### ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeal of	)	
Cascade General, Inc.	)	ASBCA No. 47754
Under Contract No. N00024-88-H-8812	)	
APPEARANCE FOR THE APPELLANT:		John T. Jozwick, Esq. Paradise Valley, AZ
APPEARANCES FOR THE GOVERNME	NT:	Arthur H. Hildebrandt, Esq. Navy Chief Trial Attorney Stephen R. O'Neil, Esq. Associate Director Evadne Sanichas, Esq. Senior Trial Attorney Navy Litigation Office, Western Division San Bruno, CA

## OPINION BY ADMINISTRATIVE JUDGE JAMES UNDER BOARD RULE 11

This appeal arises from the contracting officer's final decision denying the contractor's claim with respect to two Job Orders ("JO") under the captioned Master Ship Repair Agreement ("MSRA") for "Regular Overhaul Availabilities" on four naval utility landing craft ("LCU"). The Board has jurisdiction of this appeal under the Contract Disputes Act of 1978, 41 U.S.C. § 607. The parties elected to submit this appeal for decision on entitlement only, upon the written record, pursuant to Board Rule 11.

## FINDINGS OF FACT

1. On 29 June 1990 the Navy's Supervisor of Shipbuilding, Conversion and Repair ("SUPSHIP"), San Diego, awarded JO 7M03 to Cascade General, Inc. ("CGI") under the captioned MSRA for the firm, fixed-price of \$1,766,666.00, for the overhaul of LCUs 1635 and 1648 at CGI's Portland, OR, facility. JO 7M03 required Government delivery of LCUs 1635 and 1648 to CGI at Coronado, CA, and required CGI to redeliver them to the Navy on 31 October 1990 at Coronado, CA. (R4, tabs 1, 6, 10)

2. On 11 September 1990 SUPSHIP San Diego awarded JO 7M04 to CGI under the captioned MSRA for the firm, fixed-price of \$1,935,503.00 for the overhaul of LCUs

1652 and 1666 at CGI's Portland facility. JO 7M04 required Government delivery of LCUs 1652 and 1666 to CGI at Coronado, CA, and required CGI to redeliver them to the Navy on 18 January 1991 at Coronado, CA. (R4, tabs 52, 56)

3. JOs 7M03 and 7M04: (a) designated SUPSHIP, Seattle, to administer the JOs for the Navy, (b) included "Work Items" ("WI"), which were a type of specification, among which were "Boat Alteration" ("B/ALT") Nos. 215B, 219C, and 217C, (c) prescribed in clause C-5 that CGI was to accomplish the requirements of the most current revision of drawings, plans and references issued and incorporated into the JO, and (d) included the following pertinent clauses:

#### H-1 COMPLETE AND FINAL EQUITABLE ADJUSTMENTS

Whenever the contractor submits any claim for an equitable adjustment [due] to any fact or circumstance regarded as a change order, whether formal or "constructive," under the "changes" or any other clause of the contract, such claim shall include all adjustments (including but not limited to adjustments arising out of delays or disruptions or both caused by such change order) to which the Contractor is entitled under the provisions of this contract .... [U]pon the execution of the supplemental agreement setting forth the equitable adjustment for such change order, then, except as the parties may otherwise expressly agree in the aforesaid supplemental agreement, the Contractor shall waive any right under the "Changes" clause or any other clause of this contract to further equitable adjustments attributable to such facts or circumstances giving rise to the aforesaid claim, and, in any event, such right shall be deemed to have been so waived.

# H-4 DOCUMENTATION OF REQUESTS FOR EQUITABLE ADJUSTMENT

. . . .

(a) For the purpose of this clause, the term "change" includes not only . . . a written order that is designated as a "change order," but also . . . any act or omission to act on the part of the Government in respect of which a request is made for equitable adjustment.

(b) . . . whenever the Contractor requests an equitable adjustment in any amount in respect of any other act or omission to act on the part of the Government, the proposal supporting such a request shall contain the following information . . . :

(1) A description (i) of the work required by the contract before the change, which has been deleted by the change, and (ii) of the work deleted by the change which already has been completed . . . .

(2) Description of work necessary to undo work already completed which has been deleted by the change;

(3) [New design and production work substituted or added by the change;]

(4) Description of interferences and inefficiencies in performing the change;

(5) Description of each element of disruption and exactly how the work has been, or will be disrupted; [including the calendar period of time, location, trade(s), scheduling and mitigation measures taken.]

(6) Delay in delivery attributable solely to the change;

(7) Other work attributable to the change.

(8) ... a narrative statement of the direct causal relationship between any alleged Government act or omission and the claimed consequences thereof, cross-referenced to the detailed information provided as required above.

. . . .

(e) [A contractor certification that each proposal submitted pursuant to this clause (1) has been thoroughly investigated for completeness and accuracy of facts and for identification of judgments and conclusions; (2) sets forth the information previously required by this clause; and (3) the

adjustment claimed is reasonable and accurately represents the added time and costs incurred due to the change.]

