ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeals of --	)	
	)	
W.G. Yates & Sons Construction Company	)	ASBCA Nos. 49398, 49399
	)	
Under Contract No. DAHA22-92-C-0002	)	

APPEARANCE FOR THE APPELLANT: William R. Purdy, Esq.
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APPEARANCES FOR THE GOVERNMENT: COL Michael R. Neds, JA
Chief Trial Attorney
MAJ Robert C. Spinelli, JA
MAJ Edward O. Pearson, JA
CPT Stephen P. Bell, Jr., JA
Trial Attorneys

OPINION BY ADMINISTRATIVE JUDGE ELMORE

W.G. Yates & Sons Construction Company (Yates or appellant)[1] has appealed the contracting officer's (CO) "deemed denial" of its amended claim for $387,964.55 (the amount allegedly due "after deductions of partial payments received"), the direct labor and material cost and mark-ups incurred due to changes and disruptions resulting from the Government's defectively designed structural steel for a new hangar building (Docket No. 49399).[2] Yates also appealed the CO's "deemed denial" of its amended claim for $101,536.04 (the amount allegedly due "after deductions of partial payments received")[3] for extended performance cost for 206 calendar days[4] (R4, tab 632; app. br. at 2-3).

GENERAL FINDINGS OF FACT

1. On 4 March 1992, the United States Property and Fiscal Officer for the Mississippi Air National Guard (USPFO-MS, ANG, or Government) awarded Yates contract No. DAHA22-92-C-0002 (C-0002), "ITEMS 0001 THRU [sic] 0005," at a contract price of $10,118,000 for, in pertinent part, the construction of a hangar facility (building A), two adjoining shops, and the administrative offices (wings B, C and D); Additive Bid Item No. 2, the removal of asbestos from, and the demolition of, buildings No. 101, and 102, the old hangar and boiler room respectively; and the construction of a parking lot when/where building No. 101 was demolished. Contract Amendment 0002 provided:

> Construction phasing shall be required in this project and shall include Phase I and Phase II in the Base Bid, and Phase III in

> Additive Bid Item No. 2 as shown on Drawings Nos. C1 and C2. The Owner shall occupy all buildings in Phase II and Phase III (Additive Item No. 2) of the project until the new facility has been completed, accepted and the owner has relocated into the new facility. The Contractor can then begin work in the areas of Phase II and Phase III (Additive Item No. 2).

The contract incorporated by reference the following Federal Acquisition Regulation (FAR) and Department of Defense FAR Supplement (DFARS) clauses: 52.233-1 DISPUTES - ALTERNATIVE I (APR 1984); 52.243-4 CHANGES (AUG 1987); 52.249-10; DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984); 252.243-7001 PRICING OF CONTRACT MODIFICATIONS (DEC 1991). (R4, tabs 1, 3; ex. A-2) The CHANGES clause, paragraph (d) provided:

> (d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. . . . In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

2. On 4 March 1992 the CO, Captain (CPT) Bobby C. Thornton, informed Yates that Lieutenant-Colonel (LTC) James White, Base Civil Engineer (BCE), was appointed the CO's authorized representative (COR); that the COR had no contracting authority and could neither obligate the Government for additional work nor make changes in the work called for under the contract; and the appointment could not be re-delegated (R4, tab 5).

3. At the 17 March 1992 pre-performance conference Yates was informed of the identity of persons authorized to issue change orders and modifications;[5] the CO's representatives for conducting inspections were LTC White and the Benham Group (TBG), the Architect/Engineer (A/E) firm; all changes would be called to the CO's attention; submittals were to be submitted for review and recommendation to TBG, who forwarded them to LTC White, who forwarded them to the CO for final recommendation. The contract called for the work to commence ten calendar days and be completed 730 calendar days (24 months) after the notice to proceed (NTP) was received. Yates, on its critical path method (CPM) schedule, acknowledged receiving the NTP on 3 April 1992. The specifications defined contract completion as total project completion, correction of all pre-final inspection punch-list items, and submission of all required close-out documents specified in the contract. The original contract completion date was acknowledged to be 3 April 1994. During contract performance 37 modifications were issued, four of which

extended the contract as follows: P00026 - 45 days extension from 3 April to 18 May 1994; P00029 - 45 days extension from 18 May to 2 July 1994; P00030 - 20 days extension from 2 July to 22 July 1994; and P00033 - 45 days extension from 22 July to 6 September 1994. Yates contends the beneficial occupancy date for the new hangar was 1 February 1994 when all the contract work was substantially completed. The Government contends the substantial completion and beneficial occupancy date for the new hangar was 6 May 1994. The record does not provide a beneficial occupancy date for either the parking lot, buildings 101 and 102 demolition, or the contract completion date. Yates contends the actual contract completion date was 8 October 1994. (R4, tabs 6, 294, 360, 372, 389, 499, 579, 581; exs. A-5, -6)

ASBCA NO. 49399

4. Contract C-0002 called for the erection of an aircraft (A/C) hangar, capable of housing two KC-135 A/C[6], and three smaller buildings, two for shops and the third housing the administrative offices. In constructing the hangar Yates' CPM started with erection of pods[7] 1 and 2, followed by the erection of the perimeter steel and the erection of the 312 feet long by 18 feet high trusses, starting with truss G and working backward to truss A, and then the miscellaneous steel. Trusses G, F, E, and lower D, measuring 38 feet from the bottom of the cord to the ground, were the trusses for the low bay which accommodated the front portion of an aircraft. Trusses A, B, C, and upper D, measuring 73 feet from the bottom of the cord to the ground, were the trusses for the high bay which accommodated the A/C's tail. (R4, tabs 621-628; tr. 1/32-34, 40, 82-83, 4/32; ex. A-2)

5. Prior to the start of truss assembly the segments for all of the trusses were delivered to the job site. The truss manufacturer pre-assembled every other truss segment by connecting the splice plates thereto. The truss was to be constructed with a 6-inch "camber"[8] which Yates intended to accomplished by using a "jig"[9] during truss assembly. Yates assembled the truss segments on the ground connecting each segment to the next using the pre-connected outside splice plates. The contract documents called for the outside splice plates to be continuous, *i.e.*, one-piece, connecting two truss segments. The eight inner splice plates, four on each of the bottom and top undersides of the I-beam, however, were not continuous and did not inter-connect with the adjoining segment. (R4, tabs 511, 629; tr. 1/36-37, 41, 44, 47, 49-50, 64-65, 88-91, 278-79, 2/101-05, 3/12, 5/196; ex. A-3; finding 20 *infra*)

6. When placing a truss Yates used two 150-ton cranes to pick up and hold the truss while a 35-ton and 65-ton crane were used to lift the team to make the connection. Mr. Hank Champion, Yates' steel rigging supervisor, testified he estimated 12-weeks to complete the steel erection using two crews of eight to ten men[10] each and erecting one truss on an average of every three to four days. (Tr. 1/43-46, 76-77, 2/9-12, 16; ex. A-2)

7. In its 6 July 1992 CPM schedule, Yates projected 17 November 1992 to 9 February 1993 as the early start/finish dates for activity 05001, hangar structural steel framing, a duration of 65 workdays or 85 calendar days (12 weeks). The Government without objection approved Yates' 6 July CPM schedule. (R4, tabs 579, 581; tr. 2/153-61, 302-03, 313-16, 3/11-12, 237)

8. On 14 October 1992, approximately one month earlier than projected, Yates commenced structural steel erection (ex. A-5). Yates' 3 October 1992 work schedule projected activity 05001 to have a duration of 60 workdays or 79 calendar days (11 weeks). No updated schedule subsequent to 3 October 1992 was introduced into evidence or made a part of the record. The record is devoid of evidence that Yates informed the Government the projected duration for the steel structural work was changed to 11 weeks. Yates' 3 October 1992 work schedule projected the following early/late finish dates for steel (R4, tabs 581, 607):[11]

ACTIVITY	TONS	CPM NODE	EARLY START/FINISH	LATE START/FINISH	FLOAT
Structural steel & miscellaneous at hangar	1305.56	05001	26 Oct 92/12 Jan 93	24 Oct 92/11 Jan 93	-1
Structural steel at shops	47	05004	19 Jan 93/1 Feb 93	9 Jun 93/22 Jun 93	121
Structural steel at administration	20	05008	11 Mar 93/27 Mar 93	10 Jun 93/26 Jun 93	78
Steel Joists at shops	18	05005	2 Feb 93/10 Feb 93	22 Jul 93/30 Jul 93	144
Steel Joist at administration	7	05007	29 Mar 93/3 Apr 93	28 Jun 93/6 Jul 93	78
Steel Joist at pumphouse[12]	1	05010	16 Jan 93/16 Jan 93	14 Apr 93/14 Apr 93	75
Miscellaneous steel fabrication[13]	31.44	05003	23 Apr 93/20 May 93	1 Oct 93/28 Oct 93	134
TOTAL	1430.00				

9. On 15 October 1992 TBG informed Yates its 12 October 1992 truss erection plan submittal has been reviewed and approved (R4, tab 582; tr. 5/76).

10. On 2 December 1992 Yates, having completed the two PODs, the perimeter steel, and erection of truss G and the fillet iron which went between truss G and perimeter steel at column line H, was hanging truss F when it "rolled-over" and buckled. Mr. Alex Ronnie Norris, Yates' project superintendent, testified he immediately called Mr. Brad Carter, President, Carter Engineering Co. (CEC), the structural engineering firm that designed the erection sequence. Mr. Carter testified he observed the condition of truss F in the air on 2 December, and on the ground on 3 December, and concluded there was an

"inherent design problem in that particular truss." From 2 to 11 December 1992 Yates, awaiting Government direction, did not erect any structural steel. (R4, tab 511; tr. 1/44-45, 51-54, 57-58, 229-231, 2/13-15, 3/15-16)

11. On 2 December 1992 Mr. Mark Thompson, TBG's project structural engineer, had attended the monthly project meeting and while at the Jackson, Mississippi airport, was informed of truss F's roll-over but elected not to return to the project site. Yates contends that from 2 December onward Mr. Thompson, either through direct contact by Mr. Carter or through Yates' project manager, Mr. Michael Stinson, was continually kept informed of truss design problems. On 8 December 1992 truss F had been re-fabricated and was again ready for erection but on 9 December TBG advised Yates not to erect it until TBG completed a review of the splice plates and gusset plate design. (R4, tab 216 at 5-6, 511; tr. 1/229, 235-37, 246-47)

12. Mr. Carter's report addressing truss F's roll-over, consisting of his 7 and 8 December 1992 letters to Yates, concluded in pertinent part that the following conditions contributed to the rotation: (a) absence of "total bracing"; (b) knee bracing not bolted to the columns which was not possible until both cranes were released; (c) inadequate splice design "directly impacted" the stability. After additional investigation Mr. Carter further determined that the splice plate and the gusset plate thickness were inadequate to handle the maximum transfer requirements and he recommended that stiffeners be applied in vertical alignment with the flange of the web member, and that all connection materials shown on the design documents and the connection materials shown on the shop drawings be checked by a registered engineer. (R4, tab 511; tr. 1/52-55, 232-35)

13. Yates on 9 December 1992 informed TBG it would suspend all truss work based on TBG's determination the "splice plates for truss F are under-designed" and that all work relating to truss F would be suspended until conditions have been reviewed and corrective measures presented or "until structural redesign has been made," and this would severely impact its performance costs and progress (R4, tabs 566, 583). During the period 2 December through 31 December no trusses were erected.

14. TBG on 10, and the CO on 11, December 1992 provided Yates with TBG's 10 December 1992 letter with three sketches enclosed showing "corrections for the splices on Trusses A through G," and directed Yates to proceed with the corrective actions stated in the TBG letter and expeditiously proceed with thickening the inner splice plate and making it continuous so the truss erection could restart immediately after the correction were instituted thereby avoiding "any further delay." The splice plate redesign corrected a design defect for which Yates was requested to submit an itemized proposal. (R4, tabs 56-57, 216 at 6; tr. 1/56-57, 59, 4/7, 19; Gov't. br. at 1)

15. TBG on 11, and the CO on 15, December 1992, provided Yates with revisions to Details 10-S11, 12-S11 and 13-S11 calling for the addition of 6, 28 and 34 stiffener bars to the gusset plates on trusses E, F and G respectively. The Government's cover letter

directed Yates to proceed with the "corrective" action for the gusset plates to avoid further delay and to "submit a itemized proposal for this change." Yates contends the gusset plate stiffeners which had to be attached by welding were labor intensive. The Government contends the gusset plate stiffeners were simply enhancements made for added value and not a correction of a design defect. (R4, tabs 59, 63, 630; tr. 1/57-59, 93-100, 4/18-19; finding 62 *infra*)

16. On 14 December 1992 Yates, acknowledging receipt of TBG's 14 December 1992 facsimile (FAX) concerning corrections to the gusset plates on trusses E, F, and G and TBG's 11 December 1992 letter with the revised details for sketch 10-S11, 12-S11, and 13-S11, stated it considered the letter/FAX to represent a release; it would proceed with the work unless directed otherwise; and it requested it be provided with any corrective measures to be taken for trusses A, B, C, and D. Yates further requested information on how to proceed concerning other recommendations and other items stated in Mr. Carter's 7 December 1992 letter. (R4, tab 584)

17. Yates' 17 December 1992 letter to the CO, referring to an attached 16 December 1992 CEC letter wherein Mr. Carter stated that after reviewing TBG's splice plates and gusset plate stiffeners revised design, he determined that the revisions were still inadequate for compression transfer, stated Yates was continuing to proceed with the splice and gusset plate corrections but was requesting that an engineer of record or other structural agency continue investigating all project connections as recommended in CEC's 16 December letter (R4, tabs 65, 67).

