ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeals of)	
D.E.W., Inc. and D. E. Wurzbach, A Joint Venture Under Contract No. DACA63-86-C-0043)))	ASBCA Nos. 50796 and 51190
APPEARANCE FOR THE APPELLANT:		Carl Payne Tobey, Jr., Esq. The Tobey Law Firm San Antonio, TX
APPEARANCES FOR THE GOVERNME	NT:	Frank Carr, Esq. Engineer Chief Trial Attorney Charles L. Webster, III, Esq. Engineer Trial Attorney U. S. Army Corps of Engineers Fort Worth, TX

OPINION BY ADMINISTRATIVE JUDGE TUNKS

ASBCA No. 50796 is the contractor's termination for convenience claim. As revised, the amount of the claim is \$2,246,977.44 plus interest. ASBCA No. 51190 is the Government's claim for an offset in the amount of \$2,791,954.34 plus interest for costs resulting from the contractor's alleged "gross disregard" of its contractual obligations. The Government acknowledges that, as a general rule, it is not entitled to a credit for defective work, but argues that this case falls within an exception to that rule.

I. ASBCA No. 50796: THE TERMINATION FOR CONVENIENCE CLAIM

The termination for convenience claim arose from the Government's improper default termination of a contract to build a fuel cell shop for C-5A aircraft. The hangar or high bay area was to be constructed of long span structural steel, with main carrying trusses or CT-trusses spanning up to 265 feet. The steel superstructure was to be bolted together using ASTM A325 bearing bolts, which have a tolerance of 1/16 inch. After the contract completion date had passed, the Government discovered widespread misalignment of the bolt holes, along with evidence of what appeared to be defective workmanship. The contractor, D.E.W., Inc. (DEW), argued that the design was impossible to construct. The Government concluded that the misalignments were caused by defective workmanship and terminated the contract for default. On appeal, we concluded that the specification of ASTM A325 bearing bolts combined with other design defects, such as the failure to specify the correct camber, the omission of a special erection sequence and the failure to account for the effects of two-way action and differential deflection, rendered the design technically impossible and converted the default termination into a termination for the convenience of the Government. *D.E.W., Incorporated,* ASBCA No. 35896, 94-3 BCA ¶ 27,182.

FINDINGS OF FACT

1. The Government awarded the contract to DEW on 11 April 1986. At award, the contract price was \$5,831,361. (R4, tab 1A)

2. The contract contained FAR 52.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (ALTERNATE I) (1984 APR) which is relevant, in part, to this appeal:

(f) If the Contractor and the Contracting Officer fail to agree on the . . . amount to be paid . . . the Contracting Officer shall pay the Contractor the amounts determined as follows . . . [:]

(1) For contract work performed before the effective date of termination, the total . . . of –

(i) The cost of this work;

. . . .

- (ii) The cost of settling and paying termination settlement proposals . . . if not included in subdivision (i) above; and
- (iii) A sum, as profit on (i) above, determined . . . under [FAR] 49.202 . . .; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed . . . [the settlement shall be reduced] to reflect the indicated rate of loss.

(h) The cost principles . . . of Part 31 . . . shall govern all costs claimed, agreed to, or determined under this clause.

(R4, tab 1B)

3. DEW appealed seven equitable adjustment claims to the Board in connection with this contract. Each of these appeals proposed a profit rate of 10 percent. With the exception of ASBCA No. 37232, the appeals were denied. The appeals are as follows:

Defective plans (ASBCA No. 35171)	\$131,814
Extra rebar/grout (ASBCA No. 35172)	40,618
Pier caps (ASBCA No. 35173)	296,256
Wye fittings (ASBCA No. 35759)	45,453
Landing mats (ASBCA No. 36970)	174,501
Site drainage (ASBCA No. 36389)	111,267
Panels (ASBCA No. 37232)	276,067

(Ex. G-1)

4. The Government terminated the contract for default for failure to timely complete the contract on 26 October 1987 (ASBCA 35896, finding 39).

5. On 18 December 1987, Trinity Universal Insurance Company (Trinity), DEW's surety, entered into a takeover agreement with the Government (ASBCA 35896, finding 42). Trinity hired The Datum Moore Partnership (Datum/Moore) to evaluate the conditions at the fuel cell shop and prepare a remedial plan (ASBCA 35896, finding 42). Templeton Construction Company (TCC) was the prime contractor for the takeover contract (*D.E.W. & D. E. Wurzbach, A Joint Venture*, ASBCA No. 50796, 98-1 BCA ¶ 29,385, duplicated at 98-1 BCA ¶ 29,374).

6. In connection with the issuance of the bonds, DEW entered into an Agreement of Indemnity with Trinity, agreeing to indemnify Trinity against "any and all liability for losses and/or expenses of whatsoever kind or nature . . . and from and against any and all such losses and/or expenses which the Surety may sustain and incur" (R4, tab 81).

7. The contracting officer received DEW's termination settlement proposal on 16 August 1995. Ms. Beverly Shipley, DEW's former comptroller and a certified public accountant, prepared the proposal and assembled the 32 volumes of supporting data that were submitted to the contracting officer (tr. 1/15-18). The proposal was prepared using the total cost method and included costs incurred by DEW, Trinity and TCC. The amount of the combined proposal was \$15,211,956.10. (AR4, Book 1, tab 5)

8. Mr. Wayne Moosman, a Senior Auditor employed by the Defense Contract Audit Agency (DCAA) and a certified public accountant, performed the audit of DEW's claim and its revisions (tr. 2/110-11, 5/28; R4, tab 105, ex. G-2).

9. The contracting officer failed to issue a final decision. On 8 April 1996, DEW appealed the deemed denial of its claim to the Court of Federal Claims. The Court transferred the appeal to this Board where it was docketed as ASBCA No. 50796 on 10 June 1997.

10. On 20 November 1997, the Board issued a decision on the parties' motions for summary judgment ruling, among other things, that certain costs claimed by DEW were unallowable as a matter of law, such as interest on borrowings, life insurance premiums, and litigation costs incurred by the surety. We also ruled that DEW's recovery was not limited to the contract price because the conversion of the default termination was on the basis of impossibility. *D.E.W.*, 98-1 BCA ¶ 29,385, *supra*. As a result, DEW reduced its claim to \$8,406,381.

11. Shortly before the hearing, which was held on 8 December 1997, Trinity withdrew its portion of the claim, including the costs incurred by TCC. As a result, DEW reduced its claim to \$2,246,977 (app. br at 7; ex. G-2).