(R4, tabs 1, 10, 52, 56)

4. JOs 7M03 and 7M04 required B/ALT Nos. 215B, 219C, and 217C for the applicable LCUs by the following WIs:

<u>B/ALT No.</u>	JO	<u>LCU</u>	<u>WI No.</u>
215B "	7M03 7M04 7M04	1635 1652 1666	583-43-005 100-10-031(N) 200-10-021(N)
219C "	7M04 7M04	1652 1666	100-10-012 200-10-006(N)
217C "	7M03 7M03 7M04 7M04	1648	583-43-004 583-43-126 100-10-009(N) 200-10-009(R)

(R4, tabs 1, 56)

5. The foregoing WIs prescribed the following pertinent Navy drawings:

WI No(s).	Drawing(s)
583-43-005	6109487, 6109490
100-10-031(N) & 200-10-021(N)	5104284, 5104298, 6109490, 6109611, 6109612, 6109613, 6109643, 6109644
100-10-012	6109642, 5184170
200-10-006(N)	6109654
583-43-004	5897356, 0900-LP-001-7000, TM-03544
583-43-126	5897362, 0900-LP-001-7000
100-10-009(N)	5897365, 6109660

#### 200-10-009(R) 6108107

(R4, tabs 1, 56) The foregoing WIs, drawings and test memorandum 03544 included both detailed design and performance requirements.

6. The nine WIs identified in findings 4 and 5 for B/ALTs 215B, 219C and 217C prescribed Standard Item ("SI") 009-23 (R4, tabs 1, 10, 52, 56). SI 009-23: (a) defined an "interference" as "any part of a ship, whether installed or portable, that must be moved or disturbed in the accomplishment of work specified in the [JO]"; (b) required CGI to report interferences to SUPSHIP; (c) required SUPSHIP to review reported interferences, and, if removal were approved, prepare an appropriate change to the WI; and (d) required CGI to remove approved interferences, to reinstall undamaged and non-deteriorated interferences that were suitable for reinstallation, and to test reinstalled interferences to assure that they performed their normal functions (ex. G-23 at 23).

7. Under JO 7M03, the parties bilaterally extended the original redelivery date by 37 days to 7 December 1990. CGI redelivered LCUs 1635 and 1648 on 6 March and 22 February 1991, 89 and 77 days, respectively, after the revised redelivery date, for which respondent assessed \$66,400 in liquidated damages (\$400/day for 166 days). (R4, tabs 36, 46, 50) Under JO 7M04, the parties bilaterally extended the original redelivery date by 70 days to 29 March 1991, on which date CGI redelivered LCUs 1652 and 1666 (R4, tabs 59, 67, 72, 87).

8. In March 1992 CGI sent a "draft" Request for Equitable Adjustment (REA) to SUPSHIP Seattle. The contracting officer (CO) rejected that draft REA for lack of details required by the JOs' clause H-4, Documentation of Requests for Equitable Adjustment. (R4, tabs 91, 92) On 9 December 1992 CGI submitted to SUPSHIP Seattle a \$3,291,005 REA under JOs 7M03 and 7M04. The REA alleged defective Navy information for the main engine replacement, lighting system upgrade, and fire extinguishing system installation, and other items. (R4, tab 95) The CO's "12 Mar 92" (sic, meant 1993) letter to CGI disputed CGI's allegations, but declined to issue a final decision thereon, citing CGI's failure to provide adequate documentation in accordance with clause H-4 (R4, tab 96). CGI sent more information to the CO on 11 June and 9 August 1993 (R4, tabs 97, 98). The CO's 11 August 1993 letter to CGI found no entitlement for excusable delays or constructive changes, but did not constitute a final decision on the REA (R4, tab 99).

9. On 24 March 1994 CGI submitted to SUPSHIP Seattle a \$5,002,856 certified claim under JOs 7M03 and 7M04, which alleged that defective Government design information caused CGI to incur additional costs, "rescinded" CGI's 9 December 1992 REA, expressly incorporated §§ 4-10 of said REA, and requested the Navy to extend the

completion dates for LCUs 1635 and 1648 to their actual redelivery dates of 6 March and 22 February 1991, *i.e.*, an 89-day extension for LCU 1635 and a 77-day extension for LCU 1648 (R4, tab 100).

10. The contracting officer's 28 April 1994 final decision denied CGI's March 1994 claim in its entirety (R4, tab 101). On 6 July 1994 CGI filed a timely notice of appeal to this Board from that CO's final decision (R4, tab 102), which appeal was designated ASBCA No. 47754.

11. In June 2000 CGI advised the Board that it withdrew all of its March 1994 claim items except for allegedly defective Government information for B/ALT 215B, replace main engines; B/ALT 219C, modify main lighting; and B/ALT 217C, install halon fire-fighting system, which claim items we analyze sequentially.

12. *B/ALT 215B, Replace Main Engines.* CGI's 1992 REA and 1994 claim alleged that CGI encountered the following errors, omissions and conflicts in the Navy's WIs and drawings for B/ALT 215B. CGI alleged that many WI and drawing provisions did not conform to the requirements set forth in the Navy Repair Manual and other Navy documents. JOs 7M03 and 7M04 did not reference or require the WIs and drawings to comply with such documents. We find those allegations were invalid.

## (a) **WI 583-43-005**.

(1) The main engine requirements were not stated in a single place, but rather in WI ¶¶ 1.3, 3.2 and in drawing 6109487 (R4, tab 100, Book 3 at 5-2). We find that the main engine requirements in JO 7M03 were not defective.

(2) CGI alleged that WI ¶ 3.3, "Accomplish the requirements of 2.b through 2.j" inadequately described and sequenced the required engine replacement (R4, tab 100, Book 3 at 5-2, 5-3). WI 583-43-005 set forth 31 sequential requirements, plus eight "check points" designated for component testing (R4, tab 1). We find that WI 583-43-005's work description was not inadequate.

(3) WI ¶ 3.4.1, "Modify each bilge pump mandrel to match surrounding area," was included under ¶ 3.4, which did not address bilge pumps, but instead the "control console," and provided inadequate direction of the work involved (R4, tab 100, Book 3 at 5-3, 5-4, 5-37). Respondent admitted that ¶ 3.4.1 should have been numbered ¶ 3.3.2 (Mucciolo affid., attach. 1 at 3). The record contains no contemporaneous evidence that CGI was misled by the mis-numbered ¶ 3.4.1, how many hours CGI incurred to discover that error, or what additional work CGI performed as a result thereof.