18. On 28 December 1992 Yates, in response to the CO's request for an estimate for the changed splice plates and gusset plate stiffeners, stated it was still incurring additional costs for this work and although unable to submit an itemized proposal estimated the cost would exceed $450,000, excluding impact or other costs that may affect the overall project (R4, tab 72).

19. Yates' second 28 December 1992 letter, with Mr. Carter's 23 December 1992 letter attached wherein he stated he had examined the shear tabs and determined them to be inadequate and referencing CEC's 17 December 1992 letter requesting a continued investigation of all connections, informed the CO that Yates, "truly believed that the modifications proposed by the government, through its Architect, are still inadequate" (R4, tabs 71, 73).

20. Mr. Norris testified that in December 1992, when only trusses F's and G's splice plates were changed-out, he conducted a time study and confirmed that it took four ironworkers 6 hours to replace the upper cord splice plates and 5 hours to replace the bottom cord splice plates for a total of eleven hours per segment. Mr. Champion testified it took four men ten hours, one day, to un-impact[14], replace the inner splice plates with a single continuous splice plate, and re-impact the bolts at each of the 92 splice plate segments on trusses A through G; and that the same 10 hours were needed to replace the

partially assembled splice plates on trusses A through E as it took to replace the fully assembled splice plates on trusses F and G. Mr. Champion, asked to explain why it took the same 10-hours to un-impact/re-impact half the number of bolts for trusses E through A, the splice plates of which having only been attached, by the steel fabricator, to one truss segment and which had yet to be connected to the adjoining truss segment, than were un-impacted/re-impacted for trusses F and G, could not give a cogent explanation for this inconsistency. Mr. Champion's testimony on this point is found to be illogical. Yates began work on trusses G and F on 28-30 December 1992. The Government's Daily Inspection Report (DIR) and Yates' Daily Jobsite Diary (DJD) for 29 December 1992 indicated truss G's splice plate change-outs took one day to complete. The Government's DIR further stated the work was performed by eight of Yates employees (two crane operators, four steel workers in the air, and two steel workers on the ground). The Government's DIR and Yates' DJD for 30 December 1992 indicated the splice plate change-outs for truss F were started and completed on 30 December. The Government's DIR further stated that 8 of Yates' workers (one crane operator, one fork lift operator and 6 steel workers) performed the splice plate change-out for truss F. Yates completed re-erection of truss F on 31 December 1992. (R4, tabs 511, 512, 558, 566, 629; tr. 1/63-66, 1/88-92, 2/18, 106-123 *passim*, 3/246; *see* finding 5 *supra*)

21. On 31 December 1992 TBG informed the CO it had reviewed the items brought up in CEC's 16 December 1992 letter and (R4, tab 78, finding 17 *supra*):

> It is [TBG's] conclusion that the revisions to the splice plates recommended in [TBG's] letter dated December 10, 1992, and the addition of stiffening elements recommended in [TBG's] letter dated December 11, 1992, satisfy all *design requirements*. [Emphasis added]
>
> As previously recommended, erection of the structure should be resumed immediately to avoid further delay.
>
> An additional minor modification to the top cord to column connection is forthcoming. This modification will not, in anyway [sic] impede the progress of erection, and can be done after erected trusses are in place.

22. It was reported in the 5 January 1993 monthly meeting minutes that TBG's representative, Mr. Bill Allison, stated the concerns of Mr. Carter regarding the gussets and splices were taken into account and TBG "felt that they might need to beef up on these items"; Mr. Thompson acknowledged the truss failure was a "significant problem"; that he had never designed a structure like the hangar before; and the conditions identified by CEC as inadequate had been "confirmed" by TBG. Mr. Thompson stated Yates was doing "the right thing"; that the knee brace connections on trusses B and C had to be made prior to

release of the truss; and the details would be worked out in the meeting immediately following. (R4, tab 585)

23. The minutes of the second 5 January 1993 meeting, held to discuss and review "engineering philosophies" concerning the truss design problems on the project, reported that Yates contended TBG's 31 December 1992 contention that all design requirements were satisfied by the revisions to the splice plates and the addition of stiffeners recommended in their 10 and 11 December 1993 letters disagreed with Carter's 16 December 1992 letter that these changes were inadequate. During the meeting it was agreed the CO would furnish Yates with a direction to proceed with TBG's shear tab connection modifications; that a modification would be issued for the design problem on the knee brace on tresses B and C 1 and 2; and TBG would review and advise if the same design problem related to tresses A and D also. The meeting minutes ended with the statement that to maintain the six-inch camber TBG wanted all trusses bolted or welded at the knee brace before releasing the crane vice this being done only for trusses B and C as stated in the earlier meeting. (R4, tab 586; finding 22 *supra*)

24. LTC White in his 7 January 1993 FAX to TBG requested clarification regarding when the proper camber is to be determined, in the jig or in the air. LTC White stated the Government's inspector, John Watts, was confused since the camber when measured in the jig would vary from truss to truss due to the differences in the trusses' lengths and if it is to be measured while in the air the amount of camber required in the jig was difficult to determine due to the number of connections and the length of the truss. (R4, tab 587)

25. On 12 January 1993 TBG provided Yates with sketches SK-S-1 through SK-S-10 showing reinforcement to be added to truss connections either before or after erection at Yates' discretion. Yates was also told to fabricated the trusses with the specified camber prior to lifting; that when truss E is erected the kicker brace should not be connected until the truss is in-place, braced, and the crane is released; and that trusses B, C and D, due to their having a different configuration, must be connected before the cranes are released. (R4, tabs 83, 515)

26. On 13 January 1993[15] Mr. Carter memorialized his 11 January 1993 meeting with TBG's Messrs. Bill Allison, Mark Thompson, Luis Santizo, and Russell Trumbel regarding "engineering procedures and corrections" for the hangar project. Mr. Carter reported the parties discussed and apparently agreed, in pertinent part, that erection could proceed for trusses B, C, D, E and F while corrective sketches for knee brace modifications were being developed; corrective procedures had been submitted for the top cord end gusset plate which included a stiffening shear tab; a correction is being prepared for the shear tab located at the bottom cord of truss E and F which will "require additional plate or weld to accommodate the over-stressed condition evolved in a re-evaluation of design loads"; that there were no problems regarding the gusset plates at the end towers; and it was critical that the 6-inch design camber be held during the erection

of truss B, C and D, that before the crane is released, attachment of the K brace to column is to be made with the 6-inch design camber held in place. (R4, tabs 85, 588)

27. On 20 January 1993 TBG, providing a copy of Carter's 13 January 1993 letter, informed the CO that TBG, following truss F's roll-over on 2 December 1992, had responded to the various areas in question, completed a thorough re-evaluation of all truss members on the project, and to finalize the various conditions and the methods of evaluation had Mr. Carter, on 11 January 1993, attend a meeting held at TBG's office. TBG stated that the "outcome of the meeting was a unanimous agreement by all parties present that the method [of evaluation] being used by TBG were indeed satisfactory and, in some cases, a more conservative approach than necessary." TBG concluded the letter by stating it had the utmost confidence in its design and "now that corrections and re-evaluation have been complete, there should be no other concerns on the structural integrity of the project." (R4, tab 86)

28. On 29 January 1993 Yates informed TBG that its requirement that the six-inch camber be held during the erection of trusses B, C, and D and that the attachment of the K-braces be made with the 6-inch camber in place and before the crane is released was a change to the contract requirements and normal erection procedures and would result in additional costs (R4, tab 589).

29. On 9 February 1993 TBG informed Yates that its review of the shop drawings for trusses B, C, and D indicated that additional length was provided in the knee brace members to accommodate the six-inch camber called for on the drawings, that this would require the connection of the knee brace to the column to be completed before the crane released the trusses; and accordingly no extra erection cost would be experienced (R4, tab 590).

30. From the Government's DIRs and Yates' DJDs we find the following entries: 20 November 1992, truss G hung (R4, tab 566); 2 December 1992, truss F hung and lowered after deflection/rotation (R4, tabs 558, 566); 31 December 1992, truss F re-hung (*id*.); 17 January 1993, truss E hung (R4, tabs 559, 566); 29 January 1993, lower truss D hung (*id*.); 5 February 1993, upper truss D hung (R4, tabs 560, 566); 17 February 1993, truss C hung (*id*., 565); 5 March 1993, truss B hung (R4, tabs 561, 565); and 11 March 1993, truss A hung (*id*.). The reports further provided the following information: average structural steel workers/days work was performed: October 1992 - 8.75/20; November 1992 - 13.23/13; December 1992 - 13.19/16; January 1993 - 14.40/15; February 1993 - 14.0/19; March 1993 - 13.11/18; April 1993 - 13.75/20; May 1993 - 11.25/16 (R4, tabs 556-63).

31. On 21 April 1993 Yates requested the CO issue an official directive for the items noted in TBG's letters of 12 January 1993, with sketches SK-S-1 through SK-S-10 attached; and 20 January 1993, with Carter's 13 January letter attached (R4, tab 111; findings 25, 27, *supra*).

32. On 19 May 1993 the CO, responding to Yates' 21 April 1993 official directive request, directed Yates to proceed with the corrective action noted by TBG (R4, tabs 129, 518; finding 31 *supra*).

33. In its 7 June 1993 FAX to the CO (R4, tab 521), TBG determined Yates, due to truss F's failure, incurred 14 days of delay and $62,827.03 extra cost as follows:

SUMMARY OF COSTS:	
Equipment	$20,340.78
Labor	12,625.92
Material	16,069.78
Consulting	8,079.00
	$57,115.48
Overhead @ 10%	5,711.03
TOTAL COSTS	$62,827.03

34. TBG, from its review of the Yates' DJDs, computed the number of days Yates took to complete steel erection as follows (R4, tabs 521, 566):

STEEL ERECTION PHASE	ERECTION PHASE COMPLETED	DAYS BETWEEN ERECTION PHASES	WEEKEND, HOLIDAYS, AND RAIN DAYS	TOTAL WORK DAYS[16]
Started receiving steel	5 October 1992			
1st steel erected	21 October 1992	17 calendar days	4 weekend days	13
Columns H5 & H12 erected	15 November 1992	25 calendar days	6 weekend and 3 rain days	16
Truss G	20 November 1992	5 calendar days		5
Truss F (1st erection)	2 December 1992 (truss failed)	12 calendar days	4 weekend, 2 holidays	[6] 5[17]
Truss F (2nd erection)	31 December 1992	29 calendar days	8 weekend, 2 holidays, and 3 rain days	16
Truss E	17 January 1993	12 calendar days	4 rain, 1 holiday, 4 weekend days	8
Truss D Lower	29 January 1993	12 calendar days	2 rain, 1 weekend	9
Truss D Upper	5 February 1993	7 calendar days	2 weekend days	5
Truss C	17 February 1993	12 calendar days	1 Rain, 4 weekend days	7
Truss B	5 March 1993	16 calendar days	1 rain, 4 weekend days	11
Truss A	11 March 1993	6 calendar days	2 weekend days	4
Fill-in steel	24 March 1993	13 calendar days	4 weekend, 3 rain days	6
TOTAL TIME ERECTING STEEL				106 DAYS

35. The 6 July 1993 Contract Progress Report, concurred in by Yates, stated all of the steel work elements had been completed. Mr. Champion testified when he left the job at the end of March 1993[18] the trusses had been erected and the steel work completed except for some miscellaneous steel and gusset plate work which was part of the modification. The as-built schedule, DIRs and DJDs after 26 March 1993 verify that Yates did some fill-in steel and gusset stiffener work but (as shown on Yates' 30 October 1992 projected work schedule) the majority of the steel work was for metal deck/roofing and structural steel for shops, administrative office and pumphouse (steel work not part of the truss or fill-in steel), putting up miscellaneous steel, handrails, backwelding, fixing cat-walk, ladders, and structural bracing (work Mr. Norris testified was under activity node