DEW PROPOSED**		DCAA		
		Questioned	Unresolved	Accepted
1 DIRECT MATERIAL	3,585,043			3,585,043
[1.5] COSTS PAID BY TRINITY	847,788	29,561		818,227
2 DIRECT LABOR	335,977			335,977
3 INDIRECT FACTORY EXPENSE				
4 SPECIAL TOOLING				
5 OTHER COSTS				
6 G&A	688,755	36,525		652,230
7 TOTAL COSTS (items 1 thru 6)	5,457,563	66,086		5,391,477
8 PROFIT @15%	818,634		818,634	
9 TOTAL (items 7 and 8)	6,276,197	66,086	818,634	5,391,477
10 FINISHED PRODUCT INVOICED				
11 TOTAL (item 9 less 10)	6,276,197	66,086	818,634	5,391,477
12 SETTLEMENT EXPENSES	111,663		20,000	91,663
13 TOTAL (items 11 and 12)	6,387,860	66,086	838,634	5,483,140
[13.5] POST-TERMINATION LABOR	862		862	
14 SETTLEMENTS WITH SUB'ORS	3,506			3,506
[14.5] POST-TERMINATION PROFIT	655	655		
@15%				
15 GROSS PROPOSED SETTLEMENT	6,392,883			5,486,646
16 DISPOSAL AND OTHER CREDITS			(1,758,065)	(1,758,065)
17 NET PROPOSED SETTLEMENT	6,392,883			3,728,581
18 PROGRESS PAYMENTS	(4,145,906)			(4,145,906)
19 NET PAYMENT REQUESTED (item 18 less 19)	2,246,977			(417,325)

12. DEW's revised proposal and DCAA's position on each element is as follows:

**For ease of reference, DEW's claim has been put into the format required by the SF 1436. Additional lines have been added at 1.5, 13.5 and 14.5 to display particular cost elements.

13. DEW claims that it paid \$3,585,043 in subcontractor and material costs prior to termination (line item 1) (tr. 1/43-52; AR4, Books 6-12). Although the Government argues that DCAA classified a portion of these costs as "unresolved" in its original audit report, Mr. Moosman abandoned this position at the hearing (ex. G-2; tr. 5/112-14).

14. DEW claims \$847,788 in material and subcontractor costs accrued prior to termination, but which were paid by Trinity after termination under the performance bond (line item 1.5). Under the Agreement of Indemnity, DEW is liable for all costs paid by Trinity on its behalf in connection with the bond. Initially, DCAA questioned the propriety of including these costs in DEW's portion of the claim but later agreed that, to the extent DEW had reimbursed Trinity for the costs, they were allowable (tr. 2/118-24, 5/52-54; ex. G-2). Of the total claimed, Mr. Moosman verified that DEW had reimbursed Trinity \$818,227. He questioned the remaining \$29,561 because he could not verify that they had been incurred. Although DEW suggests at page 9 of its brief that Mr. Moosman withdrew this objection, the cited transcript pages do not support that conclusion (tr. 5/137).

15. DEW claims labor costs of \$335,977 (line item 2) (AR4, Books 13, 14; tr. 1/52-74). DCAA did not take exception to these costs (tr. 5/11-13; ex. G-2).

16. DEW claims general and administrative (G&A) expense of \$688,755 (line item 6). DEW computed this expense by dividing total revenues collected for the fuel cell shop contract by total revenues collected for all contracts during the contract period. DEW then multiplied total G&A by the resulting percentage. (Tr. 1/114-20; AR4, Book 30, tab 2; R4, tab 105 at 33). Mr. Moosman questioned \$36,525 of this item alleging that use of a revenue base, rather than a cost base, did not comply with FAR 31.203(b) which requires that indirect costs be allocated to final cost objectives on the basis of benefits accrued. DEW's practice of using progress payments from new work to finance jobs in the later stages of completion resulted in the allocation of indirect costs to contracts in the early stages that should have been allocated to contracts in the later stages (ex. G-2; tr. 5/55-59). Since DEW's contract was terminated before it reached the later stages of completion, the costs did not "balance out," resulting in an inequitable allocation of G&A to the fuel cell shop contract. He also objected to use of the revenue base because it caused a higher percentage of indirect costs to be allocated to profitable contracts than non-profitable contracts (tr. 2/125-26; R4, tab 105 at 31-35). And finally, he objected to DEW's method of calculating G&A because it was not based on a full base period as required by FAR 31.203(e). Mr. Moosman recalculated DEW's G&A expense

using information from DEW's audited financial statements and tax returns for fiscal year 1988 and obtained an allowable G&A of \$652,230 (R4, tab 105 at 32-33; ex. G-2).

17. DEW used a profit rate of 15 percent in calculating its claim (line item 8). This rate was computed on the basis of gross profits, without taking the allocations for indirect costs into account. In DCAA's view, this method inflates the rate of profit. DEW could not locate its original bid documents, so DCAA was unable to determine the profit rate DEW used to prepare its bid. Using DEW's Job Cost Report, DCAA estimated that DEW contemplated a profit rate of roughly 10 percent at the time of bid. DEW's audited financial statements and tax returns for the fiscal years ended 31 January 1985, 1986, 1987, 1988 and 1989 indicate that DEW had profit (loss) rates from jobs other than the fuel cell shop of (1.91), (0.03), 2.63, 2.46 and 0.08 percent respectively (R4, tab 105 at 37-39, and appendix 1, 17-18). Each of DEW's equitable adjustment claims proposed a profit rate of 10 percent.

18. Although DCAA verified that DEW had paid \$111,663 in settlement expenses (line item 12), it classified these costs as "unresolved" because they included costs attributable to both DEW and Trinity (ex. G-2). At the hearing, Mr. Moosman and counsel for DEW agreed that it was reasonable to attribute \$91,663 of these costs to DEW and \$20,000 to Trinity (tr. 5/127-34).

19. DEW claims \$862 in post-termination labor costs (line item 13.5). DEW incurred the costs in December 1997 to protect the pipes at the fuel cell shop from freezing (tr. 1/55-57; AR4, Book 13). DCAA did not question these costs, but recommended that they be treated as settlement expenses because they were incurred after termination (tr. 1/52-74, 5/128; ex. G-2).

20. DEW claims \$3,506 in connection with the settlement of subcontractor claims (line item 14). These costs represent legal expenses incurred in the defense of lawsuits by DEW's subcontractors and suppliers (tr. 1/123-24). DCAA did not take any exception to this expense (tr. 5/139; ex. G-2).

21. DEW claims \$655 in post-termination profit (line 14.5) on line items 13.5 and 14. DCAA questions this expense because the termination for convenience clause limits profit to work performed (R4, tab 105 at 39-40). We find DEW entitled to profit at 10 percent on post termination labor costs of \$862 (line item 13.5) for a total of \$86. No profit is allowable on the \$3,506 claimed on line item 14 because the costs were legal expenses incurred in the defense of lawsuits by DEW's subcontractors and suppliers, not the costs of work performed (tr. 1/123-24; AR4, Book 31, tab 1).