(4) WI ¶ 3.5.1 stated: "Alignment shall be in accordance with 2.b," which was drawing 6109487. CGI alleged that drawing 6109487 "did not provide . . . correct alignment procedures" (R4, tab 100, Book 3 at 5-4). "General Note 38" of drawing 6109487 stated: "Radial misalignment of flanges to be less than 0.004 inches, face TIR to be less than 0.001 inches. Final measurements to be made with engine firmly bolted down." WI 583-43-005, ¶¶ 3.5 through 3.5.3.2, provided requirements with respect to waterborne alignment, coupling and resin chocks. WI 583-43-007, ¶¶ 3.10 through 3.10.4.1, prescribed "S9200-A2-MMA-010; Main Propulsion System Alignment Manual for Craft of the U.S. Navy," for optical alignment and required moving engines and bearings, machining stern tubes and strut bearings, press fitting of bearing sleeves, bore and shafting alignment tolerances, and four testing check points. (R4, tab 1) Bilateral Modification A00007 in JO 7M03 changed the alignment requirements in WI 583-43-005 for LCU 1635 (bilateral modifications A00009 and A00010 changed the alignment requirements in WIs 100-10-031(N) and 200-10-021(N) for LCUs 1652 and 1666, respectively), and all those modifications included CGI releases of claims (R4, tabs 17, 65, 66).

(5) CGI alleged that, although the specification prescribed no liquid loading requirements, during engine alignment respondent's fuel and potable water loading deflected the LCUs and misaligned the engines (R4, tab 100, Book 3 at 5-34, 5-35).

(6) WI ¶ 3.10 provided, "Install new insulation, lagging, and reusable covers on new installations. Accomplish the requirements of [SI] 009-11 of [reference] 2.a." General Note 16 of drawing 6109487 stated: "Insulate and lag IAW Section 508 of NAVSEA S9-AAO-AB-GOS-10 and MIL-STD-769." CGI alleged that the foregoing requirements differed. (R4, tab 100, Book 3 at 5-4, 5-5). SI 009-11 prescribed MIL-STD-769 (ex. G-23). Whether S9-AAO-AB-GOS-10 conflicted with MIL-STD-769 cannot be determined, since neither document is in the record. That such documents may have differed is not proven to be a defect in JO 7M03.

(7) CGI alleged that WI ¶ 3.11's requirement to "[a]ccomplish the requirements of [SI] 009-32 . . . for new and disturbed surfaces to match surrounding areas" differed from the cleaning and painting requirements in General Note 20 of drawing 6109487 which required: "Surfaces affected by this installation shall be cleaned and painted IAW Section 631 of NAVSEA S9-AAO-AB-GOS-10." Whether the requirements of § 631 of S9-AAO-AB-GOS-10 differed from SI 009-32 requirements cannot be determined, because S9-AAO-AB-GOS-10 is not in the record. That such documents may have differed is not proven to be a defect in JO 7M03.

(b) *Drawing 6109487*.<sup>1</sup> Certain CGI allegations of deficiencies are frivolous, *e.g.*, drawing 6109487, view 34-A, showed "FWD" to the left, not to the right as in other drawings; drawing 6109644, view 18-A, oriented frame numbers up-and-down, rather than left-to-right; and drawing 6109487 and others lacked signatures for NAVSEA approval and ship checking. We do not address such allegations further.

(1) General Note 4 stated: "The point of origin of each view is indicated in parenthesis [sic] ( ) below the view." CGI alleged that: (i) views 34-A, 38-A, 38-B, 39-B, 45-A, 45-C, 49-B, 52-C, and 63-A lacked a "point of origin," thereby requiring CGI to search for their derivations; and (ii) many views did not state whether they were plans, elevations or cross-sections, whether inboard, outboard, forward or aft, and what area of the craft was shown (R4, tab 100, Book 3 at 5-7, -11, -24 to -30, -32). We find that: (i) view 38-A designated view 52-C as its point of origin, (ii) views 34-A, 38-B, 39-B, 45-A, 45-C, 49-B, 52-C, and 63-A lacked points of origin, and (iii) view 39-B was on the same sheet six inches from detail 39-A, which designated 39-B's point of origin.

(2) Drawing 6109487 contained sheets, details and views with no scale, dimensions or equipment locations (R4, tab 100, Book 3 at 5-7).

(3) Drawing 6109487 does not refer to the B/ALT 217C for the new halon system (R4, tab 100, Book 3 at 5-9). We find that such omission is not a defect in drawing 6109487.

(4) CGI alleged that General Note 3's requirement, "Except where otherwise noted or approved by NAVSEA," to use specifications and standard/type drawings and revisions as of the 16 September 1983 effective date of NAVSEA S9AAO-AB-GOS-010, conflicted with clause C-5 (R4, tab 100, Book 3 at 5-10, 5-11). We find that clause C-5 resolved any conflict by requiring use of the most current revision of drawings, plans and references issued and incorporated into the JOs (see finding 3(c)).

