2008, Hanley informed the Government they experienced failure on a critical characteristic during high pressure testing which caused a tube to rupture at Gormac while producing Lot 2. This occurance [sic] is classified as a critical characteristic per MIL-T-15119A. As a result and in accordance with the Critical Characteristics Clause, E-10, Far Clause 52.246-4550 per contract W52P1J-05-C-0076, production was stopped/discontinued at both Hanley and Gormac on February 26, 2008.

The Government has completed the necessary technical review of MK-45, Primer Tube 685475 Root Cause and Corrective Action Report and has determined that the report is insufficient in identifying root cause and subsequent corrective action. Notwithstanding the deficient failure analysis, the Government is hereby allowing Hanley to restart production upon completion of the following conditions:

1. Reject and segregate ALL tubes that have been manufactured by Webco tubing - Primer tubes and Primers.

2. Per referenced b. Gormac's current procedures indicate that Hydrostatic Testing is being conducted on 100% of the material. The procedure discusses using a snap gage set to .765 to measure the tube for distortion of the O.D. after hydro-testing per MIL-T-15119A, however, it fails to address whether a measurement was taken of the tube prior to hydro-testing in order to determine if max .003 distortion was not exceeded. Therefore, these procedures shall be revised and provided to the Government for approval to reflect that beginning measurement of the tube is being recorded prior to hydrostatic testing. Also, all Acceptance Inspection Equipment (AIE) being utilized at Gormac shall be submitted to the Government for review and approval. 3. Only material obtained from the qualified tube vendor that was approved at First Article (FAT) can be utilized in production. If Hanley wishes to submit Webco or any other vendor as a source of supply for tubing for Government approval, Hanley shall submit a request for a "modified" FAT to qualify a new vendor(s). Please note, however, that the recent rupture makes Webco a questionable source of tubing. Therefore, a detailed root cause analysis would be required in addition to FAT request in order for the Government to consider Webco as a qualified source.

4. Only tubing that is certified to MIL-T-15119A, TABLE I, paragraphs 3.7 and 4.9 can be utilized in production. Hanley's qualified tubing vendor(s) must supply the proper certification.

5. Hanley shall revise all their procedures to ensure that flowdown of applicable quality contractual requirements are included in subcontractor purchase orders. This shall be validated by DCMA QAR.

It should be noted that any delay to the current contract delivery schedule as a result of the critical failure is considered to be the responsibility of Hanley Industries, Inc.

As a result of this authorization to resume production, it is requested that Hanley provide necessary delivery schedule revisions to include their offer of consideration to the Government for any delays.

(R4, tab 169 at 195-96) The CO, Ms. Nielsen, testified that she was not required to issue a conditional restart in this instance. She testified further "I was trying to do what I could to help Hanley keep moving and making progress." (Tr. 5/49)

55. On 26 March 2008, Hanley forwarded to the government a "Root Cause and Corrective Action Report" in which it concluded:

All the investigation, evaluation data and reports provided show only one 12 foot section of tubing is non-conforming. Whole Lot is <u>not</u> non-conforming[.]

Webco has provided the steel per AMS-T-6736 which has the same chemical composition as the MIL-T-1511-9A. No requirement for pressure testing.

Material is Non Destruct Tested: Electric tested to ASTM A450 or A1016 & applicable test method E309 or E426 per certification[.]

Gormac has 100% pressure tested the tubes prior to just prior [sic] to going into production (found only 1 ruptured 12 foot section of non-conforming tube was removed from being placed in use).

Saint Louis Testing report stated embrittlement is not the cause of the rupture of the tube.

All processing at Hanley Industries has been per procedure.

All final assemblies have passed manufacturing and x-ray processing as deliverable product[.] Please review the previously submitted documentation for approval.

This is a also [sic] request to restart production at Hanley Industries[.]

If at all possible list Effectivity date for 3/26/08 for this request[.]

