

In the United States Court of Federal Claims

Case No. 98-712C

Filed: August 29, 2002

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**HI-SHEAR TECHNOLOGY
CORPORATION,**

Plaintiff,

v.

UNITED STATES,

Defendant.

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**Estimated Contract
Requirements, 48 C.F.R. §§
16.503, 52.216-21; Negligence;
Unexecuted Options; Breach of
Contract Damages; Lost Profits.**

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PETER B. JONES, Jones & Donovan, Newport Beach, CA, attorney of record for the plaintiff.

MICHAEL D. AUSTIN, Commercial Litigation Branch, Civil Division, United States Department of Justice, Washington, D.C., **HAROLD D. LESTER, JR.**, Assistant Director, and **DAVID M. COHEN**, Director, for the defendant. **MAJOR DAVID L. CONN**, United States Army Legal Services Agency, Arlington, VA, of counsel.

O P I N I O N

HORN, J.

The above captioned case concerns two government requirements contracts, each for the purchase of spare parts relating to a circuit switch used in the military's Tri-Service Tactical Communications System. The plaintiff, Hi-Shear Technology Corporation (Hi-Shear), alleges that the government breached the contracts when it negligently prepared the estimates of the contract requirements used in the solicitations. The government denies that it was negligent in preparing the estimates.

FINDINGS OF FACT

In 1991, the Directorate of Material Management (Directorate) at the United States Army Communications & Electronics Command (CECOM) decided to move towards flexible, multi-year acquisitions for the procurement of certain systems. In selecting candidates for multi-year contracts, CECOM took into account whether a system was of tactical or strategic importance and whether there were previous, significant demands on the system which would be sustained in the future. One of the systems selected for multi-year procurement was the AN/TTC/TYC-39 Circuit Switch (T-39 Circuit Switch), which

provides automatic switching for the Tri-Service Tactical Communications System.

The T-39 Circuit Switch has over 3,000 individual spare parts, approximately 1,100 of which were managed by CECOM. In 1992, Michael Bradley Harrison was the branch chief at the Directorate in charge of item management for Tri-Service Tactical Communications. His branch was responsible for managing the T-39 Circuit Switch at that time. In this regard, the branch initiated budget requirements, computed the need to acquire or repair spare parts, issued requisitions for spare parts and updated portions of the National Stock Number Master Data Record (NSNMDR) for the T-39 Circuit Switch. The NSNMDR is a computer database maintained by the government. The NSNMDR functions as a central data repository for information relating to a number of items used by the government. Each item is assigned a National Stock Number. For each item, there is a variety of available information, such as usage rates and assets on hand, which is updated daily. Further, all National Stock Numbers are examined monthly to determine if the government needs to take action, such as a buy or cutback, for that item. The monthly examination is done by a computerized system. Because of the limitations of that system, item managers use a formula to generate multiple year requirements.

Richard A. Zaccarine, the section chief who supervised the inventory management of the T-39 Circuit Switch, was responsible for identifying those parts of the T-39 Circuit Switch that were appropriate for multi-year contracts. Mr. Zaccarine had to determine which items the Army had sufficient quantities on hand and/or due to be returned from the field, such that the Army did not need additional quantities. To calculate which items the Army needed to procure, Mr. Zaccarine created a formula, using a computer database program, which he then used to compare a number of factors gathered from the NSNMDR database.

The factors which Mr. Zaccarine compared included each item's monthly usage rate, the amount of assets the Army had on hand, the "unserviceable return rate" and the "final recovery rate." The unserviceable return rate of an item is the percentage of the average monthly demand that is related to the return of items from units in the field that need to be repaired. The final recovery rate is the percentage of those items that are returned from the field for repair and that are then successfully repaired.¹

Mr. Zaccarine reviewed all of the unserviceable return rates on items he was considering for multi-year contracts and found those rates to be very low. At the time, however, Mr. Harrison was concerned with a recent change in how the Army accounted for

¹ This concept is illustrated by the following example elicited from Mr. Harrison at the trial. If the government's average monthly demand for an item was twenty, and the unserviceable return rate was seventy-five percent, the Army could expect to receive fifteen items back from the field as unserviceable items requiring repair. If the final recovery rate for that item was eighty percent, that would mean that the Army had been able to successfully repair twelve of the fifteen items returned for repair. Consequently, the Army would need to procure only eight items that month.

