ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeals of --	)	
	)	
Zimcon Professionals	)	ASBCA Nos. 49346 and 51123
	)	
Under Contract No. F04699-93-C-0123	)	

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OPINION BY ADMINISTRATIVE JUDGE JAMES

These appeals arise from the contracting officer (CO)'s final decisions which terminated the captioned contract for default (ASBCA No. 49346), and claimed $1,474,311 for water damage to the Government building, the subject of said contract work (ASBCA No. 51123). The Board has jurisdiction of these appeals under the Contract Disputes Act of 1978, 41 U.S.C. § 607. Attorneys Brentnall and Sullivan represent appellant on ASBCA No. 49346; attorney Gifford represents appellant on ASBCA No. 51123. After a nine-day hearing in Sacramento, California, the parties submitted post-hearing and reply briefs. The Board is to decide the validity of the default termination and entitlement only on respondent's water damage claim (tr. 1/11-12). Citations to the Rule 4 file in ASBCA No. 49346 are designated "Appeal 1, tab #"; citations to the Rule 4 file in ASBCA No. 51123 are designated "Appeal 2, tab #" (tr. 1/42-43).

FINDINGS OF FACT

A. ***Pre-Award Facts***.

1. In 1993 respondent decided to replace the roof on a hangar used by the U. S. Coast Guard, designated as Building 1106 at McClellan Air Force Base (AFB), CA, because of roof leakage and loss of shingles which created flight hazards (tr. 3/67-68).

2. Building 1106's center line is on a north-south axis between the hangar doors. Building 1106 has an "upper bay," the hangar proper; two "lower bays" with offices and crew quarters adjoining the upper bay's east and west walls; and a one-story "pocket area" in each corner of the building. The upper bay roof is supported by 12 trusses installed normal (90°) to the center line, at grid lines HH, FF, A, C, E, G, J, L, N, Q, EE and CC. The north and south ends of the upper bay are called "nose docks," the roofs of which are pitched at 3:12. In 1993, the middle part of the upper bay roof was pitched at 4:12, and each lower bay roof, supported by 15 beams installed normal to the center line, was pitched at ¼:12. (Appeal 1, tabs 1, 1A, dwgs. A-7, S-1, tab 2, § 01010, ¶ 1.03A; tr. 8/85)

3. In April 1993 respondent contracted with architect Howard R. Perkins to redesign the roof for Building 1106 (ex. G-1; tr. 3/31-32, 48-50). Mr. Perkins contracted with Mr. David Crane to assist in the structural design elements (tr. 3/29, 51-52, 210-11).

4. Mr. Perkins based his roof redesign on "generic" maintenance hangar drawing No. AW39-01-08 of January 1957; Tinker AFB maintenance hangar drawing No. 39-05-12 of June 1964; and McClellan AFB Building 1106 drawing Nos. SMBE-S-4033 of March 1970, SMBE-S-5897 of July 1982, and SMBE-S-6980 of July 1987, all of which drawings were kept in McClellan AFB's "vault" (appeal 1, tab 1; tr. 3/58-61, 74).

5. Drawing Nos. AW39-01-08 and 39-05-12 respectively showed the truss ridge line at the middle part of the upper bay at elevation 55' 10" and of the nose docks at elevation 56' 5". Drawing No. SMBE-S-5897 showed the truss ridge line elevation of the nose docks slightly higher than that of the middle part of the upper bay. (Ex. G-238)

6. Mr. Perkins' 1993 Building 1106 redesign depicted: (a) in the demolition drawings, existing truss ridge lines for the upper bay's middle part at elevation 55' 10" and for the nose docks at elevation 56' 5" and (b) in the new work drawings, a uniform 3:12 slope and truss ridge line at elevation 56' 5" for the upper bay roof (appeal 1, tab 1, dwgs. A2 to A7, A18, A19, A21; tr. 3/61-62, 66).

7. The 7" differential ("gap") shown in the redesigned upper bay's truss ridge line elevations could not be seen from inside or outside Building 1106. On 2 June 1993 David

Crane told Perkins that he (Crane) was not sure such gap existed, but respondent did not permit selective demolition to verify existing elevations. (Tr. 3/66-71, 198; ex. A-11) Thus, Mr. Perkins' drawing A1 for Building 1106 re-roofing, dated 9 July 1993, stated:

> DIMENSION NOTE ALL DIMENSIONS ARE BASED ON [EXISTING] CONDITIONS & AS-BUILT DRAWINGS FIELD VERIFY ALL DIMENSIONS & ELEVATION HEIGHTS PRIOR TO FABRICATION/CONSTRUCTION. SELECTIVE DEMOLITION PRIOR TO TRUSS MANU-FACTURING TO VERIFY AS-BUILT CONDITIONS

Mr. Perkins' drawing S2 had a note at upper bay truss ridge:

> * NOTE: CONTRACTOR SHALL FIELD VERIFY EXISTING AS-BUILT CONDITION, PERFORMING SELECTIVE DEMOLITION AS NECESSARY. REPORT ANY DEVIATIONS WHICH EFFECT [sic] THE CONSTRUCTION DETAILS PROVIDED.

(Appeal 1, tabs 1, 1A; tr. 3/71-76)

8. Drawing No. SMBE-S-6980 of 28 July 1987, entitled "REPAIR ROOF BUILDING 1106," showed concrete pads measuring 15' by 29' (east side) and 16' by 34' (west side) installed in approximately the center of the lower bay roofs (ex. G-238; tr. 2/95-97). Such drawing was known to David Crane, who calculated the pads' weight (ex. G-244 at 11; tr. 3/214, 4/200). Respondent's 1993 design drawings and solicitation for the Building 1106 roof repair contract did not show such concrete pads, nor could such pads be seen by inspecting the roof (appeal 1, tabs 1-2; tr. 2/36, 3/242).

B. ***Contract Award and Pertinent Provisions***.

9. On 30 September 1993 respondent awarded fixed-price contract No. F04699-93-C-0123 (contract 123) to Zimcon Professionals (Zimcon) to repair the roof of Building 1106 at McClellan AFB. Contract 123 required Zimcon to remove the existing roof and to install: "Type II" "in-fill" trusses atop the existing upper bay trusses; "Type I" trusses atop the existing lower bay beams; "Z" purlins atop and normal to the Types I and II trusses; "bubble pack" insulation; standing seam metal roof and wall siding panels; and fire sprinkler risers. (Appeal 1, tab 2; tr. 8/84-86, 195-96)

10. Contract 123 incorporated by reference, *inter alia*, the following FAR 52.212-12 clauses: "Suspension of Work (APR 1984)"; 52.236-2 "Differing Site Conditions (APR 1984)"; 52.249-10 "Default (Fixed-Price Construction) (APR 1984)"; 52.212-5

"Liquidated Damages-Construction (APR 1984)" and 52.246-12 "Inspection of Construction (JUL 1986)," with liquidated damages of $240 per day of delay set in § F-20 (appeal 1, tab 2 at 3-9). Specification § 01010, ¶ 1.08B, provided that the lower bays would be occupied during the entire construction period, and ¶ 1.24 provided:

> Roofing and Excavation operations shall be suspended during the "rainy" season (1 Nov-15 Apr). In the event there appears to be an early/late start/end of the rainy season, Contractor may request the date of the start/end of the suspension be changed. Any change in start/stop dates is at the discretion of the [CO] and at no additional cost to the Government.

