

ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeals of --)
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Hanley Industries, Inc.) ASBCA Nos. 54315, 56383
)
Under Contract No. N00104-01-C-K109)

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OPINIONS BY ADMINISTRATIVE JUDGE PARK-CONROY ON ASBCA NO. 54315 AND ADMINISTRATIVE JUDGE TING ON ASBCA NO. 56383

At issue in these consolidated appeals are claims arising out of a contract to supply CCU-107/B impulse cartridges. Following a hearing on entitlement and submission of briefs by the parties, ASBCA No. 54315 is denied in an opinion written by Administrative Judge Park-Conroy. ASBCA No. 56383 is denied in an opinion written by Administrative Judge Ting to which Administrative Judge Park-Conroy dissents.

FINDINGS OF FACT

The Naval Inventory Control Point (Navy) awarded Contract No. N00104-01-C-K109 to appellant Hanley Industries, Inc. (Hanley) on 8 June 2001. The contract required Hanley to manufacture and deliver 181,150 CCU-107/B impulse cartridges at a firm, fixed-price of \$831,478.50. (R4, tab 1) The cartridges are used to release bombs from aircraft in order to strike ground targets (tr. 1/19). They were to be manufactured in accordance with the government's technical data package (TDP) requirements (R4, tab 1).

Contract Line Item (CLIN) 0001AB required Hanley to deliver first article test (FAT) samples consisting of 70 cartridges, 25 glass header assemblies, 25 ignition elements loaded in modified cases, and material certifications (R4, tab 1). Section I of the contract contained the standard clause, FAR 52.209-4, FIRST ARTICLE APPROVAL-GOVERNMENT TESTING ALTERNATE I (JAN 1997) (*id.* at 40). Section F of the

contract set forth the contractual delivery requirements. The FAT samples were to be delivered by 5 December 2001, with production lots consisting of 20,000 cartridges each to follow beginning 3 June 2002. The final delivery date was 5 March 2003. (R4, tab 1)

The contract incorporated the following relevant standard clauses by reference: FAR 52.233-1, DISPUTES (OCT 1995); FAR 52.242-17, GOVERNMENT DELAY OF WORK (APR 1984); and FAR 52.243-1, CHANGES--FIXED-PRICE (AUG 1987) (R4, tab 1).

Section C of the contract identified the applicable Data List as DL 6260802, Revision C, dated 29 March 2000 (R4, tab 1 at 4). The Data List sets forth the drawings for the impulse cartridge components (R4, tab 75 at 1-4). The Data List identifies Drawing No. 6260802 "DL REV: C" as the "TOP ASSEMBLY DRAWING" and also includes Drawing No. 6260802 Revision C, dated 6 March 2000, described as "CARTRIDGE IMPULSE CCU-107/B," in the list of drawings. It shows Drawing No. 6261105, dated 31 October 1988, as the relevant drawing for the "IGNITION CHARGE," Drawing No. 6261109, dated 31 October 1988, as the relevant drawing for "HEADER & BRIDGEWIRE ASSEMBLY," and Drawing No. 6261110 Revision B, dated 30 March 1999, as the relevant drawing for the "IGNITION ELEMENT LOADED ASSEMBLY." (R4, tab 75 at 1, 16, 22) The ignition element is commonly known as the "ignitor" (tr. 1/20).

Note 2 on Drawing No. 6261105 sets forth the ingredient, specification and ingredient weight percentage requirements for the ignition charge. There is a "(C1)" reference next to Note 2 which is meant to characterize the requirements as critical. (R4, tab 75 at 16; tr. 2/58) The ingredients and weight percentages for the ignition charge are zirconium powder, MIL-Z-399, Type II, Class 1 (46.5%), potassium perchlorate (52.5%), graphite (1%), and ethyl alcohol as required (R4, tab 75 at 16, note 2). The ignition charge or mix is commonly known as ZPP, an abbreviation for the two major ingredients, zirconium and potassium perchlorate (tr. 1/37-42).

The zirconium specified is "a very fine pyrophoric-grade" and is "[v]ery reactive, quite hazardous to handle" (R4, tab 73 at 31; tr. 2/59). Potassium perchlorate is an oxidizer which reacts with zirconium resulting in "a liberation of heat and gas, and causes ignition of the material" (tr. 2/60). Graphite is included in the ZPP to make it "safer to handle and process." It also serves as a lubricant. (Tr. 2/61)

Both the Data List and Note 2 on Drawing No. 6261105 identified MIL-Z-399 as the specification applicable to zirconium, MIL-P-217 as applicable to potassium perchlorate and MIL-G-155 as applicable to graphite (R4, tab 75 at 2, 16). The parties agree that the applicable version of the zirconium specification is MIL-Z-399D, reinstated

2 December 1996, which sets forth the chemical, physical and performance requirements for Type II, Class 1 powder zirconium (R4, tab 73 at 4, 8, 10).

The chemical requirements are set forth in Table III of MIL-Z-399D as follows:

<u>Requirement</u>	<u>Type II Class 1</u>
Total Zirconium, percent min.	94.0
Calcium, percent, max.	0.10
Iron, percent, max.	0.20
Aluminum, percent, max.	0.30
Hydrogen, percent, max.	0.20
Ignition gain, percent	30.2-33.0

(R4, tab 73 at 4)

The particle size requirements for Type II zirconium are set forth in Table II of MIL-Z-399D as follows:

<u>Sieve</u>	<u>Class 1</u>
Thru No. 120 sieve (125 microns), percent by weight	100
Thru No. 200 sieve (74 microns), percent by weight	99 min.
Thru Buckbee Mears No. 26 sieve, (20 microns), percent by weight	96 min.
<u>Subsieve</u>	
Less than 9 microns, percent by weight	85 min.
3 microns, percent by weight	70-90
0.75 microns, percent by weight	12-30
Average particle size, microns	2.5 ± 1.0

(R4, tab 73 at 8)

Paragraph 3.3 Burning time of MIL-Z-399D requires that Type II zirconium, classes 1 and 2 have a “burning time between 1.3 and 2.4 seconds (per 10 inches)” (R4, tab 73 at 10).

In response to an inquiry by Hanley after contract award, the Navy suggested Hummel Croton, Inc. (Hummel) as a possible supplier of the zirconium (R4, tab 78). Ultimately, however, Hanley purchased the zirconium from AEE, a supplier of ingredients for military requirements that it had used for energetic powders since 1993

(tr. 1/48-49). The AEE zirconium was priced at \$98 a pound; the Hummel zirconium was \$286 a pound (R4, tab 24).