(R4, tab 172 at 206)

56. On 7 April 2008, the CO informed Hanley in writing that its CAR was insufficient and that "the entire lot of Webco tubing is considered rejected." She indicated that the government might consider accepting the rejected lot if Hanley successfully complied with these requirements:

1. Prepare a fault tree/root cause analysis of the critical failure and identify what has been done or will be done to investigate the various possible causes of the failure....

2. Provide documentation of Traceability of all Heat Lots in Lot 2....

3. Provide documentation that all tubes were Hydrostatic tested in accordance with MIL-T-15119A and met all the requirements.... 4. In addition to the above mentioned requirements for the existing tubes, to qualify Webco as a supplier will require a Modified FAT....

5. Also, in order to accept the tube stock from Webco in lot 2, Hanley will need to submit two Requests for Deviation.

$(R4, tab 180 at 1-3)^{10}$

57. On 23 April 2008, Hanley stated it intended to use Webco as its tube vendor. The government responded that Hanley would have to qualify Webco through a full FAT. (R4, tab 187 at 251) Hanley never met this requirement (tr. 5/52). On 29 April 2008, Hanley submitted two RFDs to the government: one related to the certification of a different type of steel; the other sought to allow multiple heat lots of tubes in production lot 2 (R4, tab 192 at 266-67).

58. On 2 June 2008, the CO forwarded a show cause notice to Hanley. She stated:

Since you have failed to perform Contract W52P1J-05-C-0076 within the time required by its terms, or cure the conditions endangering performance under Contract W52P1J-05-C-0076 as described to you in the Government's letter date[d] 19 March 2008, the Government is considering terminating the contract under the provisions for default of this contract. Pending final decision in this matter, it will be necessary to determine whether your failure to perform arose from causes beyond your control and without fault or negligence on your part. Accordingly, you are given the opportunity to present, in writing, any facts bearing on the question to Ms. Cheryl Nielsen; HQ, ASC, ATTN: AMSAS-ACA- M; 1 Rock Island Arsenal; Rock Island, IL 61299-6500, within ten (10) days after receipt of this notice. Your failure to present any excuses within this time may be considered as an admission that none exist. Your attention is invited to the respective rights of Hanley Industries, Inc. and the Government and the liabilities that

¹⁰ At the hearing, the CO testified that Hanley never complied with items 2 and 3 (tr. 5/56-57).

may be invoked if a decision is made to terminate for default in accordance with clause 52.249-8, Default.

Effective 22 April 2008 subject contract's delivery schedule became delinquent due to a critical failure that occurred on 26 February 2008. Hanley's inability to provide a realistic schedule is directly tied to their inability to meet the conditions of production restart as follows:

- a. Hydrostatic Test the primer tubes in accordance with TDP requirement MIL-T-15119A which requires measurement to be taken prior to Hydrostatic Testing.
- b. Government approval on Acceptance Inspection Equipment (AIE) utilized at Hanley's subcontractor Gormac in accordance with FAR clause 52.245-4537, Acceptance Inspection Equipment (AIE) and CDRL A009.
- c. Government approval on a FAT plan to qualify a new vendor for steel tubing in accordance with CDRL A010. Only material obtained from the qualified steel tube vendor that was approved by First Article Testing (FAT) can be utilized in production. Hanley purchased tubes without the Government's knowledge from an unqualified vendor that produced the critical failure. Hanley failed to use steel tubing that is certified to MIL-T-15119A in production.
- d. Revise procurement procedures to ensure that flowdown of applicable quality contractual requirements are included in subcontractor purchase orders in accordance with FAR clause 52.246-4550, Higher-Level Contract Quality Requirement, ISO 9001-2000.

Any assistance given to you on this contract or any acceptance by the Government of delinquent goods or services will be solely for the purpose of mitigating damages, and it is not the intention of the Government to condone any delinquency or to waive any rights the Government has under the contract. If Hanley Industries, Inc. fails to provide any response satisfactory to the Government within ten (10) days of the date of this letter, the Government reserves the right to assert its rights under this contract to include terminating the contract for default in accordance with FAR clause 52.249-8.

