ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeals of --	)	
	)	
Lockheed Martin Corporation	)	
d/b/a Sanders	)	ASBCA Nos. 50464, 51350
	)	
Under Contract No. N00019-86-G-0186	)	

APPEARANCE FOR THE APPELLANT: Norman J. Marsh, Jr., Esq.
Company Counsel
Nashua, NH

APPEARANCES FOR THE GOVERNMENT: Thomas B. Pender, Esq.
Chief Trial Attorney
William F. Manley, Esq.
Trial Attorney
Defense Contract Management Command
Boston, MA
Debra E. Berg, Esq.
Trial Attorney
Defense Logistics Agency
E. Hartford, CT

OPINION BY ADMINISTRATIVE JUDGE COLDREN

This appeal was taken from a final decision of the contracting officer asserting a Government claim for defective pricing in the amount of $496,427 plus interest in pricing orders for five circuit cards being retrofitted for the Navy AN/ALQ-126B Countermeasures System. After the appeal was filed and at the Government's insistence that collection actions would be taken unless appellant paid the claimed amounts before the litigation concluded, appellant paid the $496,427 plus interest claimed by the Government. Appellant then filed a certified claim for the $496,427 plus interest. The contracting officer issued a final decision denying this claim. Appellant appealed that final decision. At the request of both parties, the Board consolidated the two appeals.

The Government alleges three failures to provide accurate, complete and current cost and pricing data. The first is that appellant failed to provide required cost data to estimate the labor hours to assemble five circuit cards being furnished to be retrofitted into each of 592 counter measure systems under the contract. All prior contracts as well as the orders under this contract had used a composite or average performance factor (measure of efficiency) based upon all of the 40 to 45 circuit cards included in each counter measure

system not just the five being replaced under these orders to estimate the number of hours to assemble the circuit cards. The Government alleged that the performance factor should have been based only on the five circuit cards being furnished. Appellant responded that no cost data existed indicating the five card specific performance factor, that all prior contracts had been negotiated using the composite performance factor, and that neither party knew prior to agreement on price that there would be significant differences between the composite and the five card performance factors.

The second allegation of defective cost data involves program administration hours. The Government alleges that the appellant failed to submit cost data indicating that appellant was incurring these program administration hours at half the rate proposed in appellant's cost and pricing proposal. Appellant replies that the Government was provided cost data providing the total program administration hours incurred from the inception of performance until shortly before agreement on price. The Government contends that this disclosure was inadequate because appellant did not point out the impact of this data.

The third allegation of defective pricing concerns the labor hours for testing semiconductors to be incorporated into the circuit cards. Semiconductors which had previously been tested under prior orders and contracts had been transferred from inventory for use in manufacturing the circuit cards under the orders at issue and many of these were not re-tested. The Government alleges that cost data should have been furnished which indicated that the testing of semiconductor labor hours would be less due to these pre-tested semiconductor transfers. Appellant contends in response that it did furnish data indicating that semiconductors were being used from its inventory but that no data existed which would indicate which semiconductors did not need to be re-tested.

The Government also points to the estimate for the number of semiconductors to be tested as erroneously indicating 30% more semiconductors to be tested than were to be used. Appellant responds that the Government pointed to no cost data, which had not been furnished, apparently arguing that an estimate is a prediction not cost data.

Two days of hearing were held in Nashua, New Hampshire.

FINDINGS OF FACT

A. Contract and Dispute Background

1. The Government issued Orders YS28 and YS39 to appellant under Basic Ordering Agreement (BOA) No. N00019-86-G-0186 (1st stip. ¶ 1; tr. 1/47). These orders were for a total of 592 retrofit kits, each retrofit kit consisted of five electronically erasable programmable read only memory (EEPROM) cards each for replacement of the same five ultraviolet programmable read only memory (UVPROM) cards for the U.S. Navy aircraft AN/ALQ-126B Deceptive ECM system (*id*.; tr. 1/123). The UVPROM was becoming obsolete and cards containing UVPROM had to be removed to be reprogrammed on a mission per mission basis while ones with EEPROM did not (tr. 1/123). Order YS28 was issued 1 September 1989 for a not to exceed price of $4,200,000 and Order YS39 was issued 20 December 1989 for a not to exceed price of $1,800,000 (1st stip. ¶ 2; tr. 1/49-50). Two orders were issued because the funding for the first order was insufficient to cover the cost of all 592 retrofit kits (*id*.).

2. The orders for the retrofit kits were placed under CLIN 0001 of the BOA listed as "Change kits ... to the ... AN/ALQ-126B... delivered by the contractor to the Government." (1st stip. ¶ 4). The definitization of the orders was left for negotiations, which were concluded on 26 September 1990 (1st stip. ¶ 3).

3. The AN/ALQ-126B is an electronic countermeasures set which is installed in Navy aircraft to overcome enemy radar (tr. 1/47-48, 2/71, 72).

4. Appellant began production of the retrofit kits when Orders YS28 and YS39 were issued in September and December of 1989 (tr. 1/50).

5. On 19 February 1990, appellant submitted a cost and pricing proposal in the amount of $5,046,934 to perform Orders YS28 and YS39 (R4, tab 33; tr. 1/51).

6. A Government proposal evaluation team immediately reviewed appellant's cost and pricing proposal in preparation for negotiations (tr. 1/51, 120). This team consisted of a pricing analyst, an auditor, Paul McGrath, from the Defense Contract Audit Agency (DCAA), a Government engineer, a Government negotiator, Al Barrett, and a contract specialist, Richard Perrier (tr. 1/46, 51). The Government engineer, Donald Katz, reviewed appellant's proposal as to the number of labor hours proposed as well as the part numbers and/or materials offered both as to quantities and as to whether or not they were needed (tr. 1/120). However, he did not participate in the negotiations (tr. 1/123-24); nor did the Government auditor (tr. 2/29, 53). The pricing analyst did not testify.

7. The Government contract specialist Perrier had been assigned full-time to appellant's factory for approximately 18 years (tr. 1/43); and was the administrative contracting officer (ACO) for these orders as well as the prior orders for AN/ALQ-126B countermeasures sets known as lots 71 and 4 (tr. 1/45, 65-66). The Government engineer Katz had been assigned full-time to this program since the late 1970's as the Navy's eyes and ears in appellant's factory spending some of his time on the production floor but a lot in testing (tr. 1/77, 103, 119, 165-66, 2/144, 149-50). Mr. Katz was totally familiar with this program and its history (tr. 1/103, 144-45, 149-50). He submitted monthly status reports, evaluated engineering changes, monitored test programs, and commented on appellant's manufacturing procedures and plans (tr. 1/119, 2/149-50). He was the technical reviewer of appellant's proposal for these orders (tr. 1/103, 119, 2/144).

8. In August 1990, negotiations commenced (tr. 1/51-52). They were completed on 26 September 1990 (*id*.). Al Barrett represented the Government during these negotiations but retired at the conclusion of the negotiations (tr. 1/49-50, 52, 77, 2/144). Mr. Barrett did not testify at the hearing of this appeal. His supervisor, the Government contract specialist Perrier, who did testify, had not participated in the negotiations. He replaced Mr. Barrett, who had retired, to write the negotiation memorandum and complete the drafting of the contract modification to definitize the pricing of the orders. (Tr. 1/52-54). Thus, none of the Government witnesses who testified was present during price negotiations.