Section C of the contract identified the applicable specification for the CCU-107/B impulse cartridges as MIL-DTL-32048, dated 28 March 2000 (R4, tab 1 at 4). Paragraph 4.2.2, "First article inspection" of MIL-DTL-32048 sets forth the applicable tests to be performed and the acceptance criteria. Of relevance for the ignition element is the ballistic test. (R4, tab 74 at 7) Paragraph 3.4.1.6, "Ignition element" provides that the ignition element be manufactured to Drawing No. 6261110 and, among other things, meet the requirements of paragraph 3.4.1.6.1, "Ignition delay" when tested as specified in paragraph 4.2.2.3.2, "Ballistic test" (*id.* at 4, 10). The ballistic test requires the sample to be installed into the ignition element test chamber and fired by application of 4.0 ± 0.1 amperes (*id.* at 10). Ignition delay is defined in paragraph 6.6.5 as "the time from application of the [electric] current to first indication of continuous thrust or pressure on the thrust or pressure versus time curve" (*id.* at 15; tr. 1/28). Paragraph 3.4.1.6.1 requires that the maximum allowable ignition delay not exceed 10 milliseconds (R4, tab 74 at 4).

First Article Testing

Although Hanley had manufactured other impulse cartridges, this was its first contract for the CCU-107/B cartridges (tr. 1/27-28). Hanley completed manufacturing its FAT samples on 30 November 2001. They were inspected on 5 December 2001 by Charles Hinkle, Hanley's on-site inspector, and submitted to the Navy. (R4, tab 72 at 1; app. supp. R4, tab 86 at H-65)

The Navy tested the samples, apparently on 15 January 2002, and determined that 4 of 6 cartridges and 3 of 10 ignition elements exceeded the upper limit of 10 milliseconds for ignition delay (R4, tab 16). By a letter dated 24 January 2002, the Navy advised Hanley that its FAT samples were disapproved and that it was considering terminating the contract for default, but gave Hanley 10 days within which to show cause why the contract should not be terminated (R4, tab 18).

Upon receiving the Navy's letter, Hanley undertook a failure analysis investigation. Because the failures were due to ignition delay, it looked first at the bridgewire and the ignition mix. (Tr. 1/67-68) The Navy agreed that both can impact ignition delay (tr. 2/112). We are satisfied from the testimony of Ms. Norma Davis, Hanley's assistant production manager, and the related test evidence that the welding of the bridgewire conformed to the TDP requirements (tr. 1/170-79).

Mr. Gaynor Blake, Hanley's president and a chemist, was responsible for mixing the ZPP ignition charge/mix ingredients (tr. 1/18, 45). The mixing procedures provided in Note 3 of Drawing No. 6261105 are advisory (tr. 2/93). Mr. Blake explained persuasively that, except for using dry zirconium, the mixing and drying of the ZPP conformed to the requirements set forth in Note 3. Wet zirconium is safer to handle

than dry zirconium, but Hanley was able to use dry zirconium because it had equipment that allowed it to be handled safely. Using dry zirconium is an acceptable method. (R4, tab 75 at 16; app. supp. R4, tab 86 at H-64; tr. 1/57-64) The ZPP was loaded into the ignition elements/ignitors in accordance with Note 4 of Drawing No. 6261110 (R4, tab 75 at 22; app. supp. R4, tab 86 at H-64; tr. 1/180-92).

Hanley also performed testing as part of its investigation, which it described in a letter to the Navy dated 28 February 2002 that concluded it was “reasonable to assume the problem lies with the ignition element itself” (R4, tab 24 at 1). Hanley compared the Navy’s test results with additional tests it performed both on unfired FAT samples returned from the Navy using AEE zirconium and on ignition elements loaded with ZPP containing zirconium from its stock that had been obtained from Hummel at some earlier time. There is no defined expiration date for zirconium. The Hummel zirconium had been manufactured in 1966 and stored by Hanley under water. (Tr. 1/165-66, 2/107-08) AEE and Hummel are suppliers of zirconium; neither manufactures it. The ignition elements using ZPP containing zirconium obtained from AEE again exceeded the upper limit of 10 milliseconds, however, those using ZPP containing zirconium obtained from Hummel did not exceed it. Hanley explained to the Navy that the zirconium obtained from both AEE and Hummel had been certified to MIL-Z-399, Type II, Class 1 as specified in Drawing No. 6261105 and that the AEE zirconium was “identified with an average particle size of 2 microns.” It had no explanation as to why the AEE zirconium did not function as required by the TPD. (R4, tab 24)

Hanley attached a copy of the AEE Certificate of Analysis, stating that it had no reason to question the document’s validity and that there was “no reason to believe that zirconium certified to the material specification by an established manufacturer [was] not acceptable” and “would not perform satisfactorily” (R4, tab 24 at 2). Hanley offered to manufacture another sample of 94 cartridges and ignition elements. (R4, tab 24) Hanley did not have the facilities to test the AEE zirconium and did not have it tested by an independent laboratory because it had only 10 days within which to respond to the Navy (tr. 1/132, 147, 149, 163).

Hanley had received the Certificate of Analysis for the zirconium used in the FAT samples by fax on 7 September 2001 from Micron Metals, Inc., AEE’s parent corporation, and had placed the certificate in Hanley’s quality assurance files (R4, tab 24 at 5; tr. 1/50-51). Hanley routinely requests material and part certifications in its purchase orders. It had also received Certificates of Conformance and Certificates of Compliance from its other suppliers. (R4, tab 86 at H-35, H-37, H-48, H-49; ex. A-1; tr. 1/53, 56-57)

The AEE certificate identifies the zirconium shipping date as “8/21/01,” the catalog number as “MIL-Z-399-D,” the product item as “ZIRCONIUM METAL POWDER” “TYPE II, CLASS 1” and includes a chemical analysis reflecting results within the specified requirements and an average particle size of 2 microns which was

within the specified range. The certificate states: “The above analysis is carried out as part of our internal quality control testing and is based upon our analysis methods. We do not assume any warranty, liability, or risk based on such findings. Our quality is warranted within the scope of our general sales conditions.” There was no testimony from any witness about the quoted language. The certificate is signed over the typed name “A. M. Kessler, Mgr.” (R4, tab 24 at 5) Handwritten notes on the Hanley purchase order and the certificate that were in Hanley’s files indicate the material was received on “9-4-01” (R4, tab 86 at H-48, H-49).

The zirconium certificate did not contain an AEE lot number, information that Hanley uses to track the material’s use (tr. 1/154). It also did not contain a chemical analysis test result for ignition gain, which indicates whether the zirconium is reactive, that it can oxidize, but does not relate to performance time (tr. 2/67-72). Additionally, the certificate did not provide any information relating to burn time (tr. 1/120). Burn time is actually a burn rate test for zirconium and is a “good measure of its reactivity.” Burn time that exceeds 2.4 seconds indicates the “material is performing atypical for this class and grade.” (Tr. 2/78)

The AEE certificate is typical of the certifications Hanley receives from its material suppliers. MIL-Z-399D does not require vendors to receive certifications or provide actual test data and test results showing conformance or compliance. It is Hanley’s experience, and it is fairly common in the industry, that suppliers sometimes provide test data and sometimes do not. (R4, tab 24 at 5; tr. 1/50-54, 154-55, 2/99-103) It is also common to accept a certification of compliance in lieu of testing (tr. 1/133-34). There are such certifications for this contract in the record from RFT Industries, Inc. for the potassium perchlorate, Fabricated Components, Inc. for a pallet part number 564200 and Elecpac for materials and/or parts (ex. A-1; R4, tab 86 at H-35, H-37, H-40).