(Appeal 1, tab 2 at 01010-3; appeal 2, tab 1 at 01010-9)

11. Zimcon was required to complete contract 123 work 120 days after receipt of notice to proceed (appeal 1, tab 2). Respondent issued Zimcon notice to proceed on 14 October 1993, with an effective date of 15 April 1994, thereby establishing the contract completion date as 13 August 1994 (appeal 2, tab 131 at 6; ex. G-7).

12. On 14 January 1994 Zimcon submitted to the CO a progress schedule showing site work from 24 January to 26 February, and resuming on 18 April 1994 (ex. A-13). The CO did not approve that schedule, stating that it was in respondent's best interest for Zimcon not to start work until 15 April 1994 (ex. A-15).

C. ***Furnishing the Storage Area***.

13. Contract 123's specification § 01010, ¶ 1.20, provided that Zimcon was to be furnished a storage area for equipment and materials, to be assigned by the CO at the time of contract award. The FAR 52.236-10 "Operations and Storage Areas (APR 1984)" clause incorporated in contract 123 required Zimcon to confine all operations and storage of materials on Government premises to areas the CO authorized. (Appeal 1, tab 2)

14. On 14 October 1993, respondent's inspector, SSGT Charles Breder, told Zimcon's partner, Dennis Zimmerman, that Zimcon "may use the south approach for a storage yard" and Breder noted: "It was agreed to formalize the Contractor's storage area when the letter requesting it was received" (appeal 2, tab 131, rpt. 1; tr. 2/133).

15. Zimcon submitted to the CO a progress schedule with site work beginning on 16 May 1994, demolition from 21 May to 24 June, and contract completion by 13 August 1994, which the CO approved on 4 May 1994 (ex. G-29). The CO's 5 May 1994 letter to Zimcon approved a storage area south of Building 1106 to be "available starting 17 May 1994" (ex. A-21).

16. On 16 May 1994 Zimcon mobilized at the job site, and began to use the storage area on 17 May 1994 (appeal 2, tab 131, rpts. 25, 26). We find that furnishing the storage area on 17 May 1994 did not delay Zimcon's performance of contract 123.

D. ***Structural Steel Truss Submittals***.

17. Contract 123's specifications prescribed that within 21 days after issuance of the notice to proceed, Zimcon was to submit for the CO's approval submittals showing compliance with applicable specification sections, and the CO was to review and return such submittals within 21 days to Zimcon (§ 01300, ¶ 1.01(C)), and required submittals of: (a) structural steel shop drawings showing "all pieces with all pertinent dimensions, data, layout, sizes, connections and all controlled dimensions and elevations," with the warning: "The dimensions shown on the Drawings . . . should not be used for fabrication purposes without verifying dimensions at the project site" (§ 05120, ¶¶ 1.05, 3.01(A)); (b) manufacturer's installation instructions, detail drawings, and design data with calculations showing the ability of the roof framing and prefabricated roof trusses to comply with specified design loads, further stating:

> It is the intent of the Construction documents to serve as the basic conceptual design of the project. However, the roof manufacturer will ultimately be responsible for the final roof framing design as it applies to the structural performance of the entire roof system.

and requiring "selective demolition . . . to verify as-built conditions and dimensions prior to fabrication" (§ 05200, ¶¶ 1.01, 1.05(A), (C)); and (c) premanufactured steel truss shop drawings "showing sizes, spacing, and location of trusses, connections, bridging, reinforcing, anchoring, cambers, loads . . . welded connection and the length thereof, using AWS standard welding symbols" and requiring "selective demolition to Field Verify actual . . . conditions and dimensions prior to fabrication" of trusses (§ 05210, ¶¶ 1.04(A), 2.02(A)). Sections 05120, 05200, and 05210 each referred to the others as "Related Work," and all applied to the truss submittals. (Appeal 1, tab 2)

18. Contract drawings S1 through S4 depicted trusses with vertical and diagonal web members between their top and bottom chords. Web members intersect at a "panel point." (Tr. 4/35-36) Type II trusses had 42 web members of uniform spacing; atop their upper chord were 36 purlins spaced at 5' 2" at and between 18 panel points, with a 4,400 pound load over each purlin. Type I trusses had 21 web members of non-uniform spacing; atop their upper chord were 11 purlins spaced at 4' 10" with a 1,800 pound load over each purlin; and purlins did not coincide with panel points. Type II trusses were connected by 112, ½"-diameter "sway braces," normal to the trusses, with turnbuckles

and clevis connections, to maintain the trusses' alignment (tr. 4/53, 59, 64-65). The specifications and drawings did not require installation of sway braces at any particular sequential point in erecting the Type II trusses, purlins or roofing panels. Purlins were connected by 776, 5/8"-diameter, "sag rods" normal to the purlins to prevent their rotation, and crossing the roof peak between the topmost "Z" purlins. (Appeal 1, tabs 1, 1A, 2)

19. On 28 April 1994 Zimcon timely submitted structural drawings by Submittal No. 7 (ex. G-27). Those drawings showed Type II trusses with 42 web members beneath 34 purlins uniformly spaced at and between 16 panel points; Type I trusses with 19 web members of decreasing length and spacing, below purlins spaced at 4' 10" intervals, not at panel points; 112 ¾"-diameter sway braces with turnbuckles and ¾" threaded clevis connections; and no sag rods (ex. G-202).

20. Mr. Perkins opined that the contract specifications and drawings he had drafted contemplated selective demolition and confirmation of truss ridge elevations before preparing structural drawings (tr. 3/202-05). In May 1994 Zimcon asked to do selective demolition to verify measurements. The CO's 11 May 1994 letter directed Zimcon "not to open up the existing roofing system . . . until . . . your submittals for structural steel, roofing materials . . . have been approved." (Ex. A-219; tr. 6/165-67, 7/119-21, 8/47)

21. David Crane's review of Submittal No. 7 stated that Zimcon's shop drawings were in general conformance with the original design documents, but that calculations for joints with eccentric weld groups were absent, purlin calculations had erroneous loading and support conditions resulting in inaccurate stress levels and deflections, and truss calculations were incomplete, contained serious errors and resulted in a deficient truss design (ex. G-40). Respondent disapproved Submittal No. 7 on 16 June 1994, 49 days after its submission, and 28 days beyond the prescribed review period (ex. G-27).