05003 and/or not on the critical path). (R4, tabs 143, 562-563, 616; tr. 1/80-81, 2/33-34, 159-60, 290-91; ex. A-5; finding 8 *supra*, note 13 *supra*)

36. TBG on 30 November 1993 submitted to the CO its report addressing Yates' 4 October 1993 REA[19] for structural design modifications. TBG concluded Yates was fully responsible for the erection procedure and was not directed to alter its procedures for the benefit of camber; since Yates never submitted standard erection procedures, as required by drawing S1, section IX, TBG could not have altered the standard procedures; truss F failed because Yates prematurely released the 150-ton crane leaving a section of the truss unbalanced; since the splice plates were designed for greater loads than required by code Mr. Carter's contention they could not withstand the stress was based on personal preferences; the 6-inch camber was a design requirement and Yates was never directed to provide it on trusses in loaded condition since it is known that once the loads are applied, including self-weight, the truss will deflect and the residual camber will be reduced; Government DIRs show that except for two days Yates' average operation consisted of 14 and not 20 steel personnel; the actual rate of completion per truss prior to 2 December 1992 was 6, not 4, days; and when computed with accommodations for weather delays, weekends, and holidays the actual completion for truss erection would not have occurred before 9 March 1993 and adding three weeks for fill-in and bolt-up actual completion would be late March at best. TBG recommended (R4, tab 216 at 42):

> The Contractor is due additional is due additional [sic] compensation for incorporating the structural modifications into the construction of the hangar. The Contractor should be paid for material, labor, and equipment necessary to install the revised splice plates and gusset stiffeners. He is also entitled to be reimbursed for equipment rental for equipment which was idle during the design review.
>
> The cost, including Contractor's overhead and profit, due to design deficiency is $44,496.95. The cost for improvement to the design is $3,917.27. If all of the design revisions had been included in the bidding documents, the Contract price would have increased $3,814.34. The Contractor's request for $612,466.26 includes $564,052.04 of excessive and unjustifiable cost. The fair and equitable cost for the design revisions is $48,414.22.

37. On 28 December 1993, the Government proposed miscellaneous changes such as additional compressed air outlets affecting wings B, C, and D. On 4 January 1994 Yates submitted a "Request for Amendment Proposal" to LTC White for a 9-week time extension and $91,107.69 to perform the proposed changes. Yates stated the Government was told at the 7 December 1993 monthly meeting of Yates' intention to turn over wings B, C and the pumphouse between the end of December and mid-January so that the asbestos removal and

demolition of the existing hangar building could commence; that the untimely changes submitted 28 December directly affected the completion and the owner's occupancy of these buildings, as well as the progress of work on the existing hangar building. (R4, tab 592; finding 78 *infra*)

38. On 17 January 1994 Yates, after reviewing proposed Modification No. P00023 incorporating the 28 December 1993 changes, informed the CO the proposed modification was unacceptable because it reduced Yates proposed performance cost from $91,107.69 to $45,222.50, a fifty percent reduction; deducted the cost of the electrical subcontractor's work; disregarded the time extension and direct labor costs requested; and included verbiage disallowing any further compensation (R4, tab 593).

39. In a 22 January 1994 internal memorandum the Chief, Structures Branch, Engineering and Construction Division, Andrews Air Force Base (ANGRC/CEE) provided USPFO-MS a copy of ANGRC/CEE's structural engineer's comments regarding the truss modifications wherein he concluded (R4, tab 526):

> 1. Truss F Erection and Failure: The truss should not have bowed as shown in the pictures provided by Yates if a proper erection sequence was being followed. Evidence that the correct sequence is provided in the way of pictures by Carter Engineering. Only four of the top chord lateral braces seem to be connected. The result of releasing the truss without all lateral bracing attached would most surely bring about the bowing of the truss as depicted. The gussets and splice plate problems would not, in my opinion, have resulted in the truss failure supporting its own weight. The Benham Group brings forth plausible logic for the sequence of events in their report page 17.
>
> 2. Cost: I think that both of the proposals are not completely correct. The Benham Group's numbers are closer to the real costs, but fail to provide for the added equipment rental costs and cost of modifying the trusses that were already erected. Yates throws in all kinds of extra costs that are not really related to the design deficiencies. Due to the questions of structural adequacy of the design, Yates should be compensated for equipment rental and labor costs, but only for those laborers at the job site during the period from Dec. 2 to Jan 5/6. I would estimatae [sic] that the total cost associated with the changes should not exceed $200,000.

3. Days: 134 days is too much. I would recommend that from 2 Dec to 5 Jan be allowed along with the number of days associated with the changes subtracting weekends and holidays.

4. Camber: It is standard practice to have the camber in the fabricated truss before erection. After trusses are in place the amount of camber should be somewhat less. I cannot fathom a structural engineer directing a contractor to hold the camber in place while the connections are made. I can imagine a structural engineer requesting the specified camber be there before lifting the truss, but not insisting it be ther[e] before the knee braces are attached.

40. On 31 January and 3 February 1994 Yates and the CO executed Modification No. P00023 in the amount of $45,233.43. In a series of letters exchanged between the parties prior to the execution of Modification No. P00023 it was agreed that Yates was reserving its rights to additional compensation for additional job expenses incurred due to a time extension beyond the contract completion date. (R4, tab 274, 594-96)

41. On 11 February 1994 Yates submitted its proposal in the amount of $14,317.44 and a time extension of 42 calendar days to perform various interior finish changes (R4, tab 598).

42. On 3 and 8 March 1994 Yates and the CO executed bilateral Modification No. P00026 which increased the contract price $10,397.56 to make various contract interior finish changes, and extended the contract completion date 45 calendar days, from 3 April to 18 May 1994, due to the changes. The modification did not include a release clause and Yates' 2 March 1994 cover letter stated that it reserved all rights in regard to reimbursement for all delays and additional costs for the extended period once the costs were determined. (R4, tabs 288, 294, 600)

43. The BCE, in a 2 March 1994 internal memorandum to the CO, analyzed TBG's 30 November 1993 report and concluded that all costs associated with truss F's failure were to be borne by Yates; that TBG's assessment of $35,367.72 for the inner splice plate replacement and the 6 January 1993 revised connection was adequate compensation; TBG's calculation of 12 days of delay associated with miscellaneous gusset stiffeners and plates should be increased by an additional 12 days. Accordingly, the BCE determined that Yates was entitled to the following remuneration (R4, tabs 293, 535):

1. Truss F Failure		$ 0.00
2. Splice Plates (per Benham)		$35,367.72
3a. Gusset Reinforcement		3,113.58
3b. 12 day delay, Not included by Benham	10,080.58	
SUBTOTAL		48,561.88

Overhead @ 10%		4,856.19
Profit @ 10%		5,341.81
Bond @ 0.325		190.97
SUBTOTAL		58,950.85
Gross Receipts Tax & Insurance @ 3.65%		2,151.71
TOTAL ALLOWED COST	$61,102.56	

44. On 18 March 1994, at a meeting of the parties to discuss the modifications associated with the truss, the Government offered Yates $61,102.56 and a 24-calendar day time extension as full settlement for Yates' truss modification REA. Mr. John Watts, the Government's project engineer, during the meeting stated "that the observations of himself and the Benham Group during the erection was limited [and] that when [Yates] removed the second crane no one saw [the truss] roll."[20] Yates rejected the offer. (R4, tabs 303-304)

45. On 23 March 1994 the CO provided Yates with a copy of the minutes of the 18 March meeting together with a copy of ANGRC/CEE's structural engineer's comments. Yates was told the Government would entertain a settlement proposal with sufficient back-up documentation but the Government's position presented at the 18 March meeting "constituted the [CO's] decision on [Yates'] request for equitable adjustment." (R4, tab 306)

46. On 29 June 1994 Yates sent its fire protection subcontractor, Goss Fire Protection (Goss), a certified letter stating that on 15 March 1994 Goss was provided a letter stating what was included in its contract; that Goss failed to perform the work specified in its contract causing the project's completion to be delayed; that no further delays will be tolerated; that Goss is to perform all electrical work, testing, or any other items specified in contract Sections 15330, 15331, and 15390 to provide to the owner's satisfaction a complete system. Yates further stated that if deficiencies are not remedied within the time specified in the contract they will be corrected in accordance with the terms of the contract and deducted from the subcontract amount. (R4, tab 546)

47. On 1 July 1994 Goss, responding to Yates' 29 June letter, stated it disagreed with the contention Goss was delaying contract performance; that its contract recognizes that other firms are involved in making the system complete; that Goss' contractual obligation was to coordinate not perform the work; that Yates continually responded to Goss' letters with statements such as "coordinate with Stratton"; that Goss is only asking for authorization or direction to provide work or services believed to be outside its contract obligation; that testing of items pulled into Goss' panel is required; and that there was a list of items that have yet to be completed (*id.*).

48. On 6 July 1994 Yates, referencing Goss' 1 July 1994 response to Yates' 29 June 1994 "notice letter," informed Goss that its continual refusal to perform testing and any other electrical work and other items specified in Sections 15330, 15331, and

15390 as to provide to the owner's satisfaction a complete system has "further delayed the completion of [the hangar and support facilities] project" (*id*.).

49. In a 11 July 1994 FAX, Mr. Watts, the Government's project manager, informed the CO the occupancy dates for sections of the hangar were: the move into areas B and C started 9 April and concluded 21 April 1994; the move into area D started 16 May and concluded 20 May 1994; that area A is not occupied except for dock offices and dock storage areas (R4, tab 397).

50. Mr. Carter's 13 January 1995 letter to Yates, responding to TBG's position regarding truss F's rollover, stated he, Mr. Carter, observed the failure at the splice condition and all parties agreed the splice was a design error; that the area, section modules, moment of inertia and radius of gyration at the splice do not equal the properties of the cord design; the crane with spreader bar at the east side was in position holding the truss; with lift thrust of the crane and connection at the end column, the top cord compression should have been reversed; although the statement that the slenderness ratio in compression was exceeded, the slenderness ratio is invalidated by the discontinuation and non-continuity of the member that failed at the inadequate splice; and not only the splice that failed was inadequate but so were other cord splices on the project. However, Mr. Carter avoids addressing what effect the missing bracing had on the rollover and we are left with the conclusion, stated in his 7 December letter, that had it been installed it may have assisted in stabilizing the truss thereby avoiding the rollover.[21] (R4, tab 514; finding 12 *supra*)

YATES' CLAIM

51. On 10 October 1995 Yates filed a certified claim for additional compensation in the amount of $540,210.10 and a contract extension to 11 July 1994 due to delays caused by the defective design of, and subsequent modifications to, the trusses and related structural components (R4, tab 491-92). On 19 March 1996 Yates filed a certified amended claim for additional compensation of $560,806.54 (R4, tab 495). Subsequently, on 15 April 1998 Yates, in its supplemental appeal file (tab 631) filed a second amended claim in the amount of $469,285.75. The Government has acknowledged that at the pre-performance conference it and Yates agreed to use a 10 percent mark-up for overhead and a 10 percent mark-up for profit on all modifications and equitable adjustments. During the pre-performance conference it was also agreed that the bond premium mark-up would be decided later. Subsequently, the parties executed Modification No. P00036 incorporating the bond premium mark-up for all modifications to the contract at .42 percent. As for the gross receipts tax, the Mississippi revenue tax code, §27-65-21, sets the gross receipts tax on the total contract price at 3.5 percent. (R4, tabs 485, 500, 605; tr. 3/144-15, 4/207-08, 5/77 ex. A-8; finding 62 *infra*) The three claims were as follows:[22]

COMPOSITE MAINTENANCE HANGAR
AND SUPPORT FACILITIES

SUMMARY OF COSTS DECEMBER '92 - MAY '93

CLAIMED COST	ORIGINAL CLAIM	FIRST AMENDED CLAIM	SECOND AMENDED CLAIM
LABOR COSTS (Exh. C)	$258,125.34	$274,479.94	$260,074.12
MATERIAL COSTS (Exh. D)	24,570.44	24,570.44	21,301.41
EQUIPMENT COSTS (Exh. E)	115,737.25	115,737.25	101,054.07
FUEL, OIL, GREASE, SUPPLIES (Exh F)	25,545.48	24,545.48[23]	22,304.88
LODGING COST (Exh. G)	12,495.13	12,495.13	5,275.00
CONSULTING SERVICES COST (Exh. H)	8,079.00	8,079.00	8,079.00
CLAIM CREDITS (Exh. H.1)			(29,853.29)
SUBTOTAL	444,552.64	460,907.24	$388,235.19
CREDIT FOR CHARGES TO ELLIS STEEL THIS TIME PERIOD	(15,599.04)	(15,599.04)	(15,599.04)
OVERHEAD 10%	42,895.36	44,530.82	37,263.62
PROFIT 10%	47,184.90	48,983.90	40,989.98
PERFORMANCE BOND .42% OF TOTAL	2,268.89	2,355.39	1,971.00
SUBTOTAL	521,302.75	541,178.31	$452,860.75
GROSS RECEIPTS TAX 3.5% OF TOTAL	18,907.35	19,628.23	16,425.00
TOTAL	$540,210.10	$560,806.54	$469,285.75