It appears that Hanley requested AEE’s lot number just before it submitted its FAT samples to the Navy on 5 December 2001 because there is another copy of the AEE certificate dated 30 November 2001 which contains the lot number. Apart from the use of a different type face to enter the lot number, the 30 November 2001 certificate is identical to the 7 September 2001 certificate. (R4, tab 24 at 5; app. supp. R4, tab 88 at 1; tr. 1/120-21)

The Navy agreed to test a second set of samples for consideration of \$5,430 and on 13 March 2002 the parties executed bilateral Modification No. P00002, setting 29 March 2002 as the delivery date for the second submittal of the FAT samples (R4, tab 1). Using the Hummel zirconium it had in storage, Hanley manufactured the second set of FAT samples (tr. 1/81, 162-63). These samples were inspected by Hanley on Friday, 29 March 2002 and shipped on Monday, 1 April 2002 (R4, tab 27). By a letter dated 17 June 2002, the contracting officer notified Hanley that its second set of FAT samples met all ballistic requirements and was approved. The letter noted, however, that some of the ignition delay times were higher than normal, with two units

firing after a delay of eight milliseconds, that the typical ignition delay time was three to five milliseconds, and advised Hanley “to closely monitor” its manufacturing process. (R4, tab 28)

Further Investigation and Production

The delivery dates were then revised on 24 July 2002 by bilateral Modification No. P00003, with production lot deliveries beginning 15 November 2002 and ending 12 August 2003 (R4, tab 1). Hanley was concerned that, with two units firing after eight milliseconds, it was possible that the one sample selected for lot acceptance testing could exceed the ignition delay time test. If so, the entire 20,000 unit lot would fail. Thus, Hanley decided to conduct a further investigation into the matter. (Tr. 1/85-86) The Navy agreed at the hearing this was a prudent action (tr. 2/48).

The firing circuit produces the ignition. Mr. Ron Jones, Hanley’s marketing manager, requested a copy of the Navy’s wiring schematic for the test firing circuit by telephone. He followed-up with an e-mail dated 14 June 2002, which indicated that Hanley needed a new power supply and stated that “[i]t makes sense” to buy one like the Navy was using. (R4, tab 30; tr. 1/198-99) Hanley’s next request for the schematic on 24 July 2002, after FAT approval, noted that there had been a “significant difference” between Hanley’s results for ignition delay time and the results reported by the Navy on the FAT samples and expressed concern about rework of any production lot failure (R4, tab 30). We cannot determine from the record exactly what this “significant difference” was. The next e-mail request was made on 9 August 2002, the contracting officer’s response to which on 9 September 2002 provided power supply information, but advised that the schematic was not releasable (R4, tab 32). On 18 September 2002, Hanley wrote a more detailed letter to the contracting officer explaining why it thought it needed the schematic (R4, tab 34). An e-mail response from the contracting officer on 24 September 2002 advised Hanley that the schematic was being drafted and would be provided the first week in October (R4, tab 35). (Tr. 1/200-05) None of Hanley’s communications make reference to any delay being experienced due to the Navy’s failure to release the firing circuit schematic.

The contract did not require Hanley to test the cartridges and ignition elements, which involves detonating the explosives (R4, tab 1; tr. 2/20, 37-38). The primary factor for igniting the cartridge is the application and regulation of four amperes (+/- 0.1) of current to the ignition element firing pin (tr. 2/13, 19). The type of firing circuit does not matter and the recorded ignition delay results should be similar if the correct amount of current is used because performance timing begins with the first indication of current application (tr. 2/20, 31-34, 50). A difference of one millisecond in ignition delay results would not be caused by different firing circuits (tr. 2/33-34).

The Navy’s firing circuit schematic contained special safety features for the Naval test facility because of the potential for explosions and the Navy was concerned about

potential liability if it released a schematic that included this information (tr. 2/18-21, 28). The Navy had not previously released its schematic to a contractor, but invited Hanley to Indian Head, MD to view the Navy's test facility (tr. 2/21). Following a misunderstanding as to whether Hanley had visited the test facility, the Navy ultimately updated the old version of its schematic and prepared an electronic copy of the new version for Hanley after activities associated with the end of the fiscal year were completed (tr. 2/21-26, 36). The new wiring schematic was e-mailed to Mr. Jones on 17 October 2002 (R4, tab 36; tr. 1/206-07). However, the schematic was missing manufacturer and part numbers, which Mr. Jones requested and received from the contracting officer on 4 November 2002 (R4, tab 37).

Meanwhile, Hanley continued to investigate the ZPP mix and determined that a procedure called "ball milling" would reduce the particle size and make ignition faster, thereby reducing ignition delay (tr. 1/91-92). It constructed a test firing circuit that duplicated the Navy's after receiving the schematic and began testing the ZPP for ignition delay results within the three to five millisecond range the Navy had indicated was typical. It concluded that the milled ZPP produced better results and used the process in manufacturing the first lot of impulse cartridges. (Tr. 1/92-99)

It appears that Hanley purchased additional zirconium for its production lots from Hummel. A Certification of Analysis and Compliance dated 26 November 2002 from Hummel provides test results for all of the chemical, physical and burn time requirements specified by MIL-Z-399D. Additionally, the certificate states: "IT IS HEREBY CERTIFIED THAT THE MATERIAL, AS SHIPPED ABOVE, CONFORMS WITH SPECIFICATION: MIL-Z-399, TYPE 2, CLASS 1." A handwritten note indicates that Hanley received the zirconium "12-3-02." (R4, tab 87 at H-48)

Hanley shipped its first production lot to the Navy on 3 February 2003. By a letter dated 24 March 2003, the Navy notified Hanley that the lot had passed ballistics testing requirements and was acceptable. The average ignition delay was 5.2 milliseconds. (R4, tabs 50 through 53) In an effort to further increase the ignition rate, Hanley next experimented with ball milling just the zirconium and ultimately settled upon milling the zirconium for 30 hours before mixing it with the other ingredients (tr. 1/98-100). This was the process Hanley used to manufacture the second production lot, which passed acceptance testing with an average ignition delay of 4.2 milliseconds (tr. 1/99-101). For its third production lot, Hanley increased the drying time of the ZPP beyond that specified by the TDP. The average ignition delay for this lot was less than 4 milliseconds. (Tr. 1/102-04)

Hanley completed contract performance on 17 October 2003, with the delivery of production Lot 10 (R4, tabs 1, 72)

Hanley's Claims and Modification No. P00005

On 9 April 2003, Hanley submitted an uncertified claim to the contracting officer alleging that the TDP was defective because it incorrectly represented that “any zirconium powder used in the ignition mix that is certified to government specification MIL-Z-399D will produce acceptable CCU-107/B Impulse Cartridges” (R4, tabs 54, 61). It stated that it had been required to stand ready to perform to full capacity while investigating the cause of the ignition delay and was unable to replace the lost work because the delay period was uncertain. It asserted that it had suffered unabsorbed overhead, as well as an unquantified “increased cost of performance.” It computed 238 days of delay resulting in unabsorbed overhead of \$235,480 under the so-called *Eichleay* formula. (R4, tabs 54, 61) *See Eichleay Corp.*, ASBCA No. 5183, 60-2 BCA ¶ 2688.