9. As of the 26 September 1990 agreement on price, appellant had completed performance on orders of AN/ALQ-126B systems including the five EEPROM circuit cards along with the other approximately 40 circuit cards for a prior order known as Lot 71 (supp. R4, tab 52 at Interrogatory & Response, ¶ 2f; tr. 1/78-80, 166-67, 2/73, 122, 213-16). It had also completed 72% of another order known as Lot 4 with the five EEPROM circuit cards and the other 40 plus cards including delivery of 151 completed units (supp. R4, tab 52 at Interrogatory & Response, ¶ 2f; tr. 1/80, 2/122, 181). It had completed 99% of the circuit cards as well 98% of the testing of these cards but had not assembled the remainder of the cards into the units and tested them prior to delivery which could have required re-work of the circuit cards (supp. R4, tab 52 at Interrogatory & Response, ¶ 2f; tr. 1/130, 2/181). Lot 4 followed Lot 71 (tr. 1/64-65, 167). Lot 4 had 200 units while Lot 71 had 71 (tr. 1/64-65).

10. On 27 September 1990, appellant sent its certificate of current cost or pricing data (R4, tab 19; tr. 1/55). In its certificate, appellant listed some of the data it was relying upon as cost or pricing data and stated that the list was not complete. The Government attorney in reviewing the certificate advised the Government contract specialist that this additional language was ambiguous (tr. 1/56-57, 2/79, 132). In late October 1990, the appellant revised this cost and pricing certificate to delete the listing of the data appellant was relying upon (R4, tab 20; tr. 1/56-58, 2/79, 132). The contract modification was then signed by the parties (tr. 1/57).

11. The DCAA commenced a post-award audit in September of 1993 (tr. 1/58). The DCAA determined that the labor hours incurred in assembling the circuit cards, semiconductor testing, and the administration of the project were much lower than appellant proposed in its cost and pricing proposal (tr. 1/125). DCAA requested that the Government engineer Katz determine what factors caused the underrun in assembly, semiconductor testing, and project administration hours (*id*.). Mr. Katz then wrote the appellant and requested that appellant explain what caused the underrun in hours for these various items (tr. 1/126). The audit was completed in August of 1994 (tr. 1/58).

12. The DCAA prepared a draft audit report, which was provided to appellant in June of 1994 (tr. 1/58-59). In September of 1995, the Government's contract specialist was authorized to proceed with discussions of the audit report with appellant (tr. 1/59-60).

13. The audit report was discussed for several months by the parties (tr. 1/60-62). The Government's contract specialist advised the appellant that a final decision of the contracting officer would be issued unless the appellant presented new information (tr. 1/62). The contracting officer's decision dated 11 October 1996 was then issued asserting defective pricing in the total amount of $496,427 against the appellant (R4, tab 1; tr. 1/63). Appellant filed a timely appeal with this Board which was docketed as ASBCA No. 50464.

14. By letters dated 5 and 26 November 1996, appellant notified the Government that it intended to appeal the Government's claim and requested a Deferment of Collection of the disputed defective pricing claim (app. supp. R4, tabs 138, 139; tr. 1/71). The Government in a letter dated 7 March 1997 advised appellant that it would not grant a deferment (app. supp. R4, tab 137; tr. 1/71).

15. By a letter dated 3 April 1997, the Government informed appellant that it would accept payment of the debt in installments over a period not to exceed three years (app. supp. R4, tab 136; tr. 1/72). The letter threatened that if appellant did not pay: (a) it would enter appellant's name on a list of contractors indebted to the Government so that appellant would receive no payments owed by the Government until this debt was paid; (b) report appellant to a commercial credit reporting bureau; (c) forward the debt to the U.S. Treasury for offset; and (d) either hire a professional collection service or have the Justice Department commence collection litigation.

16. By a letter dated 8 April 1997, appellant again requested deferment of payment since it had appealed the defective pricing final decision of the contracting officer and a hearing on that appeal had been scheduled (app. supp. R4, tab 135). The Government replied in a letter dated 10 June 1997 that deferment was denied and that either payment or an installment payment agreement must be provided (app. supp. R4, tab 133).

17. By a letter dated 2 July 1997, appellant requested reconsideration of the Government's denial of its request for deferment (app. supp. R4, tab 131). The Government refused reconsideration in a letter dated 18 July 1997 (app. supp. R4, tab 130).

18. Appellant sent the Government a proposed installment payment plan and financial statements as an attachment to a letter dated 15 August 1997 (app. supp. R4, tab 129). It pointed out that it expected the Government to refund any payment plus interest if appellant prevailed in its appeal to this Board. The Government responded in a letter dated 28 August 1997 attaching a proposed promissory note with installment payments for appellant to sign (app. supp. R4, tab 128).

19. Appellant sent a promissory note dated 12 September 1997 signed by its president to the Government which included paragraphs 1, 7 and 8 indicating that appellant's promise to pay was subject to further determination by this Board and requiring re-payment of any monies in excess of those determined by this Board due the Government in this appeal and stating that appellant's furnishing of the note does not admit liability of the amounts claimed by the contracting officer (app. supp. R4, tab 126; tr. 1/72).

20. On 14 October 1997, the Government acknowledged that appellant had made a payment of $69,000, which was applied only to interest due, and the cost of administering the promissory note (app. supp. R4, tab 123; tr. 1/72-73).

21. The interest rate payable under the promissory note was 9% as contrasted with the corporate borrowing rate of 6% payable by appellant (2nd stip. ¶¶ 1, 9). Without consulting counsel or advising the contracting officer or Government counsel, appellant's financial personnel decided that appellant would pay off the promissory note to reduce the interest appellant was paying (2nd stip. ¶¶ 3, 4, 8, 9; tr. 1/74).

22. By a check dated 18 November 1997, appellant paid the Government $706,664.17 (app. supp. R4, tab 120). This check had no notations, such as reservation of rights or payment under protest (*id*.; 2nd stip. ¶ 6; tr. 1/74). By a letter dated 9 December 1997, the Government acknowledged payment in full of the promissory note (app. supp. R4, tab 119).

23. By a letter dated 30 January 1998, appellant filed a claim with the contracting officer seeking a refund of the monies it had paid the Government for its defective pricing claim and requested a final decision (app. supp. R4, tab 117). Attached to the 30 January 1998 letter was a certification of the claim (*id*.). The contracting officer by a final decision dated 9 February 1998 denied appellant's claim (app. supp. R4, tab 116). Appellant filed a timely appeal, which was docketed with this Board as ASBCA No. 51350 (app. supp. R4, tabs 115, 116).

B. Circuit Card Assembly Labor

24. Appellant determined the number of standard hours to perform a task by using industrial engineering time studies (R4, tab 33 at 4-8, ¶ 5.1).

25. Appellant measured how efficiently it performed each task by comparing how many hours it took to perform that task with the number of standard hours described in finding 24 (R4, tab 33 at 4-9, ¶ 7.0). This efficiency was determined by dividing the number of standard hours into the number of actual hours to come up with a performance factor (R4, tab 33 at 4-9, ¶ 7.0; tr. 1/63, 141-42, 2/181-82, 208-09).

26. Appellant recorded the number of labor hours in assembling each circuit card on a route card listing the number of hours each type of employee worked on that circuit card (1st stip. ¶ 7; tr. 2/93-95, 113-14, 121-22, 221-22). The data entered upon each route card was gathered and entered into appellant's financial accounting system (tr. 1/117-18, 2/94, 122-23).

27. Efficiency in the form of a performance factor historically was measured as a weighted composite of all circuit cards as it was for other types of components (tr. 1/92, 2/90-91, 182). It had never previously been measured for each model of circuit card (tr. 1/92, 121, 167-68, 2/218). Appellant claimed it was too expensive to measure to that level of detail in evaluating its efficiency (tr. 2/183).