52. In preparing its claim Yates used what it termed the "measured mile methodology/analysis" to compute when it should have completed erection of hangar steel. The Government neither provided its own analysis nor provided an analysis disputing Yates' contention as stated in its measured mile analysis. Yates used the measured mile analysis to compare steel erection efficiency before and after truss F's failure. Yates alleges it was stopped from erecting trusses from 8 December[24] to 31 December 1992 while the Government was determining what steps were necessary to correct the design defects for the trusses; that on 31 December 1992 truss F was hung for the second time; that TBG provided Yates with three sketches correcting the splice plates on trusses A through G; that Yates was also provided with revisions calling for stiffeners to be added to the gusset plates; that Yates was instructed to bolt or weld trusses at knee braces before releasing the cranes to maintain the 6-inch camber; that except for the modifications to correct the design defects it would have completed its steel erection by 2 February 1993; that it was not until 30 May 1993 that steel erections, including the modifications, were completed. In developing its man-hours (M/H) per ton of steel erected Yates made the following computations (R4, tabs 491-92, 495, 615, 631; ex. A-5):

14 October - 30 November 1992	4763.50 M/H expended on steel erection
Structural steel erected at hangar	520.00 tons[25]
Actual production before truss failure	9.16 M/H per ton of steel erected

Total tons of structural steel at hangar	1305.56 tons
Tons erected by 30 November 1992	520.00 tons
Tons to erect after 30 November 1992	785.56 tons

M/H to complete hangar steel erection 785.56 tons x 9.16 M/H/ton=7,195.73 M/H

Yates predicted it would have performed slightly more than 7,195.73 M/H of steel erection between 1 December 1992 to 2 February 1993. Yates computed its labor for the steel erection as follows:

M/H 11/30/92 - 01/03/93	3,757.50
M/H 01/04/93 - 01/31/93	3,553.00
Subtotal	7,310.50
Deduct M/H for 11/30/92	(208.50)
M/H 12/01/92 - 01/31/93	7,102.00
Add M/H for 2/01/93	178.00
Total M/H	7,280.00

Yates concluded "[t]herefore, under actual production ("measured mile"), Yates should have completed erection of structural steel at hangar by 2 February 1993.

53. Yates contends labor costs in the amount of $260,074.12 were the result of overruns directly attributable to the structural steel design defects and the measures set-out by TBG to correct the design defects. Yates in its first and second amended claims computed its labor costs (exhibit C) for the hangar's structural steel erection as follows (R4, tabs 491-92, 495, 608):

MONTH	TONS OF STEEL ERECTED (AS REPORTED IN 1ST AMENDED CLAIM)	MANHOURS (AS REPORTED IN 2ND AMENDED CLAIM)	LABOR COSTS 1ST AMENDED CLAIM PAYROLL 2ND AMENDED CLAIM
October 1992	220	1,673	$32,495.68
November 1992	343	3,090.5	$60,188.82
SUB-TOTAL	563	4763.5	$92,684.50
December 1992	7	3,757.5	$70,219.88
January 1993	91	3,553	$70,178.47
February 1993	239	4,182.5	$81,998.11
March 1993	300	4,302.5	$78,686.98
SUB-TOTAL	637	15795.5	$301,083.44
April 1993	35	3,254	$60,165.54
May 1993	91	2,158.5	$41,639.65

SUB-TOTAL	126	5412.5	$101,805.19
TOTAL	1326	25,791.5	$495,573.13[26]

Yates argues that during the period October-November 1992 (unaffected by the design problems) it erected 520 tons[27] of steel at the total labor cost of $92,684.50 or $178.24 per ton; that from December 1992-May 1993 it erected 785.56 tons of steel at the total labor cost of $402,888.63 or $512.87 per ton; that the total labor cost to erect 1305.56 tons at a cost of $178.24 should have been $232,703.01; that it incurred additional labor costs of $260,074.12 ($495,573.13 (actual costs) less $232,703 (contract steel labor costs) and $2,796.00 (costs for building B work respectively)). (R4, tabs 495, 631)

54. Yates contends additional material costs of $24,570.44 (exhibit D) were directly attributable to the design revisions made by the Government to the hangar steel. Yates' second amended claim reduced the material cost claimed to $21,301.41 due to additional credits which were not previously given. (R4, tabs 491-92, 631; finding 51 *supra*)

55. Yates computed its equipment costs as follows (exhibit E):

EQUIPMENT COSTS FOR TIME PERIOD

MONTH	EQUIPMENT COSTS INCURRED	DAYS	COST PER DAY	COST 9 DEC 92 - 26 MAR 93
December 1992	$ 34,922.35	31	$1126.53	$ 25,910.13 (23 days)
January 1993	35,524.45	31	1145.95	35,524.45
February 1993	35,122.85	28	1254.38	35,122.85
March 1993	34,024.96	31	1097.57	28,537.06 (26 days)
April 1993	10,380.96	30		
May 1993	7,220.50	31		
TOTAL	$157,195.37	182		$125,094.49

Equipment Costs per day - $157,195.37 ÷ 182 = $863.71
Dollars per day x Impact Days = Equipment Costs
$863.71 x 134 = $115,737.25

Yates' second amended claim reduced the number of impact days from 134 to 117 thereby reducing its claimed equitable adjustment cost for equipment to $101,054.07. (*Id.*)

56. Yates computed its fuel, oil, grease, supply (FOGS) costs as follows (exhibit F):

FUEL, OIL, GREASE, SUPPLIES (FOGS) FOR TIME PERIOD

MONTH	DAYS	COST INCURRED	COST PER DAY	COST 9 DEC 92 - 26 MAR 93
December 1992	31	$7,930.16	$255.81	$5883.63 (23 days)
January 1993	31	$7,930.16	$255.81	$7,930.16
February 1993	28	$7,930.16	$283.22	$7,930.16
March 1993	31	$7,930.16	$255.81	$6651.06 (26 days)
April 1993	30	$1,487.73		
May 1993	31	$1,487.73		
TOTAL	182	$34,696.10		$28,395.01

FOGS Costs per day - $34,696.10 ÷ 182 = $190.64
Dollars per day x Impact Days = FOGS Costs
$190.64 x 134 = $25,545.48

Yates' second amended claim reduced the number of impact days from 134 to 117 thereby reducing its claimed equitable adjustment costs for FOGS to $22,304.88. (*Id.*)

57. Yates incurred $5,275.00 in additional lodging costs (exhibit G) to provide backup lodging for the steel erection crew from 1 February to 25 March 1993 (*id.*).

58. Yates paid $8,079.00 to Carter Engineering Corp., to identify the cause of truss F's failure, confirm the adequacy of the design revisions, and assist Yates in setting out the proper erection procedures (*id.*). Pursuant to Mr. Carter's recommendation the Government did determine the splice plates were under designed and the gusset plates would be strengthened with the addition of stiffeners (findings 10, 12-17, 26, *supra*).

59. Yates computed $29,853.29 as credits due the Government (exhibit H.1) (R4, tab 631). Yates, in attachment 1 to its post-hearing brief, entitled "Structural Modification Claim," credited the Government with an additional $15,556.32 for "Equipment Depreciation." To the extent attachment 1 differs from Yates' second amended claim (finding 51 *supra*), such differences are not being acknowledged by the Board as they were provided after the hearing and there was no showing the information was not available during the hearing. *Joseph T. Yamin, supra*.

60. On 18 December 1995 Yates appealed the CO's "deemed denial" of Yates' 10 October 1995 claim to this Board (Bd. corr. file; finding 51 *supra*).

61. On 4 April 1996 the Defense Contract Audit Agency (DCAA) published its report of the audit conducted on Yates' $560,807 equitable adjustment claim for the truss modifications, as amended, and questioned $80,072. DCAA determined that $61,400 of equipment costs of $115,737.25 was duplicative inasmuch as Yates' owned equipment was verified as being included in Yates' indirect overhead pool expenses and Yates charged the equipment to the Government contract at a rental rate; that $11,393 of fuel, oil and grease costs of $25,545.48 were duplicative inasmuch as they were included in, and all these costs were recouped from, Yates' indirect overhead pool expenses; and that $7,279 was the reduced overhead cost due to the $72,793 reduction of the Yates' claimed costs. (R4, tab 496)

62. On 2 May 1996 the CO issued a final decision wherein he determined that Yates' failure to provide an erection plan sealed by a professional engineer precluded the Government from determining if an engineer was involved in the erection processes; Yates failed to follow erection procedures used in erecting prior trusses when it installed truss F; the roll-over of truss F did not result from a design deficiency but rather from Yates' failure to adequately support the truss until sufficient lateral bracing was in place; and that a drafting error for the inside splice plate, which Yates' engineer found after truss F's failure, had nothing to do with the truss failure. The CO concluded that Yates was due additional compensation and time as a result of the drafting error for the splice plates and for the added value the Government received from the gusset reinforcement, and that the A&E's "should cost" analysis was determined to accurately reflect the additional costs involved with the drafting error except for an additional 12 days. Accordingly, the CO, using the figures in the A&E's report, determined Yates to be due: $35,367.72 for correction of the splice plates, $3,113.58 for the gusset reinforcement, $10,080.58 for an additional 12 days of delay not included in the A&E's report, 10 percent overhead, 10 percent profit, .325 percent bond premium, and 3.65 percent gross receipt tax for a total of $61,102.56 and

statutory interest from 10 October 1995 until payment was made. We find the CO's use of a bond premium percentage rate of .325 vice .42 percent agreed to in Modification No. P00036 and his use of a gross receipt tax of 3.65 percent vice 3.5 percent as called out in the Mississippi tax code, § 27-65-21, to be non-compliant with the terms of the contract. (R4, tab 500; finding 36, 43, 51 *supra*)

ASBCA No. 49398

63. By letter dated 5 May 1993 LTC White was informed by the Mississippi Department of Archives and History, Historic Preservation Division (DAH-HPD) that hangar building 101 was eligible for listing in the National Register of Historic Places (R4, tab 121).

64. On 1 July 1993 the BCE informed Yates the demolition of hangar building 101 may be deleted from the contract, and if this were to happen the asbestos abatement portion of the contract would still be required. Yates was requested to provide a date by which it must know what the Government's intentions were relative to hangar building 101. (R4, tab 142)

65. On 15 July 1993 Yates, responding to the BCE's 1 July letter, stated that in accordance with the project schedule the demolition of hangar building 101 was to be performed at the beginning of 1994. Yates requested it be informed of the Government's plans for the building. (R4, tab 147)

66. In his 25 August 1993 internal memorandum to contracting the BCE stated, in pertinent part, that no decision had been made as to the historical significance and possible preservation of hangar building 101 but that if the decision is to retain the building a detailed cost breakdown will be necessary to extract the cost of demolition of the building from the cost of other elements which will still be required (R4, tab 159).

67. The CO on 13 September 1993 requested Yates provide a schedule of values for additive bid item No. 2, the asbestos removal and demolition of buildings 101 and 102 and the construction of a new parking lot, and the relocation of electrical service and communication beneath the new parking lot. It was the CO's position that although no decision had been made regarding the historical significance of hangar building 101 the cost breakdown was necessary for the BCE to document the cost of demolition. (R4, tab 166)

68. Yates, responding to the CO's 13 September 1993 letter, on 27 September 1993 submitted a schedule of values totaling $171,921 for additive bid item No. 2 (R4, tab 173).

69. Yates on 27 October 1993 again requested it be informed if the demolition of hangar building 101 was to be deleted from the contract so that it could submit a proposal

(R4, tab 189). The CO's 23 November 1993 internal memorandum memorialized his telephonic notice to Mr. Stinson, Yates project manager, that the Government had decided to go forward with the demolition of hangar building 101 (R4, tab 209).

70. On 7 December 1993 the CO issued a cure notice addressing Yates' alleged failure to complete hangar work stating in pertinent part: (R4, tab 221)

> You are notified that the Government considers [Yates] failure to promptly replace or correct the rejected work as stated in the Benham Group inspection reports [dated 9 August, 14 September, 8 October, 4, 6, 8, 9, 10 and 24 November 1993] a condition that is endangering performance of the contract.