22. On 23 June 1994 Zimcon resubmitted structural steel drawings and calculations by Submittal No. 38 (ex. G-43). These drawings reduced the sway brace, clevis and turnbuckle size to 1/2", added chord and web flange connection point dimensions, and added a weld symbol for Type II truss support plates, but did not address the other bases for rejecting the initial submittal (ex. G-203).

23. On 8 July 1994 respondent disapproved submittal No. 38, within the specified 21 day review period (ex. G-43). David Crane's review of Submittal No. 38, and his annotations on the shop drawings, stated that Zimcon needed to calculate bending in the top chord of the Type II truss and to indicate and calculate the eccentricity of the Type I truss panel points with respect to purlins, and stated: "Calculations contain errors in the

loading and support conditions resulting in inaccurate stress levels and deflections . . . . Truss type 2 has been calculated for incorrect chord size" (exs. G-43, - 203; tr. 4/33-34).

24. On 28 July 1994 Zimcon resubmitted structural shop drawings and calculations by Submittal No. 39 (ex. G-51). These drawings added materials and dimensions, reverted to 3/4" sway braces, identified upper and lower chord web spacing dimensions, relocated 11 purlins to coincide with panel points at 4' 10" intervals on the upper chord of the Type I trusses, and stated a maximum two inch eccentricity for truss panel points and purlins (ex. G-204). Respondent approved Submittal No. 39 on 3 August 1994 (ex. G-51).

E. ***The Non-Existent 7" Ridgeline Gap***.

25. Zimcon's 16 August 1994 letter notified the CO of a differing site condition in that the 7" upper bay ridgeline gap shown on the contract drawings did not exist. Zimcon said that the Type II truss shop drawings had been revised to change the truss length and top chord connection detail, it was continuing to manufacture the trusses to the original design while awaiting Government approval of the truss re-design, and there would be added engineering costs for which respondent was responsible. (Ex. G-54; tr. 1/111-22, 3/78-79, 8/228)

26. On 19 August 1994 Zimcon sketched revised Type II truss length and chord connection details and submitted them to the CO (ex. G-54). On 25 August 1994 the CO told Zimcon that its truss redesign was approved technically and a change order would be issued for the modification (exs. G-59, -60; tr. 8/50).

27. The Type II trusses delivered to Building 1106 on 13 September 1994 were not modified to account for the non-existent 7" ridgeline gap (appeal 2, tab 135, rpt. 1; tr. 8/79, 229). Zimcon later decided to modify them at the shop of its subcontractor, High Sierra Fabricators (tr. 8/229-30).

28. On 19 September 1994, bilateral Modification No. P00001 extended the contract completion date by 79 days to 31 October 1994, required the facility to be weathertight by 15 October and all remaining interior work completed by 30 October 1994, and released "all claims arising from contract changes made by this modification," without identifying such changes. On 20 October 1994 bilateral Modification Nos. P00002, -03 and -04 were issued to incorporate five changes without extending the contract completion date. The modifications required the changed work to be performed by 30 November 1994 (except for one change by 31 December 1994), and included no release of claims. Modification No. P00003 was for the redesign of the Type II trusses due to the non-existent gap by 30 November 1994, a period of 41 days. (Appeal 1, tabs 4-7) We find that from notice to respondent of the non-existent gap on 16 August 1994 to

issuance of corrective Modification No. P00003 on 20 October 1994, a 65-day duration, respondent caused the 28-day delay after 16 August to 13 September 1994, and the remaining 37-day delay after 13 September through 20 October 1994 was concurrently caused by defective truss paint (see finding 36).

F. ***Truss Painting Defects***.

29. Contract 123's specifications required Zimcon to: (a) clean structural steel of loose mill scale, rust, dirt and the like (§ 05120, ¶ 1.04G); (b) apply one coat of "Tnemec," "Rustoleum," or CO-approved equal primer to a dry film thickness between 2.0 and 3.5 mils to "the joist system," including premanufactured steel trusses (§ 05210, ¶ 2.02B); (c) clean and spot prime all rusted and abraded areas, bolts and nuts after erection of structural steel (§§ 05120, 05200, ¶ 3.04); and (d) select a finish paint compatible with the primer; assure that surfaces had no runs, drips, ridges, waves, laps, brush marks, and variations in color, texture and finish; touch up primed metal surfaces; and apply two finish coats of "Alkyd Gloss Enamel" (§9900, ¶¶ 1.05H, 2.01G, 3.04A, 3.08A).

30. On 2 September 1994 Type I trusses were delivered to Building 1106, without primer in some areas (appeal 1, tab 134, rpts. 24, 26). High Sierra's 14 September 1994 letter to Zimcon said that High Sierra had cleaned the Type II trusses, hand painted their joints with Fuller-O'Brien Blox-Rust Latex Metal Primer # 621-05 White, spray painted them with such primer, and applied two coats of Fuller O'Brien Double AA Acrylic Semi-Gloss Latex Enamel (ex. G-78). On 14 September 1994 respondent inspected the Type II trusses and found some areas without primer and others with rust, runs, drips, and peeling (appeal 2, tab 135, rpt. 1; exs. G-75, -80, -83, -252; tr. 1/48-60, 2/146-49, 5/57).

31. On 15 September 1994, the CO directed Zimcon not to erect the trusses the next day, as planned, until the defective paint could be evaluated (ex. G-79).

32. Zimcon's 16 September 1994 letter to the CO stated that the premanufactured steel truss specification (§ 05120, ¶ 2.02B) required one primer coat, but § 09900 required no finish coat, so adding a finish coat would constitute a constructive change (ex. G-81).

33. On 19 September 1994 a Fuller-O'Brien technical representative inspected the Type II trusses and found that they were contaminated before priming and they had inadequate paint coverage (appeal 2, tab 135, rpt. 5).

34. Respondent hired Harlan Associates to examine the paint. Harlan Associates' 21 September 1994 report to respondent stated that Harlan had examined paint peelings submitted by respondent both microscopically and by spectroscopy; they had mill scale on the back, one 2.0-mil coat of "Fuller O'Brien 621-05 Blox Rust Latex Metal Primer

(White)," and one or two coats, 2.5 to 3.0-mil thickness, of "Fuller O'Brien 214-00 AA Interior Acrylic Semi-Gloss Enamel (White)" (ex. G-84). Respondent's paint expert, Harold Harlan, opined that mill scale on those samples caused poor paint adhesion and allowed rust to form (tr. 3/13-14), and we so find.

35. The CO authorized Zimcon to repair defective Type II truss paint on site (exs. G-86, -92; tr. 1/60-61, 2/151). Zimcon's 22 September 1994 letter to the CO stated that contract 123 was "substantially delayed by the paint issue on the trusses" (appeal 1, tab 16). On 27 September 1994 Zimcon sent the trusses to High Sierra for modification and paint repairs (appeal 2, tab 135, rpt. 12; ex. G-95; tr. 1/62-64, 2/152, 7/96, 113-14, 8/80).