(R4, tab 264)

59. Hanley responded to the show cause notice on 14 June 2008. With respect to "a"; the hydrostatic testing, Hanley stated:

The government's letter of 4/7/08 address [sic] this topic is paraphrased as follows:

Provide documentation that all tubes were Hydrostatic tested in accordance with MIL-T-15119 or tube stock that has not been machined will need to be Hydrostatic tested and the DCMA representative to verify, and all tube stock that has been processed into tubes checked to insure not expanded beyond .003 or provide documentation that all tube stock and/or primer tubes that the outer diameter could not have experienced a permanent deformation of greater than .003"[.] Hanley submitted documentation in support of the third option on 5/27/08. The documentation showed statistically that there was less tha[n] 1 in a million possibility that a tube had swelled more than .003." The use of statistics to evaluate a characteristic is well understood and used extensively in quality determinations by the Government. Hanley provided an explanation that we thought was suitable for persons with a passing understanding of statistical methods. Attached is documentation and calculations providing engineering evidence that the .003 requirement is met and tubes at Hanley Industries have been measured with Government [oversight] and meet the drawing requirements. If there is need of a more detailed explanation, we would be happy to provide it. Hanley requests that the Government clarify in what way the documentation was insufficient. (Reference Master Restart Index Items 11-14).

Regarding "b"; the AIE requirements, Hanley asserted:

Hanley submitted documentation in support of the AIE requirement on 5/27/08. Hanley requests that the Government clarify in what way the documentation was insufficient. (Reference Master Restart Index Item 60)

As for "c"; the FAT plan to qualify Webco as a new vendor, Hanley stated in part:

In regards the use of tubing from Plymouth, Hanley was made to understand the critical nature of the need. We understand our Navy needs top quality Mk45 gun primers immediately. We have governed our actions accordingly and attempted to get production restarted as soon as possible. Obtaining material from Plymouth (vendor #1) will introduce a delay of many weeks. Perhaps we should not have assumed that the Government wanted quick delivery. Please note that all the tubing needed for Lot 3 has already been produced by Webco, and that production can begin immediately when the Government is satisfied with the provided documentation.

Hanley did purchase tubing from a vendor that had not been prequalified by the Government, and we apologize for that. This, however, in no way was related to the critical failure. The process for qualifying a new vendor requires the examination of 5 tubes with QAR oversight. The tubes, had they been submitted in advance of use on Lot 2, would have passed. In fact, we could have presented 10,000 tubes to the OAR, and each would have passed. Please note that the vendor for Lot 1, Plymouth, is not immune to having tubes burst. Hanley has interviewed the retired Government QAR who had oversight at Propellex when the previous Mk45s were manufactured. He confirms that there was an occasional tube burst, and that burst tubes were discarded. with production continuing. In addition please note that Plymouth Tube declines to quote tubing to MIL-T-[15119A]. In addition, it is our understanding that the only significant difference between the AMS-T-6736A specification and the MIL-T-[15119A] specification is the Hydrostatic testing. With the accomplishment of the Hydrotest, MIL-T-[15119A] requirements have been met.

If the government insists, we will order tubing from Plymouth. The tubing will take many weeks longer to get, cost more, will still be subject to rare hydrostatic test failures and will not be certified by the manufacturer to MIL-T-15119A. Hanley requests clear direction on this question, as the government's requirement for prompt delivery seems to be at odds with the Governments [sic] desire to use Plymouth tubing, without achieving any demonstrated improvement in quality.

Hanley submitted documentation in support of the Webco FAT requirement on 5/27/08. Hanley requests that the Government clarify in what way the documentation was insufficient. (Reference Master Restart Index Items 14-16)

With respect to "d"; Revising procurement procedure to reflect flowdown of applicable quality requirements, Hanley asserted:

Procurement procedures have been revised and submitted to the Government QAR. Hanley requests that the Government clarify in what way the documentation was insufficient.