71. On 8 December 1993 Yates informed the CO that asbestos removal for buildings 101 and 102 was scheduled to begin the first week of January 1994; that to date no written direction had been given as to what the Government intended to do regarding the removal of buildings 101 and 102; and that it was critical that Yates be advised of the Government intentions (R4, tab 224).

72. In a 17 December 1993 letter the CO, responding to Yates' 8 December letter, stated that any request from the Meridian Airport Authority (MAA) regarding building 101 had no bearing on the contract and the contract should proceed as is and Yates should coordinate the demolition of buildings 101 and 102 with the BCE (R4, tabs 231, 233).

73. On 28 December 1993 Yates requested BCE clarify the status of buildings 101 and 102. Yates stated its contract with the Government called for the demolition of buildings 101 and 102, which has been planned to commence between 15 and 31 January 1994[28]; that it has been instructed to coordinate the demolition with BCE; but BCE has informed Yates the building was owned by the MAA. Yates stated it would proceed pursuant to its demolition scheduled unless directed otherwise by the CO. (R4, tab 236)

74. The minutes for the 4 January 1994 monthly meeting memorialized Yates' representative's statement that the work called out in the cure notice had been completed and they requested that a substantial completion review be conducted for building B on 14 January and building C and the pumphouse on 21 January. It was Yates' conclusion that all trades were winding down loose ends; the majority of items were completed; and that the ANG "should be able to start moving in January 24-30." It was the CO's determination, based on comments from TBG, that Yates made a good faith effort to correct the deficiencies noted in the cure notice. At a meeting held following the monthly meeting the CO reaffirmed that building 101 would be torn down and Yates was to proceed accordingly. The meeting minutes reported the actual percent completed on the project was 94.57 percent. (R4, tabs 241, 242, 251)

75. In its 17 January 1994 letter to the CO Yates complained it had been informed that only TBG's inspector, Mr. James Lane, could approve acceptance of shops B, C, and the pumphouse; that although the parties agreed to do the inspections on 14 and 21 January, that Mr. Lane did not attend; and Mr. Lane's non-attendance delayed the substantial completion review of the buildings. Yates, ostensibly to minimize project cost and delay, requested confirmation that maintenance personnel were aware of, and prepared for, the move from buildings 101 and 102 to shops B and C, and that Mr. Lane would make himself available when the inspections are scheduled and not just when he is attending the monthly meeting. (R4, tabs 254-255, 268)

76. In the 1 February 1994 monthly meeting minutes it was reported Mr. Stinson stated that since December 1993, when Yates was informed that building 101 would be demolished, Yates had been working diligently to get shops B and C ready for occupancy; that the inspection dates for buildings B and C were set, without objection, at the January meeting; that Mr. James Lane, the person the Government identified as the only one would could "punch out" the buildings, failed to be present on the agreed to inspection dates; that LTC White stated the demolition of buildings 101 and 102 were not priority items; that he had a meeting that afternoon with MAA and the Historical Society to decide the fate of hangar building 101; and that he would not have a problem with the old hangar building being demolished after the contract completion date. Yates requested, and the CO agreed to provide, an acknowledgment of the change and the contractor's entitlement to be compensated for encountered delay. (R4, tab 268)

77. By letter of 2 February 1994 the CO informed Yates that a Notice To Proceed (NTP) with the demolition of the old hangar building 101 will be issued after the new hangar has been completed. The CO stated that "upon issuance of the Notice to Proceed to demolish the old hangar, a forty-five (45) day time extension will be given." (R4, tab 271) Yates does not dispute its CPM experts' acknowledgment that Stratton, Yates electrical subcontractor, was consistently mentioned throughout Yates' DJDs as delaying progress and that between "mid December 1993 through the end of January 1994", "significantly" contributed to delaying the completion of shops B and C (R4, tab 616, tr. 2/317-18; ex. A-5). The Government did not provide a progress schedule or scheduling expert to testify to the effect Stratton's delay may have had on Yates' claim.

78. On 3 February 1994 the CO executed bilateral Modification No. P00023 wherein Yates agreed to provide, in pertinent part, additional compressed air outlets in the shop areas of wings B and C and to paint the piped in color code as specified at an increase in contract price of $18,990.57.[29]

79. Yates, in its 7 February 1994 response to the CO's 2 February letter, stated that it was only advised in December 1993 that buildings 101 and 102 would be demolished; that to date it still had not received approval on its truss modification request and time extension; that at the January monthly meeting the Government agreed to occupy shops B and C during the last week in January but made no attempt to prepare for this move; at the

February monthly meeting the Government stated the ownership of building 101 had yet to be resolved; that the greater portion of Yates' remaining contract work hinges on the demolition of building 101 and 102; and the Government's re-direction to complete all work in the new hangar and await a NTP was the Government's vain attempt to cover up its inability to turn over buildings 101 and 102 for demolition. Yates contended that vice the forty-five day extension cited in the 2 February letter it was entitled to 135 days for the time period in which the owner occupied the building through its demobilization and completion of this project, as per the approved contract schedule. Yates stated it and its subcontractors were entitled to, and were requesting, compensation for additional costs associated with the extended contract period; that if the demolition of buildings 101 and 102 was not resolved in a timely fashion it reserved the right to add additional time and associated costs for any delays. Yates requested the CO approve its request for a time extension and additional costs in writing as soon as possible. (R4, tab 279)

80. The CO's 9 February 1994 memorandum to the BCE, with a copy of Yates' 7 February letter attached, noted Yates' request for 135-calendar days time extension and requested clarification whether or not building 102 had already been demolished (R4, tab 281).

81. In the 1 March 1994 monthly meeting minutes Yates reported, in pertinent part, that the estimated project percent completed was 97.992 percent; the majority of punchlist items in shops B and C had been corrected; and the CO had yet to respond to Yates' 1 and 7 February letters concerning hangar building 101 and 102 and associated work (R4, tab 291).

82. On 16 March 1994 the Advisory Council on Historic Preservation, the last approval/necessary signatory, signed the Memorandum Of Agreement (MOA) between the ANG and the State of Mississippi allowing for the demolition of hangar building 101 to become binding (R4, tab 302).

83. On 4 April 1994 the CO advised Yates to proceed with the demolition of hangar building 101 and to furnish an itemized proposal and supporting documentation for any delays encountered concerning the building's demolition (R4, tab 309).

84. On 18 April 1994 Yates, acknowledging receipt of the CO's 4 April 1994 directive to proceed with the demolition of hangar building 101, informed the CO it would take 30 days before the asbestos subcontractor can schedule this work with the proper regulatory authorities and perform the asbestos abatement in buildings 101 and 102. The CO was requested to provide a date when the building will be empty of all personnel, equipment and other items owned by the Government. (R4, tab 324)

85. On 25 April 1994 the Government, responding to Yates' 18 April 1994 request for the date when hangar 101 would be handed over, provided Yates with a 22 April 1994 BCE memorandum wherein LTC White stated the move to the new hangar facility is "well under way"; that Yates failure to complete offices at docks 1 and 2, and the central tool

storage were obstacles to the maintenance section being fully operational; that a punch list was given to Mr. Norris for substantial completion of the five rooms which are built out in the hangar bay between the nose of the two aircraft spaces, and assuming Yates continues work on the old and begins immediately on the new punch-list items and completes enough of them for occupancy by 29 April, hangar 101 could be handed over to Yates by 6 May 1994 (R4, tabs 327, 328).

86. By letter of 25 April 1994 Yates informed the CO that buildings 101 and 102 still contained Government owned items and again requested a vacate date so the asbestos abatement and building demolition could commence (R4, tab 329).

87. In the 3 May 1994 monthly meeting minutes it was reported that ANG had moved into shops B and C and the dock area rooms at A; buildings 101 and 102 would be vacated by 6 May 1994; and Yates is scheduling asbestos abatement and demolition based on this schedule. Mr. Norris testified that in May 1994 the Government had moved into the shops B and C of the new hangar. (R4, tab 334; tr. 1/199-200)

88. On 9 May 1994 Yates advised the CO that buildings 101 and 102 were not yet vacant delaying asbestos abatement and demolition (R4, tab 344).

89. In a 9 May 1994 internal memorandum the BCE informed the CO hangar 101 was vacated on 6 May 1994; that the only items remaining were some portable aircraft jacks and stands which must be left under shelter; that until the job superintendent notifies them to tow them out, which would take about fifteen minutes to accomplish, it was BCE's intention to leave them in the old hangar. The BCE stated that building 102 had a boiler to be removed and this would be accomplished on 10 May, otherwise the building was vacated on 6 May also. The memorandum concluded by stating that Yates, although claiming it was being delayed, had begun demolition on 9 May. The DIR for 9 May indicated that "electricians began demolition of hangar 101 - removing fixture lenses, panelboard, aluminum wire." (R4, tabs 343, 543)

90. On 10 May 1994 the CO apprised Yates of the Government's insistence that buildings 101 and 102 were vacated 6 May except for the boiler in building 102, which would be removed 10 May, and jacks and stands in building 101 which could be removed upon request by Yates' superintendent. It was the CO position the Government did not cause Yates "any delay on May 6, 1994." (R4, tab 348)

91. Yates, in its 11 May 1994 letter responding to the CO's 10 May letter, questioned how the Government could reconcile its contention that buildings 101 and 102 were vacant on 6 May while stating that building 101 still contained Government equipment and building 102 has a boiler that the Government wanted to remove on 10 May. Yates requested the CO to immediately have the buildings vacated to allow work to begin. Yates failed to mention that on 9 May its electricians began demolition work in building 101. (R4, tabs 350, 543 at report No. 500; finding 89 *supra*)

92. On 12 May 1994 the CO, in response to Yates' 11 May 1994 letter, stated the Government was adamant it was not the cause "of any delay on May 6, 1994"; there was still painting ongoing in the hangar bay; and the BCE will move the equipment in building 101 at a moments notice when Yates' superintendent ensures him the new hangar bay is ready to be moved into (R4, tab 354).

93. On 13 May 1994 Yates, in a letter memorializing a telephonic conversation held that morning with the CO, confirmed the CO's promise to have all remaining equipment removed from buildings 101 and 102 immediately to allow asbestos removal and demolition to begin. Yates further stated the extent of delay concerning the demolition of hangar buildings 101 and 102 could not be determined by the contract completion date of 18 May 1994, and, therefore, Yates requested a unilateral directive concerning a contract extension. The 13 May DIR stated that Yates' electrical contractor "has three of his laid-off employees working in hangar 101 demolishing the electrical work [and] they cut the wires in the buss duct which is served from bldg. 101." (R4, tabs 357, 543)

94. On 16 May 1994 the CO executed unilateral contract Modification No. P00029 extending the completion of the contract 45 calendar days, from 18 May to 2 July 1994, to allow for demolition of buildings 101 and 102 (R4, tab 360).

95. On 26 May 1994 Yates informed the CO that asbestos abatement in buildings 101 and 102 was completed and demolition would commence 31 May 1994 (R4, tab 368).

96. The CO on 3 June 1994 issued unilateral contract Modification No. P00030 which in pertinent part increased the contract cost $15,416.71 and extended the contract completion date from 2 to 22 July 1994 to cover the cost of revisions made to the AFFF fire suppression system (R4, tab 372).

97. The CO in his 12 July 1994 letter to Yates reiterated the completion dates for areas B, C and D as stated by Mr. Watts in his 11 July FAX and requested Yates concurrence (finding 49 *supra*). As for area A the CO indicated that only the dock offices and storage areas were occupied to date and he acknowledged that this was due in part to changes made to the AFFF control system. The CO assured Yates the mutually agreeable beneficial occupancy dates will be established but that additional deficiencies are still being found; that the facility requires additional work before any part can be considered as a complete and usable facility; and to date there has been no certification submitted that the work has been inspected and is complete and ready for inspection as required by contract Section 01700, Paragraph 1.2A. (R4, tab 399)

98. On 15 July 1994 Yates informed the CO that due to rainfall encountered on almost a daily basis the new parking lot would not be completed by the 22 July 1994 contract completion date (R4, tab 405).

99. On 21 July 1994 Yates informed the CO the fire protection system completion date, 22 July 1994, would not be met (R4, tab 407).

100. On 3 August 1994 the CO informed Yates that although the contract completion date of 22 July 1994 had passed, the delayed completion resulted from excessive rains during the month of July. Yates was instructed to submit a request for an extension of time for the number of rain days in excess of the norm to allow the Government to extend the contract completion date. (R4, tab 414)

101. On 8 August 1994 Yates, responding to the CO's 3 August letter, stated that in prior correspondence it requested a time period of 135 days in accordance with the original contract for the demolition of buildings 101 and 102; that the Government extended the contract 45 days; that they were reserving all rights in regard to this matter; and they were requesting a unilateral 90 day contract extension in order to complete the work in accordance with the original contract (R4, tab 416).