36. Type II truss repainting and configuration changes were completed and accepted by 31 October 1994, and were redelivered to the site on 1 November 1994 (appeal 2, tab 136, rpts. 2, 10-11; tr. 1/64-65, 2/153-56). We find that the delay from 14 September 1994, when defective Type II truss paint was observed, to 27 September 1994 when Zimcon sent the trusses for modification, a period of 13 days, chargeable to Zimcon. From 27 September to the redelivery of trusses on 1 November 1994, the parties concurrently caused the 35 delay days.

G. ***Truss, Purlin and Metal Roof Panel Installation***.

37. Specification § 05120 required structural steel to be "square, plumb, straight and true" (¶ 2.02D), and to "be set accurately at the established lines and levels. The Steel shall be plumb and level before final bolting or welding is commenced and after complete erection . . . . Level of plumb shall be within the tolerances defined in Section 7(h) of (AISC) [American Institute of Steel Construction] Code of Standard Practice" (¶ 3.01G, I, J), and forbade welded splices except those shown on the contract drawings or on the shop drawings and approved by the CO (¶ 3.02) (appeal 1, tab 2). The AISC Code of Standard Practice, 9th Ed., in effect contains no Section "7(h)" and no tolerances for "level of plumb" (ex. A-220).

38. Specification § 05200, governing roof framing systems and prefabricated trusses, required all work to be erected square, plumb, straight, and true (appeal 1, tab 2).

39. Specification § 05210, ¶ 3.02B, for "Premanufactured Steel Trusses" required: "Install the work . . . in strict accordance with the original design, the accepted shop drawings . . . and the manufacturer's recommended installation procedures as accepted by the [CO], anchoring all components firmly into position" (appeal 1, tab 2).

40. Specification § 07465 for "Preformed Metal Siding and Roofing," required in ¶ 3.01 that "[m]etal panels shall be installed only when the substrate and/or subframe

work is installed and properly aligned . . . to acceptable tolerances as reviewed and recommended by the panel manufacturer and approved by the" CO (appeal 1, tab 2).

41. Zimcon's approved metal roofing submittal included manufacturer's "Guide Specifications" which required: "Substrate shall be installed level, flat and true to avoid panel stresses" (¶ 1.07A); "[V]erify that . . . substrate to receive panels are . . . in true plane" (¶ 3.01A); "Remove strippable protective film . . . preceding panel installation . . . panels shall be installed in a true and straight alignment" (3.03A.8, .9) (ex. G-206). Its approved structural steel shop drawings stated the following erection sequence: install six Type II half-trusses, upper bay, east side; brace northern truss to wall; "as following trusses are installed sway brace rods will be installed, at high end only" (*i.e.*, the end of greater vertical dimension, tr. 8/96); install 15 Type I trusses, east lower bay; install six Type II half-trusses, upper bay, west side; brace west trusses as with the east side; and install 15 Type I trusses, west lower bay (ex. G-204; tr. 3/161-62, 4/57-58).

42. Zimcon's 5 August 1994 schedule submitted to respondent planned structure and roof installation for the upper bay from 15 August to 24 October 1994 and for the lower bay from 3 to 31 October 1994 (ex. A-37 at 2). Zimcon's 23 and 24 August 1994 letters to respondent reported two concrete pads with asbestos on the lower bay roofs (exs. A-43, -45). On 25 August 1994, the CO stated that those pads were differing site conditions, Zimcon had no duty to remove them until so directed, and he would issue a change order therefor (ex. A-46; tr. 6/172-73). From September 1994 to April 1995 Zimcon did no work on the lower bay roofs, but did upper bay roof work, with the CO's knowledge and at Government insistence (appeal 1, tab 17; appeal 2, tabs 39, 45-47; tr. 1/71-72). Bilateral Modification No. P00009, of 5 May 1995, required Zimcon to remove the concrete pads from the lower bay roofs (appeal 1, tab 12).

43. Zimcon performed the following contract 123 work at the following times:

Work	Time Period	Appeal 2 Cite
Demo. lower bay roof	8/18-19/94	Tab 134
Demo. upper bay roof	8/94 to 1/95	Tabs 134-38
Upper bay trusses	11/7 to 12/20/94	Tabs 136-37
Upper bay purlins	11/10/94 to 2/8/95	Tabs 136-39
Upper bay sag rods	12/6/94 to 6/22/95	Tabs 137-42
Upper bay roof panels	2/7 to 2/28/95	Tab 139
Sway braces	3/10 to 3/14/95	Tab 140
Upper bay roof details	3/2 to 4/5/95	Tabs 139-40
Fire sprinklers	3/13 to 4/5/95	Tab 140
Demo. concrete pads	5/16 to 5/19/95	Tab 141

Respondent took beneficial occupancy of the upper bay hangar on 10 or 11 April 1995 (ex. A-132). Zimcon did no contract work from 6 April to 11 May 1995 (appeal 2, tab 140, rpt. 25, to tab 141, rpt. 26). We find that the concrete pads delayed lower bay work from 23 August 1994 to 5 May 1995, but did not delay contract performance as a whole.

44. Zimcon's Request For Information No. 37 of 15 December 1994 notified respondent of a conflict between the existing sag rods and the first row of new "Z" purlins adjacent to the upper bay ridge, and of no provision for attaching the "upper last row of new sag rods into the existing ridge purlins" (ex. A-2 at Bates 344). Modification No. P00009, on 5 May 1995, deleted the new ridge line sag rods (appeal 1, tab 12), which rods Zimcon did not install (tr. 5/208, 8/140-45, 148-53; exs. A-206, -227).

45. Zimcon's contract administrator, Steven Waechter, stated that by his visual examination, "all the purlins ran in a line . . . it was a . . . flat roof," and respondent's inspector Alan Callahan checked the plane of the purlins by a string "strung from bottom to top" (tr. 7/164-66). Mr. Callahan stated that he looked at those purlins, but did not inspect them to see if they were in a plane, nor did he observe Zimcon assure that they were in a plane (tr. 6/188-89). We find that neither party verified that Zimcon originally installed the purlins "in true plane."

46. By 28 February 1995, when all the upper bay roof panels had been installed, Zimcon had installed no sway braces (tr. 3/162, 4/53, 74, 5/48-49, 8/218). On 10 March 1995 Zimcon first installed sway braces having welded rods (appeal 2, tab 140, rpt. 2, tab 80, photo 1). Drawing S4 and Zimcon's approved shop drawings showed no welding of sway brace parts (appeal 1, tab 1A; ex. G-204; tr. 8/214, 9/69). Inspector Callahan's 14 March 1995 report said: "Sway bracing is not Acceptable" (appeal 2, tab 140, rpt. 5).