On 8 May 2003, the contracting officer advised Hanley that its claim lacked a proper certification (R4, tab 58). Hanley certified the claim on 15 May 2003 (R4, tab 61). Bilateral Modification No. P00005 was executed on 19 May 2003, further revising the delivery schedule for reasons that apparently are not relevant to the matters in dispute. It stated: “This supplemental agreement to the contract . . . shall be full, complete and final settlement of any and all claims which the contractor or its successor may now have or which may arise in the future as a result of the issuance of this modification.” It was executed by Mr. Raymond H. Steimel, Hanley’s vice president. (R4, tab 1)

By a letter dated 11 June 2003, the contracting officer issued a final decision denying Hanley’s claim, finding that the release in Modification No. P00005 was a waiver of any right to recover any costs associated with any government delay, without addressing the merits of Hanley’s claim (R4, tab 64). Mr. Steimel immediately responded in a letter dated 13 June 2003 that he did not intend to settle Hanley’s claim when he executed Modification No. P00005, but only to update the delivery schedule, which was months out of date (R4, tab 66). Mr. Jones did not think that anyone at the Navy considered the modification to be a waiver of the claim Hanley had just submitted and testified that no one at Hanley considered it to be such a waiver (tr. 1/216-20). The Navy offered no evidence to the contrary either with respect to Modification No. P00005 or any of the other contract modifications.

A timely notice of appeal was filed with this Board and docketed as ASBCA No. 54315. The complaint alleges entitlement to not less than \$400,258 (compl. ¶ 9). It alleges delay costs in the amount of not less than \$188,460 in the form of unabsorbed overhead (compl. ¶ 37) and an increase in the cost of performance in the amount of not less than \$211,798, attributable to engineering and equipment costs expended to investigate and develop an acceptable and consistent ignition time (compl. ¶ 38).

The Navy has not tested the AEE zirconium. However, in conjunction with the Board litigation, it did question AEE’s 7 September 2001 and 30 November 2001 certificates which led Hanley to request another certification from AEE (1/124-25). AEE provided another certificate to Hanley by fax on 15 May 2006. The typeface of the lot number on this certificate corresponds to the typeface on the rest of the document. The

certificate also contains additional, but not relevant, data under the categories “DOCUMENT” and “QUANTITY.” It also includes a new paragraph that states: “It is hereby certified that the material described herein conforms with specification: MIL-Z-399 D, type II, class I.” (R4, tab 24 at 5; R4, tab 88 at 2; tr. 1/122-23) Mr. Blake testified that the AEE certificates met Hanley’s requirements, in particular this last one which “greatly” clarified conformance with the specification (tr. 1/132-33). Finally, the signature above A.M. Kessler’s typed name on this third certificate appears to be different from the signature on the first two (R4, tab 24 at 5; app. supp., R4, tab 88 at 2; tr. 1/123-24). Mr. Blake does not know Kessler and had no way of knowing who signed any document that Hanley received by fax (tr. 1/115, 125). The certificate is otherwise the same as the 7 September and 30 November 2001 certificates.

At the hearing, Hanley revised the number of days of delay it claims upward to 259, beginning on 24 January 2002, the date of FAT failure, and ending when it began full production on 26 November 2002, with a deduction of 46 days for the period 13 September through 28 October when it began assembling inert hardware to be ready to load the ignitors (tr. 1/210-14).

Following the hearing, on 13 February 2008, Hanley submitted a “New/Revised Claim” quantifying a sum certain for the “increased cost of performance” allegedly caused by the defective TDP that it had initially sought in its 9 April 2003 claim in order to satisfy a potential jurisdictional infirmity. *See Reflectone, Inc. v. Dalton*, 60 F.3d 1572, 1576 (Fed. Cir. 1995). The total amount now sought for the alleged increased cost of performance is \$386,334.65. The contracting officer denied the claim on 31 March 2008. A timely appeal was docketed as ASBCA No. 56383 and consolidated with ASBCA No. 53415 for decision with the agreement of the parties.

Thus, entitlement to *Eichleay* damages for 259 days of delay are now at issue in ASBCA No. 53415 and increased costs of performance in the amount of \$386,334.65 due to the alleged defective TDP are sought in ASBCA No. 56383.

Technical Ordnance, Inc.

Technical Ordnance, Inc. (TKO) manufactured the CCU-107/B impulse cartridges for the Navy during 2000 pursuant to a contract awarded in 1999. Ignition delay times in excess of the 10 millisecond threshold were recorded during acceptance testing of TKO Lots 20 and 26. It appears that Lot 20 was accepted for service use on waiver. Lot 26 failed on 14 June 2000 and was rejected. TKO performed Failure Analysis Reports for Lots 20 and 26. Both reports concluded that no cause for slow ignition delay could be identified. The government’s DD Form 250, used to forward the Failure Analysis Report for Lot 26, refers to Drawing No. 6260802. (App. supp. R4, tab 92)

There is no evidence establishing which revisions of the specifications were applicable to the TKO contract. The March 2000 versions of MIL-DTL-32048 and Drawing No. 6260802 were applicable to Hanley's contract (R4, tab 74 at 1, tab 75 at 1). As is relevant here, however, the MIL-DTL-32048 requirement that maximum allowable ignition delay not exceed 10 milliseconds was the same for both contracts. Revision B, dated 30 March 1999, of Drawing No. 6261110 was applicable to Hanley's contract (R4, tab 75 at 1). This drawing provides details for the ignition element. It also makes reference to Drawing No. 6261105 which, in turn, provides the critical specifications for the ignition charge mix, including MIL-Z-399 Zirconium. (R4, tab 75 at 22) There were no changes to either Drawing No. 6261105 or MIL-Z-399 after 1999 (R4, tab 75 at 1, 2, 16, tab 73). Based upon the foregoing, we consider the relevant requirements relating to ignition delay to be the same for both the TKO and Hanley contracts.

PRELIMINARY MATTERS

Two evidentiary matters ruled upon during the hearing have been raised again in the post-hearing briefs. The first is Hanley's assertion that we should strike the testimony of Mr. Frank Valenta from the record because he gave expert testimony, but was not disclosed as an expert prior to the hearing. The Navy responds that Mr. Valenta was not offered as an expert and gave admissible lay witness opinion under FED. R. EVID. 701 regarding zirconium and its performance that was rationally based on his personal perception and would be helpful to the Board in understanding the evidence. It further responds that Mr. Valenta was identified as a witness, that appellant took his deposition at which time it learned about the exact nature of his testimony and, therefore, was neither unfairly surprised nor prejudiced by his testimony.

Mr. Valenta is a Navy employee who has been working with pyrotechnic ignition compositions since 1968 and is familiar with the ZPP ignition mix that is specified for CCU-107/B impulse cartridges (tr. 2/54-57). Mr. Valenta's testimony was offered to assist the Board in understanding the properties of the ZPP mix, in particular zirconium. Some of his testimony is in the nature of expert testimony. We have not, however, relied upon his testimony with respect to the cause for the ignition delays experienced by Hanley. Indeed, Mr. Valenta agreed on cross-examination that he did not know if the AEE zirconium met the requirements of MIL-Z-399D, that there were many reasons for ignition delay and it would be speculation on his part to identify any such reasons in this case (tr. 2/106, 113). Appellant's request to strike Mr. Valenta's testimony is denied.