22. The parties agree that the Government released \$1,758,065 (line item 16) in withheld progress payments to Trinity after the termination (ex. G-2). DCAA argues that

this payment must be deducted from DEW's overall recovery because the money was released to Trinity with DEW's permission. Trinity applied the money to reduce the debt DEW owed Trinity. DEW argues that this money should not be reduced by this amount because it was paid to Trinity.

23. The parties agree that DEW was paid a total of \$4,145,906 in progress payments prior to termination (line item 18).

DECISION

Conversion of a termination for default to a termination for convenience converts a fixed-price contract to a cost-reimbursement contract, entitling the contractor to recover allowable costs incurred in the performance of the terminated work, a reasonable profit on work performed and certain additional costs associated with the termination. *Anlagen und Sanierungstechnik GmbH*, ASBCA No. 37878, 91-3 BCA ¶ 24,128 at 120,753; *Seven Science Industries*, ASBCA No. 23337, 80-2 BCA ¶ 14,518 at 71,555; *Caskel Forge, Inc.*, ASBCA No. 7638, 1962 BCA ¶ 3318 at 17,108. Allowability is determined using the cost principles in FAR Part 31, subject to the proviso in FAR 49.201(a) that the contractor should be compensated fairly for the terminated work. *See, e.g., McDonnell Douglas Corporation v. United States*, 40 Fed. Cl. 529, 536 (1998); *American Electric, Inc.*, ASBCA No. 16635, 77-2 BCA ¶ 12,792. Since a termination for convenience claim is an affirmative claim against the Government, the contractor bears the burden of proof. *Lisbon Contractors, Inc. v. United States*, 828 F.2d 759, 767 (Fed. Cir. 1987).

In addition to the specific costs challenged by DCAA, the Government asserts that it is entitled to reduce DEW's recovery by the loss formula in the termination for convenience clause and the amount of DEW's six previously denied equitable adjustment claims. These arguments will be discussed after we rule on the individual line items. The Government also maintains that it is entitled to offset DEW's recovery by \$2,791,954.34, the costs allegedly resulting from DEW's "gross disregard" of its contractual obligations in erecting the structural steel. The Government's offset claim is the subject of ASBCA No. 51190.

Since DCAA did not question any of DEW's claimed direct material costs (line item 1), we conclude that DEW is entitled to \$3,585,043 for this item.

DEW is entitled to recover \$818,227 of the costs paid by Trinity (line item 1.5). DCAA could not verify that DEW incurred the remaining \$29,561 and DEW did not introduced any evidence to support its claim for the portion that was disallowed. Accordingly, we conclude that the \$29,561 cannot be recovered.

DCAA did not question DEW's claimed labor costs (line item 2). As a result, we conclude that DEW is entitled \$335,977 for this item.

With respect to G&A (line item 6), DEW's practice of using revenues from contracts in the later stages of completion to fund new work does not comply with FAR 31.203(b). Although DEW argues that the costs will balance out, they will not balance out if the contract is terminated before it reaches the later stages of completion. In addition, DEW's use of a base period of less than its fiscal year is not in accordance with FAR 31.203(e). That provision requires that a base period be for a full fiscal year unless the work involves only a minor portion of the fiscal year or there is a contrary practice in the industry. Neither exception applies to DEW. DEW finally argues that the difference between \$688,755, the amount claimed, and \$652,230, the amount recommended by DCAA, should be disregarded as immaterial under FAR 30.305 as in effect at the time of termination. FAR 30.305 applied to CAS-covered contracts. DEW's contract was not a CAS covered contract. We conclude that DEW is entitled to \$652,230 in G&A.

We find that a profit rate of 10 percent is reasonable. Under the best of circumstances, long span structural steel structures are difficult to erect. In this case, the Government-furnished design was not merely complex, it was impossible to erect. In our opinion, there is nothing that DEW could have done to erect the hangar in the manner required by the contract. Accordingly, we conclude that DEW is entitled to profit at 10 percent.

DEW claims settlement expenses of \$111,663, which includes the cost of preparing the claim and the 32-volumes of supporting data (line item 12). At the hearing, Mr. Moosman agreed that it would be reasonable to attribute \$91,663 to DEW and \$20,000 to Trinity. We find that DEW is entitled to \$91,663 in settlement expenses.

DEW claims \$862 for post-termination labor (line item 13.5). The contract was terminated on 27 October 1987 and DEW sent personnel to the site to protect the pipes against freezing in early December 1987. We consider these costs to be "continuing costs" allowable under FAR 31.205-42(b). Accordingly, we include them on line 5 as "Other Costs."

DCAA did not take exception to DEW's claim for \$3,506 in legal expenses related to subcontractor and supplier lawsuits (line item 14). We find that DEW is entitled to these costs.

DEW claims \$655 of profit (line item 14.5) on post-termination costs. We have classified \$862 of these costs as "continuing costs" and included it at line item 5, where it will receive profit. With respect to the remaining \$3,506, DEW is not entitled to profit

because the cost consists of legal expenses related to subcontractor/supplier expenses lawsuits rather than work performed.

The parties agree that the Government released withheld progress payments of \$1,758,065 (line item 16) to Trinity with DEW's consent following the termination. The Government argues that the money should be used to reduce DEW's termination settlement because the money was paid to Trinity with DEW's consent. Trinity credited the money to the debt DEW owed Trinity under the Agreement of Indemnity. DEW argues that since the payments were made to Trinity, they should not be used to reduce DEW's termination settlement. In our view, the \$1,758,065 paid to Trinity represented contract payments due DEW and must, therefore, be credited to the Government for purposes of determining the amount due DEW under the termination for convenience clause.

The parties agree that DEW was paid \$4,145,905.84 in progress payments prior to termination (line item 18) and we so find.

In addition to the foregoing items, the Government argues that DEW's recovery is subject to the loss formula in the termination for convenience clause. In the summary judgment decision, we ruled that DEW's recovery was not limited to the contract price because the contract was converted on the basis of impossibility. The same exception applies to the loss formula in the termination for convenience clause. Thus, DEW's recovery is not subject to the loss formula. *The Dewey Electronics Corporation*, ASBCA Nos. 33869, 33870, 91-1 BCA ¶ 23,443 at 117,621, *mot. for reconsid. denied*, 91-1 BCA ¶ 23,656; *Scope Electronics, Inc.*, ASBCA No. 20359, 77-1 BCA ¶ 12,404, *mot. for reconsid. denied*, 77-2 BCA ¶ 12,586; *R. H. J. Corporation*, ASBCA No. 12404, 69-1 BCA ¶ 7587 at 35,227; *The Douglas Corporation*, ASBCA No. 8566, 69-1 BCA ¶ 7578 at 35,157.