Concerning the reference to the delivery schedule, Hanley has pointed out a critical issue that must be resolved. Since a heat lot of tubing may extend over several lots of Primers, and the failure of one tube calls into question the entire heat lot, does the government intend that every tube for the entire contract be Hydrostatically tested before machining begins on any tube? Otherwise a burst tube in Lot 8 could reject Lot 4 from a year earlier. When the tube burst issue first came up, I asked why not just throw the bad tube away and continue production. The answer was that a burst tube could indicate hydrogen embrittlement that could affect the entire heat. We promptly sent samples to St. Louis Test Labs where the definitive answer was given that there was no hydrogen embrittlement. In response to further government questions, further metallurgical testing was conducted. The test results concluded that the failure was an anomaly. This information was submitted to the government 5/5/08, and is apparently still under review.

In consultations with Webco we have educated ourselves about the methods of Non Destructive Testing (NOT) suitable for tubing. There are two types, Eddy Current and Ultrasonic, neither [of] which is a requirement of the contract. Eddy Current is suitable for finding flaws of some types, but not of the type that was encountered in Lot 2. Ultrasonic is suited for the type of flaw that was encountered; however it cannot be used on such a small tube as we are using. Webco and Hanley have developed a plan by which the tubing can be ultrasonically tested before being drawn down to the final diameter. This testing is available as an option from the vendor, starting with Lot 4, and the government may want to consider including this testing in the specification.

In effect, Hanley provided the CO with little new information, preferring to recycle arguments and data which it had already forwarded to the government. (R4, tab 243)

60. On 16 July 2008, the CO forwarded to Hanley her determination to terminate its contract for default. She wrote, in pertinent part:

Reference:

a. Contract No. W52P1J-05-C-0076

b. Letter. HQ, Army Sustainment Command, subject: Show Cause letter, dated 02 June 2008.

c. Letter, Hanley Industries, Inc. not dated, received electronically June 13, 2008 Re: Show Cause Notice; Contract Number W52P1J-05-C-0076

d. Request for Deviation (RFD) for Primer, Electric MK 45 MODl, RFD No. 0076-D-0023, dated 02 May 2008, Procuring Activity Number R08U7038 entitled: Material Certification Change for Lot 2 Primer Tubes (enclosure)

The Government has reviewed Hanley Industries, Inc. response to the Government's Show Cause letter, which was provided in the Hanley Industries letter in reference c. above. The Government has also reviewed and considered all information and matters relevant to the Show Cause. As a result of this review, it is the determination of the Contracting Officer that the above referenced contract is hereby terminated for default, pursuant to the Default Clause 52.249-8 of the contract. The reasons therefore and further instructions in regard to the Default action are set forth below.

I. Review and Relevant Facts.

As a result of this review, the following is the Government's response to the assertions in referenced c. letter. The assertions of Hanley Industries are shown in the bold print, followed by the Government position:

a. Primer Tubes met the .003 requirement and measured with Government oversight and meet the drawing requirements. Hanley Industries has not provided objective evidence that all tubes were Hydrostatic tested in accordance with MIL-T-15119A (OS) and met all the requirements nor provided the Government revised work procedures to ensure Hydrostatic Test would be performed on new material in accordance with MIL-T-15119A. This would include providing objective evidence that all tubes met the expansion requirement of MIL-T-5119A that none of the tubes expand more than 0.003 inches after hydrostatic testing.

Hanley cites their outer diameter maximum after grinding is 0.763 + - 0.001 and their lower specification limit after grinding at 0.762. Contractor has not provided any objective evidence that proves all tubes met the 0.762 limit (100% inspection data not provided), and a maximum growth after testing of 0.765. The snap gage at Gormac was set at 0.765. Hanley did not test/inspect in accordance with paragraph 4.9 of MIL-T-15119A. An unknown quantity of tubes could have been less than 0.762; therefore, the data presented is not acceptable. It has not been shown that tubes comply with the 0.003 requirement of MIL-T-15119A paragraph 3.7. Banner provided data demonstrating conformance with the diameter specification .763 + -.001. This data was not taken with approved procedures using approved AIE. To date Hanley has not provided the Government revised work procedures to ensure Hydrostatic Test would be performed on new material in accordance with MIL-T-15119A which is a condition for restart of production.