28. Appellant's prior bids and proposals used these composite standard performance factors as a standard practice without Government objection (tr. 2/182-84). Appellant had never before bid a card specific performance factor (tr. 2/183-84). The Government engineer admitted he was wrong when he claimed that appellant had done so on two prior occasions (R4, tab 6(e) at 18 February 1994 letter, ¶ 3(c), tab 10(e), ¶ 3(c); tr. 1/167-68, 195-96).

29. The Government had never requested card specific performance factor data for this or any other procurement (tr. 1/93, 161-62, 2/92, 98, 184), nor did appellant furnish such data prior to agreement on price (tr. 1/66-67, 2/91, 138). No document existed indicating a card specific performance factor for any prior procurement nor was such a figure for a performance factor in appellant's computer data base as it had never been computed prior to agreement on price for these orders (tr. 1/95-96, 139, 162-64, 194-95, 2/44, 100, 189, 193-94, 209-11, 217-18). This appeal involves the first instance where the Government raised the issue of circuit card specific performance factor data (tr. 2/101). The Government's contract specialist testified that he would have sought a lower performance factor had he known the card specific performance factor data for Lot 4 discussed *infra* (tr. 1/67). However, he did not participate in the price negotiations (finding 8).

30. Neither party appeared to recognize that the efficiency or performance factor for the five EEPROM circuit cards would differ significantly from the composite performance factor for the 40 plus circuit cards (tr. 1/174-75). The Government engineer claims that appellant could have generated a card specific performance factor if appellant had thought to do so (tr. 1/139, 202-03). It also appears that the Government similarly could have done so if it had thought to do so (tr. 1/138-39, 164-65).

31. In its cost and pricing proposal dated 19 February 1990, appellant estimated the number of labor hours to assemble each of the five EEPROM circuit cards by multiplying the standard hours determined under industrial engineering time studies for that circuit card by the composite performance factor for all circuit cards (R4, tab 33 at 4-8 to 4-9; tr. 1/63-64, 169-70, 2/181-82). It used the composite performance factor in the amount of 2.28 for the last completed order, Lot 71, finished in August of 1989, for all of the circuit cards not just the five EEPROM circuit cards being retrofitted under the orders at issue (R4, tab 33 at 4-8 to 4-9; tr. 1/64, 121, 142, 2/89-92, 180-81, 200-08). It used the standard hours determined separately for each of the five EEPROM cards in a set, then multiplied each card's standard hours by 2.28 and then totaled the products to estimate the total number of assembly hours for each set, and then multiplied by 592 sets to estimate the total number of assembly labor hours of 16,349 (R4, tab 33 at 4-8 to 4-9).

32. The Government engineer reviewed the proposed performance factor for manufacturing labor in appellant's cost and pricing proposal (tr. 1/120). By a memorandum dated 26 February 1990, the Government engineer Katz requested that appellant provide the latest performance factor data for the orders under Lot 4 (R4, tab 31, ¶ 1; tr. 1/159-60). Appellant furnished performance factor data which indicated that the composite performance factor for all circuit cards for Lot 4 was 2.16 as of 2 February 1990 (R4, tab 6(f), tab 30; tr. 1/160). The Government engineer adjusted the performance factor of 2.16 to 2.38 because the standard hours for Lot 4 were different (tr. 1/121, 142-43).

33. In a memorandum dated 16 March 1990, the Government engineer approved appellant's proposed composite performance factor of 2.28 (R4, tab 25(f), ¶ 5b(1)(a)). The Government engineer stated:

> The 2.28 factor was the weighted average actual of all circuit cards built for the 71 lot, task ELT. The standards applied under task ELT were, however, 6% higher than the current standards though the actual assembly operations were the same. This means that with respect to the proposed standard hours, the ELT actual performance factor was 2.40. Recent Lot IV data . . . when applied to the latest standards, supports a factor of 2.44. Based on this data, I project a factor of 2.25 - 2.40 for

> this job. I, therefore, consider the proposed 2.28 factor reasonable.

(*Id.*)

34. By a letter dated 21 September 1990, appellant described how a new soldering technique would affect the assembly costs for each of the five EEPROM cards (R4, tab 24). It also stated that attached were a weekly special labor report as well as a weekly project cost report for the week ending 7 September 1990 to update the contract requirements for the submission of data but without any discussion as to what was contained in these reports (*id.*; tr. 2/106, 109-11). These attached reports indicated what labor hours were incurred for each circuit card plus the labor hours incurred to date for each card under Orders YS28 and YS39 (R4, tab 24(c), tab 24(d); tr. 1/102, 170-73, 2/137, 185-89). The Government's contract specialist complained that the significance of this data was not brought to its negotiators' attention (tr. 1/110-11). The DCAA auditor admitted that the actual hours to assemble each circuit card were available to the Government prior to agreement on price (tr. 2/41, *see also* tr. 2/137-38).

35. Either contracting party could have evaluated whether the use of standard hours and a performance factor of 2.28 produced a reasonable estimate of the hours to assemble a circuit card by dividing the total hours to assemble those cards indicated in the weekly reports described in finding 34 by the number of cards assembled and comparing the actual number of hours to make a card with the estimated hours to assemble that card in appellant's cost and pricing proposal (tr. 1/96-97, 145-47, 2/25-28). The record does not indicate that either party did this prior to agreement on price (tr. 1/97). However, the Government engineer in the post-performance audit did so for Lot 4 and determined that the actual assembly hours per set of five EEPROM cards for Lot 4 was 21.7 as contrasted with the 28.7 hours per Lot 4 set of five cards using the composite performance factor data (tr. 1/144-47, *see also* tr. 2/26).

36. By a memorandum, the administrative contracting office memorialized the price negotiation concluding with agreement on price on 26 September 1990 by indicating that the parties had agreed on manufacturing labor costs considerably lower than both what appellant proposed and the Government's price analyst recommended (R4, tab 21 at 3). The memorandum concluded that the price settlement reached was fair and reasonable to both sides. It further stated:

> This is the first and only effort involving these retrofit kits. However, since the total effort is to build 2,960 Circuit Cards the contractor proposed this using his history for building similar circuit cards on the same program. The technical reviewer, who was totally familiar with the history of this

> program, used the history provided to evaluate this bid and provide his recommendation.

(*Id.* at 5, ¶ 6)

37. By a memorandum dated 10 December 1993, DCAA requested that the Defense Logistics Agency (DLA) have the Government engineer Katz determine why appellant incurred many less hours to assemble the EEPROM circuit cards (9,900 hours) than appellant proposed (16,349 hours) in its cost and pricing proposal (R4, tab 16; *see also* tab 15). By a memorandum dated 3 January 1994, the Government engineer requested that appellant's contract administrator provide information as to what performance factor was realized on the two orders at issue, how it was computed, and indicate what changes in method of assembly, if any, contributed to the significant underrun in manufacturing labor hours and cost (R4, tab 14). Appellant replied in a letter dated 24 January 1994 that actual assembly hours were 9,898, standard hours were 7,143, and that the performance factor was 1.38 calculated by dividing actual assembly by standard hours (R4, tab 13; tr. 1/139, 2/211). The letter also indicated no changes in the method of assembly caused the underrun in assembly hours.

38. By a letter dated 25 January 1994, the Government engineer Katz requested that appellant explain why the performance factor of 1.38 was so much lower than the 2.17 realized for the circuit cards assembled for the order for Lot 4 (R4, tab 12). He indicated that he did not agree that there were no changes in the method of assembly that affected the underrun.