102. The CO on 11 August 1994 sent Yates proposed Modification No. P00032 stating it reflected a time extension of 45 days which had been determined to be adequate for Yates to complete the contract. In support of his determination the CO contended that Yates' 8 August letter stated a total of 135 days for the demolition of buildings 101 and 102 was due; that Modification No. P00026 extended the contract 45 days, from 3 April to 18 May 1994; that Modification No. P00029 extended the contract 45 days, from 18 May to 2 July 1994; that Modification No. P00030 extended the contract 20 days, from 2 July to 22 July 1994; and that proposed Modification No. P00032 extended the contract an additional 45 days, from 22 July to 6 September 1994. The implication made by the CO was that the contract's extension of 155 days is greater than and, therefore, meets Yates' request for 135 days extension. (R4, tab 417)

103. On 12 August 1994 the CO issued unilateral Modification No. P00033 extending the contract completion 45 days, from 22 July to 6 September 1994, due to "excessive rains received during the last two months." The modification did not elaborate on the time period the last two months covered and there was no evidence in the record clarifying this point. (R4, tab 418)[30]

104. On 23 August 1994 the CO in response to prior Yates' correspondence acknowledged that warranty on the contract commenced 15 April 1994, that the Government's acceptance and use of any part of the work before acceptance does not equate to acceptance of the work; that items that are deficient are not warranty items but punch-list items (R4, tab 425).

105. On 26 August 1994 Yates informed the CO that it disagreed with Modification No. P00033 extending the contract 45 days since it was half of the extension time requested and this letter was to be considered a reservation of Yates' rights regarding this matter (R4, tab 432).

106. On 16 November 1994 Yates provided the Government with a certification stating all work had been inspected and was found complete, performed in accordance with the contract documents, and ready for the CO's inspection (R4, tab 453).

107. On 18 July 1995 the parties issued bilateral contract Modification No. P00036 including acceptance of the asphalt pavement as complete; a price decrease for the asphalt because it did not conform to MSHD standards; and, an increase in the contract price incorporating the bond premiums for all contract modifications to the rate of .42 percent. Modification No. P00036 included a waiver clause stating the Government was released from further equitable adjustment attributable to this supplemental agreement. (R4, tab 485)

YATES' CLAIM

108. On 2 October 1995 Yates filed a certified claim for delays associated with the hangar bay steel erection, the demolition of buildings 101 and 102, and the construction of the parking lot. Yates claimed entitlement to additional compensation in the amount of $93,294.34 "for extended field and home office overhead costs" for 173 calendar days of extended performance due to Government caused delay and an excusable contract extension of 189 calendar days to 8 October 1994. (R4, tab 490 at 25) Subsequently, Yates filed an amended certified REA for $93,439.23 (*id*.). On 15 April 1998, in its supplemental appeal file, Yates filed a second amended claim in the amount of $114,611.73 with delay periods of 104 and 102 days (R4, tab 632)[31]. Yates divided the claimed costs between "project management direct job cost" and "job expense cost." (R4, *see* tab 490, exs. B, C) The claims did not include damages calculated according to the *Eichleay* formula. The three claims were as follows:[32]

CLAIM FOR COMPENSATION
SUMMARY OF COSTS

CATEGORY WHERE CLAIMED COSTS WERE INCURRED	ORIGINAL CLAIM (R4, tab 490)	FIRST AMENDED CLAIM (R4, tab 490)	SECOND AMENDED CLAIM (R4, tab 632)
PROJECT MANAGEMENT COSTS	$10,502.83	$ 8,027.20	$ 13,275.56
JOB EXPENSE COSTS	63,577.50	66,168.18	77,731.84
SUBTOTAL	74,080.33	74,195.38	91,007.40
OVERHEAD 10%	7,408.03	7,419.54	9,100.74
PROFIT 10%	8,148.84	8,161.49	10,010.81
PERFORMANCE BOND .42% OF TOTAL	391.84	392.44	481.37
SUBTOTAL	90,029.04	90,168.85	110,600.32
GROSS RECEIPTS TAX 3.5% OF TOTAL	3,265.30	3,270.37	4,011.41

TOTAL	$93,294.34	$93,439.23	$114,611.73

109. Yates' project management cost consisted of the cost of its project manager assistant-on-site for 104 "impact days" during the period from "December 92 - May 93"[33], 104 days at $77.65 per day for a sub-total of $8,075.60; and from 1 February - 13 May 1994, 102 days at $50.98 per day for a sub-total of $5,199.96. The cost claimed for the two periods is $13,275.56. (R4, tabs 490, 632)

110. Yates computed its field office expenses as follows (*id.*):

ITEM	COST PER DAY	CALENDAR DAYS OF DELAY	PERIOD OF DELAY	TOTAL COST
Builder's Risk Insurance	$18.92	104	Dec 92-May 93	$ 1,967.68
Job Clerk	$60.70	104	Dec 92-May 93	$ 6,312.80
Project Supt.	$156.14	104	Dec 92-May 93	$16,238.56
Job Office	$17.01	104	Dec 92-May 93	$ 1,769.04
Telephone	$11.42	104	Dec 92-May 93	$ 1,187.68
Periodic Cleanup	Lump Sum		Dec 92-May 93	$ 7,849.74
Chemical Toilets	Lump Sum		Dec 92-May 93	$ 449.40
Job Office	$15.96	102	Feb 94-May 94	$ 1,627.92
Chemical Toilets	$9.67	102	Feb 94-May 94	$ 986.34
Utilities	$22.07	102	Feb 94-May 94	$ 2,251.14
Telephone	$10.62	102	Feb 94-May 94	$ 1,083.24
Periodic Cleanup	Lump Sum		Feb 94-May 94	$ 9,082.87
Builder's Risk Ins.	Lump Sum		Feb 94-May 94	$ 1,800.00
Project Supt. Ronnie Norris Joe Collins	Lump Sum		Feb 94-May 94	 $14,857.91 $10,267.52
TOTAL				$77,731.84

111. On 18 December 1995 Yates filed with the Board its notice of appeal of the CO's "deemed denial" of its 2 October 1995 claim (Bd. corr. file; finding 108 *supra*).

112. On 11 April 1996 DCAA published its audit of Yates' $93,439.23 REA claim wherein the auditor opined (R4, tabs 490, 497):

> In our opinion, the cost or pricing data submitted by the offeror are inadequate in part. . . . However, the inadequacies described are considered to be relatively insignificant. The claim was not prepared in all respect in accordance with applicable provisions of the FAR and DoD FAR Supplement. The impact of the noncompliance is considered relatively insignificant. Nevertheless, in our opinion, the technical evaluation of costs discussed in the Qualifications section of

the report is significant enough to impact the results of the audit. Therefore, as discussed with Lieutenant Milton Griffith, price analyst, on 25 March 1996, we recommend that contract price negotiations not be concluded until the results of the technical analysis are considered by the contracting officer.

However, should the contracting officer feel the need to negotiate this claim we obtained cost data from the contractor's books and records to assist in the negotiation of a settlement with the contractor. Our audit of the total claimed amount of $93,439 disclosed no claimed amounts which were not supported by the contractor's books and records.

QUALIFICATIONS:

- We consider the contractor's accounting system to be inadequate in part for reporting actual incurred costs. . . . However, we evaluated the claim to the extent possible.

- The results of audit are qualified pending the receipt of a technical review by the requester's office. Our report addresses the monetary aspect of the claim only, as requested by your letter dated 1 December 1995.

113. On 1 May 1996 the CO issued a final decision on Yates' $93,294.34 claim, the alleged increased project management and field office expenses incurred due to delay experienced in connection with the structural steel, the demolition of buildings 101 and 102 and the changes made to the AFFF Fire Suppression System[34] (R4, tabs 490, 499). In his decision the CO stated that when the Government was informed by the Mississippi Department of Archives and History the old hangar might be registered as an historical building, Yates was immediately informed that the possibility existed the old hangar would not be demolished since the Government was not the last word on this. The decision to demolish building 101 and 102 was subsequently made on 4 April 1994 and the Government vacated the building on 6 May 1994; the Government's indecision about demolishing building 101 did not delay Yates since the old hangar could not be demolished until the new hangar was completed on 11 September 1994; that the 32 days between the notice to proceed with the demolition and the date the building was vacated was to allow Yates to mobilize; and the 45 days time extension given to Yates under contract Modification No. P00029 was "to delay assessment of liquidated damages" and was never intended to compensate them for a delay that never occurred. The CO determined, however, that the Government neglected to consider job site overhead when calculating the amount for Modification Nos. P00026 and P00030; and using Yates' job costs cited in its claim

Yates was due an additional $20,465.78[35] plus interest from 10 October 1994 until payment was made. (R4, tab 499)

114. On 13 May 1996 the CO issued unilateral Modification No. P00037 awarding Yates $20,465.78 (R4, tabs 490, 501-502).[36]

DECISION

ASBCA No. 49399

Yates has the burden of proving its affirmative claim against the Government by a preponderance of the evidence. *Capital Services, Inc.*, ASBCA Nos. 40510,40511, 91-1 BCA ¶ 23,310 at 116,907; *Planning and Human Systems, Inc.*, ASBCA No. 29725, 90-2 BCA ¶ 22,821. Yates alleges it incurred additional costs of $387,964.55 to implement changes correcting the Government's defective specifications for the new hangar's structural steel components. The Government does not contest Yates' entitlement to an equitable adjustment as to the splice plates and gusset stiffener reinforcement (finding 62; Gov't br. at 1). Yates has met its burden of proof for entitlement and we now address quantum.[37]

It is settled that once an action is brought before the Board the parties start with a clean slate and the proceeding proceeds *de novo*. *TPI International Airways, Inc.*, ASBCA No. 46462, 96-2 BCA ¶ 28,373, *recon. denied*, 96-2 BCA ¶ 28,602, *aff'd.*, 135 F.3d 776 (Fed. Cir. 1998) (table), *cert. denied*, 525 US 874 (1998).

MEASURED MILE METHODOLOGY

Yates, using the measured mile methodology, computed its alleged additional labor inefficiency costs by comparing performance costs incurred prior to the defective specification disruption with performance costs after the defective specification disruption (finding 52). In *DANAC, Inc.*, ASBCA No. 33394, 97-2 BCA ¶ 29,184 this Board endorsed the use of the measured mile methodology to measure the cost for labor inefficiency caused by Government delay and disruption holding:

> For labor inefficiency claims, a "good period vs. bad period" analysis, comparing the cost of performing work during periods both affected and unaffected by disrupted events "is a well established method of proving damages." *U.S. Industries, Inc. v. Blake Construction Co., Inc.*, 671 F.2d 539, 547 (D.C. Cir. 1982).

The Government has not provided a cogent argument why Yates' use of the measured mile methodology is invalid. Accordingly, we accept Yates' use of this methodology as an acceptable vehicle for determining incurred labor inefficiency costs due to the Government's defective specification.

PERIOD OF DELAY AND INEFFICIENT LABOR COST INCURRED

It is undisputed that Yates erected 520 tons of the total 1305.56 tons of structural and miscellaneous steel during the October-November 1992 time frame, before the design defect was encountered, leaving 785.56 tons of steel to be erected after the design defect was encountered (findings 8, 52-53). Yates' claim for additional direct labor/labor inefficiency cost due to the Government's defective specification is predicated on Yates' contention it erected 520, of a total of 1305.56 tons of structural steel, *i.e.*, the trusses and miscellaneous/fill-in steel, prior to encountering the defective specification, at a cost of $178.24 per ton; Yates contends it expended 4763.50 M/H to erect the 520 tons of steel; that in so doing it erected a ton of steel in 9.16 M/H; that at the rate of 9.16 M/H per ton Yates would have erected the remaining 785.56 tons of steel in 7,195.73 M/H thereby completing the erection of the structural and miscellaneous hangar steel by 2 February 1993; that due to the defective specifications Yates did not complete the structural steel erection, including modification work, until 30 May 1993; that labor costs to erect the full 1305.56 tons of structural steel should have been $232,703.01; that the total labor expenditure to erect the structural steel was $495,573.13; and, accordingly, Yates was entitled to remuneration of $260,074.12, the difference between its actual labor cost, $495,573.13, and its proposed labor costs, $232,703.01, less a credit of $2,796, for work performed out of sequence (findings 51-53). The CO acquiesced to Yates' labor inefficiency claim but contends the cost was not as large as claimed and, in any event, the structural steel erection was completed prior to 30 May 1993 (finding 62). Without the Government contending otherwise we accept Yates M/H figures and the 2 February 1993 completion date as valid (*id.*).