47. The CO's 7 June 1995 letter directed Zimcon either to remove welded sway braces or to perform destructive testing and calculations to establish the equivalency of welded rods (appeal 1, tab 53). The CO's 7 July 1995 letter rescinded the testing alternative and demanded replacement of welded with integral sway braces (appeal 1, tab 59).

48. From 28 February to 21 May 1995 the parties saw no buckled, disengaged or distorted upper bay roof panels (exs. A-211, photos 6, 15-16, 18-19, 23, A-226, -229; tr. 5/45-46, 6/191-95, 7/163-64, 167, 176-77, 8/178-79, 183, 208-09, 9/28). From 16 to 19 May 1995 Zimcon removed the concrete pads from the lower bay roofs, and on 19 May 1995 began cutting slots in the lower bay roofs for Type I truss installation (appeal 2, tab 141, rpts. 30-31, tab 142, rpts. 1-2). Shortly thereafter, some lower bay interior walls moved vertically, pulling up off the floors and ceilings from ¼ to ½ inch (tr. 7/171-75).

49. On 22 and 26 May, 26 June, 7 July, and 19-25 July 1995, the parties saw and sometimes photographed upper bay roof panels out of plane, distorted horizontally and vertically, bent over purlins, disengaged, and with bent panel ribs (appeal 1, tab 57; appeal 2, tab 142, rpts. 8, 16, tab 143, rpt. 20; exs. A-154, -155, -187, -228, -233 to -235, G-178 to -182, -244, -249; tr. 3/130-36, 4/90-92, 5/52, 196-97, 6/190).

50. In September 1995 Andregg Corporation, at respondent's request, surveyed Building 1106's roof by means of an infra-red, digital, theon light, "geodetic total station," which determined three-dimensional coordinates in a grid of about 400 roof panel points and defined a "base plane" and an "adjusted plane" for various roof areas, which data Andregg supplied to Boyle Engineering (tr. 6.122-27, 142, 146; ex. G-246). The instrument's tolerance was ¼" in elevation (tr. 6/147-49). Andregg's data measured the metal roof panels, not the purlins or trusses (tr. 6/143-44). Boyle found that the upper bay roof varied from plane by up to .16 feet (*i.e.*, 2 inches) on the 288-foot long roof (ex. G-247).

51. Based on the opinions of experts in structural engineering, David Crane (tr. 4/55-56) and Howard Smith (tr. 6/77-78), in architecture and steel truss roofing systems, Howard Perkins (tr. 3/29-30, 44-45), and in metal roofing installation, Richard Schroter (tr. 5/182, 185), we find that: (a) removing concrete pads from the lower bay roofs caused vertical movement and slight lengthening of the support beams, but caused negligible translation of lateral movement into the upper bay and insufficient movement of the upper bay trusses to distort roof panels (tr. 4/111-13, 7/105-07, 9/64-65), and cutting slots in the roof decks to install Type I trusses did not cause significant lateral movement of the lower bay (tr. 4/93, 196-97); (b) Zimcon's installing and tensioning sway braces after installing purlins and roof panels contributed to misalignment of purlins and distortion and buckling of roof panels (tr. 4/55-56, 59-60, 73-75, 87, 117 9/65-66), and Zimcon's misaligning panel attachment clips and plastic protective coverings in panel seams caused adjoining panels to bind and deform, rather than to move freely when expanding or contracting (tr. 3/133-35, 149; ex. G-192); and (c) respondent's specified requirements to install roof panel clips over two layers of bubble pack insulation bent those clips so as to cause panel binding (ex. A-206 at 2, A-228; tr. 8/198-200), and its direction to delete ridge line sag rods in Modification No. P00009 contributed to purlin buckling and twisting, which could jamb roof panel clips, prevent thermal expansion, and bow or buckle the attached roof panels (ex. A-206 at 3, A-221; tr. 5/218, 223-24, 228-31, 239-40).

52. Zimcon performed contract 123 from 22 May to 31 August 1995, except for 3 July and 18, 21 and 28 August 1995, on which it did no work for no apparent reason (appeal 2, tabs 142-44). On 14-15 August 1995 Zimcon spent 1½-days repairing roof

panels (appeal 2, tab 144, rpts. 11-12). We find that the parties concurrently caused that 1½-day delay based on our previous finding of the causes of nonconforming roof panels.

H. ***Metal Panel Attachment and Sprinkler Pipe Bends***.

53. Specification § 07465 and the contract drawings did not provide for screwing roof or siding panels to the substrate, except at the uppermost elevations (appeal 1, tab 69). Zimcon screwed some wall areas and roof panels without respondent's authorization (appeal 2, tab 144, rpts. 4-5, 11-12; exs. G-217, -220, -249 photos 6, 10; tr. 9/7-9). On 10 August 1995 the CO authorized Zimcon to screw down disengaged roof panels temporarily, without accepting such procedure "as a fix" for the roof problems (appeal 1, tab 71; tr. 9/50-51).

54. Contract 123 required appellant to raise the existing fire sprinkler's riser nipple piping to accommodate the new roof design, to submit design drawings of the sprinkler details for the CO's approval, and to install such pipe in accordance with National Fire Protection Association (NFPA) Code 13 (appeal 1, tab 2, spec. § 15300, ¶¶ 1.01, 1.04(C), 3.02(A)). NFPA 13 permitted pipe bending so long as "bends are made with no kinks, ripples, distortions, reductions of diameter, or any noticeable deviations from round" (ex. G-153; tr. 5/86, 94). Appellant's approved sprinkler submittal showed 7-1/2° elbow couplings where the risers changed angles (ex. G-207; tr. 6/214, 8/212).

55. After Zimcon encountered delay in obtaining such couplings, it bent the pipe risers to 7-1/2° at the job site by means of a hydraulic pipe bending device (ex. G-153; tr. 6/215-16, 8/213). Richard Archer, an Air Force technical employee, viewed the installed pipes and saw creases or kinks at the bend point (tr. 5/89-90). Merle Rawls, President of West Coast Fire Protection, appellant's sprinkler supplier, observed those pipes while they were being bent on the ground, but not when installed near the roof. He stated that the pipes were not crimped, and he could bend pipe 35 to 90 degrees by the hydraulic pipe bending device without crimping or creasing it (exs. A-222, -223; tr. 6/211, 216, 223-28). We find that the sprinkler pipes Zimcon installed were creased or kinked. On 9 May 1995 appellant submitted to the CO a drawing showing a "bent" pipe in lieu of an elbow coupling (ex. A-143). The CO's 7 July 1995 letter to Zimcon said that bent pipes could not be accepted, and directed replacement with elbows (appeal 1, tab 60; tr. 6/219).