b. Revised Acceptance Inspection Equipment (AIE) has been submitted for Government approval. The Government has reviewed Hanley's AIE submission dated May 28, 2008 and it only provided Gormac's work instructions (procedures) and make and model of the equipment Gormac used during the investigation of the ruptured tube. It failed to specifically identify all equipment used to perform and verify the hydrostatic test requirement as specified in MIL-T-15119A, as well as provide a detailed procedure and log sheet for this characteristic. Hanley also failed to submit AIE approval for two hydrostatic test machines used at Gormac.

c. Hanley did purchase tubes from vendor that had not been pre-qualified by the Government, however, in no way was related to the critical failure. Government disagrees with Hanley's assertion that changing the vendor was not related to the critical failure. Hanley purchased tubes without the Government's knowledge from an unqualified vendor that produced the critical failure. The purchased steel tubing used in production was not certified to MIL-T-15119A. Hanley has not qualified Webco or any other steel supplier via the First Article Test (FAT) process per FAR Clause 52.209-4511, First Article Test (Government Testing).

d. Hanley has revised procurement procedures to ensure flowdown of applicable quality contractual requirements. DCMA QAR issued a Level II Corrective Action Report (CAR) 0076-006 in violation of MIL-Q-9858, paragraph 5.2 Purchasing Data. Even though Hanley has provided revised procedures that appear to be adequate, to date, Hanley has not provided corrected purchase orders for Government verification.

e. Lot 002 can be submitted by Hanley 2 weeks after restart approval. The Government provided Hanley conditional restart to utilize new material. To date, Hanley has not provided a revised delivery schedule. Hanley's assertion that they can deliver 2 weeks after restart is contingent upon obtaining Government approval to use material purchased from Webco. Per letter dated April 7, 2008, the Government stipulated the conditions that Hanley would need to meet in order to gain Government approval to use material utilized in Lot 002 from Webco as follows:

(1) Prepare root cause analysis of critical failure[.]

(2) Provide documentation of traceability of all Heat Lots in Lot 002[.]

(3) Provide documentation that all tubes were Hydrostatic tested in accordance with contract which requires diametrical measurements to be taken before and after Hydrostatic Testing.

(4) Qualify Webco as a supplier via a modified First Article Test[.]

(5) Submit Requests for Deviation to get approval for the steel purchased to AMS-T-6736 in lieu of contract requirement of MIL-T-15119A and to allow the use of multiple heat lots within Lot 002 of primers.

Hanley has failed to provide the required objective evidence needed to gain Government approval to use the Webco material for the following reasons:

a. Hanley's corrective action report provided in response to the critical failure involving Webco tubing was insufficient in identifying root cause and subsequent corrective action. The root cause analysis failed to investigate the supplier or foundry that produced the steel billets. Hanley has not thoroughly evaluated the foundry processes therefore, root cause analysis of the non-metallic inclusion is incomplete. As result of this omission, Hanley has failed [to provide] adequate root cause and corrective action for the critical failure.

b. Hanley has failed to adhere to sampling requirements of MIL-T-15119A (OS); MIL-P-18714D, paragraph 4.5.1 Lot Formation; and MIL-Q-9858A paragraph 3.4 Records, as Lot 002 contains up to four known heats of primer tubes (two Webco heat lots and two Plymouth heat lots) and Hanley is unable to provide objective evidence to determine/distinguish the heat lots of the entire quantity of primer tubes in Lot 002. c. As stated in paragraph la. above, Hanley Industries has not provided objective evidence that all tubes were Hydrostatic tested in accordance with MIL-T-15119A (OS) and met all the requirements.

d. Hanley failed to qualify Webco as a supplier.

e. The RFD to obtain Government approval for steel purchased to an alternative specification (0076-D-0023RI) is disapproved (see enclosure) as none of the proposed alternative specifications would meet the required mechanical properties required. Hanley has not submitted an official copy of the RFD to allow use of multiple heat lots to the Government.