spare parts that were returned from the field for repair. Prior to 1991, if a unit in the field returned a broken part to be repaired, it was charged for shipping the part. A unit in the field, however, was not charged for spare parts. The policy deterred units in the field from returning broken parts. In October of 1991, the Army made a significant change in policy and began to charge units in the field for spares and give units credit for returning broken parts. Mr. Harrison testified that the Army knew that unserviceable return rates would increase, but did not know how large the increase would be. Mr. Zaccarine suggested that they use the actual unserviceable return rates. Mr. Harrison and the Division Chief, Joseph Roddy, however, told Mr. Zaccarine to use a default unserviceable return rate of twenty-five percent for any item that had an actual unserviceable return rate under twenty-five percent, even though a majority of the items had unserviceable return rates between zero and five percent. The default rate was designed to try to account for the expected increase in unserviceable return rates. Mr. Zaccarine testified that he repeatedly reviewed the unserviceable return rates for the relevant items until he left CECOM in October of 1993 and that those rates remained low.

After Mr. Zaccarine identified the items he felt were appropriate for multi-year contracts, the list of items he selected was sent to the engineering directorate. The engineers placed the items into acquisition packages based on similar materials and components. Once the parts were aligned into packages, they were sent back to Mr. Harrison's branch for review.

Doreen Macchiarella and Barbara Gallagher were the item managers assigned to review the acquisition package that eventually became the two contracts the Army awarded to Hi-Shear. Ms. Macchiarella believed that her assignment was to calculate the quantity ranges to be used for pricing purposes in the solicitations for each acquisition package. Each item was assigned three quantity ranges, a low, or "A" range, a medium, or "B" range, and a high, or "C" range. The quantity ranges related to the amount of the item the government might buy with each order. The government expected the bidders to offer a different price for each quantity range because, generally, the unit price for producing low quantities exceeds the unit price for producing high quantities.

Ms. Macchiarella testified that she asked Mr. Zaccarine for help in calculating the quantity ranges. Mr. Zaccarine told Ms. Macchiarella to multiply the Base Average Monthly Demand (BAMD) for the item by the Program Change Factor (PCF) and the Reorder Cycle (REOCY). He also wrote the formula down for her. The Reorder Cycle refers to the time frame for which the calculation is made, which for this contract was a constant of twelve, to reflect buys made in one year increments. The PCF is a multiplier based on the number of end items in the field that use the item in question. The base average monthly demand for an item is the average demand for that item per month.

Mr. Zaccarine had a different recollection of the conversation with Ms. Macchiarella. Mr. Zaccarine testified that Ms. Macchiarella asked him for help in developing quantity ranges and how to compute an estimated contract requirement. In addition, Mr. Zaccarine stated that he could not remember whether he told Ms. Macchiarella to use the base average monthly demand for an item or to use the net base average monthly demand. The

net base average monthly demand for an item is the base average monthly demand adjusted for the unserviceable return rate and the final recovery rate. Regardless of the discrepancy between Mr. Zaccarine's and Ms. Macchiarella's testimony, both parties agree that the government used the base average monthly demand, instead of net base average monthly demand, in calculating the estimated contract requirements listed in the solicitations. Both parties also have stipulated that it was improper to use the base average monthly demand instead of the net base average monthly demand.

Initially, Ms. Macchiarella only calculated quantity ranges for each contract line item and did not calculate an estimated contract requirement. After the contracting officer, then Stephanie J. Allen, received the contract ranges, she requested specific estimated contract quantities from Ms. Macchiarella. After conferring with Mr. Zaccarine, Ms. Macchiarella told Ms. Allen to use the lower end of the middle range for each contract line item.

On April 26, 1994, CECOM issued invitation for Bids Number DAAB07-94-B-F513 (IFB F513), seeking bids for the procurement of twelve different spare parts for the central processor of the T-39 Circuit Switch. The IFB described a one year requirements contract with a government option to extend the contract up to four years.

The IFB provided three quantity ranges for each item. The IFB stated that bidders were to provide "unit prices for twelve spare part items, for each of three quantity ranges (Ranges A, B, and C) and each of five possible ordering years (base year and four option years)." The IFB also included an estimated contract requirement for each of the twelve spare part items and each of the five possible ordering years.

The IFB included Federal Acquisition Regulation (FAR) 52.216-21, as follows:

(a) This is a requirements contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies or services specified in the Schedule are estimates only and are not purchased by this contract. Except as this contract may otherwise provide, if the Government's requirements do not result in orders in the quantities described as "estimated" or "maximum" in the Schedule, that fact shall not constitute the basis for an equitable price adjustment.