To determine the extent of Yates' incurred labor inefficiency we look to the record where we find that on 9 December 1992 Yates was advised by TBG not to re-erect truss F until a review of the splice plates and gusset plate design was completed; TBG subsequently determined the splice plates were incorrectly designed and the gusset plates should have stiffeners added; on 10 December 1992 TBG issued, and directed Yates to proceed with, corrections for the splice plates on trusses A through G; on 11 December 1992 TBG issued, and directed Yates to proceed with, the addition of stiffeners to the gusset plates on trusses E, F and G; and on 31 December 1992 truss F was re-erected (findings 11-16, 20).

There is no dispute that gusset plate stiffeners were to be added and the splice plates had to be changed before the trusses erection could continue. Yates, under the Changes clause, was entitled to the increased labor costs associated with this additional work (finding 1). To decide the correct increased labor cost remuneration Yates is entitled to we must first determine when truss erection and fill-in steel were completed.

Yates claimed it did not complete the structural steel erection until 30 May 1993 (finding 52). It is uncontested that truss A, the last truss to be erected, was erected on 11 March 1993; that fill-in steel, the steel used between trusses for strength and support,

was completed 24 March 1993; and on 26 March 1993, according to Mr. Champion's testimony, the truss erection had been completed and all that remained was "some miscellaneous steel and gusset plate work" (findings 34-35). This testimony is bolstered by Yates' lodging claim for the steel erection crew which extends from 1 February to 25 March 1993, assumedly the time when the erection crew's work was completed (finding 57 *supra*). Although the DIRs, DJDs and the certified payrolls state that some structural steel and gusset work was performed after 26 March 1993 these records verify that, to a great extent, this steel work was not a part of the structural steel for the hangar, but rather steel for shops B and C, the pumphouse, the administrative offices, metal roof, and miscellaneous steel work, *i.e.*, handrails, "putting up misc. steel," metal decking, fixing cat-walk, welding up main structure, in general, steel work Mr. Norris testified was under activity 05003 and not on the critical path (findings 8, 35, note 13, *supra*). It is evident from the record that Yates substantially completed the structural steel erection by no later than 26 March 1993, a period of 108 days inclusive from 9 December 1992 and 53 days inclusive from 2 February 1993.

As to the Government's argument the gusset plate as designed were adequate to handle maximum transfer and the stiffeners were simply an enhancement and were not to correct a design defect (findings 15, 17, 22, 25, 27, 62), we find this argument misses the point. Regardless of whether the stiffeners were an enhancement or not, their addition increased Yates' work load and decreased Yates' labor efficiency in erecting the structural steel. However, since Yates has failed to provide evidence regarding the number of stiffeners added after 26 March 1993 we conclude Yates elected to add most of the gusset stiffeners simultaneously with the change-out of the splice plates, which the Government acknowledges was a design defect, and Yates' inefficient labor claim encompasses both.

Based on Yates' failure to segregate the steel work performed after 26 March 1993 into structural steel and miscellaneous steel work, Yates' failure to provide an updated work schedule for the period after 3 October 1992, and Yates' own DJD entries characterizing much of the work performed after 26 March as "misc[ellaneous] steel work" and structural steel for shops B and C, pumphouse, and administrative offices we conclude that the erection of the structural steel, *i.e*, the truss erection and fill-in steel, was substantially completed on 26 March 1993 when Mr. Champion left the site; and that the work after 26 March did not follow a single critical path but ran through a number of different activities including masonry, carpentry, skin, metal decking and roofing.

Yates' contention that a study was performed from which it was determined it took 4 men 10-11 hours to change one splice plate segment is at best questionable. Yates did not provide a record of the study and in light of this absence we reviewed the only contemporaneous record available, the DIRs and DJDs, and found that they both indicate and support our determination the splice plates change-out for trusses F and G were each done in one day with eight of Yates' workers (finding 20). Mr. Champion, when asked to clarify/explain why it took the same 10-11 hours to change-out one partially assembled splice plate segment on trusses A through E as it took to replace one fully assembled splice

plate segment on truss F and G was unable to give a credible answer (*id*.). That a study was done is not supported by the record. We conclude the alleged study is nothing more then generalized unsupported self-serving opinion testimony which we have held does not reach the level of credible proof. *AGH Industries, Inc.*, ASBCA Nos. 27960, 31150, 89-2 BCA ¶ 21,637.

Accepting Yates' measured mile methodology and using the agreed to steel erection figures we compute Yates' labor inefficiency costs from its reported labor/manhour cost incurred during the period 9 December 1992 through 26 March 1993, when the labor inefficiency was experienced, as follows (finding 53 *supra*):

Period Actual Labor costs	Structural Steel Erected	Total Labor spent	Labor cost per ton
October-November 1992	520 TNS	$ 92,684.50	$178.24
9 December 92- 26 March 93 (108 calendar days)	785.56 TNS	$301,083.44	$383.27
TOTAL	1305.56 TNS	$393,767.94	

Structural Steel To Be Erected	Cost per Ton	Total Labor Included in Contract
1305.56 TNS	$178.24	$232,703.01

Actual Cost	Contract Cost	Total
$393,767.94	$232,703.01	$161,064.93 (The deduction for shop B is not applicable as this work was performed in the April-May 1993 period).

Regarding Yates' equipment costs the DCAA auditor determined that $61,400 (53 percent) of Yates' claim for $115,737.25 was duplicative leaving $54,337 (finding 61). Accordingly, we reduce Yates' claimed equipment cost for the 108 days period by 53 percent and recompute its equipment cost as follows (finding 55): $125,094.49 - claimed equipment cost incurred from 9 December 1992 through 26 March 1993 x 53 percent = $66,300.07. Yates equipment cost claim ($125,094.49 – $66,300.07) is $58,794.42 ÷108 days = $544.39 (equipment cost per day) x 53 days (2 February 1993 - 26 March 1993) = $28,852.82 of costs.[38]

In like fashion we reduce Yates' FOGS costs. The DCAA auditor determined that $11,393 (44.6 percent) of Yates' FOGS claim for $25,545.38 was duplicative (finding 61). Accordingly, we reduce Yates' claimed FOGS cost for the 108 days period by 44.6 percent and recompute these cost as follows: $28,395.01 (claimed FOGS cost for the period 9 December 1992 through 26 March 1993) x 44.6 percent = $12,664.17. Yates FOGS cost claim ($28,395.01 – $12,664.17) is $15,730.84 ÷ 108 days = $145.66 FOGS cost per day x 53 days (2 February 1993 - 26 March 1993) = $7,719.76 of costs.

We accept as reasonable Yates material cost of $21,301.41, lodging costs of $5,275 and consulting service costs of $8,079. We also accept Yates' credit of $29,853.29 as stated in its second amended claim. (Findings 54, 57-59)

We computed Yates remuneration for costs due to the structural steel defective specification as follows:

CATEGORIES OF CLAIMED COST	BOARD'S RECOMPUTED COSTS
LABOR COSTS (Exh. C)	$161,063.93
MATERIAL COSTS (Exh. D)	21,301.41
EQUIPMENT COSTS (Exh. E)	28,852.82
FUEL, OIL, GREASE, SUPPLIES (Exh F)	7,719.76
LODGING COST (Exh. G)	5,275.00
CONSULTING SERVICES COST (Exh. H)	8,079.00
SUBTOTAL	232,291.92
CLAIM CREDITS (Ex. H.1)	(29,853.29)
SUBTOTAL	$202,438.63
CREDIT FOR CHARGES TO ELLIS STEEL THIS TIME PERIOD	(15,599.04)
SUBTOTAL	$186,839.59
OVERHEAD 10%	18,683.95
SUBTOTAL	$205,523.54
PROFIT 10%	20,552.35
SUBTOTAL	$226,075.89
PERFORMANCE BOND .42% OF TOTAL	949.51
SUBTOTAL	$227,025.40
GROSS RECEIPTS TAX 3.5% OF TOTAL	7,945.88
SUBTOTAL	$234,971.28
PAYMENT PURSUANT TO CO's FINAL DECISION (app. br., ¶126)	(61,102.56)
TOTAL	$173,868.72

ASBCA No. 49399 is sustained in the amount of $173,868.72, the added incurred labor inefficiency and other cost, due to the Government's defective specification, with interest from 10 October 1995, the date the claim was filed with the CO.

ASBCA NO. 49398

Yates claims entitlement to $114,611.73 for the following alleged Government caused delays: 104 days, incurred due to the defective specifications when erecting the hangar bay steel, and 102 calendar days due to the delay incurred in the commencement of asbestos removal and demolition of buildings 101 and 102. In its brief it reduces the hangar period to 91 days and assigns 13 days to weather delays during construction of the parking

lot (undertaken after buildings 101 and 102 were demolished) which Yates alleges had been pushed into a less favorable construction period due to prior Government caused delays. The original contract completion date was 3 April 1994, 24 months after the issuance of the NTP. Yates contends the actual contract completion date was 8 October 1994. (Finding 3 *supra*).

CLAIMED DELAY ERECTING HANGAR BAY STRUCTURAL STEEL

Addressing Yates' claim for 104 calendar days for delay incurred when erecting the hangar bay steel suffice it to say we have determined Yates was delayed 53 calendar days, 2 February to 26 March 1993, due to the defective specifications for the steel structure erection (see discussion above).

CLAIMED DELAY IN DEMOLITION OF BUILDINGS 101 AND 102

The Government, acknowledging Yates did have "some concern and frustration," contends Yates was not delayed by its, the Government's, indecision about demolishing building 101, the old hangar. In support of its contention the Government asserts the old hangar could not be demolished until the new hangar was completed; Yates was to be informed whether building 101 could/would be demolished as soon as the decision was made; Modification No. P00029 was not issued to monetarily compensate Yates for a delay but to "delay assessment of liquidated damages by 45 days in an effort to appease Yates"; and buildings 101 and 102 were vacated on 6 May 1994, even though the new facilities were not fully completed and accepted, to allow Yates to begin demolition. The CO, in his final decision, did determine that job site overhead was neglected when calculating the amount for Modifications Nos. P00026 and P00030 and, accordingly, awarded Yates an additional $20,465.78. (Finding 113 *supra*)

In *David Builders*, ASBCA No. 51262, 98-2 BCA ¶ 30,021 at 148,539, quoting *Robert McMullen & Son, Inc.*, ASBCA No. 19023, 76-2 BCA ¶ 11,728 at 55,903, we held:

> With respect to appellant's claim for compensation for the 60 days granted in Modification 1, we have said in other appeals, that the affect of the Government's unilateral grant of an extension:
>
> > . . . amounted to a recognition by it that the overall project was delayed to that extent and an administrative determination that the delay was not due to the fault or negligence of appellant. It also raised a presumption, subject to rebuttal, that respondent was responsible for delay. [Footnote omitted]

The issue we must first address is did the Government's indecision regarding the fate of buildings 101 and 102 delay Yates' access to these buildings thereby causing Yates' contract performance to be delayed?

Unquestionably, the CO issued four contract modifications extending the contract completion date from 3 April 1994 to 6 September 1994, a total of 155 calendar days (findings 3, 42, 94, 96, 103). Since there were no liquidated damages assessed we conclude that the extended periods were recognized by the CO as periods of excusable delay. *David Builders, supra*. However, whether these modifications can be construed as administrative determinations that the delay was solely the responsibility of the Government and not due to any fault or negligence of the appellant and is, therefore, monetarily compensable, as called out in *id*., will require further analysis.

Modification No. P00026, although bilaterally executed, did not include a release paragraph and Yates reserved its rights to reimbursement for all delays and additional costs for the extended period once the costs were determined (findings 40, 42). Yates is entitled to recover the costs it reserved when executing Modification No. P00026. *See Loral Corp., Defense Systems Division-Akron*, ASBCA No. 37627, 92-1 BCA ¶ 24,661, *aff'd*, 979 F.2d 215 (table) (1992).

Discussing the Government's issuance of unilateral Modification No. P00029, the stated purpose of the modification was to allow for the demolition of buildings 101 and 102, and the Government has not pointed to, and we have failed to find, evidence in the record that supports the CO's contention this modification was issued to delay assessment of liquidated damages (findings 94, 113). However, whether this was or was not the purpose for the issuance of the modification is immaterial since it was unilaterally issued by the Government. *Overstreet Electrical Company, Inc.*, ASBCA No. 51654, 51655, 51823, 51907, 00-1 BCA ¶ 30,588 at 151,062. Having reviewed this modification in the broadest sense possible we can find no reasonable explanation for its unilateral execution other than the Government was acknowledging responsibility for delaying the contract.