39. The Government engineer in a memorandum dated 16 February 1994 indicated that the standard hours did not contribute to the underrun in assembly hours and that the composite performance factor of 2.28 was slightly lower than the composite performance factor for the order under Lot 4 (R4, tab 10(d), ¶ 4b(1)). He indicated that appellant's explanation for the much lower actual performance factor of 1.38 was unsatisfactory (*id.*).

40. By a letter dated 16 February 1994, appellant explained to the Government engineer that the performance factor for Lot 4 was 2.17 if computed as an average for all 40 plus circuit cards but was 1.66 if computed using just the five EEPROM circuit cards (R4, tab 11; *see* tr. 1/135-38, 2/216-17). It further pointed out that the learning curve due to continuous production of these cards caused the reduction in the card specific performance factor from 1.66 to 1.38 (*id.*). This letter was the first indication that the card specific performance factor was lower than the composite one (tr. 1/95-96, 134, 194, 2/184-92) and was what initiated the Government's defective pricing claim (tr. 1/96, 128, 194).

41. By a letter dated 18 May 1994, DCAA advised appellant based upon the Government engineer's report that appellant had failed to provide complete and accurate

data when it did not provide the card specific performance factor for Lot 4 of 1.66 for the labor to assemble the EEPROM circuit cards and furnished instead the inaccurate composite performance factor of 2.28 for the 40 plus circuit cards (R4, tab 10). Appellant replied in a letter dated 6 June 1994 that its bidding practice was to always use composite rather than card specific performance factors because the assembly of each of the various cards had an effect upon the others (R4, tab 8). It also pointed out that Lot 4 involved many more circuit cards than the orders at issue here and that Lot 4 was not complete at the time of agreement on price (*id*.).

42. By an audit report dated 19 August 1994, DCAA took the position that appellant had failed to furnish complete and accurate cost and pricing data before agreement on price when it furnished composite rather than card specific performance factor information concerning assembly labor to make the EEPROM circuit cards (R4, tab 6). The report erroneously also claimed that appellant had used card specific performance factors on two prior contracts (*id*. at 5; finding 28). The report was sent to appellant several years later as an attachment to a letter dated 7 February 1996 from the ACO (R4, tab 5).

43. By a letter dated 16 August 1996, appellant advised the contracting officer that card specific performance factors had never been used by the parties to estimate assembly labor both before and after the negotiations of the pricing for these orders (R4, tab 4). The letter pointed out that assembly labor performance factors were affected by all of the cards being assembled not just that single card or the five EEPROM cards (*id*.). It pointed out that the composite performance factor was a method of estimating utilized by both parties and that the audit report was an attempt after the fact to change the estimating method (*id*.).

44. By a final decision dated 11 October 1996, the contracting officer asserted a defective pricing claim against appellant claiming that the failure of appellant to compute and disclose a new card specific performance factor for the labor to assemble the EEPROM circuit cards rather than provide the composite performance factor regularly computed and reported for all of the 40 plus cards ordered under Lot 4 was defective pricing (R4, tab 1). He sought costs of $318,727 plus profit of $43,602 (13.68%) for a total of $362,329 (R4, tab 6(a) at 4, 6, tab 6(b) at 8).

C. Program Administration Labor

45. Program Administration includes establishing and maintaining the performance measurement baseline, preparing and analyzing monthly cost/schedule reports concerning performance, and negotiating firm budgets with the functional groups (R4, tab 33 at 4-63). In its 19 February 1990 cost and pricing proposal, appellant proposed 1365 hours for program administration (65 hrs/mo x 21 months) estimated from historical data from prior spares orders (*id*.; app. supp. R4, tab 111; tr. 1/82, 2/50, 80, 125, 127-28, 155-58). The labor code used by appellant for program administration was "AHE ADM" (tr. 1/81-82, 2/51, 158). The work breakdown structure code was "MHXWB" (tr. 1/81-82, 2/51, 158).

46. The first spares order referred to in appellant's cost and pricing proposal is Task "JEF" (R4, tab 33 at 4-63; supp. R4, tab 61). By far the highest numbers of hours incurred in performance of Task "JEF" were in the second year (quarters 5-8) (supp. R4, tab 61). The second and third spares orders referred to were Tasks "MGB" and "MPB" (R4, tab 33 at 4-63; supp. R4, tabs 62, 63). By far the highest numbers of hours incurred in performance of Tasks "MGB" and "MPB" were in the fourth quarter, which was after the eighth month when agreement on price occurred for the orders at issue here (supp. R4, tabs 62, 63). Moreover, substantial hours were incurred in the second year of Tasks "MGB" and "MPB" (*id*.). Thus, we are unable to conclude or agree with the DCAA auditor (tr. 2/14-25) that the prior spare order tasks should have alerted appellant that program administration hours would *not* grow after agreement on price.

47. By a letter dated 30 July 1990 and attachments, appellant submitted Statement of Position No. 2 regarding its cost and pricing proposal (R4, tab 26). Attached was a weekly labor report dated 29 June 1990 showing actual labor incurred by labor code and work breakdown structure (R4, tab 26(c); tr. 2/76, 81). This weekly labor report provided that appellant had incurred 92.9 hours for program administration since the inception of the project (R4, tab 26(c) at 4; tr. 1/84-85, 2/51, 81-83). Thus, six months into performance of the orders appellant had incurred 92.9 hours divided by 6 months or 15 hours per month (tr. 1/85, 2/51-52, 82-83). The Government engineer admitted that appellant disclosed this but he claimed that appellant should have pointed out its impact (tr. 1/192-94).

48. The Government audit team reviewed the weekly labor report (R4, tab 26(c)) submitted with appellant's Statement of Position No. 2 (R4, tab 25(a)). It noted that for administration related to manufacturing, appellant was incurring only half of the hours proposed in its cost and pricing proposal and recommended to the Government negotiator that it propose a reduction in line with what had already been incurred (*id*. at 7; tr. 1/112-14, 2/47-49, 76-77; app. supp. R4, tab 104). Thus, the Government used appellant's weekly labor reports to propose reductions in price for another administration function, manufacturing.

49. By a letter dated 21 September 1990 and attachments, appellant submitted current data concerning its cost and pricing proposal (R4, tab 24). Attached was a special labor report dated 7 September 1990 (R4, tab 24(d)). This weekly labor report provided that appellant had incurred 164.2 hours for program administration since the inception of the project (*id*. at 9). Thus, eight months into performance of the orders appellant had incurred 164.2 hours divided by eight months or approximately 20 hours per month as contrasted with the 65 hours per month proposed in appellant's cost and pricing proposal (finding 45; tr. 1/69, 83-84, 156, 2/52, 126, 158-59). Appellant did not point out this underrun to the Government nor did it consider this something it had to point out (tr. 2/131, 135). It knew from its prior history of completed spare order tasks that program

administration hours never were evenly incurred and still expected to incur the 1,365 hours it proposed (tr. 2/156-58, 244-45).

50. The Government's contract specialist testified that he did not know that appellant had averaged 20 hours rather than the proposed 65 hours per month up to the time of agreement on price and had he known this he would have used this information to reduce the order price (tr. 1/69-70). However, he did not participate in the price negotiations (finding 8).

51. The DCAA in a report dated 10 December 1993 noted that appellant had incurred only 415.2 hours for program administration as contrasted with the 1,365 hours proposed in appellant's cost and pricing proposal (R4, tabs 16, 16(a)). For the 21-month performance period, appellant incurred 415.2 hours for program administration divided by 21 months for a monthly rate of approximately 20 hours per month (*see* finding 45).