The second is the Navy's assertion the AEE documents are hearsay and should be removed from the record. The 7 September 2001 AEE certificate was attached to Hanley's 28 February 2002 letter to the Navy and is page 5 of tab 24 of the Rule 4 file; the 30 November 2001 and 12 May 2006 AEE certificates comprise tab 88 of appellant's supplemental Rule 4 file. The Navy objected to all three of these documents and they were removed from the record under Board Rule 4(e) at the beginning of the hearing.

(Tr. 1/8-10) After Hanley authenticated the 7 September 2001 AEE certificate, the Board admitted it as a record of a regularly conducted business activity, overruling the government's hearsay objection. *See* FED. R. EVID. 803(6). The government subsequently withdrew its prior objection to the AEE certificates contained in tab 88 of appellant's supplemental Rule 4 file and used them during its cross-examination of Mr. Blake (tr. 1/119-20).

Despite the Board's ruling on the 7 September 2001 certificate and the fact that it withdrew its objection to tab 88, the Navy now asserts again in its post-hearing brief that the three AEE certification documents should be removed from the record as hearsay. Its new argument is that the AEE certificates do not satisfy the two reliability standards identified by the Court of Appeals for the Federal Circuit under Rule 803(6) for documents prepared by a third party. The first standard requires reliance upon the accuracy of the documents and the second looks to other circumstances indicating their trustworthiness. *See Air Land Forwarders, Inc. v. United States*, 172 F.3d 1338, 1343 (Fed. Cir. 1999).

We consider the *Air Land Forwarders* standards to have been satisfied with respect to the 7 September 2001 certificate. As to the first inquiry, it is clear that Hanley relied upon the accuracy of AEE's Certificate of Analysis. It used the AEE zirconium in its ZPP ignition mix for its FAT samples and provided a copy of the AEE certificate it received on 7 September 2001 to the government as an attachment to its 28 February 2002 explanation of its investigation into the FAT failures. Its letter stated that it had no reason to question the validity of the certificate or whether the certified zirconium would perform satisfactorily. As to the second inquiry, there are other circumstances indicating the trustworthiness of the certificate, in particular the ongoing business relationship with AEE, an established supplier of energetic powders to Hanley since 1993. *See Munoz v. Strahm Farms, Inc.*, 69 F.3d 501, 503 (Fed. Cir. 1995). Further, the certificate identified the catalog number as MIL-Z-399D for "ZIRCONIUM METAL POWDER" "TYPE II, CLASS I" and included a chemical analysis that was performed as part of AEE's quality control testing. The certificate is typical of those Hanley receives from its suppliers in response to its routine purchase order requests for material certifications. We find no reason to reverse the trial judge's evidentiary ruling on the 7 September 2001 AEE certificate.

Remaining are the two certificates that comprise tab 88 of appellant's supplemental Rule 4 file. The Navy not only withdrew its objection to these documents, but it also used them during cross-examination. Its opportunity for further objection has passed. The Navy's request to have the AEE certificates removed from the hearing record is denied.

DISCUSSION

Hanley's brief emphasizes the additional work it asserts it performed relating to the investigation of the cause for the high ignition delay readings, rather than the alleged delay for which it seeks entitlement to unabsorbed overhead. It contends that this additional work was the result of the Navy's defective TDP. Hanley also asserts that the Navy failed to cooperate because it took 143 days to provide the schematic for the test firing circuit. The Navy responds that Hanley did not demonstrate the TDP was defective and that it did not breach its duty to cooperate. It contends that Hanley did not establish government-caused delay, but even if there was government-caused delay, Hanley has not satisfied the requirements for recovery of unabsorbed overhead under the *Eichleay* formula.

ASBCA NO. 56383

DEFECTIVE TDP

OPINION BY ADMINISTRATIVE JUDGE TING

Hanley's FAT samples failed because the ignition elements exceeded the upper limit of ignition delay. The bridgewire and the ignition mix were thought to be potential causes of the failure. Hanley's testing led to its conclusion that it was "reasonable to assume the problem lies with the ignition element itself." In further testing, Hanley found that the ignition elements using ZPP containing zirconium obtained from AEE again exceeded the upper limit of ignition delay, but using ZPP containing zirconium obtained from Hummel (which Hanley had in stock) did not exceed the limit. Hanley had no explanation as to why the AEE zirconium did not function as required by the TDP. Hanley's claim, submitted in April 2003, and resubmitted in May 2003, contended that the TDP was defective because it states that "any zirconium powder used in the ignition mix that is certified to government specification MIL-Z-399D will produce acceptable CCU-107/B Impulse Cartridges."

Detailed design specifications contain an implied warranty that, if they are followed, an acceptable result will be produced. *United States v. Spearin*, 248 U.S. 132, 137 (1918). The Federal Circuit has defined the difference between design specifications and performance specifications. Design specifications "explicitly state how the contract is to be performed and permit no deviations." *Stuyvesant Dredging Co. v. United States*, 834 F.2d 1576, 1582 (Fed. Cir. 1987). They tell the contractor in precise detail "the materials to be employed and the manner in which the work is to be performed." *Blake Constr. Co. v. United States*, 987 F.2d 743, 745 (Fed. Cir.), cert. denied, 510 U.S. 963 (1993). Performance specifications merely describe a result that the contractor is expected to achieve and leave it up to the contractor to achieve the result. *Stuyvesant*, 834 F.2d at 1582.

The parties appear to be in general agreement that, at least with respect to the ignition charge ingredients (zirconium, potassium perchlorate, graphite and ethyl alcohol)

of the ZPP, the TDP set out a design specification. In the context of a design specification, the assignment of the parties' burden of proof in cases involving a claim of defective specifications is well established. The contractor bears the initial burden of proof demonstrating that it has substantially complied with the government's plans and specifications, and reached an unsatisfactory result. Upon such showing, the burden then shifts to the government to prove that defective materials or defective workmanship are responsible for the unsatisfactory result. *M.A. Mortenson Co.*, ASBCA No. 53062 *et al.*, 01-2 BCA ¶ 31,573 at 155,906; *R.C. Hedreen Co.*, ASBCA No. 20599, 77-1 BCA ¶ 12,328 at 59,554.

Thus, Hanley must establish that it produced its FAT samples in conformance with Drawing No. 6261105, and that, among other things, it used Type II, Class 1 zirconium, meeting the requirements of MIL-Z-399D. To establish that the zirconium it purchased from AEE met MIL-Z-399D, Hanley relied on two Certificates of Analysis both signed by A.M. Kessler as "Mgr." and faxed to it on 7 September 2001 and 30 November 2001, and a Certificate of Analysis supposedly signed by Kessler on or about 15 May 2006, after litigation in this appeal commenced. It is unclear from the record whether Hanley is relying on all three certificates or just the 2006 certificate.