(5) General Note 5 stated: "Dimensions shown are approximate. Install piping as close as practicable to indicated runs to clear interferences." CGI alleged that the drawing indicated no specific positions for piping runs, CGI could not install the exhaust lines from the starboard engine manifold to the muffler as shown on sheet 8, and it could not install the fuel oil piping for the forward port diesel engine as depicted, which required their re-routing (R4, tab 100, Book 3 at 5-11, 8-3, 8-10, 8-21). The material list

<sup>&</sup>lt;sup>1</sup> Findings with respect to drawing 6109487 and other JO drawings are cited to R4, tab 100, Book 4, unless the finding states otherwise. The parties stipulated that drawing 6109487's Revision B changes, issued after award of JO 7M03, are not design defects claimed by CGI and are not relevant to the appeal.

included 13 piping items, P-1 through P-13. Piping runs were shown on plans 26-A and 31-A, and on details 29-C, 38-C, 37-A, 41-B, 49-A, and 49-B. (R4, tab 100, Book 4) We find that "approximate" exhaust and fuel oil pipe dimensions and routings are not drawing deficiencies.

(6) General Note 32 referred to Detail 38-A. Detail 38-A depicted a plan view of the bilge pump drive belt, and referred back to General Note 32. CGI alleged that this "circular" reference was useless information and a questionable engineering practice. (R4, tab 100, Book 3 at 5-13, 5-14) We find that such reference was not a defect or error, nor did it cause additional work.

(7) The access hatch and ladder in the forward engine room were located at different positions with respect to bulkheads 50 and 56 on sheets 7 and 8 (R4, tab 100, Book 3 at 5-22). The record does not reveal how the discrepancy was resolved.

(8) The existing ship service generator is depicted with different sizes on sheets 7 and 8 (R4, tab 100, Book 3 at 5-22, 5-23). The record does not reveal how the discrepancy was resolved.

(9) Plan 31-A stated that the lube oil line from the forward standby pump was to go "to eng[ine]," rather than "from engine" as stated for the aft standby pump (R4, tab 100, Book 3 at 5-23). Respondent admitted that "to eng" was a "patent" defect (Mucciolo affid., attach. 1 at 16). Plan 31-A referred to detail 41-B, which showed that such lube oil lines were "existing" (R4, tab 100, Book 4).

(10) The F-37 accumulators are aligned vertically in the forward engine room and horizontally fore and aft in the aft engine room in Plan 31-A, which referred to detail 47-A for component F-37. Detail 47-A depicted the accumulators in a vertical alignment. (R4, tab 100, Book 3 at 5-23) We find that detail 47-A resolved the inconsistency in Plan 31-A.

(11) CGI was required to fabricate a cable bracket "to suit" and to install other items by "suitable securing." CGI alleged that such statements did not specify what was "suitable" (R4, tab 100, Book 3 at 5-24). Sheet 9 stated "see dwg LCM8-252-5103232" (R4, tab 100, Book 4; Mucciolo affid., attach. 1 at 17), which interpreted and established what was "suitable." We find that the requirements "to suit" and "suitable" are not defects in drawing 6109487.

(12) The F-34 hydraulic reservoir is located at divergent places in relation to the bulkheads and craft sides on Plan 31-C and in Details 45-A and 45-C. CGI alleged that this discrepancy idled its crew while awaiting confirmation of the intended equipment locations (R4, tab 100, Book 3 at 5-29, 5-30).

(13) Detail 49-B shows the aft bulkhead of the aft engine room at frame  $62\frac{1}{2}$ , whereas all other views show that bulkhead at frame 62 (R4, tab 100, Book 3 at 5-30). The record does not reveal how the discrepancy was resolved.

## (c) Drawing 6109644.

(1) The requirements to remove the feedwater expansion tanks in the forward and aft engine rooms were not stated in the captions for Plan 14-B and Plan 16-A (R4, tab 100, Book 3 at 5-41). We find that Plan 14-B and Plan 16-A were not defective.

(2) Plan 23-A did not identify terminations and termination points, and required CGI to rip out engine control cable "up to and including pilot house control station" without showing any such removal work on any other drawing (R4, tab 100, Book 3 at 5-41, 5-42).

## (d) Drawing 6109490:

(1) The title block of this drawing states "LCU 1645," yet respondent specified this drawing for LCUs 1652 and 1666 (R4, tab 100, Book 3 at 5-42). We find that such title block did not mislead CGI.

(2) Plan 10-A shows the port main engine foundation; plan 14-A shows the starboard main engine foundation. Beneath each view is a note telling CGI to see the other plan "for other info not shown." CGI alleged that such notes required CGI to compare the two views to ascertain what was lacking in each.

(3) Elevation 27-A required CGI to "drill 25/32 dia hole 3 pl template from new shaft companion coupling ref 1." Reference 1 was drawing 6109487. CGI alleged that it did not know what information from drawing 6109487 was intended (R4, tab 100, Book 3 at 5-49). Respondent contended that the requirement to prepare a template to drill the required holes was clear and was not affected by the reference to drawing 6109487 (Mucciolo affid., attach. 1 at 35). We find that the elevation 27-A requirement was not defective.

(4) Views EL-27A and 28-C lacked a "point of origin," thereby allegedly requiring CGI to determine the derivations of those views (R4, tab 100, Book 3 at 5-49).

(e) *Drawing* 5104284: The title block of this drawing states that it is for rehabilitation of "LCU 1646 class," yet respondent prescribed it for LCUs 1652 and 1666 (R4, tab 100, Book 3 at 5-50). We find that such title did not mislead CGI.

# (f) *Drawing 6109643*:

(1) General Note 4 stated that dimensions were "approximate," while detail 20-A contained a dimensional tolerance of 1/1000 of an inch. CGI alleged that these provisions were inconsistent (R4, tab 100, Book 3 at 5-52). Respondent contended that dimensions were "approximate" for purposes of templating; dimensions for machining the shaft companion coupling were precise (Mucciolo affid., attach. 1 at 37). We find that the dimensional and tolerance statements were consistent.