52. By a memorandum dated 10 December 1993, DCAA requested that DLA have the Government engineer Katz determine what changes, if any, occurred in appellant's program office which caused appellant to incur many less hours than appellant proposed in its cost and pricing proposal (R4, tab 16; *see also* tab 15). By a memorandum dated 16 February 1994 to DLA, the Government engineer stated that the average hours incurred for program administration were 20 hours per month as contrasted with appellant's proposed 65 hours per month (R4, tab 10(d)). The memorandum admitted that this 20-hour per month information was available during the time of negotiations but that appellant's estimate was too high (*id.*).

53. DCAA in a report dated 18 May 1994 took the position that the parties negotiated a 65 hours per month rate for program administration in error because they failed to consider that only 20 hours per month were incurred from project inception through agreement on price in late September 1990 (R4, tab 10; finding 8). Appellant responded in a letter dated 6 June 1994 that program administration costs were not based upon incurred costs but upon prior project costs (R4, tab 8). They historically were never incurred uniformly over the performance period (*id.*). In fact, the Government engineer testified that he thought the number of program administration hours would substantially increase as appellant was starting delivery of retrofit kits at the time of agreement on price (tr. 1/156).

54. In an audit report dated 19 August 1994, DCAA asserted defective pricing because the historic data for project administration was never updated at the time of agreement on price (R4, tab 6 at 2). Appellant commented on the audit report in a letter dated 16 August 1996 that appellant had fully disclosed all hours incurred for program administration at the time of agreement on price and the fact that all hours proposed would not be incurred was not known because these hours historically were not incurred uniformly over contract performance (R4, tab 4 at 2).

55. By a final decision dated 11 October 1996, the contracting officer claimed that appellant had not disclosed prior to agreement on price that it was incurring hours for program administration at a much lower rate than proposed (R4, tab 1 at 2). He sought costs of $33,328 plus profit of $4,559 (13.68%) for a total of $37,887 (R4, tab 6(a) at 4, 6, tab 6(b) at 8).

D. Semiconductor Testing Labor

56. Appellant's cost and pricing proposal dated 19 February 1990 indicates that all semiconductor parts will be inspected and tested prior to being assembled on the EEPROM circuit cards as were all parts for the AN/ALQ-126B Countermeasures System and that the Government would pay for this 100% testing (R4, tab 33 at 4-48; tr. 1/104, 149-50, 2/85-86). It lists all parts to be used (R4, tab 33 at 5-4 to 5-12; tr. 1/182-86). It does not separate the semiconductor parts from the others (*id.*; tr. 1/182, 188-89). The Government engineer checked appellant's parts list to be sure these parts were the ones required for these orders (tr. 1/186-87).

57. The cost and pricing proposal states that the quantity of semiconductor parts to be tested has been increased from the ones to be assembled "to allow for fallout due to electrical failures, rework, scrap, minimum lot purchases and other growth factors" (R4, tab 33 at 4-48; tr. 2/225, 241-42). It does not state what that adjustment is other than the listing of all parts and providing the number for the estimated quantity of parts to be tested as being 148,540 (finding 56; R4, tab 33 at 4-54; tr. 1/111, 187-88, 2/224-25). It further states that the estimated number of lots is 409 (R4, tab 33 at 4-54). The Government claims that appellant should have specifically stated what that adjustment factor was and the labor impact (tr. 1/189-90). Semiconductor testing labor hours were based in part on the number of semiconductor parts to be tested (tr. 2/226-27).

58. The actual number of parts being furnished as listed in appellant's cost and pricing proposal, including a scrap factor, was 118,443 (app. supp. R4, tab 112; tr. 2/160-66, 226). Appellant's manager of administration testified that appellant's semiconductor test personnel added a factor of approximately 25-30% to cover "fallout due to electrical failures, rework, scrap, minimum lot purchases and other growth factors" as described in its proposal (finding 57; tr. 2/165-66, 205, 225, 241). This factor was not fully disclosed but the Government could have calculated it from the disclosed data (tr. 2/239-40). Appellant's manager of administration indicated he deduced this factor when he went over the calculations (tr. 2/166-67).

59. Appellant's proposal listed the work breakdown structure as "MHXBC" and the labor codes as "IDD ENG," "IDD TEC," and "IDD INS" (R4, tab 33 at 4-48; tr. 1/89-90, 187, 2/176-77, 200). The total labor hours for testing were estimated to be 3,723 hours with IDD ENG being 944 hours, IDD TEC being 251 hours, and IDD INS being 2,528 hours

(R4, tab 33 at 4-49; tr. 1/89-90, 147, 2/84, 176-77). During performance, appellant modified the work breakdown structure from "MHXBC" to "MHXNP" (tr. 1/91-92, 2/177, 200, 245). The total labor cost proposed was $179,602 (app. supp. R4, tab 112; tr. 1/111-12). The labor cost per semiconductor part was $179,602 divided by the 148,540 semiconductor parts being tested, which equals $1.21 per semiconductor part (tr. 2/59-60, 137-38).

60. By a memorandum dated 26 February 1990, the Government engineer referred to page 4-54 of appellant's proposal and requested that appellant explain how it got the 813.23 hour figures for "ODC" in semiconductor testing (R4, tab 31). Appellant responded that the hours for semiconductor testing proposed in its cost and pricing proposal for MCT 2000 and Eaton A200 were 543.4 hours (R4, tab 30 at 10, tab 33 at 54). It explained that it applied a factor of 1.5 for re-testing to the 543.4 hours resulting in a total of 813 hours, which it used to compute its ODC costs at page 6-3 of its proposal (*id*.).

61. By a letter dated 12 March 1990, appellant replied to the Government engineer Katz's question as to why appellant applied a 1.5 factor to machine hours for re-test (R4, tabs 29, 29(a)). Appellant attached a memorandum dated 9 March 1990, which states:

> The 1.5 factor is there to account for the following machine time.
>
> - Retest of failed devices.
> - Datalog of failed devices.
> - Problem lot investigations.
> - Vendor correlation testing as part of corrective action plan.
> - Datalog of parts for end item spares selloff.
> - Account for machine time used in recurring software revisions until sufficient data has been recorded to establish actual rates.

(R4, tab 29(d)) Thus, it appears that appellant did provide information to the Government concerning the factor appellant applied to estimate the semiconductor testing equipment hours which appears to be directly related to the labor hours necessary to do the semiconductor testing.

62. In a technical analysis dated 16 March 1990 of appellant's cost and pricing proposal, the Government engineer approved the 3,723 hours proposed by appellant for semiconductor testing (R4, tab 25(f) at 3, ¶ 5b(3)(b)). He reported that the estimates were based upon historical throughput rates and number of lots but recommended that the historical data be reviewed after the fact to determine that this historical data reflects the

current test workload (*id*.). The DCAA audit report dated 22 March 1990 reflected this approval of the Government engineer of the 3,723 hours (R4, tab 25(e) at 24-25).

63. The Government price analyst in a report dated 22 March 1990 evaluating appellant's cost and pricing proposal and appellant's Statement of Position No. 1 indicated that the Government accepted the Government engineer's recommendation for approval of the 813.2 machine hours proposed by appellant for semi-conductor testing (R4, tab 28 at 6; findings 60, 61).

64. By Statement of Position No. 2 dated 30 July 1990, appellant increased the man-hours for semiconductor testing by 40 hours from 3,723 to 3,763 hours (R4, tabs 26, 26(b) at 11). The increased 40 hours was for appellant to generate and test new software (R4, tab 26(b) at 14). Thus, appellant proposed an average of 3,763 divided by 21 months or approximately 179 hours per month.