In like fashion we find the fact that unilateral Modification No. P00030, which extended the contract 20 calendar days, dealt with the fire suppression system to be irrelevant inasmuch as the granting of the time extension was an admission by the Government that the contract was being delayed and Yates did not participate in the determination unilaterally made by the Government (finding 96).

Unilateral Modification No. P00033 was issued for the stated purpose of extending the contract completion date 45 calendar days due to "excessive rain received the last two months" (findings 102, 103). Extensions of performance time due to weather delays are day for day extensions and not usually monetarily compensable unless the appellant can show the work adversely affected by the weather would have been completed in an earlier time period, when the weather would have been more favorable, were it not for the Government caused delay. *See*, *Charles G. William Construction, Inc.*, ASBCA No.

42592, 92-1 BCA ¶ 24,635 at 122,929-930. In the instant case we are unable to determine the time period when the unusually severe weather was experienced except for the ambiguous prior two months. However, if we review the correspondence just prior to the issuance of Modification No. P00033 we see that on 11 August 1994 the CO stated the "Government feels that 45 days is more than enough time to complete the contract" (finding 102). It appears from the CO's statement unilateral Modification No. P00033, although phrased in terms of an extension for weather delay, was granting the time extension to allow timely completion of the contract. We further note that a contractor is not bound by the unilateral issuance of a contract modification. *Overstreet Electrical Company, Inc.*, *supra*.

Lastly, when the Government causes a contractor to perform its work in a period of higher costs than originally contemplated and the performance of this work would have been completed earlier but for the Government-caused delay, the contractor is entitled to recover the increased costs incurred during the extended period.

Before we can award delay damages the contractor has the burden of demonstrating that (1) the specific delays were due to Government responsible causes, (2) the overall completion of the project was delayed as a result, and (3) any Government caused delays were not concurrent with delays within the contractor's control. *Technical & Management Services Corporation*, ASBCA No. 39999, 93-2 BCA ¶ 25,681 at 127,753 and cases cited therein. We find that the extensions of time granted in Modification Nos. P00026, P00029, P00030 and P00033 were unrebutted acknowledgments by the Government that it was responsible for the delays encountered. However, the record further provided evidence that Yates' electrical subcontractor, Stratton, also delayed contract performance from mid-December 1993 to the end of January 1994 (finding 77). We are unable to ascertain what transpired after January 1994 since the Government has failed to provide evidence on this point (*id.*). Based on the record Yates has met its burden of proof and is entitled to remuneration for the additional field office overhead referring to the project management and job expense costs incurred as a result of the delay from 1 February 1994 to 9 May 1994 when demolition commenced at building 101 (finding 89). We find no entitlement for Yates to the 13 days of weather delay while constructing the parking lot as referred to in its bids since there is no proof the Government was the sole cause of delay that extended the contract beyond its extended contract completion date of 6 September 1994. We note and rely on the DCAA auditor's finding that "the total claimed amount of $93,439 disclosed no claimed amounts which were not supported by the contractor's books and records" (finding 112). The Government has neither contended nor argued that any of the costs claimed were duplicative of any costs otherwise recovered or included in "overhead." Accordingly, we find Yates entitled to an equitable adjustment for field office overhead expenses due to Government caused delay as follows:

AMOUNT CLAIMED	PERIOD OF CLAIM	TOTAL DAYS CLAIMED	DAILY COSTS CLAIMED	BOARD AWARD OF DELAY DAYS	QUANTUM FOUND FOR YATES
$43,850.50	Dec 1992 - May 1993	104	$421.64	53 calendar days, 2 Feb - 26 Mar 1993	$22,346.89
$47,156.90	Feb 1994 - May 1994	102	$462.32	98 calendar days, 1 Feb - 9 May 1994	$45,307.61
SUBTOTAL					$67,654.50
Overhead 10%					6,765.45
SUBTOTAL					$74,419.95
Profit 10%					7,441.99
SUBTOTAL					$81,861.94
Performance Bond .42% of total					343.82
SUBTOTAL					$82,205.76
Gross Receipt Tax 3.5% of total					2,877.20
TOTAL (see note 36 *supra*)					$85,082.96

ASBCA No. 49398 is sustained in the amount of $85,082.96, the added incurred field office overhead expenses due to the Government delay with interest from 10 October 1995, the date Yates' claim was filed with the CO. (*See* also note 36 *supra*)

SUMMARY

ASBCA No. 49398 is sustained in the amount of $85,082.96 with interest from 10 October 1995. In all other respects it is denied.

ASBCA No. 49399 is sustained in the amount of $173,868.72 with interest from 10 October 1995. In all other respects it is denied.

Dated: 18 May 2001

ALLAN F. ELMORE
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

NOTES

[1] References to the record are as follows: appeal and supplemental appeal files (R4, tab_); appellant (A-_) and Government (G-_) exhibits; transcript (tr.); Government brief (Govt. br.); appellant brief (app. br.).

[2] Yates' original 10 October 1995 request for an equitable adjustment (REA) was in the amount of $540,210.10. Yates amended its REA and reduced the amount claimed to $469,285.75. (R4, tabs 491, 631; finding 51 *infra*; app. br. at 2) We do not acknowledge the changes to the claim made by appellant in its brief since there has been no showing this information was not available during the hearing. *Joseph T. Yamin,* ASBCA No. 35373, 90-3 BCA ¶ 22,657 (see finding 59 *infra*). For continuity and as an admission against interest we cite the amount claimed by Yates in its brief as the equitable adjustment claimed.

[3] Yates' original 2 October 1995 REA was in the amount of $93,294.34 for 173 calendar days extended performance and 189 calendar days excusable time extension. Yates amended its REA and increased the amount claimed to $114,611.73 and we note that Modification No. P00037 was issued pursuant to the CO's final decision. (R4, tabs 490, 632; findings 108, 114, *infra*; app. br. at 2) However, we note the amount claimed was changed in Yate's brief to "$115,704.56" [sic]. As previously stated we do not acknowledge the changes to the claim made by Yates in its brief since there has been no showing this information was not available during the hearing. *Joseph T. Yamin, supra,* (note 2 *supra*; see finding 59 *infra*).

For continuity and as an admission against interest we cite the amount claimed by Yates in its brief as the equitable adjustment claimed.

[4] Yates' delay claim per its brief is broken down into three categories: 91 days of critical path delay caused by the structural steel modifications; 102 days of critical path delays in commencement of asbestos removal and demolition of buildings 101 and 102; and 13 days of critical path delays for adverse weather delaying the parking lot construction (app. br. at 2-3, 49).

[5] The following persons were specified as individuals authorized to issue change orders and modifications: COL James L. Elmore, CPT Bobby C. Thornton, SFC K. E. Eversmeyer, MSgt Gloria Jones, SSgt Joe H. Smith, and Mrs. Nancy R. Monroe (R4, tab 6).

[6] KC-135 A/C is a Boeing 707 converted, in this instance, for use as an in-air refueling A/C (tr. 1/83, 4/187-88).

[7] The job consisted of two hangar door towers or "pods" located on each side of the hangar opening (tr. 1/33; ex. A-2).

[8] Defined as the total dimension established by the designer of a particular beam anticipating the partial implied load that is going to cause deflection that will bring the member down to a given level (tr. 1-279-80).

[9] Defined as a device used to maintain the correct positional relationship between truss segments to hold the right camber and keep the truss plumb (tr. 1/64).

[10] Mr. Champion broke down his crews as: four crane operators, four riggers, four connectors/bolt up, and the remaining people to do bolt up, minor operations, operating the fork lift, and material handling (tr. 2/11).

[11] The composite was generated by the Board from information gleaned from the record. It should be noted that Yates' original chart included roof decking which we have not reproduced since it was not part of the steel erection in dispute (R4, tab 607).

[12] Although added into the total tons of steel to be erected, our review of the record shows the pumphouse to be a separate construction set off from the new hangar and not a part of that building (R4, tab 607; ex. A-1).

13 Yates personnel testifed activity 05003 referred to miscellaneous steel items like "ballers" [sic], inserts, roof plates, angles, ladders, gratings, lintels, etc. located throughtout the project and was neither on the critical path not part of the structural steel erection (tr. 2/152-53, 158, 314-16).

14 Mr. Champion testified the process he followed replacing the splice plates was to un-impact, *i.e.*, back off the bolts holding the outer and inner splice plate to the I-beam flange, replace the two inner splice plate with a one-piece splice plate, and re-impacting the splice plates bolts (tr. 2/16-18).

15 The appeal file includes two identical letter with origin dates of 12 and 13 January 1993 respectively (R4, tabs 85, 588). This discrepancy was not addressed by either party and since it is immaterial to the decision the Board elects 13 January as the originating date for both letters.

16 We note that no allowance is made for weekend work.

17 Calculating the days we find that TBG's 5 days is incorrect and we changed it accordingly.

18 Mr. Champion last appears on the certified payroll records as working on 26 March 1993 (R4, tab 573).

19 The 4 October 1993 REA was not made a part of the record.

20 On 30 March 1994 the CO issued what he termed a "more accurate" rendition of Mr. Watts' statement as ". . . The Benham Group observed the work when both cranes were in use in the elevation of the truss [but] no representatives of the Benham Group, or the ANG, were present when the crane was removed from the north end of the truss and truss rollover occurred" (R4, tab 307).

21 Yates for purposes of the claim has deleted all costs and delays associated with truss F's failure (tr. 3/63-64; app. br. at 26). Accordingly, this issue is moot and will not be addressed in the decision.

22 The Board's decision is based on Yates' original and second amended claim. The first amended claim is provided for continuity purposes and because it was used for the audit.

[23] For purposes of clarification we note the amount claimed for fuel, oil, grease and supplies (FOGS) is incorrect and should read $25,545.48 vice $24,545.48 (R4, tabs 495, 496; finding 56 *infra*).

[24] Yates was issued a stop work order on 9 December 1992 (finding 11 *supra*).

[25] The 520 ton figure resulted from an agreement between TBG and Yates (R4, tab 631).

[26] The $495,573.13 actual labor costs was computed from Yates' records by the DCAA auditor (tr. 3/58-60; R4, tabs 495, 631).

[27] We note the difference in the tons enumerated in the chart and the number claimed, 563 vice 520. See note 25 *supra*.

[28] The letter states the demolition was to begin between 15 and 31 January "1993." 1993 is determined to be typo and we substituted 1994 as the correct date.

[29] The total increased amount for Modification No. P00023 was $45,233.43.

[30] We note the Modification is cited to be No. P00033 vice P00032 cited in the CO's 11 August 1994 letter (R4, tab 417). We reconcile this discrepancy and determine the 11 August letter's reference to Modification No. P00032 was an error.

[31] Yates also attached to its post-hearing brief attachments 2, 3 and 4 which were purported to be the claims for delay associated with the hangar steel erection, demolition of buildings 101 and 102, and weather delays associated with the parking lot. Since the total claimed amount of these attachments total $115,704.66, an amount different from what was claimed in the second amended claim we consider the attachments as newly submitted evidence after the hearing and disregard them since there was no showing this information was not available during the hearing. *Joseph T. Yamin*, *supra*.

[32] See note 22 *supra*.

[33] For accuracy we cite the time of delay as cited in Yates' claim (R4, tab 632). However, we note the 104 days claimed actually commences on 3 February 1993 and concludes 17 May 1993. We do not attempt to reconcile this time period with Yates' inefficiency claim.

[34] Although the changes to the AFFF Fire Suppression System were part of its original claim there was no evidence elicited at the hearing addressing the matter and there is no mention of it in the appellant's briefs. Accordingly, the Board concludes Yates has withdrawn this issue and we mention it for continuity purposes only.

[35] The CO calculated the additional payment as follows: $250 per day for 45 and 20 days respectively for P00026 and P00030; plus 10 percent overhead; 10 percent profit; .42 percent sales tax; and 3.65 percent bond premium (R4, tab 499).

[36] We note that the CO's award of $20,465.78 was a unilateral determination on the part of the claim dealing with the AFFF system. As previously reported the AFFF portion of the claim was abandoned and was not a part of the claim before the Board. Accordingly, we view Yates' claim of delay with respect to buildings 101 and 102 as being denied except for a "non-compensable" 45 days time extension. (Tr. 5/61-2)

[37] Yates spent a large amount of time discussing the Government's requirement that the camber be held until the truss was erected. We find this issue was concurrent with and subsumed into the splice plate delay.

[38] We are aware that Yates used different numbers for its equipment costs in attachment 1 to its brief. As previously stated we will not refer to attachment 1's figures since they were submitted after the hearing. (Finding 59 *supra*; notes 2, 31 *supra)*

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. 49398 and 49399, Appeals of W.G. Yates & Sons Construction Company, rendered in conformance with the Board's Charter.

Dated:

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