I. ***Rainfall Delay; Default Termination***.

56. Rainfall stopped productive site work on 28 September, 15 November, 3-4 and 14 December 1994, and 3-4, 6, 9-13 and 24 January, 20, 22-23 March, and 14-15 June 1995 (subtotal of 19 calendar days), and also for one-half day on 4 October, 1 November, 2 and 12 December 1994, and 13 February, and 2-3 March 1995 (subtotal

of 3½ days) (appeal 2, tabs 135-42), of which two days (28 September and ½ day each on 4 October and 1 November 1994) were concurrent with delays due to the truss ridgeline gap and defective painting (findings 28 and 36), yielding a net 20½ days of excusable delay due to rainfall.

57. Modification P00007, executed on 21 December 1994, required the changed work to be completed by 30 December 1994, but did not extend the contract completion date. Bilateral contract Modification Nos. P00008, -8, -9 and -10, executed respectively on 3 February, 5 May and 28 June 1995, added various changes, including removal of existing decking on the lower bay roofs wide enough for installation of the Type I trusses to "begin NLT 11 May 95 and (weather permitting) [to] conclude by 22 May 1995." None of the modifications included a contractor release of claims or identified the number of delay days for the causes giving rise to the extensions. Modification P00008 stated:

> The attached schedule is hereby incorporated and reflects the contractors [sic] best effort to place a roof on the high bay areas of Bldg. 1106 . . . . [P]ursuant to mutual agreement, a day-by-day slip in the schedule for any delay caused by weather related factors is authorized.

Zimcon's 25 January 1995 Progress Schedule attached to Modification P00008, showed contract completion on 8 April 1995 (appeal 2, tab 9). Modifications P00009 and P00010 respectively extended the contract completion date to 14 and 29 July 1995, the last date being 350 days after the original contract completion date. (Appeal 1, tabs 10-13)

58. The CO's 18 July 1995 letter directed Zimcon to secure loose or unattached roof panels (appeal 1, tab 61).

59. By 31 July 1995, Zimcon had completed 86% of the contract work, which percentage respondent's chief inspector Al Callihan, reduced to 57% for defective work (tr. 1/161, 2/235-36, 5/12). On 31 July 1995 the CO sent Zimcon a show cause notice citing defects in the roof panels, sway braces, and fire protection system, and Zimcon's failure to protect Building 1106 from rain resulting in water damage and its failure to complete the contract by 29 July 1995, the last extended contract completion date, and stating that any assistance of acceptance of delinquent performance did not condone such delinquency or waive any Government contract rights (appeal 1, tab 65).

60. On 4 August 1995 the CO ordered Zimcon to remove its personnel from the work site for violating his prior instructions not to screw down metal roof panels. On the same day Zimcon requested to resume work except for work on buckling panels. The CO's 9 August 1995 letter allowed Zimcon to resume work. (Appeal 1, tabs 67-69) Zimcon did no work on 5-10 August 1995 (appeal 2, tab 144, rpts. 5-8). We find that

Zimcon resumed work on 11 August 1995, such suspension was for a reasonable period of time, and was caused by Zimcon's fault or negligence.

61. Zimcon's 11 August 1995 letter to the CO asserted that contract 123 should not be terminated since it was "substantially complete," there was no proof that the roof structure was installed out of plane, it would replace sway brace rods if respondent provided "the requested design loads" for them, the bent fire sprinkler pipe was of higher quality and better workmanship than the submitted coupling, disengaged roof panels could be corrected by screws at no additional cost to respondent, and the water damage liability issue had been forwarded to Zimcon's insurers (appeal 1, tab 72).

62. The CO regarded Zimcon's response to the show cause notice as inadequate (tr. 1/156). On 7 September 1995 the CO directed Zimcon to perform no further work on contract 123 (appeal 1, tab 75).

63. On 19 September 1995 Termination Contracting Officer Marvell Lavy issued Modification No. P00011 terminating contract 123 for default for Zimcon's failure to perform in accordance with specified requirements for roof panels, sway brace rods, and fire sprinkler piping, and for failure to accomplish the work by the contract completion date. The modification stated that it was a final decision of the CO and provided Zimcon notice of its appeal rights. (Appeal 1, tab 14). Ms. Lavy considered the requirements in FAR Part 49 before deciding to terminate contract 123 for default (tr. 5/10-11). The record contains no evidence that Zimcon could have completed the deficient and incomplete work in the interval from 7 September 1995, when the CO directed Zimcon to perform no work, and 19 September 1995. Zimcon timely appealed that decision to the ASBCA on 4 December 1995.

DECISION, ASBCA No. 49346

Respondent has the burden of proving that its default termination of the contract was justified. *Lisbon Contractors, Inc. v. United States*, 828 F.2d 759, 763-65 (Fed. Cir. 1987). The FAR 52.249-10 Default clause authorized respondent to terminate contract 123 if the contractor failed substantially to complete the work with the time specified by the contract (finding 10). The last date established for completion of contract 123 was 29 July 1995 by bilateral contract Modification No. P00010 (finding 57). On 7 and 18 July 1995 the CO directed Zimcon to replace noncompliant work on the sway brace rods and fire sprinkler pipes, and to secure metal roof panels (findings 47, 55, 58). By 31 July 1995 Zimcon had performed 57% of the contract work, as such percentage was adjusted to reflect defective work (finding 59).

The FAR 52.246-12 Inspection of Construction (JUL 1986) clause provided in ¶ (g): "If the Contractor does not promptly replace or correct rejected work, the

Government may (1) by contract or otherwise, replace or correct such work and charge the cost to the Contractor, or (2) terminate for default the contractor's right to proceed." The TCO considered the regulatory factors before deciding to terminate contract 123 for default (finding 63). The record contains no evidence that Zimcon could have completed the remaining 43% of deficient and incomplete work in the interval from 7 September 1995, when the CO directed Zimcon to perform no work, and 19 September 1995, when the contract was terminated (finding 63). *See ONI Construction, Inc.*, ASBCA Nos. 45394 *et al.*, 96-2 BCA ¶ 28,277 at 141,185. Respondent carried its burden of proving, *prima facie*, that its default termination was justified.

Appellant has the burden of proving that its default was excusable. *See Pipeline Const., Inc.*, ASBCA No. 50744, 98-2 BCA ¶ 29,991 at 148,336. Appellant argues that its default was excusable because: (1) on 19 September 1995 respondent had no right to terminate contract 123 for default because Zimcon was entitled to further extension of the contract completion date for Government-caused and excusable delays; (2) unusually severe weather from September 1994 to June 1995 delayed performance; (3) respondent delayed resolution of the defective specifications and differing site conditions; and (4) Zimcon acted reasonably to mitigate such defective specifications and differing site conditions during the Government delay period.