As a result of Hanley's continued persistence on restarting production with Webco material, Hanley's inability to provide a realistic schedule is directly tied to their failure to meet the conditions of production restart and makes them incapable of meeting their proposed delivery of 2 weeks after restart.

Included in their response, Hanley also posed the following question to the Government:

"Since a heat lot of tubing may extend over several lots of Primers and the failure of one tube calls into question the entire heat lot, does the Government intend that every tube for the entire contract be Hydrostatically tested before machining begins on any tube?"

The Government does not dictate production processes. The requirements for hydrostatic testing is [sic] provided in MIL-T-15119A, paragraph 3.7 Hydrostatic Test C1, (C1 designation means that this requirement is critical defect 1 and therefore must be 100% inspected) and paragraph 4.9 Hydrostatic Test. It is Hanley's responsibility to develop the process for meeting these specification requirements.

II. Government Termination Decision

Based upon Hanley Industries failure to show the Government reasonable cause not to terminate their contract for default, this letter is a Notice of Termination of Contract Number W52PIJ-05-C-0076 awarded September 29, 2005 to Hanley Industries, Inc., for the remaining quantity of 84,630 MK45 Electric Primers for a total dollar amount \$4,327,743.76. The Government exercises its right under contract clause 52.249-8 *Default (Fixed-Priced Supply and Service)* of the aforementioned contract. The act of failing to deliver in accordance with the contract schedule, provide supplies that conform to the TDP, use of approved vendors, and to meet the criterion for quality in the subject contract which is a failure to meet the following provisions in Hanley Industries contract:

a. Higher Level Contract Quality Requirement (Government Specified) 52.246-4550 (Feb 2004)

b. MIL-T-15119A(OS) dated October 20, 1976

c. Drawings/Specifications (Government Specified) 52.210-4501 (March 1988); TDP for the MK-45 Electric Primer, 2434755K

d. Statement of Work for Statistical Process Control (Government Specified) 52.246-4506 (Feb 1999)

e. First Article Test (Government Test) (Government Specified) 52.209-4511 (May 1994)

f. Acceptance Inspection Equipment (AIE) (Government Specified) 52.245-4537 (Feb 2002)

g. Contract Data Requirements List (CDRL) A010 Test/Inspection Reports, First Article Inspection & Test, Identification Number DI-NDTI-80809B

h. MIL-P-18714D, 24 January 1994

i. Section B Delivery Schedule - Modification P00010

j. MIL-Q-9858A dated March 15, 2004

Hanley Industrie's [sic] failure to meet the criteria listed above violated the terms of their contract and thereby constitutes the default.

(R4, tab 249)

61. This timely appeal followed.

DECISION

The law in this area is well settled. A default termination is "a drastic sanction which should be imposed...only for good grounds and on solid evidence." J.D. Hedin Construction Co. v. United States, 408 F.2d 424, 431 (Ct. Cl. 1969) (citations omitted). Accordingly, the government bears the burden of proving that the termination was justified. If the government establishes a prima facie case in this regard, the burden of production–or going forward–shifts to the contractor. Lisbon Contractors, Inc. v. United States, 828 F.2d 759, 764-65 (Fed. Cir. 1987); New Era Contract Sales, Inc., ASBCA No. 56661 et al., 11-1 BCA ¶ 34,738 at 171,022. Here, the government has met its burden.

Initially, the Board notes that Hanley failed to meet the delivery date of 22 April 2008 for production lot 2 which was set forth in Modification No. P00010 (finding 36). The government had previously extended the delivery dates for both the FAT and production lot 1 multiple times (findings 23, 27-30). Similarly, the government had extended, on several occasions, the delivery date for production lot 2 from 28 November 2006 to 22 April 2008 (findings 29, 30, 36).