The Government also asserts that it is entitled to a credit of \$799,910 for six previously denied equitable adjustment claims on the basis of *res judicata* or law of the case. Neither doctrine applies here. *Res judicata* applies only if the prior litigation was based on the same cause of action. *Premiere Building Services, Inc.*, ASBCA No. 51804, 00-1 BCA ¶ 30,696 at 151,638; *Vought Aircraft Company*, ASBCA No. 47357, 00-1 BCA ¶ 30,721, *mot. for reconsid. denied*, 00-1 BCA ¶ 30,874. The subject claim arises, not under the Changes clause, but under the Termination for Convenience clause. Law of the case does not apply because the appeals relating to the equitable adjustment claims are not the same "case" as this appeal. *American Packers, Inc.*, ASBCA No. 14275, 71-1 BCA ¶ 8846. The Government is only entitled to a credit for defective work if it proves that the work was in "gross disregard" of the contractor's contractual obligations. *New York Shipbuilding Company, A Division of Merritt-Chapman & Scott Corporation,* ASBCA No. 15443, 73-1 BCA ¶ 9852 at 46,018-19. Since the Government has neither

alleged nor proven "gross disregard" in connection with the six equitable adjustment claims, the Government is not entitled to a credit for these items.

Without taking into account the costs that may be due the Government for its offset claim, we conclude that DEW is entitled to a termination settlement of \$122,771, plus interest from 16 August 1995, calculated as follows:

SUMMARY OF COSTS ALLOWED	
1 DIRECT MATERIAL	3,585,043
[1.5] COSTS PAID BY TRINITY	818,227
2 DIRECT LABOR	335,977
3 INDIRECT FACTORY EXPENSE	
4 SPECIAL TOOLING	
5 OTHER COSTS	862
6 G&A	652,230
7 TOTAL COSTS (items 1 thru 6)	5,392,339
8 PROFIT (10%)	539,234
9 TOTAL (items 7 and 8)	5,931,573
10 FINISHED PRODUCT INVOICED	
11 TOTAL (item 9 less 10)	5,931,573
12 SETTLEMENT EXPENSES	91,663
13 TOTAL (items 11 and 12)	6,023,236
14 SETTLEMENTS WITH SUB'ORS	3,506
15 GROSS PROPOSED SETTLEMENT	6,026,742
16 DISPOSAL AND OTHER CREDITS	(1,758,065)
17 NET PROPOSED SETTLEMENT	4,268,677
18 PROGRESS PAYMENTS	(4,145,906)
19 TERMINATION SETTLEMENT	122,771

The appeal is sustained.

II. ASBCA 50119: THE GOVERNMENT'S OFFSET CLAIM

The Government asserts that it is entitled to a credit of \$2,791,954.34 due to DEW's alleged "gross disregard" of its contractual obligations in erecting the structural steel in the high bay area. When the Government initially asserted its offset claim, appellant's termination for convenience claim was \$15,211,956.10. As a general rule, the Government is not entitled to reduce the contractor's termination settlement by the costs of defective or non-compliant work. *New York Shipbuilding*, 73-1 BCA at 46,019; *Caskel Forge*, 1962 BCA at 17,108. However, costs resulting from the contractor's "gross disregard" of its contractual obligations fall within an exception to this rule because they do not meet the FAR standard of reasonableness and are "hence unallowable." *Best Foam Fabricators, Inc. v. United States*, 38 Fed. Cl. 627, 640 (1997). Both entitlement and quantum are at issue.

FINDINGS OF FACT

24. The following contract clauses are relevant, in part, to this appeal:

FAR 52.236-5 MATERIAL AND WORKMANSHIP (APR 1984)

. . . .

(c) All work under this contract shall be performed in a skillful and workmanlike manner.

FAR 52.236-6 SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)

At all times during performance of this contract . . . the Contractor shall directly superintend the work or assign and have on the work [site] a competent superintendent who is satisfactory to the Contracting Officer

• • • •

FAR 52.246-12 INSPECTION OF CONSTRUCTION (APR 1984)

• • • •

(b) The Contractor shall maintain an adequate inspection system and perform such inspection as will ensure that the work . . . conforms to contract requirements.

SPECIAL CLAUSE 19. CONTRACTOR QUALITY CONTROL SYSTEM (SWFCD)

The inspection system required by [FAR 52.246-12] shall be in accordance with the following requirements:

(a) The Contractor shall . . . maintain an effective Quality Control [QC] program . . . which will assure that all [work performed] conform[s] to . . . [the] contract. . . . The [QC Representative] shall be . . . separate from the Contractor's production or supervisory staff and shall report directly to the Contractor's top management. . . . The Contracting Officer reserves the right to have replaced, any member of the [QC] staff who . . . is not accomplishing their assigned duties.

(R4, tabs 1B, 1C)

25. Paragraph 2 of specification section 5C entitled "Structural Steel" provided, in part, as follows:

2. GENERAL REQUIREMENTS: The AISC [American Institute of Steel Construction] Specification for the Design, Fabrication & Erection of Structural Steel for Buildings shall govern the work. Welding shall be in accordance with AWS Code D1.1. High-strength bolting shall be in accordance with the AISC Specification for Structural Joints Using ASTM A 325 or A 490 bolts.

(R4, tab 5)

26. The American Institute of Steel Construction (AISC) Code of Standard Practice for Steel Buildings and Bridges (1 September 1976) (Code) set forth the industry standards for the fabrication and erection of structural steel in effect at the time of contract award. The Code contained the following provision which is relevant to this appeal:

7.12 Correction of Errors

Normal erection operations include the correction of minor misfits by moderate amounts of reaming, chipping or cutting, and the drawing of elements into line through the use of drift pins. Errors which cannot be corrected by the foregoing means or which require major changes in member configuration are reported immediately to the owner and fabricator by the erector, to enable whoever is responsible either to correct the error or to approve the most efficient and economic method of correction to be used by others.

(R4, tab 8)

27. Neither the Code nor the Commentary defines "immediately" (R4, tab 8).

28. The contract completion date in effect during erection of the structural steel was 3 August 1987 (R4, tab 46; AR4, Book 2, tab 52).