(2) CGI alleged that it was unable to install tool chests at the location shown in Plan 14-A in the forward port corner of the engine rooms, and had to relocate the chests next to the MSD tank (R4, tab 100, Book 3 at 5-55).

(3) CGI alleged that the location of the fresh water expansion tank on sheet 4 differed from its location on another, unidentified drawing (R4, tab 100, Book 3 at 5-55). The record does not reveal how the discrepancy was resolved.

(4) CGI alleged that the location of the hydraulic reservoir, item 7, in the aft engine room was mislocated on sheet 4, causing "significant time and manhours to sort out" (R4, tab 100, Book 3 at 5-55).

(g) *Drawing 6109612*: CGI alleged that the fuel/water separator, item F-1, could not be installed in the location shown on the drawing (R4, tab 100, Book at 5-58).

## (h) Drawing 5104298:

(1) CGI alleged that the cable connecting the control heads in the pilot house and the portable conning station could not be installed as shown in detail 11-A because portable control consoles did not exist in the conning station on LCUs 1652 and 1666 (R4, tab 100, Book 3 at 5-67).

(2) CGI alleged that when it mounted the "panish" control head as depicted in detail 11-A, view 11-C and section 6-A, the control lever could not be moved to full throttle, but only to 2/3 throttle. CGI alleged that it had to design and build an elevated platform to allow the control lever to function properly. (R4, tab 100, Book 3 at 5-67)

(i) *Drawing 6109613*: Elevations 16-A and 14-A lacked a "point of origin," thus allegedly requiring CGI to determine their derivations (R4, tab 100, Book 3 at 4-1).

# (j) Drawing 6109611:

(1) CGI alleged that it was unable to install the inboard exhaust for the port main engine in a straight line with one 30° turn, as depicted, but rather installed it in a "convoluted S shaped pipe" to clear other equipment (R4, tab 100, Book 3 at 8-23, 8-24). SUPSHIP knew of that "S" pipe configuration by 10 January 1991 (ex. A-1).

(2) The drawing omitted the generator and its exhaust system in the forward engine room, allegedly requiring CGI to "recognize," route and install those components (R4, tab 100, Book 3 at 8-24).

(k) CGI alleged that the foregoing and many other notes, details, and requirements of the prescribed WIs and drawings for B/ALT 215B were deficient (R4, tab 100, Book 3). CGI did not identify, and the record contains no contemporaneous (*i.e.*, July 1990-March 1991) evidence: (1) of when CGI first notified the Navy of such deficiencies, other than in its March 1992 draft REA or its December 1992 REA, submitted a year or more after the LCUs were re-delivered; (2) that such deficiencies caused delay or additional work, and the time period of such delays; and (3) that CGI submitted to SUPSHIP the data showing what added, deleted, changed, and delayed work resulted from B/ALT 215B data deficiencies, as required by the Documentation of Requests for Equitable Adjustment clause, and the calendar periods of time when disruption occurred.

13. *B/ALT 219C, Modify Engine Room Lighting System*. CGI's 1992 REA and 1994 claim alleged that it encountered the following alleged errors, omissions and conflicts in the Navy's design information for B/ALT 219C.

(a) *Drawing 6109642* for LCU 1652:

(1) Contained a note stating "drawing [303-2139910] not required for production" (R4, tab 100, Book 3 at 7-2; Book 4). JO 7M04 and WI 200-10-006(N) did not prescribe drawing 303-2139910. We find that such Government information was not defective.

(2) "General Note 7" provided: "Cable lengths are aproximate [sic], exact lenght [sic] and routing shall be determined at time of installation." CGI alleged that the drawing did not set forth exact cable routing and dimensions (R4, tab 100, Book 3 at 7-2). We find that cable routing and dimensional requirements were not defective.

(3) "General Note 10" stated:

Lighting fixtures shall be located to agree with this drawing as nearly as possible to maintain headroom and maximize light distribution. When necessary, raise or lower lighting fixtures a suficient [sic] distance to prevent beams, vent ducts, pipings, etc [sic] from interfering with maximum light distribution.

CGI alleged that Note 10 is inconsistent with firm fixed-price contract obligations; the lighting installations shown on the drawing interfered with engine exhaust and other piping runs required by B/ALT 215B, and with halon piping required by B/ALT 217C; and due to such interferences CGI relocated lighting fixtures and cable runs several times. (R4, tab 100, Book 3 at 7-1 to 7-3; Book 4; ex. 7-X1)

(4) CGI alleged that this drawing lacked details and materials to build lighting fixture mounting brackets, causing CGI to design such brackets (R4, tab 100, Book 3 at 7-3). Mounting bracket details and materials were not shown on drawing 6109642 (R4, tab 100, Book 4), but were shown on drawing 5184170 (ex. G-27). We find that such lighting fixture bracket details and materials were not defective.

# (b) *Drawing 6109654* for LCU 1666:

(1) "General Note 11" corresponded to General Note 10 on drawing 6109642, set forth in (a)(3), above. CGI alleged that the engine exhaust and other piping runs required by B/ALT 215B, halon piping required by B/ALT 217C, and an undepicted ventilation duct interfered with the prescribed lighting fixtures and conductors. Due to such interferences CGI allegedly relocated lighting fixtures and cable runs several times. (R4, tab 91, Attach. 12; tab 100, Book 3 at 7-5, 7-6, 8-14, 8-15, 8-26)

(2) CGI alleged that engine room lights just forward of the access ladder could not be installed at the location and in the fore and aft orientation depicted, and thus had to be relocated and reoriented athwartships (R4, tab 100, Book 3 at 8-22).

(3) Its General Note 12 stated:

Remove all foundations, supports, deck clips, and all structural and other appertenances [sic] associated with items removed or relocated by this drawing except where retention is specifically indicated.