48 C.F.R. § 52.216-21 (1993). The Executive Summary of the IFB stated: "The contract will not have any guaranteed minimum order quantities."

Hi-Shear submitted a bid for all twelve spare part items. Contrary to what the Army intended, for each item, Hi-Shear bid the same price for each quantity range and each proposed contract year. According to Thomas Mooney, the chief executive officer and chairman of the board for Hi-Shear, the plaintiff based its bids on the estimated contract requirements, not the quantity ranges. Mr. Mooney testified that:

[M]y experience, both when I was in the military and in our bids with the Navy and bids with the Air Force, is that U.S. military, regardless of what the papers say, is very good at estimating their requirements. They have a large

database. . . . So we rely on the government to say this is what we are going to buy. So we make our bids up based upon what the government says they are going to buy, the estimated contract requirements. You only have a certain amount of time to submit a bid to the government, and logistically bidding on other things, it's impossible to compute every permutation combination of what the government might buy. So based on our experience that the government is good at this, we developed a price for the ECR [estimated contract requirement] in this particular case.

On October 31, 1994, the government awarded Hi-Shear Contract No. DAAB07-95-D-F301 (Contract F301) for nine of the items covered by IFB F513. The estimated contract requirement quantities and the unit prices for each of the contract line items included in Contract F301 were as follows:

Contract Line Item Number (CLIN)	Estimated Quantities Per Contract Year					Total Estimated Quantities	Unit Price	Total Cost
	1	2	3	4	5			
0001	6	6	6	6	6	30	\$2,077.00	\$62,310.00
0003	60	15	15	15	15	120	\$2,555.00	\$306,600.00
0005	6	6	11	11	11	45	\$2,261.00	\$101,745.00
0007	6	15	15	15	15	66	\$1,948.00	\$128,568.00
0011	25	15	15	15	15	85	\$1,303.00	\$110,755.00
0015	6	6	6	6	6	30	\$3,458.00	\$103,740.00
0017	29	11	11	11	11	73	\$1,969.00	\$143,737.00
0019	31	11	11	11	11	75	\$1,414.00	\$106,050.00
0022	10	11	11	11	11	54	\$4,494.00	\$242,676.00
Total								\$1,306,181.00

On July 8, 1994, CECOM issued Invitation for Bids Number DAAB-07-94-B-F567 (IFB F567) seeking bids for the procurement of circuit card assemblies for the T-39 Circuit Switch. Similar to IFB F513, IFB F567 described a one year requirements contract with a government option to extend the contract up to four years, required bidders to submit prices for each of three quantity ranges (Ranges A, B, and C) and each of the five possible ordering years, and included the clause at FAR 52.216-21 concerning requirements contracts. The executive summary for IFB F567 stated: "The contract will not have any guaranteed minimum order quantities nor will it contain an Economic Price Adjustment

clause.”

Hi-Shear submitted a bid for the seven items listed in IFB F567. Similar to its bid for IFB F513, Hi-Shear’s bid for IFB F567 listed the same unit price for all quantity ranges and all proposed contract years. On November 16, 1994, the government awarded Contract Number DAAB07-95-D-F305 (Contract F305) to Hi-Shear for the seven items listed in IFB F567. The estimated contract requirements quantities and the unit prices for each of the contract line items in Contract F305 were as follows:

Contract Line Item Number (CLIN)	Estimated Quantities Per Contract Year					Total Estimated Quantities	Unit Price	Total Cost
	1	2	3	4	5			
0001	16	16	16	16	16	80	\$473.86	\$37,908.50
0002	35	35	35	35	35	175	\$364.62	\$63,808.50
0003	16	16	16	16	16	80	\$254.35	\$20,348.00
0004	35	35	35	35	35	80	\$327.80	\$26,224.00
0005	16	16	16	16	16	80	\$1,508.83	\$120,706.40
0006	40	40	40	40	40	200	\$304.97	\$60,994.00
0007	12	16	16	16	16	80	\$1,259.00	\$100,720.00
Total								\$430,709.40

Although the government exercised the option to extend both contracts twice, it only issued one order, in total, under Contract F301, for a total price of \$153,300.00 and two orders under Contract F305 for a total price of \$92,805.97.