29. The fuel cell shop hangar (or high bay area) is 61-feet high and encloses an area of 37,000 square feet. The roof structure is supported by long span structural steel trusses. The structure includes two types of trusses: the main trusses or CT-trusses, and the secondary trusses or T-trusses. (R4, tab 63A at 6-7)

30. The CT-trusses run in the north/south direction. The four long CT-trusses span approximately 265 feet across the hangar and are supported by a column at either end. The trusses consist of a top horizontal member, or top chord, and a bottom horizontal member, or bottom chord. The top and bottom chords are connected by a series of vertical members or struts and diagonal members. (R4, tab 63A at 6-8) Each long CT-truss weighed several tons (tr. 4/160). Due to their size, they were delivered to the site in pieces and splice welded on the ground prior to erection (tr. 3/150-51, 4/160).

31. The T-trusses run perpendicular to the CT-trusses in the east/west direction and span 33 feet. The T-trusses are supported by columns, CT-trusses or a combination of both. The T-truss top and bottom chords are also connected by struts and diagonals. (R4, tab 63A at 6, 39) The T-trusses receive their share of the roof load through steel bar joists which support the roof deck. Altogether, there are 43 T-trusses. (Tr. 4/168)

32. Structural resistance to lateral loads, such as wind loads, was provided by wall braces and horizontal braces. Wind posts received lateral wind loads from the horizontal

cladding support members and transferred them down to the foundation and up to a roof bracing element. (R4, tab 63A at 7, 31)

33. A note on the contract drawings required that the structure be erected with ASTM A325 bearing bolts, which have a tolerance of 1/16 of an inch (ASBCA 35896, finding 4).

34. Following contract award, DEW subcontracted with Palmer Steel Supplies, Inc. (PSSI) to perform the structural steel work. Among other things, PSSI fabricated and erected the steel columns, trusses, bracing, bar joists, roof deck, girts and parapets. (AR4, Book 3, tabs 31, 32)

35. On 20 February 1987, DEW requested approval of Mr. Thomas F. Lutz as its Quality Control (QC) representative (R4, tabs 28, 31, 32). DEW appointed Mr. Lutz to the position on or about 18 March 1987 (R4, tab 32).

36. On or about 3 March 1987, PSSI began welding the four long CT-trusses at the job site (R4, tab 100 at Report No. 267).

37. After observing PSSI's welding operation, Government representatives met with DEW on 23 March 1987 and requested information regarding PSSI's procedures (R4, tab 100 at Report Nos. 281, 287). On 8 April 1987, the Government issued a notice of non-compliance to DEW regarding the welding (R4, tab 100 at Report No. 303).

38. On 18 April 1987, the Government threatened to issue an interim unsatisfactory performance rating to DEW because it had not received the information requested on 23 March 1987 (R4, tab 51).

39. PSSI began ultrasonic testing of the welds on 27 April 1987. The Government sent a team of structural engineers and welding inspectors to the site to observe the testing. The welds were acceptable. In addition to the testing, PSSI provided the information requested by the Government on 23 March 1987. (R4, tab 51, tab 100 at Report No. 322)

40. On 1 May 1987, PSSI raised the first long CT-truss, followed immediately by erection of the T-trusses and connection of the T-truss bottom chords. By approximately 15 May 1987, the other three long CT-trusses had been erected in the same manner. (R4, tab 55 at 12-15, tab 100 at Report Nos. 326-343, tab 101 at Report No. 326)

41. PSSI experienced extreme difficulty in aligning the bolt holes, particularly at the T-truss bottom chord end connections (tr. 4/171; R4, tabs 45C, 55).

42. Mr. James C. Irwin, owner of Irwin Steel Erectors (Irwin), the company that performed the remedial steel work, and Mr. Koz Sowlat, the project engineer for The Datum/Moore Partnership (Datum/Moore), the firm that prepared the remedial design, agreed that PSSI would have noticed the alignment problems on the day it erected the first long CT-truss and tried to connect the secondary members (tr. 3/75-76, 4/212-13).

43. Alignment problems are common during erection and can usually be cured during the erection process (ASBCA 35896, finding 19). However, the typical erector or iron worker is unable to recognize a design error during erection and design problems are not usually apparent until after the structure has been completed and put into service (tr. 3/75, 4/218-19; ASBCA 35896, finding 20).

44. PSSI followed the normal industry practice for handling fit-up problems. It checked the shop drawings to make sure the members were correctly detailed. After it verified that the members were correctly detailed, it measured the members to make sure they were fabricated to the correct dimensions. The Government has agreed that the fabrication of the members and spacing of the bolt holes "was pretty accurate and in performance [sic] with the contract." (ASBCA 35896, finding 19; tr. 3/75-76)

45. Neither DEW nor PSSI notified the Government of the misalignment problems.

46. On an unspecified day in May 1987, the Government's construction representative (CR) noticed that the north side of the building was missing some bolts and issued a notice of non-compliance (R4, tab 51).

47. Although PSSI installed the roof deck, the parapet, the hangar door rails, the wind bracing and performed other miscellaneous work on the hangar in June 1987, the daily reports for that month do not indicate that PSSI worked on the truss connections (R4, tab 100 at Report Nos. 357-386).

48. On 20 June 1987, four months after DEW's initial request for approval of Mr. Lutz as its QC representative, the Government requested more information regarding Mr. Lutz's construction experience (R4, tab 41A). The Government never approved Mr. Lutz's appointment as QC representative.

49. On 24 July 1987, the Government advised DEW that its work was unsatisfactory, citing its failure to (1) provide adequate replies to the Government's April 1987 letters regarding the quality of the CT-truss welds; (2) increase its work force as directed by the Government; (3) submit a plan showing how it intended to regain the schedule; and (4) replace or supplement its job superintendent with a principal of DEW (R4, tab 42A).

50. On 27 July 1987, DEW advised the Government that some T-trusses had buckled and bowed (R4, tab 42B).

51. DEW's Daily Report for 28 July 1987 stated as follows:

Called Jim Thompson [President of PSSI] re: completing job - Said he would. Also told him I thought we are getting into a dangerous situation in that many bolts are not in place, many others are loose, plus truss CT-5 is loose at one end - bolts have never been tightened. He then said that he would have someone on job tomorrow.

(R4, tab 42C)

52. On 29 July 1987, DEW replied to the Government's 24 July 1987 letter, stating that (1) the welds were tested in front of Government personnel and found to be satisfactory; (2) it could not prepare a plan showing that it could regain the schedule because contract time had expired; (3) it could not put a principal on the site because of DEW's three officers, only one was active in the company (R4, tab 42D).

53. That same day, DEW met with Government representatives who threatened default termination (R4, tab 51).

54. Except for a few days in August when it worked on the hangar door rails and girts and two days in October when its president inspected the steel, PSSI did not return to the site (R4, tab 100, Report Nos. 388-417; ASBCA 35896, tab 235 at Report Nos. 427, 428, 429, 448, 493, 495).