(R4, tab 91, Attach. 12) CGI alleged that SUPSHIP Seattle construed note 12 to require CGI to remove items outside the work required by JO 7M04. The record does not identify any specific items or dates of their removal.

(4) The drawing allegedly lacked material details to manufacture lighting fixture mounting brackets, allegedly causing CGI to provide parts, labor and engineering to attach lighting fixtures (R4, tab 91, Attach. 12, tab 100, Book 3 at 7-6).

(5) The drawing allegedly mislocated a battle lantern on the forward engine room overhead, which actually was on the aft bulkhead, thus requiring CGI to relocate the lantern and its cable to the overhead (R4, tab 100, Book 3 at 8-18).

(c) CGI alleged that the foregoing and other requirements of the prescribed WIs and drawings for B/ALT 219C were deficient (R4, tab 100, Book 3). CGI did not identify, and the record contains no contemporaneous (*i.e.*, September 1990-March 1991) evidence: (1) of when CGI first notified the Navy of such deficiencies, other than in its March 1992 draft REA or its December 1992 REA, submitted 12 to 21 months after LCUs 1652 and 1666 were re-delivered; (2) that such deficiencies caused delay or additional work, and the time periods of delay; and (3) that CGI submitted to SUPSHIP the data showing what added, deleted, changed, and delayed work resulted from B/ALT 215B data deficiencies, as required by the Documentation of Requests for Equitable Adjustment clause, and the calendar periods of time when disruption occurred.

14. *B/ALT 217C, Install Halon Fire Extinguishing System*. CGI's 1992 REA and 1994 claim alleged that it encountered the following errors, omissions and conflicts in the Navy's design information for B/ALT 217C.

(a) LCU 1652 *drawing* 5897365 and LCU 1666 *drawing* 6108107 did not indicate interferences that caused CGI to relocate several times the halon junction box C-IFRI in the forward engine room, delaying work by six weeks (R4, tab 100, Book 3 at 6-2, 8-15). SUPSHIP Seattle was aware of the junction box interferences from 9 January through March 1991 (ex. A-4 at 2).

(b) LCU 1652 *drawing 6109660* for B/ALT 217C, halon installation, outlined the old main engine to be replaced, not the new main engine required by B/ALT 215B (R4, tab 100, Book 3 at 4-6, ex. 4-X4 at 2-3). The record does not disclose when the Navy first learned of this error (other than in CGI's March 1992 draft REA or its December 1992 REA, submitted 12 to 21 months after the LCUs were re-delivered).

(c) CGI alleged eleven other B/ALT 217C design errors:

(1) The location of pilot house halon control panel conflicted with existing FZ alarm control panel (R4, tab 100, Book 3 at 6-2, 8-11, 8-16, 8-17, 8-22, 8-34, 8-35). JO 7M03 bilateral Modification Nos. A00027 and A00028 compensated CGI for relocating the halon control panel on LCUs 1648 and 1635, and each included a CGI release of claims therefor (R4, tabs 37, 38). JO 7M04 bilateral Modification Nos.

A00002, A00005, A00008, A00013, A00015, A00017 and A00021 compensated CGI for relocating the halon control panel on LCUs 1652 and 1666, and each included a CGI release of claims therefor (R4, tabs 58, 61, 64, 69, 71, 73, 77).

(2) The existing cable raceways were inadequate to accommodate new cable (R4, tab 100, Book 3 at 6-2, 8-3, 8-13, 8-23, 8-29). JO 7M04 bilateral Modification Nos. A00017 and A00021 compensated CGI for modifying the existing raceways to accommodate new halon cable in LCUs 1666 and 1652, and each included a CGI release of claims therefor (R4, tabs 73, 77).

(3) Alarm horns were mis-specified (R4, tab 100, Book 3 at 6-3, 8-4, 8-35).

(4) Alarm horns had a five-minute built-in discharge period for alarm lights, which delayed their testing (R4, tab 100, Book 3 at 6-3, 8-21).

(5) Commercial terminal boxes were specified instead of military specification boxes (R4, tab 100, Book 3 at 6-3).

(6) Divergent flame detector part numbers were specified for LCUs 1635 and 1648 (R4, tab 100, Book 3 at 6-3, 6-4, 8-2).

(7) The 115-volt blower for ventilation exhaust system bypass in the anchor windlass room was inadequate (R4, tab 100, Book 3 at 6-4).

(8) The existing DC control panel had internal grounding (R4, tab 100, Book 3 at 6-4, 6-5).

(9) The commercial type alarm lights in flame detectors grounded and short-circuited (R4, tab 100, Book 3 at 6-5, 8-12).

(10) The halon system falsely activated and discharged halon by radio microphones of CGI's employees (R4, tab 100, Book 3 at 6-5, 6-6, 8-18). CGI notified SUPSHIP on 10 December 1990 of incompatible halon test procedures by "Condition Found Report" ("CFR") Nos. 5248 and 8191 for LCUs 1635 and 1648 (exs. G-21, -22). JO 7M03 bilateral Modification Nos. A00038 and A00039 compensated CGI for modifying the halon test procedures, and each included a CGI release of claims (R4, tabs 48, 49).

(11) Cables atop the exhaust system were misrouted, which led to melting of the cable exterior and required its re-routing (R4, tab 100, Book 3 at 6-6, 8-5, 8-8).

CGI did not identify the particular WI and drawing requirements whose deficiencies allegedly caused the foregoing problems, nor when CGI first notified the Navy of those problems, except for item (c)(10) above, and by the March 1992 draft REA and December 1992 REA, submitted 12 to 21 months after the LCUs were re-delivered.