We have found that: (i) respondent's furnishing of the storage area to Zimcon on 17 May 1994 and the differing site condition of concrete pads on the lower bay roofs did not delay performance of the contract as a whole (findings 16, 43); (ii) respondent delayed contract performance for 28 days (20 May to 16 June 1994) in reviewing Zimcon's first structural steel submittal (findings 19, 21), and for 28 days (17 August to 13 September 1994) due to the differing site condition of the non-existent 7" ridgeline gap (finding 28); (iii) the parties concurrently caused 48 days of delay (14 September to 1 November 1994) to modify and to correct the Type II trusses on account of the non-existent ridgeline gap and defective paint (findings 28, 36); (iv) rainfall excusably delayed Zimcon's performance for 20½ days (between 15 November 1994 and 15 June 1995), which 20½ days were not concurrent with the foregoing Government-caused or concurrent delays (finding 56); and (v) the parties concurrently caused 1½ days of delay on 14-15 August 1995 for roof panel repairs (finding 52).

The foregoing Government-caused, excusable and concurrently-caused delays total 126 days. Modification Nos. P00001, P00008, P00009 and P00010 extended the contract completion date by 350 calendar days. Whether the 126 days of Government-caused, excusable and concurrently caused delays were among those 350 days cannot be determined, because those modifications do not identify the number of delay days giving rise to the extensions (findings 28, 57)). Legally, it makes no difference. All but 1½ days of the 126 delay days occurred before 28 June 1995, when bilateral modification No. P00010 was executed, extending the completion date to 29 July

1995. Therefore, causes of delay arising prior to 28 June 1995 cannot excuse Zimcon's failure to complete contract 123 by 29 July 1995. *See Precision Dynamics, Inc.*, ASBCA No. 42955, 97-1 BCA ¶ 28,846 at 143,892; *Cox & Palmer Const. Corp.*, ASBCA Nos. 43438 *et al.*, 93-3 BCA ¶ 26,005 at 129,274.

The 1½ day concurrent delay after 28 June 1995 would extend the 29 July 1995 date set in Modification No. P00010 to 31 July 1995. Therefore, Zimcon did not sustain its burden of proving that at the time of termination on 19 September 1995 (finding 63), it was entitled to additional delay days, or that its default was excusable. We deny the appeal in ASBCA No. 49346.

FURTHER FINDINGS OF FACT, ASBCA No. 51123

64. Contract 123 incorporated by reference the following FAR clauses: (a) 52.236-5 "Material and Workmanship (APR 1984)," requiring Zimcon to perform the contract work in a "skillful and workmanlike manner"; (b) 52.236-7 "Permits and Responsibilities (NOV 1991)," making Zimcon responsible "for all damages to . . . property that occur as a result of the Contractor's fault or negligence"; (c) 52.236-9 "Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements (APR 1984)," requiring Zimcon to "preserve and protect all structures . . . on . . . the worksite," "protect from damage all existing improvements" and "repair any damage to those facilities . . . resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work"; (d) 52.246-12 "Inspection of Construction (JUL 1986)," ¶¶ (f) and (g) of which provide that the "Contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements," and "[i]f the Contractor does not promptly replace or correct rejected work, the Government may (1) by contract or otherwise, replace or correct such work and charge the cost to the Contractor"; and (e) 52.246-21 "Warranty of Construction (APR 1984)," providing a one-year warranty that work performed by Zimcon or its subcontractors at any tier conformed to contract requirements and was free of any defect in workmanship, requiring Zimcon to remedy at its expense any such nonconformity, defect, or damage to Government-owned real or personal property resulting from such non-conformity or defect in material or workmanship and to restore any work damaged in fulfilling the terms of the warranty clause, giving the Government the right to replace, repair or remedy such failure, defect or damage at the contractor's expense, and excepting the contractor from liability for defective design or material furnished by the Government unless the defect was caused by the negligence of the prime or subcontractor or supplier at any tier (appeal 2, tab 1).

65. Contract 123's specification § 01010 required Zimcon to "take necessary care to ensure inclement weather does not damage government property" and "[a]t the end of each work day [to] protect all entrances and/or exterior openings to the work area from

inclement weather. Proposed protection methods shall be submitted to the Contracting Officer for approval," and its § 02050, "Demolition," required Zimcon to protect existing work from damage and to repair work damaged by the contractor to match the existing work, and did not limit the amount of roof demolition Zimcon could perform in any time duration (appeal 1, tab 2).

66. On 18-19 August 1994 Zimcon removed Building 1106's lower bay roofs down to the underlying metal deck (appeal 2, tab 134, rpts. 11-12; tr. 1/66-67, 8/55-56).

67. The CO's 20 September 1994 memorandum to Zimcon said that the first rainfall could occur as early as 10 October 1994 and referred to contract provisions for protecting materials and structures from inclement weather (appeal 1, tab 15; tr. 1/67-68).

68. Zimcon's 22 September 1994 letter told the CO that contract work was "currently stopped and substantially delayed by the paint issue on the trusses," Zimcon's plan to weatherize the building by completing the roof was no longer valid, and it was formulating an alternative weather protection plan, the cost of which would be included in pending changes, and stated: "Currently any inclement weather will result in major damage to the structure and its occupants" (appeal 1, tab 16).

69. On 26-28 September 1994 Zimcon installed 45-mil, ethylene propylene diene monomer (EPDM) membrane over the lower bay roof decking, adhered its perimeters, ballasted its centers, and placed sheet metal flashing along, and dark "visquene" plastic sheeting over, the adjoining walls (appeal 1, tab 17 at 3; appeal 2, tab 135, rpts. 11-14; exs. A-111, -211, photos 15, 19, 23, A-226, -229; tr. 1/70-71, 7/132-33, 8/125-30;).

70. Rain water entered the lower bay interior spaces on 28 September 1994, 4 October 1994, 6, 15 and 25 November 1994, 3-4 December 1994, 4, 6 and 9-10 January 1995, 2-3, 10, 13, 15 and 22-23 March 1995, and 14-15 June 1995 (appeal 2, tabs 19, 23-24, 30, 32, 34, 49-50, 135, rpts. 14, 20, tab 136, rpts. 16, 26, tab 137, rpts. 5, 12-13, tab 138, rpts. 7, 9, 12, tab 139, rpts. 25-26, tab 140, rpts. 2, 4, 6, 12-13, tab 142, rpts. 22, 23; ex. A-211, photos 4-5, 7, 9, 11, 21-22; ex. G-213; tr. 1/94, 103, 109-10, 2/163, 166-67, 169-70, 175-76, 191-95, 5/148, 6/12-13, 16).

71. According to Zimcon, it intended the EPDM to last from a few days to two months, until the CO issued a change order to remove the concrete pads from the lower bay roofs (tr. 7/132, 180-81), and in March 1995 the parties agreed to leave the EPDM in place until 15 April 1995 (tr. 8/131-32). According to the CO, the parties agreed not to remove the EPDM and open up the lower bay roofs until a change order was issued to remove the concrete pads by about 15 April 1995, the end of the rainy season (tr. 1/72-74). The record contains no corroboration of any agreement in 1994 to leave the EPDM in place until 15 April 1995. We find that the parties did not so agree.