65. Appellant regularly transferred semiconductor parts to and from its inventory including those from prior jobs (tr. 1/88, 104, 196, 2/88, 253-54) and the Government knew this (tr. 1/196, 2/52, 88, 174). It did this on an almost daily basis (tr. 2/174).

66. In Statement of Position No. 2 dated 30 July 1990, appellant attached a material commitments report, which indicated that appellant transferred a net input of 16,855 semiconductor parts from its inventory for orders YS28 and YS39 (R4, tab 26(d); tr. 1/68, 85-87, 98, 2/168-70, 172, 223-24). Many of the semiconductor parts in appellant's inventory had been purchased by appellant for use in prior orders for the AN/ALQ-126B Countermeasures System and thus had been previously tested (tr. 1/68, 148, 197, 199). Appellant did not transfer these test costs along with the material costs because of the complexity of the accounting and because the prior orders had also been fixed price jobs (tr. 2/85-86). It did not re-test these transferred inventory parts unless the test standards differed or there was too long a lag between the test and their use for the orders at issue here (tr. 1/104-05, 196-97, 200, 2/256, 258). Appellant's engineers decided this after the transfer (tr. 1/88). The Government claimed that it did not know that this resulted in reduced semiconductor testing hours which should have been pointed out by appellant (tr. 1/68, 150, 2/56-57).

67. The Government's contract specialist testified that if he had learned prior to agreement on price that the inventory transfers resulted in reduced semiconductor testing hours he would have sought a lower price for the Government (tr. 1/68-69). However, the Government contract specialist did not participate in the negotiations (finding 8).

68. The material commitment report described in finding 66 did not indicate whether the transferred semiconductor parts had to be re-tested (tr. 1/87-88, 108-09, 149-50, 2/224). It did contain codes indicating for what project the parts had been previously purchased (tr. 1/150, 199-200). No other document exists which indicates

whether or not transferred inventory semiconductor parts need testing (tr. 2/88-89, 173). No appellant document or any other document in existence prior to agreement on price shows the labor impact of either the inventory transfers or the adjustment factor used to estimate semiconductor testing hours (tr. 1/98-99, 190-91, 2/57, 62, 88-89, 173-74).

69. By a letter dated 21 September 1990 and attachments, appellant submitted current data concerning its cost and pricing proposal (R4, tab 24). Attached was a special labor report dated 7 September 1990 (R4, tab 24(d)). This weekly labor report provided at work breakdown structure "MHXNP" that appellant had incurred 450.2 hours for semiconductor testing labor since the inception of the project (*id*. at 5; 1st stip. ¶ 21; tr. 1/90-92, 2/179, 251). Thus, eight months into performance of the orders appellant had incurred 450.2 hours divided by eight months or approximately 56 hours per month as contrasted with the approximate average of 179 hours per month proposed by appellant (finding 64).

70. Prior to agreement on price, appellant had a net transfer of 20,325 semiconductor parts from prior job inventories (1st stip. ¶ 17; app. supp. R4, tab 112; tr. 2/169-70, 223). Of the 20,325 parts, 4,932 semiconductor parts were re-tested, leaving 15,393 not tested (1st stip. ¶ 18; app. supp. R4, tab 112; tr. 2/170-72, 223, 256). Thus, the total cost at issue is 15,393 parts X $1.21 per part, which equals $18,625.53 (finding 59; app. supp. R4, tab 112; tr. 2/229-30).

71. A special labor report dated 28 September 1990, which was after agreement on price, indicated that appellant had incurred 781 hours for semiconductor testing since project inception (R4, tab 18).

72. At the completion of performance of the orders, appellant had a net transfer from prior job inventories of 15,046 semiconductor parts (app. supp. R4, tab 112; tr. 2/171). Of these, 1,670 parts were re-tested, leaving 13,376 parts not tested (tr. 2/171).

73. By memoranda dated 10 and 14 December 1993, DCAA requested that the Government engineer investigate why appellant only incurred 1,410.5 hours of the 3,763 hours proposed (R4, tabs 15, 16, 16(a)). The Government engineer in a letter dated 3 January 1994 requested that appellant explain why this underrun in semiconductor testing hours occurred (R4, tab 14). He specifically asked whether material transfers were a major factor and whether appellant made any changes in the test procedures (*id*.).

74. By a letter dated 24 January 1994, appellant replied to the Government engineer that reduced semiconductor testing hours resulted because: (1) appellant overestimated the number of semiconductor parts to be tested as being 148,540 when only 104,747 were actually tested; and (2) it made transfers of approximately 15,000 semiconductor parts from its inventory from prior jobs which impacted semiconductor test hours (R4, tab 13; tr. 1/149-50, 2/222). The Government engineer further inquired as to what happened to the

28,793 semiconductor parts proposed when 148,540 were proposed, 15,000 were transferred into the job but only 104,747 were tested (R4, tab 12; tr. 1/152). This 148,540 hours for semiconductor parts testing appears to be an erroneous projection or estimate but no explanation was included in the record (*see* tr. 1/152-53).

75. In a report dated 16 February 1994, the Government engineer indicated that semiconductor parts transferred from inventory ordinarily do not have to be re-tested and that approximately 20,000 had been transferred prior to agreement on price (R4, tab 6(e) at 14, ¶ (5)(a), tab 10(d) at 3, ¶ (5)(a)). He pointed out that these transfers had taken place on prior jobs as well as proposed jobs and the impact of these transfers in lowering the number hours of testing labor had never been considered before (*id*.).

76. By a letter dated 6 June 1994, appellant admitted that material transfers had been made prior to definitization but claimed that the impact of these transfers was unclear requiring additional research and a later reply (R4, tab 6(f)). Appellant further responded by a letter dated 15 July 1994 that appellant had provided the latest material commitments report which disclosed all adjustments to direct materials at negotiation and that its estimates had been based upon historical averages including testing of transferred material (*id*.).

77. In an audit report dated 19 August 1994, DCAA indicated that the underrun of semiconductor test labor was caused by appellant's failure to disclose material transfers prior to agreement on price (R4, tab 6 at 2-3; tr. 2/54-55). The report claimed that appellant had disclosed procurement transfers not transfers from inventory from prior jobs but the Government auditor admitted he did not know what this meant (*id*. at 3; tr. 2/58). It further claimed that appellant should have known of the underrun because only 700 hours of semiconductor testing had been incurred prior to agreement on price (*id*. at 5).

78. Appellant responded in a letter dated 16 August 1996 that appellant had disclosed all material transfers as well as the number of testing labor hours incurred to the time of price agreement (R4, tab 4). The letter pointed out that parts to be tested are primarily from outside vendors and dependent on when these parts are shipped by these vendors, making the timing of testing labor hours a matter not under appellant's control.

79. By a final decision dated 11 October 1996, the ACO claimed appellant had provided defective cost and pricing data by failing to disclose that the transfer of approximately 20,000 semiconductor materials (most of which had been previously tested) from its inventory from prior jobs would result in lower semiconductor testing hours since the previously tested materials would not have to be re-tested (R4, tab 1 at 2). He sought costs of $84,634 plus profit of $11,578 (13.68%) for a total of $96,212 (R4, tab 6(a) at 4, 6, tab 6(b) at 8).

DECISION

I. Waiver and Estoppel

The Government contends that appellant has waived or is equitably estopped from seeking a refund of monies it paid the Government to satisfy a Government claim for defective pricing. The Government alleges that appellant made the payment without protest or notice that appellant was contesting the defective pricing claim. We hold that the Government was on notice that appellant was contesting the Government's claim and reject this Government affirmative defense.