15. *Interferences*. CGI alleged that: (a) interferences not shown on the drawings caused "workaround" and delayed performance of B/ALTs 215B, 219C and 217C. Such interferences included an undepicted MSD tank, longitudinal support beams, hot and potable water tanks, work bench, aft engine exhaust fan controller, pilot house lighting panel, freshwater tank, hot water heater, saltwater flushing pressure tank, associated gauges and controllers, space heater, and electrical control panel (R4, tab 100, Book 3 at 8-1, 8-2, 8-9, 8-10, 8-11, 8-13, 8-21, 8-22, 8-30); and (b) components of B/ALTs 215B, 219C and 217C -- including a main engine exhaust, an overhead light, and a halon heat detector and piping -- became interferences that required CGI to relocate them (R4, tab 100, Book 3 at 8-2, 8-6, 8-10, 8-13).

16. *Alleged Changes*. CGI alleged that the following constructive changes delayed performance of B/ALTs 215B, 219C, and 217C: (a) a halon control panel cabinet door would not open for lack of clearance by the main diesel engine water box in the forward engine room, requiring CGI to modify the door; (b) the Navy rescinded the requirement to remove the existing cooling water expansion tank shown in drawing 6109487, sheet 7, and required CGI instead to install additional plumbing to tie that tank to the new main engine; (c) lights with the specified four foot pigtails were insufficient to reach designated junction boxes, requiring added cable and rewiring; (d) CGI installed an unspecified 440-volt connection box in the anchor windlass room; and (e) CGI encountered delay in locating an undepicted exhaust fan switch that caused system inoperability (R4, tab 100, Book 3 at 8-4, 8-6, 8-10, 8-13).

17. CGI alleged the foregoing interferences and changes, as well as other deficient WI and drawing requirements for B/ALTs 215B, 219C, and 217C (R4, tab 100, Book 3). The record contains no contemporaneous (*i.e.*, July 1990-March 1991) evidence: (1) of when CGI first notified the Navy of any deficiencies in the WIs and drawings, except for item 14(c)(10) above and the March 1992 draft REA and December 1992 REA, submitted 12 to 21 months after the LCUs were re-delivered; (2) whether any deficiencies caused delay or additional work, or both, and the period of such delays; and (3) that CGI submitted the data required by the Documentation of Requests for Equitable Adjustment clause, describing what specific added, deleted, changed, and delayed work resulted from deficient Government data, and the calendar periods of time when disruption occurred.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> CGI's affiants Casterline, Way, Schiely, and Menon stated that they personally perceived problems and interferences that caused CGI to expend extra time in performing JOs 7M03 and 7M04. Those eye-witness statements are general and

18. CGI's consultant, Feite Posthumus, holds a B.S. in Naval Architecture, and has 43 years of experience in ship building and repair as a design drafter, supervisory engineer, program engineer, manager of engineering and senior project engineer for three private shipyards. Mr. Posthumus was not a fact witness with respect to JOs 7M03 and 7M04. In June 1999 Mr. Posthumus: (a) described each alleged defect, error, omission, conflict, and ambiguity in the JO specifications and drawings, line-by-line; (b) concluded that those deficiencies caused CGI to incur additional manhours and delayed CGI's performance of B/ALTs 215B, 219C and 217C; and (c) did not identify any specific, contemporaneous records to show CGI's planned sequence of work for performing B/ALTs 215B, 219C and 217C, and to substantiate what additional work and what period of delay arose from each of the deficient specification and drawing requirements. (Ex. A-5)

19. CGI's consultant Terry Jenkins was not a fact witness with respect to JOs 7M03 and 7M04. In May 1997 Mr. Jenkins tabulated the total budgeted, actual and variant (or "delta") manhours for (a) each of JOs 7M03 and 7M04, (b) the halon fire extinguishing system installation on the four LCUs, and (c) the main engine replacement on LCUs 1635, 1652 and 1666, *inter alia*. Mr. Jenkins did not: (i) identify the source or derivation of planned and budgeted manhours, (ii) identify any specific, contemporaneous CGI documents in the appeal record which substantiate the manhours he compiled, and (iii) correlate manhours with any of the alleged deficiencies in Navy specifications and drawings that impacted CGI's performance of B/ALTs 215B, 219C and 217C. (Ex. A-6)

20. Respondent's Stephen Mucciolo is employed by the Naval Sea Systems Command in Arlington, VA, and has 22 years' experience in new construction and ship repair, including planning, estimating, production, quality assurance, testing and operational experience. Mr. Mucciolo was not a fact witness with respect to JOs 7M03 and 7M04. In October 1999 Mr. Mucciolo denied each alleged defect, error, omission, conflict, and ambiguity in the JO drawings, sought to refute Mr. Posthumus' findings and opinions, and, where the Navy admitted deficiencies, asserted that they had been equitably adjusted by contract modifications. (Ex. G-1)

21. *Summary of Findings*. Based on the foregoing findings of fact, the Board finds that the alleged deficiencies and constructive changes under JOs 7M03 and 7M04 can be classified as follows:

conclusory, and do not correlate any specific WIs, drawings, dates, and additional design and production work with any alleged deficiency. (App. reply br., exs. 1-4)

(a) The allegations addressed in findings 12, 12(a)(1), (2), (6), (7); 12(b); 12(b)(3) through (6), (10), (11); 12(c)(1); 12(d)(1), (3); 12(e); 12(f)(1); 13(a)(1), (2), and (4) are frivolous or are not proven to be deficiencies or changes in the Navy information.

(b) The allegations addressed in findings 12(a)(4); 14(c)(1), (2) and (10) are valid deficiencies, but JO modifications released respondent's liability therefor in whole or in part.