55. Although the Government argues that DEW/PSSI intended the connections in the hangar as complete, neither Messrs. Sowlat nor Irwin agreed with that view. Mr. Sowlat viewed them as temporary erection connections that PSSI could have completed any time prior to turning the project over to the Government (tr. 4/197-98, 217-22, 238-43). Mr. Irwin concluded that PSSI had simply "walked away" from the job (tr. 3/38-39).

56. Both Messrs. Sowlat and Irwin agreed that paragraph 7.12 of the Code required DEW to notify the Government of the fit up problems. However, they differed as to when that duty arose.

57. In Mr. Sowlat's opinion, the requirement to notify the owner of fit up problems is interpreted in a very relaxed manner because it is not practical for erectors to

stop work and notify the owner of every misfit. Thus, if a truss is hanging on a crane and the erector needs to come up with a fix to continue working, it will come up with a temporary measure "to button things up" and come back later to take care of the problem (tr. 4/205). As a result, erectors are afforded considerable leeway in the methods they use during the initial erection. As long as the work complies with the contract requirements when it is turned over to the owner, the contractor may even utilize non-conforming erection techniques, such as torching holes, to get the structure into the air. (Tr. 4/203) Thus, Mr. Sowlat concluded that the notification requirement does not arise until the erector "feel[s] it's going to impact [his] ability to deliver the building as . . . promised . . ." (tr. 4/211).

58. Mr. Irwin was of the opinion that the duty arose before PSSI began modifying the connections (tr. 3/75-76). He explained as follows:

[F]or iron to properly fitup, it's pretty much strictly a matter of geometry. Pieces have to be specific lengths, angles have to be pretty close and holes have to be properly punched.

[W]hen they came to their first connection -- when they hung the first CT truss, and . . . failed to pull the members together, well they violated the geometry of everything that's going to connect to that CT truss

[A]nd pretty well guaranteed that every connection that's made to that truss is going to miss also.

And then, when they made their first brace and it didn't make up and they decided to . . . [torch] their own holes in it or sl[ot] existing holes, they further complicated the problem by locking in another piece that's no longer at its correct geometric length.

And it's a domino effect. Once you get started . . . changing connections . . . there's no stopping. And you can't go for a week and then say hey, wait, I think there may be something really wrong here.

(Tr. 3/76-77)

59. PSSI's last invoice indicated that the "Value of the Work Completed to Date" was 99 percent of its subcontract price of \$784,000.00 (AR4, Book 10, July 1987).

Altogether, DEW paid PSSI a total of \$778,729.06 (which includes the amount paid under a separate purchase order for materials) (AR4, Books 7-10).

60. On 3 August 1987, the Government began withholding liquidated damages of \$3,965.00 per day (*D.E.W., Incorporated*, ASBCA No. 38392, 92-2 BCA ¶ 24,840).

61. On 4 and 5 August 1997, Mr. Gordon Simmons, an engineer from the Resident Officer in Charge of Construction (ROICC) office, inspected the hangar from the ground. In addition to buckled and bowed T-trusses, he observed that the bottom chords of the T-trusses were not in tension as shown on the drawings, that the T-trusses were continuous members even though they were designed as single span trusses, that the bottom chords of the T-trusses were too slender and that the horizontal cross bracing sagged. He attributed these problems to design errors on the part of the Architect/Engineer (A/E). (ASBCA 35896, finding 22)

62. On 6 August 1987, the Government directed DEW to submit proof that the as-built conditions were the same as the drawings and that the distances between work points and lengths of members were as designed (R4, tab 42H).

63. On 31 August and 4 and 5 September 1987, Mr. Simmons and other ROICC personnel inspected the high bay area from man-lifts and discovered widespread misalignment of bolt holes (R4, tab 52; ASBCA 35896, findings 19, 21, 23, 24, 25).

64. On 4 September 1987, the Government directed DEW to submit a plan showing the type and location of all non-compliances and a structural analysis of the as-built condition of the hangar by 11 September 1987. By 18 September 1987, DEW was directed to submit a corrective action plan showing the "step-by-step . . . procedure for [correcting] each type of deficiency" with appropriate engineering data (ASBCA 35896, finding 25).

65. On 8 September 1987, the Government issued a stop work order for the high bay area (R4, tab 45B).

66. On 10 and 11 September 1987, ROICC personnel videotaped the members and connections in the hangar. In addition to buckled and bowed members, the videotape shows misaligned bolt holes, bolts in bending, missing bolts, missing washers, loose bolts, loose washers, gaps, elongated bolt holes and dummy bolts. In a number of instances, new bolt holes were torched. (R4, tab 45C) The Government also made photographs of many of the defective connections (R4, tab 52).

67. On 10 September 1987, DEW requested the Government to release the original design calculations. The Government denied the request. The Government later

released a portion of the design calculations, but failed to release the part that contained a critical erection limitation that had been omitted from the drawings. (ASBCA 35896, findings 29, 30, 37)

68. DEW submitted its corrective action plan on 14 September 1987 (ASBCA 35896, finding 31).

69. The Government issued a show cause notice on 18 September 1987, directing DEW to replace Mr. Lutz with a QC representative acceptable to the Government and rejecting DEW's corrective action plan as incomplete. DEW was directed to provide another corrective action plan by 30 September 1987. (R4, tab 46)

70. DEW did not submit an acceptable corrective action plan and the Government terminated the contract for default on 26 October 1987.

71. Following the termination, Trinity, DEW's surety, entered into a takeover agreement with the Government to complete the contract pursuant to its performance bond (AR4, Book 2, tab 53).

72. Trinity hired Datum/Moore to perform a structural analysis of the fuel cell shop and to determine if the hangar should be torn down or repaired (tr. 4/138-39).

73. The Government's major concern at the outset of the remedial work was that the roof structure might collapse due to buckling and bowing members. "People didn't go out there because connections were failing. They ran out there because members were failing." Mr. Sowlat testified that "no single connection failed in this building." (Tr. 4/174-75)

74. Datum/Moore issued its first report in March 1988. The report concluded that the hangar could be repaired and included a comprehensive set of remedial sketches. The report described the remedial plan as follows:

Remedial concepts were developed that would establish overall structural stability, repair connections, replace members, and stiffen members in accordance with the code requirements. In repair of connections, welds would be used in lieu of existing bolts. Both existing and new welds would be verified by an independent testing laboratory. Selected members would be replaced or stiffened. Internal forces induced by the existing two-way action of the structure would be relieved by temporary release of selected connections.