Appellant appealed the final decision of the contracting officer asserting the defective pricing claim to this Board (finding 13). It requested deferment of collection of monies to pay that claim both before and after its appeal was taken until the appeal was decided by this Board (findings 14, 16, 17). The Government denied the deferment request and threatened appellant with various collection actions unless immediate payment was made either in cash or by promissory note with installment payments (findings 15, 16, 18). Appellant paid the claim with a promissory note, which required the Government to repay appellant if appellant were to succeed in its appeal before this Board (finding 19). Thus, the record is clear that appellant paid the Government claim under protest.

It is true that appellant prepaid the promissory note because commercial interest rates were lower than the rate required by the Government in the promissory note (findings 21, 22). It is also true that appellant did not include any notations, reservations, or protests in paying the promissory note (finding 22). This failure to protest when it paid the note is the basis of the Government's position that appellant waived or is equitably estopped to assert its appeal rights.

We are forced to reject the Government's estoppel and waiver arguments. Appellant clearly indicated it was paying under protest when it paid the Government claim with the promissory note borrowing money from the Government to make that payment. The payment of the note is not a new payment of the defective pricing claim but a separate legal transaction involving the payment of appellant's debt reflected in that note.

Even if the payment of the note were interpreted as a new payment of the claim, the surrounding circumstances including the fact that the claim had been appealed to this Board and appellant had made numerous protests about being forced to pay the claim before the appeal was concluded, make it impossible for us to conclude that appellant admitted liability in making the payment. Thus, we reject the Government's contention that appellant admitted liability.

II. The Merits

The Government contends that the appellant overstated its labor costs to assemble the 592 sets of five EEPROM circuit cards, its program administration labor costs, and its semiconductor labor testing costs and violated the Truth in Negotiation Act (TINA) by failing to provide accurate, complete, and current cost and pricing data which would have placed the contracting officer on an equal footing with appellant in negotiating these labor costs.

In the relevant period, TINA required any contractor to furnish cost and pricing data for any negotiated contract or contract modification exceeding $100,000 with certain exceptions not relevant to this appeal. 10 U.S.C. § 2306a (1987). It further required that such contracts or modifications contain a contract provision requiring the adjustment of the contract price to "exclude any significant amount by which it may be determined . . . that such price was increased because the contractor . . . submitted defective cost or pricing data." 10 U.S.C. § 2306a(d) (1987). It defined defective cost or pricing data as cost and pricing data that is "inaccurate, incomplete, or noncurrent". (*Id.*)

TINA defined cost and pricing data as follows:

> [T]he term "cost or pricing data" means all facts that, as of the date of agreement on the price of a contract (or the price of a contract modification), a prudent buyer or seller would reasonably expect to affect price negotiations significantly. Such term does not include information that is judgmental, but does include the factual information from which a judgment was derived.

10 U.S.C. § 2306a(g) (1987) Factual as distinguished from judgmental information is information which is verifiable and is not a projection or estimate of future costs. FAR 15.801.

The purpose of TINA is to establish a level field for price negotiations by requiring a prospective contractor to furnish factual cost or pricing data significant to the price negotiations known to it so that the contracting officer will have the same knowledge during negotiations. *M-R-S Manufacturing Company v. United States*, 203 Ct. Cl. 551, 563-64, 492 F.2d 835, 842 (1974). TINA requires the submission of cost or pricing data which is significant to prudent buyers and sellers. *Rosemount, Inc.*, ASBCA No. 37520, 95-2 BCA ¶ 27,770 at 138,455.

The Court made it clear in *M-R-S Manufacturing* that a prospective contractor must make the significance of the data known to the contracting officer if it does not physically deliver that data to the contracting officer but instead makes all of its records available. 203 Ct. Cl. at 564-65, 492 F.2d at 843. Thus, TINA requires the equalizing of cost or

pricing data knowledge and does not require the creation of new cost or pricing data, a new analysis of furnished data, or the re-organization of furnished data. *Rosemount, Inc.*, *supra*.

In *McDonnell Douglas Helicopter Systems*, ASBCA Nos. 50447 *et al*., 00-2 BCA ¶ 31,082 at 153,465, we set forth the burden of proof for defective pricing appeals:

> In defective pricing cases the Government bears the burden of proof on three elements--1) that the information in dispute is "cost or pricing data" under the Truth in Negotiations Act, 10 U.S.C.A. § 2306a; 2) that cost or pricing data was not meaningfully disclosed; and 3) that it relied to its detriment on the inaccurate, noncurrent or incomplete data presented by the contractor. As to the third element, once nondisclosure is established a rebuttable presumption arises that a contract price increase was a natural and probable consequence of that nondisclosure. *Sylvania Electric Products, Inc. v. United States*, 479 F.2d 1342 (Ct. Cl. 1973). However, "[t]he ultimate burden of showing the causal connection between the incomplete or inaccurate data and an overstated contract price remains with the Government." *Grumman Aerospace Corporation*, ASBCA No. 27476, 86-3 BCA ¶ 19,091 at 96,494.

In *Rosemount, Inc.*, *supra*, we held that the Government failed to meet its burden of proving "a causal connection between the undisclosed or defective data and an overstated contract price" when it failed to present any evidence from its negotiators as to the consequences of the alleged defective pricing. None of the Government witnesses who testified in these appeals was present during the negotiations. The Government engineer who testified was not present but did provide technical input on appellant's proposal. The Government contract specialist who testified was the supervisor of the Government negotiator but not present for negotiations.

A. EEPROM Circuit Card Assembly Labor Hours

The Government alleges that appellant's furnishing of historical composite performance factor data to support the performance factor used to compute the estimated labor hours to assemble an EEPROM circuit card was not complete, accurate, and current cost or pricing data because card specific performance factor historical data was not furnished. A composite performance factor is determined by dividing the actual number of hours to assemble the 40-45 circuit cards for each AN/ALQ-126B Countermeasures System by the total number of standard hours for these cards determined by industrial engineering standards (findings 24, 25). The labor hour estimate to assemble a circuit card

was determined by multiplying the standard hours for that card by the composite performance factor (finding 31).

In estimating labor hours to assemble each circuit card, appellant used a composite performance factor which was the measure of its labor efficiency in assembling all of the 45 to 50 circuit cards contained in the AN/ALQ-126B Countermeasures System (finding 31). It supported this proposed performance factor with historical data of the actual performance factor realized on performance from the most recently completed prior order (Lot 71) for all of these 45 to 50 cards (*id.*). The Government engineer in analyzing appellant's proposed performance factor requested and obtained historical data on the composite performance being realized on a slightly more recent order (Lot 4) still under production but nearing completion (finding 32). He verified that the historical Lot 4 composite performance factor data supported appellant's proposed composite performance factor (findings 32, 33).

At the conclusion of contract performance, the labor hours incurred to assemble the circuit cards were much less than those estimated by appellant in its proposal by using the composite performance factor (findings 37-41). The Government requested that appellant determine why the underrun in assembly labor hours occurred (finding 38). After some time, appellant notified the Government that it discovered that a performance factor computed just for assembling the five EEPROM cards was much lower than the composite performance factor for all 40 to 50 cards (finding 40).

Appellant tracked the labor costs to assemble each individual EEPROM circuit card and entered that data into its computerized accounting system (finding 26). It reported these costs to the contracting officer as an update to its cost and pricing proposal (finding 34). The DCAA auditor admitted that the actual hours incurred to assemble EEPROM cards were available to the Government just prior to agreement on price (*id.*).