72. On 3 March 1995, the CO told Zimcon that a "professional roofing contractor" had advised him to place visquene on the lower bay roofs to prevent further water damage, and he would suggest other protective methods the next week (ex. A-211). On Saturday, 4 March 1995, respondent hired the firm "El Shadai" to install clear, six-mil visquene over the lower bay roofs, and to secure the visquene to the fire wall by metal strips (appeal 1, tab 28; appeal 2, tab 139 at rpt. 27; 157; ex. A-211, photos 13-19, 23; tr. 5/125, 130-33). El Shadai reinstalled visquene on 14 March 1995 (ex. A-120; appeal 2, tab 140, rpt. 5; tr. 5/150, 158). Such visquene did not stop rain water entry into the lower bays' interior (appeal 2, tab 78; ex. G-213; tr. 1/108, 212-13, 5/158-59, 6/16-17).

73. Zimcon continuously patched holes in the EPDM (tr. 8/122-23; exs. G-94, -97). Expert Howard Perkins opined that an EPDM membrane is a reasonable method to protect roofs temporarily (tr. 3/268). Mr. Chris Kneppers, Zimcon's expert in temporary roofing and EPDM use, inspected the lower bay roofs of building 1106 on 13 April 1995 and found the EPDM appropriately adhered around their perimeter, with many patch repairs, and "more than adequate" to keep the building dry (tr. 7/58, 60-61).

74. On 30 May 1995 Zimcon notified the CO that the lower bay structural beams were bowed, leaving gaps under the Type I trusses, and beam and truss flange dimensions prevented their welding adjacent to the side walls (ex. A-160). The CO's 7 June 1995 letter to Zimcon authorized shims and suggested welding from below the beam to resolve the issues, with an engineering detail to be forwarded "ASAP" (ex. A-165). The CO sent Zimcon a shim detail drawing on 13 June 1995, sent a revised shim drawing on 15 June 1995, and sent shim and welding instructions on 21 June 1995 (exs. A-170, -173, -177). These changes were formalized by Modification No. P00010 on 28 June 1995.

75. Potential and observed points of rain water entry into the interior of the lower bays included: (a) EPDM punctured by screws through metal strips attaching the EPDM to the lower bay roofs and by using those roofs, rather than the ground below, for staging areas for materials moved to and from the upper bay roof, resulting in tools, screws, and scrap metal cuttings, together with laborer foot traffic, tearing and puncturing the EPDM (appeal 1, tab 29; exs. A-115, -118; tr. 2/160-64, 5/119-22, 128-29, 146, 164, 7/135, 9/14-17); (b) inadequate EPDM edge sealing where the lower bay roofs abutted the vertical fire walls, allowing water running from the upper bay roof to enter and flow the length of the lower bay roofs under the EPDM, a condition first observed in January 1995 (appeal 2, tabs 64, 70, 134, 136 at rpts. 16, 29; tr. 1/104, 2/166-68, 173-75, 190, 193, 5/121-23, 128-29, 146-47); (c) open EPDM seams atop roof equipment (tr. 5/147); (d) inadequate EPDM extension over roof edges; (e) lack of flashings, gutters or EPDM leaving exposed bond beam joints and at the pocket areas, conditions observed on 5 October 1994, (tr. 2/172, 189-90, 263-64); and (f) uncovered slots in the EPDM over the new trusses (appeal 1, tab 51; tr. 1/148, 196, 6/17-18, 31, 8/63-66).

76. Rain water damaged the lower bay's ceiling tiles, drywalls, furniture, carpets, ducts, electrical panels, conduit and fixtures (appeal 2, tabs 30, 42, 107, 119, 121-24, 140, rpt. 2, tab 141, rpt. 22; tr. 5/22). The interior of the first floor was damaged and of the second floor was destroyed by rain water (tr. 5/21-25). The parties stipulated that respondent incurred costs to repair damages from rainwater intrusion into Building 1106.

77. We find that the period from 23 August 1994, when Zimcon notified the CO of concrete pads atop the lower bay roofs (finding 42), to 10 October 1994, when the CO warned Zimcon rainy weather would start (finding 67), was a reasonable time to modify contract 123 to resolve the concrete pad issue, and that respondent's delay to resolve such issue was the preponderant cause of rain water damage to the lower bays after 10 October 1995.

78. The CO's 21 August 1997 final decision found that Zimcon was responsible for, and demanded payment of, $1,474,311.16 in water damage to Building 1106, and notified Zimcon of its appeal rights (appeal 2, tab 130). Zimcon timely appealed that decision to the ASBCA On 6 November 1997.

DECISION, ASBCA No. 51123

The "Permits and Responsibilities" clause does not impose absolute or strict liability for damage to Government property other than materials delivered and work performed by the contractor, and places the burden of proof on the Government to show that damage to other Government property was due to the contractor's fault or negligence. *See D. J. Barclay & Co., Inc.*, ASBCA Nos. 28908 *et al*., 88-2 BCA ¶ 20,741 at 104,809. In *Shipco General, Inc.*, ASBCA Nos. 29206, 29942, 86-2 BCA ¶ 18,973 at 95,827, the Government was responsible for interior rain water damage when it took an unreasonable time to resolve a change order affecting the integrity of roof repairs.

Rain water entered the lower bay interior spaces on 28 September and 4 October 1994, shortly after Zimcon installed the protective EPDM membrane (finding 70). Rain water was observed entering bond beam joints and at pocket areas due to inadequate flashings, gutters or EPDM on 5 October 1994 (finding 75), indicative of contractor negligence in protecting the roof at that time. The period from 23 August 1994, when Zimcon notified the CO of concrete pads atop the lower bay roofs, to 10 October 1994, when the CO warned Zimcon rainy weather would start, was a reasonable time to modify contract 123 to resolve the concrete pad issue. Respondent's delay to resolve such issue was the preponderant cause of rain water damage to the lower bays after 10 October 1995. (Finding 77)

We hold that Zimcon is liable for the initial rain water damage sustained by the lower bays of Building 1106 on 28 September and 4 October 1994, and deny the appeal in ASBCA No. 51123 to that extent. We further hold that the Government was

responsible for the additional rain water damage sustained by the lower bays of Building 1106 from 6 November 1994 to 15 June 1995, and sustain said appeal to that extent.

Dated: 9 March 2000

DAVID W. JAMES, JR.
Administrative Judge
Armed Services Board
of Contract Appeals

I concur

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

I concur

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

I certify that the foregoing is a true copy of the Opinion and Decision of the Armed Services Board of Contract Appeals in ASBCA Nos. 49346 and 51123, Appeals of Zimcon Professionals, rendered in conformance with the Board's Charter.

Dated:

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