Irrespective of which certificate or certificates Hanley relied upon, however, omissions and deficiencies on the face of each of the certificates prevent us from accepting as fact that the AEE zirconium used in the failed FAT samples was compliant with MIL-Z-399D.

All three versions of AEE's certificate have a line item for "IGNITION GAIN" under "CHEMICAL ANALYSIS." Unlike the other five line items under "CHEMICAL ANALYSIS," the test result row for "IGNITION GAIN" was left blank. Ignition gain is an indicator of the performance of the ZPP. It is a check to ensure that the zirconium is reactive, and secondarily, it is a check on the purity of the zirconium (tr. 2/71). Even though all three versions of the AEE certificate state that "TOTAL ZIRCONIUM" is "97.200," without the ignition gain test results, there is no way to check or verify the purity and reactivity of the AEE zirconium.

In addition, none of AEE's certificates provided a test result with respect to "Burning time." A burning time between 1.3 and 2.4 seconds per 10 inches is required to be met by ¶ 3.3 of MIL-Z-399D. Burning time is "a good measure of its reactivity." Burning time that exceeds 2.4 seconds indicates the "material is performing atypical for this class and grade."

Moreover, none of the AEE certificates provide test results with respect to meeting the percentage by weight (85%, 70-90%, 12-30%) of zirconium of specified particle sizes (9 microns, 3 microns, 0.75 microns respectively). The particle size of the zirconium affects the ignition delay of the ZPP. As explained at the hearing, typically, "the finer the mix is, probably the shorter the ignition delay is" (tr. 2/92). Hanley failed the FAT

because it exceeded the upper limit for ignition delay. While all of AEE's certificates state that the "Average Particle Size" is "2 microns," without test results, it is impossible to determine whether the AEE zirconium contained the correct mix by weight of zirconium of the specified particle sizes.

In 2002, Hanley bought MIL-Z-399, Type II, Class 1, zirconium powder from Hummel for its production lot. Hummel provided a "CERTIFICATION OF ANALYSIS AND COMPLIANCE." That certification states "IT IS HEREBY CERTIFIED THAT THE MATERIAL, AS SHIPPED ABOVE, CONFORMS WITH SPECIFICATION: MIL-Z-399, TYPE 2, CLASS 1." The certification was signed by Hummel's Vice President. It provided test results for all requirements listed, among them: TOTAL ZIRCONIUM % - 97.3; BURNING TIME (sec.) - 1.9; IGNITION GAIN % - 32.7; SUBSIEVE: LESS THAN 9 MICRONS - 95, 3 MICRONS - 74 and 0.75 MICRONS-16, and AVERAGE PARTICLE SIZE MICRONS - 1.8. Hummel's certification listed the prescribed tests on the left hand side of the page; the testing parameters are listed correspondingly in the middle of the page; and the test results for all tests are listed on the right hand side of the page. Unlike AEE's certificates, Hummel's certification showed test results for all tests. (R4, tab 87 at H-48)

Had Hanley submitted an AEE certification like the one it received from Hummel in 2002, it might have made out a more supportable case of substantial compliance with MIL-Z-399D. By 2006, Hanley knew it had a problem with the first two AEE Certificates of Analysis. According to Mr. Blake, Hanley went back to AEE for another certificate because "we want[ed] the certification to be more exact on the material that we bought" (tr. 1/125). AEE had its parent Micron Metals, Inc. fax a Certificate of Analysis. This certificate added the sentence: "It is hereby certified that the material described herein conforms with specification: MIL-Z-399 D, type II, class I." Other than adding data for "DOCUMENT" and "QUANTITY" not relevant to this appeal, all other aspects of the 2006 certificate remained the same. No test result for "IGNITION GAIN" was provided. No subsieve test results for various specified zirconium micron sizes by weight percentage ranges were provided, and no burning time test result was provided. Moreover, and disturbingly, AEE's disclaimer with respect to "any warranty, liability, or risk," and with respect to quality warranty "within the scope of our general sales conditions" remained. (R4, tab 88) To compound the problem, A. M. Kessler's signature looked different, and when asked about that at the hearing, Mr. Blake acknowledged that "I would have no way of knowing who signed any document that came off the fax" (tr. 1/125). Hanley did not call Kessler, or anyone from AEE, to testify.

As fact finders, we are not required to blindly accept a certification, especially where, as here, each of AEE's certificates looks incomplete on its face. Hanley had ample opportunity to shore up its evidence to prove its case. It could have tested the AEE zirconium. It chose not to do so. It could have furnished a certification with all of the required test results. It did not do so. It could have arranged to call witnesses to fill

in the gaps in all of its certificates. It chose not to do that. With the multitude of missing test results on the face of its certificates, and with the certificates constituting its only proof that the AEE zirconium it used for the FAT samples met MIL-Z-399D, we conclude that Hanley has failed to carry its burden of proof.

The dissent relies, to a certain extent, on “the credible testimony” of Mr. Blake. We have no issue with Mr. Blake’s credibility. In our view, Mr. Blake did not provide testimony on the key issue we consider dispositive. To us, the fact that AEE ultimately certified its zirconium is unimportant in and of itself. The controlling issue in this appeal has to do with Hanley’s use of its certificates of analysis as proof to carry its burden of proof to persuade the Board that its FAT failed despite substantial compliance with MIL-Z-399D. On this issue, the Board has to weigh whether the three certificates of analysis containing a multitude of omitted test results and unauthenticated by their author (*see* FED R. EVID. 901) carry sufficient weight to support a conclusion that the AEE zirconium Hanley used in its failed FAT met the requirements of MIL-Z-399D. Regardless of their ultimate purposes, the dissent is willing to accept less than the full battery of prescribed test results as proof of substantial compliance. We are not.

The dissent finds nothing “relevant” or “amiss” about the Kessler signature on the third certificate, and speculates that it “simply appears to be just initials.” What purports to be “just initials” looks sufficiently different to cast doubt on whether it was in fact Kessler who signed it. We do not know for sure because Hanley did not call Kessler as a witness. Having twice signed a full name on two previous certificates, it is puzzling why Kessler would simply scribble unintelligibly on a request from Hanley for a certification that needed to be “more exact on the material” (tr. 1/125). And, as we have said before, the third certificate, although billed as a certification, was no more exact on the materials than the two previous certificates. This certificate was at best Hanley’s attempt to carry its burden of proof and no more.

The dissent minimizes the disclaimer and dismisses it because there was no testimony and no reference in the Navy’s brief. Neither of these factors, however, detracts from what the disclaimer plainly and starkly said. When Hanley’s FAT failed, Hanley did not test the failed zirconium, nor did it, as far as the record shows, go back to AEE to claim the warranty the dissent says was left “in place.” The record does not reveal if AEE stood behind its warranty on the zirconium it sold Hanley.

The dissent implies that MIL-Z-399D was defective because Hummel zirconium was not identified as the sole source. The fact that “the Navy knew that Hummel zirconium had worked well in the past” simply does not support a conclusion that no zirconium from other sources could meet the specification. Moreover, the record reveals that Hanley was familiar with Hummel prior to this contract, since it used Hummel zirconium that it already had in stock for its second first article samples.