The Government contends that appellant failed to point out that the composite performance factor was inaccurate when applied to the assembly of the five EEPROM cards. Appellant responds that it only used composite performance factors, never created or used card specific performance factors, and was not obligated to provide data that it did not possess.

Both parties had the assembly labor hour data for the EEPROM cards incurred to a time near agreement on price (finding 34). However, neither party knew that a performance factor computed using only the five EEPROM circuit cards would differ significantly from the composite performance factor, and therefore, did not know the significance of these cost figures (finding 30). Neither party had ever used card specific performance factors in their prior negotiations on the AN/ALQ-126B Countermeasures System and appellant as a matter of practice only measured efficiency at the component not at the specific part level (findings 27, 28). Both parties were equally capable of calculating

card specific performance data if either had realized its significance. *The Boeing Company*, ASBCA No. 32753, 90-1 BCA ¶ 22,270, *aff'd on recons*., 90-1 BCA ¶ 22,426.

The Government argues that appellant had the obligation to point out the significance of the card specific data to Government negotiators. However, appellant's prior history and the parties' actions prior to price agreement indicate that both relied upon the composite circuit card performance factor data in estimating circuit card assembly labor hours (findings 28-30). Appellant only has the obligation to point out the significance of card specific cost history if it knew or reasonably should have known of that significance. We determine that it did not possess the requisite knowledge and that the parties were at level bargaining positions on this issue.

We hold that appellant did not submit defective pricing for the circuit card assembly labor in failing to compute and disclose card specific performance factor cost history when it did not know or reasonably should not have known of the significance of that data in light of the circumstances present during the negotiations. Thus, we sustain this portion of the appeal.

B. Program Administration Labor Hours

The Government alleges that appellant submitted defective pricing by failing to point out that the hours appellant was incurring for program administration at the time of agreement on price were much lower than appellant estimated in its cost and pricing proposal. The Government appears to admit that the data as to how many program administration hours appellant had incurred up to price agreement was available to its negotiating team but claims that appellant failed to point to its significance. Appellant responds that it did furnish program administration hours incurred data but neither knew nor reasonably should have known that its incurred program administration hours would turn out to be much lower than it estimated in its proposal.

Appellant's cost and pricing proposal dated 19 February 1990 estimates that program administration costs would be 1,365 hours over a contract performance period of 21 months, which averages to 65 hours per month (finding 45). Appellant furnished cost updates to the contracting officer indicating that program administration costs were averaging 15 hours per month after six months of performance and 20 hours per month after eight months of performance and just before agreement on price (findings 47, 49). Thus, the Government clearly had available the data for appellant's incurred program management hours.

The Government contends that the TINA violation is that appellant failed to point out the significance of these incurred costs by indicating that the proposal estimate of 65 hours was inaccurate in light of the average of 20 hours per month of incurred costs. However, the history of prior projects prior to price agreement indicated that program administration

hours were never evenly incurred and greater hours were expended after eight months of performance (findings 46, 49). In addition, the Government engineer testified that he thought that program administration hours would substantially increase after price agreement as appellant was starting to deliver the retrofit kits at that time (finding 53).

We are unable to determine on this record that appellant knew or should have known that the average of 20 hours per month incurred prior to price agreement indicated that its estimate of 65 hours per month was erroneous. The parties were on an equal footing both with respect to having available the incurred average program administration hours and the significance of that data.

We hold that appellant did not submit defective pricing for the program administration labor hours when it failed to point out the significance of incurred program administration hours because it neither knew nor reasonably should have known of the significance of that data when each party expected the hours to substantially increase after price agreement. Thus, we sustain this portion of the appeal.

C. Semiconductor Testing Labor Hours

The Government argues that appellant submitted defective pricing because it failed to disclose that it overestimated the number of semiconductor parts to be tested by making it a number greater than the number of parts to be actually furnished the Government and thereby inflating the amount of semiconductor testing labor. However, appellant's cost and pricing proposal lists the number of semiconductor parts to be tested as 148,540 (findings 56, 57). It also lists all parts being furnished under the contract but does not separate the semiconductor parts from the other parts and does not total the number of semiconductor parts (*id.*).

The Government admits that all parts were listed but claims that appellant did not point out that it was testing more parts than it was furnishing. However, the proposal clearly states the quantity of parts being tested is adjusted for electrical failures during testing, re-testing reworked parts, scrapped parts, minimum lot purchases, and other growth factors (finding 57). All the information to calculate the adjustment made is included in the proposal but the calculation is not disclosed. We hold that the 148,540 semiconductor parts to be tested listed in the proposal is an estimate or judgment of appellant which is not cost or pricing data under TINA because it is not factual and verifiable and that the basis for the estimate and adjustment are adequately disclosed. Thus, we reject the Government argument that appellant furnished defective pricing by failing to disclose that it was testing more parts than it was furnishing.

The Government's second contention is that appellant furnished defective pricing in failing to point out the impact of transfers of previously tested semiconductor parts from inventory on semiconductor testing labor hours. Many purchased parts from inventory had

been previously tested and did not have to be re-tested unless the test standards for the prior job differed or too long a time had lapsed since the prior test (finding 66). Thus, fewer parts to be tested resulted in lower test labor hours.

Both parties knew that on prior jobs as well as this one appellant had transferred semiconductor parts from inventory, which had been purchased for prior jobs (finding 65). Appellant furnished the contracting officer with a material commitment report before price agreement indicating that 16,855 semiconductor parts had been transferred from inventory (finding 66). Accordingly, both parties knew that semiconductor parts were being used from the inventory.

Neither the material commitment report provided prior to price agreement nor any other document in existence provided any data as to how many of the transferred parts were not re-tested after transfer from inventory (finding 68). The Government contends that appellant had the obligation to advise the contracting officer as to how many parts did not have to be tested and how this impacted the semiconductor testing labor hours.

We are unable to accept the Government's argument that appellant's failure to disclose that many semiconductor parts had been previously tested and how their use would reduce appellant's semiconductor testing labor hours under this contract was significant data during negotiations prior to price agreement. First, the Government engineer admitted that the parties had never before considered the impact of these inventory transfers on testing labor hours on past projects or this one (finding 75).

Secondly, the Government agreed when it accepted appellant's proposal to pay appellant's costs for 100% testing of all semiconductor parts (finding 56). Thus, any price reduction under TINA would enable the Government to obtain these semiconductor parts without paying for their testing which would violate the terms of the contract.

The problem appears to be one of accounting in that appellant transferred the material costs for the semiconductor parts to the orders at issue but did not transfer the testing labor costs in its accounting records because of the complexity of the accounting and the fact that all of the orders were fixed price ones (finding 66).

We hold that appellant did not submit defective pricing when it failed to point out the significance of the use of previously tested semiconductor part inventory on testing labor hours when neither party previously considered this data to be significant and should not result in a price reduction when the Government agreed to pay for 100% testing of semiconductor parts. We sustain this portion of the appeal.

CONCLUSION

In conclusion, we hold that appellant has not submitted defective pricing and sustain the appeals.

Dated: 7 February 2002

JOHN I. COLDREN, III
Administrative Judge
Armed Services Board
of Contract Appeals

(Signatures continued)

I concur

PAUL WILLIAMS
Administrative Judge
Chairman
Armed Services Board
of Contract Appeals

I concur

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

I certify that the foregoing is a true copy of the Opinion and Decision of the Armed Services Board of Contract Appeals in ASBCA Nos. 50464, 51350, Appeals of Lockheed Martin Corporation d/b/a Sanders, rendered in conformance with the Board's Charter.

Dated:

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