Although, as executed, Modification No. P00010 was unilateral, the revised delivery date was contained in a spreadsheet which Hanley itself prepared and which was forwarded to the CO for incorporation into the modification (finding 36). Because the revised delivery date was proposed by Hanley in its spreadsheet, it was "both reasonable and specific from the standpoint of the performance capabilities of the contractor." *McDonnell Douglas Corp. v. United States*, 323 F.3d 1006, 1019 (Fed. Cir. 2003).

The CO gave Hanley more than adequate notice of the reasons underlying the default termination. On 19 March 2008, she approved a conditional restart of the primer production even though she was under no contractual obligation to do so. The CO referred to gaps in Hanley's hydrostatic testing procedures. In addition, she stressed that Webco was not an approved tube supplier and that Hanley needed to pass a modified FAT if it desired to use Webco's tubes. (Finding 54) Hanley did not comply with these requirements in its CAR of 26 March 2008 (findings 55-56). On 7 April 2008, the CO informed Hanley that its report was insufficient. She rejected the Webco tubing, but once again, stated the prerequisite conditions for its acceptance. These included preparing a root cause analysis of the critical tube failure, providing documentation of traceability of all heat lots in production lot 2, and qualifying Webco as a vendor through a modified FAT. (Finding 56) In a response of 23 April 2008, Hanley simply stated that it intended to use Webco as a tube supplier (finding 57). On 2 June 2008, the CO replied by issuing a show cause letter in which she stated that Hanley had failed to "cure the conditions endangering performance" under the contract. She, once again, referred to the need for a modified FAT, government approval of

Hanley's AIE for hydrostatic testing, the need for appropriate hydrostatic testing, and the flowdown of adequate quality requirements to subcontractors. The CO gave Hanley 10 days to cure these deficiencies. (Finding 58) On 14 June 2008, Hanley responded to the cure notice, for the most part, by referring to information which it had previously forwarded to the CO and which she had already deemed to be inadequate (finding 59). Accordingly, the CO acted reasonably in terminating the contract for default on 16 July 2008 (finding 60).

Hanley makes a host of arguments designed to show that the default was improper. Initially, we simply note that its repeated references to other contracts performed either by itself or by other contractors are misguided. Testimony regarding other contracts is simply irrelevant to the issues of contractual performance raised by the termination of this contract.

The Board also disagrees with Hanley's contention that the CO acted unreasonably by declining to accept Webco as an alternate vendor (app. br. at 59-63). Hanley never complied with the reasonable steps set forth by the CO to qualify Webco. Further, the CO was acting responsibly when she demanded strict compliance with contractual specifications. *Mission Valve and Pump Co.*, ASBCA Nos. 13552, 13821, 69-2 BCA ¶ 8010 at 37,243.

We also reject Hanley's belated argument that its difficulties were the result of the government's defective technical data package (app. br. at 65). This issue was not raised during contractual performance. The Board also notes that Hanley successfully completed production of the FAT and lot l, using the package at issue.

Hanley's argument that the CO acted in bad faith is also unfounded (app. br. at 66-68). As we have concluded, the CO acted reasonably in defaulting the contract after Hanley failed to cure it deficiencies. Further, the record contains no evidence of bias against Hanley by any government official. *See Am-Pro Protective Agency, Inc. v. United States*, 281 F.3d 1234, 1240 (Fed. Cir. 2002).

We have carefully reviewed Hanley's other contentions and reject them.

CONCLUSION

The appeal is denied.

Dated: 12 August 2014

Michael T. Bau

MICHAEL T. PAUL Administrative Judge Armed Services Board of Contract Appeals

I concur

MARK N. STEMPLER

Administrative Judge Acting Chairman Armed Services Board of Contract Appeals I concur

RICHARD SHACKLEFORD Administrative Judge Vice Chairman Armed Services Board of Contract Appeals

I certify that the foregoing is a true copy of the Opinion and Decision of the Armed Services Board of Contract Appeals in ASBCA No. 56584, Appeal of Hanley Industries, Inc., rendered in conformance with the Board's Charter.

Dated:

JEFFREY D. GARDIN Recorder, Armed Services Board of Contract Appeals