CONCLUSION

Because Hanley has failed to prove that the AEE Type II, Class 1 zirconium powder it used in the ZPP for the FAT samples substantially conformed with the requirements of MIL-Z-399D, we hold that it has failed to prove that the TDP is defective.

Accordingly, ASBCA No. 56383 is denied.

Dated: 25 July 2008

PETER D. TING
Administrative Judge
Armed Services Board
of Contract Appeals

I dissent
(see separate opinion)

CAROL N. PARK-CONROY
Administrative Judge
Armed Services Board
of Contract Appeals

(Signatures continued)
I concur

I concur

MARK N. STEMLER
Administrative Judge
Acting Chairman
Armed Services Board
of Contract Appeals

EUNICE W. THOMAS
Administrative Judge
Vice Chairman
Armed Services Board
of Contract Appeals

DISSENTING OPINION BY JUDGE PARK-CONROY

I dissent. I believe the majority has imposed an improper and overly stringent burden of proof on Hanley. The narrow issue upon which we disagree is whether Hanley came forward with *prima facie* evidence that it used MIL-Z-399D zirconium powder, Type II, Class I in its FAT samples. I am persuaded that it did, thus shifting to the Navy the burden of showing that the zirconium supplied by AEE was in some way defective, or that there was another cause for Hanley's failures. See *Aleutian Constructors, J.V.*, ASBCA No. 49255, 01-1 BCA ¶ 31,392 at 155,091.

MIL-Z-399D is a generic specification; it does not specify a particular zirconium manufacturer or supplier, although there was evidence that the Navy knew that Hummel zirconium had worked well in the past, but did not share this information with Hanley until after contract award. MIL-Z-399D also does not require suppliers to provide a material certification. Hanley nevertheless routinely requests material and part certifications from its suppliers in its purchase orders. It did so for this contract and there are certificates in the record that differ widely in the kind of information provided by its suppliers, ranging from general statements of compliance or conformance to detailed test results (R4, tab 86 at H-35, H-37, H-48, H-49; ex. A-1).

There are three Certificates of Analysis from AEE for the zirconium it supplied to Hanley. The first was faxed to Hanley on 7 September 2001. The second was faxed on 30 November 2001 and is identical to the first, except that it includes the lot number needed by Hanley to track its FAT samples. The last was faxed on 15 May 2006 and is identical to the others in all relevant respects, except that it contains the following additional general statement of compliance: "It is hereby certified that the material described herein conforms with specification: MIL-Z-399 D, type II, class I."

The certificates identify the catalog number of the material supplied as "MIL-Z-399-D" and the product item as "ZIRCONIUM METAL POWDER" "TYPE II, CLASS I." They include a chemical analysis reflecting test results within the specified requirements and state that the average particle size is 2 microns, also within the specified requirements. Mr. Blake credibly testified that such a certificate was typical of those Hanley receives from its suppliers, who sometimes provide test data and sometimes do not. Despite the fact that such a certificate is typical for this industry and although MIL-Z-399D does not require a zirconium certification, much less one that contains the results of chemical, performance and physical tests, the majority concludes the AEE certificates have fatal "omissions and deficiencies" because some of this information is missing. In my view, the missing information is neither required nor determinative of whether the AEE zirconium caused ignition delay exceeding 10 milliseconds.

The majority first complains that the test result of the chemical analysis for ignition gain is missing. Ignition gain, however, is nothing more than an indicator of whether the zirconium is reactive, that it can oxidize. Thus, the majority leaves the wrong impression when it uses the words "performance" and "purity" in its discussion of ignition gain, neither of which has any relationship to the rate or speed of oxidization

(tr. 2/71-72). In any event, the AEE zirconium was reactive; the FAT samples were fired in testing. The majority next laments that there is no entry for “burning time.” While this is correct, the evidence established only that a burn time exceeding 2.4 seconds is an “indicator” that further investigation is appropriate (tr. 2/78-79). There was no evidence that a burn time exceeding 2.4 seconds would cause ignition delay exceeding 10 milliseconds. The majority’s last point is that there are no sieve and subsieve test results for the particle size. This complaint overlooks the fact that the AEE certificates provide average, and compliant, particle size information. Moreover, the testimony cited relates only to “particle size,” which I understand in context to mean the specified “[a]verage particle size, microns 2.5 ± 1.0 ,” not to the sieve and subsieve percentages by weight, about which there was no witness testimony (tr. 2/92-93).

Nevertheless, the concerns about these “omissions and deficiencies” in the AEE certificates are cured by the inclusion of the certification of conformance statement contained in the third certificate. The AEE statement is similar to the general statements contained in other certificates of conformance or compliance received by Hanley that may or may not include additional or complete test information. Moreover, it is almost identical to the statement contained in the Hummel Certificate of Analysis and Compliance that the majority considers to be the only standard against which to measure the AEE certificates despite evidence of typical industry practice to the contrary. The majority then makes passing reference to what it calls a “disclaimer” in the AEE certificate. There was no testimony about this so-called “disclaimer” and the Navy made no reference whatsoever to it in its post-hearing brief despite its extensive argument on the AEE certificates. In any event, the “disclaimer” clearly relates only to the chemical analysis, the test results of which were within specified requirements, leaving the general warranty in place. Finally, I find nothing relevant, and certainly nothing amiss, in the difference in the Kessler signature on the third certificate, which simply appears to be just initials, or in the fact that Mr. Blake does not know Kessler personally.

Like Hanley, TKO also experienced ignition delay failures that could not be explained. I believe the Navy’s substantial efforts to keep the AEE certificates out of the record reflect its recognition that the certificates establish that Hanley substantially complied with the MIL-Z-399D specification requirements for zirconium. The AEE certificates together with the credible testimony of Mr. Blake and the other evidence relating to certificates of compliance and conformance were sufficient to shift the burden of proof to the Navy to come forward with evidence that absolved it of liability. The Navy did not do so. It assumed the failures were caused by the AEE zirconium, but it did not test the AEE zirconium and it did not call witnesses from AEE to explain the disclaimer and warranty and the Kessler signature or otherwise introduce evidence that Hanley’s ignition delay failures were due to the AEE zirconium. I would sustain the appeal and find entitlement to recovery of increased costs associated with Hanley’s FAT failures.

CAROL N. PARK-CONROY
Administrative Judge
Armed Services Board
of Contract Appeals

ASBCA NO. 54315

DELAY

OPINION BY ADMINISTRATIVE JUDGE PARK-CONROY

Hanley's allegations of delay encompass the issue of the alleged defective TDP, decided above, together with an alleged breach of the duty to cooperate.

Duty to Cooperate

It is an established rule that the government has an implied duty to cooperate that, in turn, imposes an affirmative obligation to do what is reasonably necessary to enable the contractor to perform. *See Coastal Government Services, Inc.*, ASBCA No. 50283, 01-1 BCA ¶ 31,353 at 154,833 *aff'd*, 32 Fed. Appx. 584 (2002). Where the failure to provide information is alleged as a breach of this duty, the contractor must show that the information requested was necessary for performance and that the government unreasonably either did not provide that information or did so in an untimely fashion. *See T&G Aviation, Inc.*, ASBCA No. 40428, 00-2 BCA ¶ 31,147 at 153,846-47.