(R4, tab 55 at 32)

75. Mr. Sowlat defined a connection as a member meeting a joint. For example, a member with a double angle at the end was one connection. Under Mr. Sowlat's definition, there were 550 field bolted connections and 17 field welded splices out of a total of 2,700 to 2,800 connections. In Mr. Sowlat's opinion, half of the field bolted connections were acceptable. (Tr. 4/170-72)

76. In addition to converting the bolted connections to welded connections, the remedial plan strengthened the connections so that they could "take more load" or "allow them to take loads in ways that were not foreseen by the original drawings" (tr. 4/165-66, 169).

77. The columns were checked to determine whether they were out-of-location and/or out-of-plumb and no significant deviations were found. The work points were also checked and found to be properly fabricated. (Tr. 4/161-62)

78. In June 1988, Datum/Moore issued a second report evaluating the constructability of the original design (R4, tab 63A). Datum/Moore attributed all the mismatched connections to errors and omissions of the A/E. Among other things, Mr. Sowlat concluded that the A/E had failed to recognize that: (1) the tolerance for ASTM A325 bearing bolts was too restrictive to permit successful construction of the hangar; (2) the CT-trusses would be subject to differential deflection; (3) the roof was subject to two-way action; (4) trusses spanning multiple spans would be subject to continuous action; (5) that the fabrication and thermal tolerances for the members were greater than 1/16 inch tolerance; and (6) it had omitted an erection sequence indicating when the bottom chords of the T-trusses were to be connected from the drawings. (Tr. 4/151-61, 163-65)

79. Trinity paid Datum/Moore a total of \$516,966.24 for its work (AR4, Book 16, tab 5). When asked what part of the company's fees were attributable to defective workmanship, Mr. Sowlat responded as follows:

Based on the June '88 report, a very, very insignificant amount of our work The last time I was asked about this, I scratched my head, and I said 99.9 percent of Datum/Moore fees were spent in taking care of -- that's investigation and redesign -- taking care of errors and omissions of the original engineer of record, and that's still a very good estimate.

(Tr. 4/172)

80. Trinity hired Templeton Construction Company (TCC) to be the prime contractor on the takeover contract (AR4, Book 2, tab 54).

81. In early 1988, TCC hired Irwin, to perform the structural steel remedial work (tr. 3/20-21). At the time the remedial work was performed, Mr. Irwin was not a certified professional engineer or a designer and he did not perform any design analysis on the fuel cell shop (tr. 3/18, 114) His conclusions are based on his visual inspection of the structure (tr. 3/112).

82. Irwin commenced work in June 1988. Datum/Moore's Drawing No. S1.02 entitled "Sequence of Remedial Actions" served as the specifications for the work. The drawing listed 44 remedial tasks in sequential order, such as stabilization of the structure, converting most of the bolted connections to welded connections, repairing the rolling doors, repairing the end chord connections, horizontal braces and diagonals, completing girts, stiffening the columns and hanging the cladding. (Tr. 3/31-32; R4, tab 66)

83. The correction of the existing connections took the most time. Virtually all the bolted connections were converted to welded connections. (Tr. 3/37)

84. In May 1988, TCC hired Owners' Inspection Testing Laboratory (OITL) to inspect the structural steel in the fuel cell shop and record the deviations from the original plans. OITL also performed a 100 percent inspection of Irwin's work. (Tr. 3/207, 4/14)

85. OITL issued its report on 17 March 1989. The report included the results of its inspection of the high bay area, the low bay area and the remedial actions (deviations from the original plans discovered during the remedial work) (R4, tab 69; tr. 3/31-32, 215-21).

86. In performing its work, OITL assumed that all deviations in the bolted connections were caused by defective workmanship (tr. 3/199-200). Mr. Frank E. Nelson, III, president of OITL, indicated that OITL did not "determine whether. . . the design [was] adequate or . . . whether [it] played any part in the deficiency . . ." (tr. 3/201). If the bolt holes did not mate; "[w]e just knew that they did not mate" (tr. 3/200).

87. Mr. Nelson defined a deviation as any non-compliance with the specifications, drawings or applicable standards. Under his definition, one connection could have many deviations (tr. 3/223). For example, OITL recorded seven deviations for connection #10: washers not installed on the west side; washers not installed on the east side; bolt holes mislocated and altered by flame cutting; bolts not centered in slotted bolt holes at wind

post connection; weld did not have any root preparation; and a weld that had been welded all the way around (R4, tab 69 at 6, items 14-20).

88. According to Mr. Nelson, there were 7,043 erection connections (bolted and welded) in the fuel cell shop (tr. 3/230; R4, tab 70). He recorded 5,076 erector deviations and estimated that 80 to 90 percent of those deviations related to the connections (tr. 4/38, 53-59, 61; R4, tab 70).

89. Messrs. Nelson and Irwin jointly computed the percentage of time devoted to the correction of workmanship defects. Using OITL's 17 March 1989 report, Mr. Nelson compiled a list of all the workmanship deviations and the number of times each deviation occurred. A deviation was any non-compliance with the specification or applicable standards. Any deviations involving a design defect were excluded. Mr. Irwin took the deviations identified by Mr. Nelson and estimated the man hours his company spent correcting those deviations. (Tr. 3/54-72, 124-25, 4/46; R4, tab 72) To obtain the percentage, Mr. Irwin divided the total man hours his company expended on workmanship deviations (14,052) by the total number of man hours it spent on the job (22,782). The resulting percentage was 61.6 percent.

90. Messrs. Nelson and Irwin conceded that the 61.6 percentage used to calculate costs attributable to defective workmanship included deviations in the low bay area (R4, tab 72). Mr. Nelson also conceded that there was no correlation between OITL's costs and Irwin's costs, *i.e.*, that it took Irwin more man hours to perform the remedial work than it did for OITL inspect it (tr. 4/25-27).

91. Mr. Sowlat rejected Messrs. Nelson's and Irwin's estimates because they were based on the assumption that the defects in the connections were caused by defective workmanship. Mr. Sowlat estimated that 99 percent of the work done by OITL and Irwin was caused by errors and omissions in the A/E's original design drawings (tr. 4/173). While conceding that Messrs. Irwin and Nelson had expertise in the fields of erection and inspection respectively, he did not believe that either had the expertise or training to trace a field irregularity to its source. (Tr. 4/166-69, 176-78, 183-84, 191)

92. We are persuaded by the opinion of Mr. Sowlat. He testified that the loose bolts, missing bolts, missing washers, gaps, bolts in bending misaligned bolt holes and the other discrepancies observed in the high bay area did not constitute "gross disregard" of the contract. He testified as follows:

It's not by any stretch of definition . . . gross disregard. It is an erector trying to meet a deadline Even general contractors twist their arm to go along with this because they know this can be done to take care of the work for a day and come back when that piece is not on the critical path with another crew, with help from another engineer [or] with help from [the] engineer of record . . . [and] fix it up.