(c) The allegations addressed in findings 12(a)(3), (5); 12(b)(1), (2), (7), (8), (9), (12), (13); 12(c)(2); 12(d)(2), (4); 12(f)(2), (3), (4); 12(g); 12(h)(1), (2); 12(i); 12(j)(1),(2); 12(k); 13(a)(3); 13(b)(1) through (5); 13(c); 14(a); 14(b); 14(c)(2) and (10) as to the unreleased JO; 14(c)(3) through (9), (11); 15; 16, and 17 may be valid deficiencies or changes, but the record either does not show which specification or drawing requirement was deficient or changed or does not show that such deficiencies caused delay or additional work, and the time period of such delays.

#### DECISION

#### I.

Respondent argues that the statements and opinions of Feite Posthumus should be accorded no probative weight because Mr. Posthumus is not a fact witness, but rather is a consultant retained years after the fact, and the Board has not accepted him as an expert witness. Respondent does not challenge Mr. Posthumus' qualifications, but objects to his statements and conclusions as unsupported factual assumptions and theoretical generalizations without documentary foundation in the record.

Although CGI has not formally proposed that the Board accept Mr. Posthumus as an expert in shipbuilding and repair generally, or in engineering design and drawings, the nature of his affidavit is such that we treat its submission as we would the offer of expert testimony. We conclude that Mr. Posthumus' testimony, as well as that of respondent's affiant, Stephen Mucciolo, can assist us in understanding the evidence and in deciding entitlement. *See Orbital Sciences Corp.*, ASBCA No. 50171, 00-1 BCA ¶ 30,860 at 152,338.

#### II.

CGI contends that the Navy specifications and drawings for B/ALTs 215B, 219C and 217C, the main engine replacement, main lighting modifications, and halon fire-fighting installation, respectively, were deficient, and that such deficiencies delayed and impacted CGI's performance of the JOs' work items for the halon system, main engine replacement, and other WIs.

To establish a constructive change based on defective Government specifications or drawings, CGI has the burden of proving not only the defectiveness of the design or specifications, but also that the alleged defective specifications were the cause of the additional work claimed. *See Die-Matic Tool Co.*, ASBCA No. 31185, 89-1 BCA ¶ 21,342 at 107,603, *aff'd*, 889 F.2d 1100 (Fed Cir. 1989) (table) (the alleged change did not result in "any increase or decrease in the cost of, or in the time required for performance of the contract, and thus there was no change"); *Maitland Bros. Const. Co.*, ASBCA No. 24476, 86-3 BCA ¶ 19,172 at 96,958, *recon. den.* 87-3 BCA ¶ 20,194, *aff'd* 20 Cl. Ct. 53 (1990). Pursuant to clause H-4 of the JOs, CGI also had to give respondent notice of each specification or drawing deficiency, with the information required by that clause.

CGI cites as "facts" statements in its 1992 REA and its 1994 certified claim. Bare allegations are not evidence, and claim letters are not proof of disputed facts. *See Burbank Sanitary Supplies, Inc.*, ASBCA No. 43477, 93-1 BCA ¶ 25,397 at 126,489; *James Reeves Contractor, Inc.*, ASBCA No. 33744, 88-1 BCA ¶ 20,426 at 103,317. Even uncontradicted expert opinion testimony is not conclusive if it is intrinsically nonpersuasive. *See Sternberger v. United States*, 401 F.2d 1012, 1016, 185 Ct. Cl. 528, 535-36 (1968).

Certain of CGI's claim allegations were frivolous or did not state deficiencies or changes (finding 21(a)). Other CGI claim allegations were valid, but JO modifications released respondent's liability therefor (finding 21(b)). The balance of CGI's claim allegations, though *prima facie* deficiencies or changes, CGI did not substantiate by proving that such deficiencies caused delay or additional work, and the time period of such delays (finding 21(c)).

The Board is aware that the 68 alleged deficiencies and changes addressed in findings 12-16 are "just examples" of the more numerous allegations in appellant's March 1994 claim. We have not prolonged this decision by addressing all the remaining items, because appellant did not substantiate what specific work and what delay period resulted from any of them (findings 12(k), 13(c), 14(c), 17). Appellant's claims contain the fatal defect of *damnum absque injuria*. *See Coley Properties Corp. v. United States*, 593 F.2d 380, 384, 219 Ct. Cl. 227, 234 (1979); *General Dynamics Corp.*, ASBCA No. 13885, 73-2 BCA ¶ 10,160 at 47,808. We hold that appellant has failed to prove entitlement.

#### III.

Appellant's second issue – whether its methodology to analyze damages resulting from such alleged design defects was proper and reasonably approximated the costs appellant incurred therefrom – is premature, since the Board is to decide entitlement only

in this appeal. We decline to issue an advisory opinion on that quantum issue. *See Lockheed Martin Corp. v. Walker*, 149 F.3d 1377, 1381 (Fed. Cir. 1998) (error to issue a statement on the appropriate measure for damages in an entitlement proceeding). In any event, such issue is moot in light of our holding on entitlement.

We deny the appeal.

Dated: 17 August 2000

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

(Signatures continued)

I concur

I concur

MARK N. STEMPLER Administrative Judge Acting Chairman Armed Services Board of Contract Appeals EUNICE W. THOMAS Administrative Judge Vice Chairman Armed Services Board of Contract Appeals

I certify that the foregoing is a true copy of the Opinion and Decision of the Armed Services Board of Contract Appeals in ASBCA No. 47754, Appeal of Cascade General, Inc., rendered in conformance with the Board's Charter.

Dated:

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