Here, Hanley claims that the Navy failed to cooperate with its investigation because it took 143 days to provide its test firing circuit schematic. Hanley asserts that it needed the schematic so that it could eliminate any possible variables between how the Navy and Hanley tested ignition delay. The Navy responds that Hanley has not shown that the schematic was necessary for it to supply a conforming product and that, even if it was necessary, the Navy acted reasonably in providing the schematic to Hanley.

We are not persuaded that the wiring schematic for the test firing circuit was necessary for Hanley to provide conforming CCU-107/B impulse cartridges. First, test firing was not required by the contract. Next, Hanley manufactured conforming FAT samples without it. Hanley's second set of FAT samples was shipped on 1 April 2002; it was notified by a letter dated 17 June 2002 that the samples met all ballistic requirements and that the second FAT was approved by the contracting officer.

Further, the record reflects that Hanley initially requested the schematic for the test firing circuit because Hanley thought it made “sense” to have the same firing circuit as the Navy. After it passed FAT, however, Hanley asserted that it needed the schematic because there were differences between its ignition delay times and those reported by the Navy from the second FAT and it was concerned that a production sample might fail. Hanley’s concerns were apparently based upon the Navy’s comment that the ignition delay times for two units were higher than normal and its advice “to closely monitor” the manufacturing process. That Hanley’s concerns may have been reasonable and the Navy agreed that further investigation was prudent does not mean, however, that the Navy directed Hanley to conduct a second investigation as Hanley asserts. It also does not mean that the Navy was obligated to provide its firing circuit schematic to Hanley. In this regard, the record contains persuasive evidence that it is not the firing circuit, but the application and regulation of four amperes (+/- 0.1) of current to the ignition firing pin that is the primary factor in recording ignition delay results.

Finally, the lack of urgency associated with Hanley’s requests for the schematic constitutes additional evidence that the schematic was not necessary to produce conforming impulse cartridges. Hanley’s first request was in early June 2002, before FAT approval. Its second request was on 24 June 2002, after FAT approval. It then waited nearly six weeks after this second request before making a follow-up inquiry on 9 August 2002. A full month passed before the contracting officer responded on 9 September 2002, without any further communications from Hanley. None of Hanley’s correspondence with request to the schematic ever asserted that the Navy was causing any delay to Hanley’s manufacture of the production lots.

Unabsorbed Overhead

As revised at the hearing, Hanley seeks 259 days of unabsorbed overhead due to alleged government-caused delay, beginning 24 January 2002, the date of the FAT failure, and ending when it began full production on 26 November 2002, with a deduction of 46 days when it began assembling inert hardware to be ready to load the ignitors.

In *P.J. Dick Inc. v. Principi*, 324 F.3d 1364 (Fed. Cir. 2003), the Court of Appeals for the Federal Circuit clarified the rules applicable to proving entitlement to unabsorbed home office overhead costs under the *Eichleay* formula. Here, Hanley must first prove there was a government-caused delay to contract performance that extended the original time for contract performance that was not concurrent with a delay caused by Hanley or some other source. Hanley must then prove that it was required to remain on standby during the period of delay. If Hanley can make this *prima facie* showing, the burden of proof then shifts to the Navy to show that it was not impractical for Hanley to take on replacement work to mitigate its damages. *P.J. Dick*, 324 F.3d at 1370. The Navy correctly contends that Hanley did not make the requisite showing.

The conclusion of the majority that the TDP was not defective resolves the question of delay resulting from the 24 January 2002 disapproval of the first set of FAT samples. Modification Nos. P00002 and P00003 extended the submission of the FAT samples to 29 March 2002 and the final delivery date of production lots to 12 August 2003. The second set of FAT samples was shipped three days late, on 1 April 2002, and approved on 17 June 2002. Apart from these three days, there was no evidence of any concurrent or other reason for the delay in FAT approval. Further, our conclusion that the test firing circuit was not necessary for Hanley to provide a conforming product establishes that the Navy was not responsible for any delay after FAT approval.

Moreover, Hanley did not demonstrate that it was on standby for either period. As to the standby requirement, Hanley must show: (1) that the delay was substantial and of an indefinite duration; (2) that it was required to be ready to resume work immediately and at full speed during the delay; and (3) that much, if not all, of the contract work was suspended. *P.J. Dick, supra*, 324 F.3d at 1371.

With respect to the first element, the execution of Modification No. P00002 on 13 March 2002 established a new delivery date for the second set of FAT samples and the contracting officer notified Hanley on 24 September 2002 that the test firing circuit would be provided the first week in October. Thus, neither delay was of indefinite duration. As to the second element, there was no evidence that Hanley was ready to resume work immediately and at full speed. And, finally, not all of the contract work was suspended because Hanley assembled inert hardware before it began full production.

Hanley replies that the Board's pre-hearing order instructed it as to what was required to prove entitlement. Contrary to Hanley's contention, the Board advised only that the number of days of delay is an element of entitlement where delay is alleged. The elements required for proving entitlement to *Eichleay* damages are set forth in *P.J. Dick, supra*. Hanley also asserts that its 9 April 2003 claim sets forth the required *Eichleay* elements. Mere allegations and assertions, such as those made in its claim, however, do not constitute proof or evidence. See *IMS Engineers – Architects, P.C.*, ASBCA No. 53471, 06-1 BCA ¶ 33,231 at 164,673; *M.A. Mortenson Co.*, ASBCA No. 53105 *et al.*, 04-2 BCA ¶ 32,713 at 161,845.

Release

Finally, we note that the contracting officer denied Hanley's 9 April 2003 claim on grounds the release contained in Modification No. P00005 was a waiver of any right to recover costs associated with the alleged delay without addressing the merits of Hanley's claim. The effect of that release and others in bilateral modifications issued on this contract was the subject of our earlier decision denying the government's motion for summary judgment. See *Hanley Industries, Inc.*, ASBCA No. 54315, 05-2 BCA ¶ 33,032. Hanley presented evidence relating to the release in Modification No. P00005

at the hearing. The Navy, on the other hand, did not present any evidence whatsoever relating to the waiver issue. Accordingly, we consider the Navy's waiver contentions to be abandoned. See *Imperial Construction & Electric, Inc.*, ASBCA No. 54175, 06-1 BCA ¶ 33,276 at 164,949.

CONCLUSION

ASBCA No. 54315 is denied.

Dated: 25 July 2008

(Signatures continued)

CAROL N. PARK-CONROY
Administrative Judge
Armed Services Board
of Contract Appeals

I concur

PETER D. TING
Administrative Judge
Armed Services Board
of Contract Appeals

I concur

MARK N. STEMLER
Administrative Judge
Acting Chairman
Armed Services Board
of Contract Appeals

EUNICE W. THOMAS
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 Nos. 54315, 56383, Appeals of Hanley Industries, Inc., rendered in conformance with the Board's Charter.

Dated:

CATHERINE A. STANTON
Recorder, Armed Services
Board of Contract Appeals