• • • •

When we had to strengthen most of the connections to take care of the final loads [due to other design defects], a lot of complexities were introduced to the fixes. But if the original design [had been] solid . . . taking even 270 connections and putting down some weld on each and every one of them . . . would not be such a big deal in a building of this size.

I'm very clear that this is not something that should be considered as a gross disregard for the contract requirements.

(Tr. 4/292-93)

93. On 19 November 1997, the contracting officer issued a final decision asserting that any potential recovery of costs stemming from the termination for convenience should be subject to an offset in the amount of \$1,320,694.10 representing costs incurred "in attempting to remedy the contractor's grossly defective work-in-place on the structural steel" (R4, tab 79 at 14). Appellant's timely appeal was docketed as ASBCA No. 51190.

94. The Government ultimately claimed the following costs as an offset:

1.	Structural steel activities on Critical Path Method (CPM):	1,207,149.00
	Erect steel columns (activity 470 - 473) Erect trusses (activity 490 - 493) Wind bracing (activity 500 - 503) Parapet framing (activity 500 - 585)	286,000.00 753,689.00 106,900.00 60,560.00
2.	The allocable portion of Datum/Moore's fees	215,912.00
3.	The allocable portion of Irwin's fees	981,904.19
4.	The allocable portion of OITL's fees	122,877.91

5.	The allocable portion of TCC's overhea	ad 28,724.33
6.	The allocable portion of TCC's fee	82,858.65
7.	The allocable portion of Trinity's contra administration fees	act 152,528.26
To	tal Offset claim	\$2,791,954.34

DECISION

The Government argues that it is entitled to offset the termination settlement for which it is liable by costs resulting from DEW's "gross disregard" of its contractual obligations, alleging that DEW/PSSI's workmanship was so substandard that it constituted "gross disregard" of the inspection and workmanship clauses of the contract and that its failure to notify the Government of its inability to complete the connections violated paragraph 7.12 of the AISC Code. *Best Foam Fabricators, supra; New York Shipbuilding, supra.*

Pointing to the sheer number of visible defects in the structural steel, the Government maintains that DEW/PSSI's workmanship was not only in "gross disregard" of its contractual obligations, but demonstrated a willful disregard for the procedures governing the erection of structural steel (Gov't br. at 57-58). Although the connections documented on the video and in the photographs are visually defective, the evidence does not establish that DEW's workmanship was in gross disregard of the contract requirements. The requirement to use only ASTM A325 bearing bolts, which have a tolerance of 1/16 of an inch, combined with other design defects which impinged on DEW/PSSI's ability to align the bolt holes within the tolerance specified, caused the misalignments, not DEW's disregard of its contractual obligations. As we stated in the termination for default, "[w]e are satisfied that poor workmanship neither caused nor contributed to the massive misalignment of bolt holes at the fuel cell shop." *DEW*, 94-1 BCA at 135,461. Nothing in this record persuades us that this statement is incorrect.

The notice issue raises two questions. First, did DEW/PSSI give notice as required by the AISC Code and, second, if not, did that failure result in any damages to the Government. The AISC Code requires an erector to report misfits which cannot be corrected using ordinary means or which require major changes in member configuration "immediately." The Code does not define "immediately." However, it is clear that the term, as used within the industry, does not require an erector to notify the owner each time it encounters a problem. The erector is entitled to a reasonable amount of time to see if it can resolve the problem and most erection problems are resolved during the erection process. Mr. Irwin, the president of the company that performed the remedial work, was

of the opinion that DEW/PSSI should have notified the Government of the misalignment problems "when [it] hung the first CT truss, and . . . failed to pull the members together," explaining that a mismatch at that point would "pretty well guarantee . . . that every connection that's made to that truss is going to miss also." Mr. Sowlat, the structural engineer who prepared the remedial plan, testified that DEW/PSSI could erect the steel using "temporary connections," including torching holes on occasion. In Mr. Sowlat's view, there is a fix for just about any problem and once the structure was in the air, DEW/PSSI could complete the connections any time before the building was turned over to the Government.

PSSI raised the first CT-truss on 1 May 1987. By 3 May 1987, PSSI had attempted to complete the T-truss bottom chord end connections and the horizontal cross bracing for the first CT-truss and knew that it was experiencing major misfits. When the misfits occurred, PSSI followed the standard practice within the industry and checked the shop drawings and measured the members. The record reflects that the detailing and the fabrication were accurate. PSSI finished raising all the CT-trusses by approximately 15 May 1987. DEW's job superintendent was aware that PSSI had not completed the connections and DEW made several attempts to get PSSI to return to the site and finish the job. PSSI was a knowledgeable erector, as evidenced by its analysis of the buckled and bowing members, and we are convinced it understood that the misalignment problems could not be cured by simply tightening the bolts and "walked away" from the job. Allowing time for PSSI to recognize the enormity of the problem, check the shop drawings, measure the members and consult an engineer if it had wanted to do so, we conclude that DEW/PSSI should have notified the Government of the misalignment problem by 5 May 1987.

Although the Government has established that DEW/PSSI failed to notify it of the misfits, it has not demonstrated that it suffered any prejudice as a result. DEW/PSSI's duty to notify the Government of the misfits arose on 5 May 1987. According to the Government, it became aware of the misfits on 31 August 1987, a delay of four months. The contract was terminated on 26 October 1987. Datum/Moore completed its remedial plan in March 1988 and Irwin began the remedial structural steel work in June 1988. Thus, the eight-months (November 1987 through June 1988) required to prepare the remedial plan and begin the remedial work far exceeded the delay caused by DEW/PSSI's failure to give notice. The Government has not demonstrated that earlier notice would have permitted it to take any alternative act to mitigate the effect of its impossible specifications. Furthermore, the structural steel erected by DEW/PSSI was not torn down and is still in use. In any event, the original connections designed by the A/E were inadequate to carry the forces in the structure and had to be strengthened as part of the remedial design. Consequently, we conclude that the Government was not prejudiced by DEW/PSSI's failure to provide notice.

Accordingly, the Government has not proved that it is entitled to an offset on the basis of gross disregard of contractual obligations or DEW's failure to give notice. The appeal is sustained.

Dated: 11 September 2000

ELIZABETH A. TUNKS Administrative Judge Armed Services Board of Contract Appeals

I concur

I concur

MARK N. STEMPLER 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. 50796, 51190, Appeals of D.E.W., Inc. and D. E. Wurzbach, A Joint Venture, rendered in conformance with the Board's Charter.

Dated:

EDWARD S. ADAMKEWICZ Recorder, Armed Services Board of Contract Appeals