On May 12, 1997, Hi-Shear filed a certified claim with the contracting officer for \$310,319.00 in damages related to Contract F301. Hi-Shear asserted that the actual orders under Contract F301 amounted to less than twelve percent of the total estimated orders for the contract. Hi-Shear alleged that the government was negligent in making its original estimates and, therefore, breached the contract. In the claim, Hi-Shear alleged that it was entitled to damages including reasonable, fixed overhead and the gross profit it would have made had the government purchased all of the estimated requirements. The claim broke down Hi-Shear’s damages as follows:

Anticipated Profit on Orders Not Received:		
Total Anticipated Orders	\$1,306,181.00	
Less Actual Orders	\$(153,300.00)	
Orders Not Received	\$1,152,881.00	
Unrealized Gross Profit Portion of Price		\$281,467.00
Unrecouped Fixed Overhead:		
Orders Not Received	\$1,152,881.00	
Estimated Overhead Portion	\$169,720.00	
Fixed Portion (17%)	\$28,852.00	
Unrecouped Fixed Overhead		\$28,852.00
Total Claim For Damages		\$310,319.00

Hi-Shear included general and administrative (G & A) costs related to, for example, executive salaries and legal fees, in its calculation of gross profit.

On the same day, Hi-Shear filed a certified claim with the contracting officer for \$53,330.00 related to Contract F305. Hi-Shear asserted that the actual orders under Contract F305 amounted to less than twenty percent of the total estimated orders for the contract. Hi-Shear alleged a similar form of breach and damages as in its claim under Contract F301, and broke down its damages as follows:

Anticipated Profit on Orders Not Received:		
Total Anticipated Orders	\$430,710.00	
Less Actual Orders	\$(84,637.00)	
Orders Not Received	\$346,073.00	
Unrealized Gross Profit Portion of Price		\$48,453.00
Unrecouped Fixed Overhead		
Orders Not Received	\$346,073.00	
Estimated Overhead Portion	\$28,686.00	
Fixed Portion (17%)	\$4,877.00	
Unrecouped Fixed Overhead		\$4,877.00
Total Claim For Damages		\$53,330.00

The only difference between Hi-Shear's calculation of damages under Contract F305 and Contract F301, including the allocation of general and administrative costs, was that under Contract F305, Hi-Shear reduced the amount of gross profit it would have realized by \$47,678.80, from \$96,131.35 to \$48,452.55. According to Mr. Mooney, Hi-Shear's chief executive officer and chairman of the board, when Hi-Shear was preparing its bid, he decided to reduce the bid by a certain percentage in an effort to win the contract. Therefore, Hi-Shear reduced the amount of gross profit it was requesting by a percentage of the total management deduction. According to both claims, Hi-Shear believed that the shortfalls in the actual orders evidenced negligence by the government in creating the contract estimates.

On February 21, 1998, the contracting officer, Kenneth Tedeschi, issued final decisions denying both of Hi-Shear's claims. According to the final decisions, while the government regretted the "substantial variance between the ECR quantities specified in the IFB and contract and the quantity which the Government actually ordered," it did not believe that the shortfall was due to any negligence on its part. Rather, the government argued that since the estimates had been prepared, "the Army Communications-Electronics Command's annual funding for spare parts has been reduced substantially, and the variance between the ECR quantities and the quantity actually ordered was a result of this reduction."

At the trial, however, Thomas Taylor, a contract specialist at CECOM who drafted the contracting officer's final decisions, although not admitting to negligence by the government, testified that the explanation for the shortfalls given in the contracting officer's final decisions was incorrect. In drafting the contracting officer's final decisions, Mr. Taylor had relied on statements by Ms. Macchiarella to him that she believed that the shortfalls were due to cuts in funding. Mr. Taylor testified at trial that in the process of answering interrogatories during discovery in this lawsuit, however, Mr. Taylor found that from fiscal year 1993 to fiscal year 1995, CECOM's total funding for spares actually increased. According to Mr. Taylor, CECOM's funding for spares did decrease from fiscal year 1995 to fiscal year 1998, but that the decline was not sufficient to explain the variance between the estimated quantities and the actual quantities ordered.

At trial, Mr. Harrison, Mr. Taylor and Ms. Macchiarella offered a number of alternative factors that they believed could explain the difference between the estimated quantities and the quantities ordered. First, they explained that the government had reduced the size of the Army over the period of the contract, which caused a decline in the usage rate of the end equipment. Ms. Macchiarella testified that in 1999, she noticed a "tremendous increase" in the number of serviceable parts that units in the field were returning as overstocked items. In addition, the witnesses testified that the Army's decision to charge units for spare parts and give credit to units for returning broken parts resulted in an increase in the number of returned and repaired parts the Army could use to fill orders. Finally, Ms. Macchiarella testified that CECOM received an indeterminable amount of spares from a program in which GTE would upgrade certain TC-39 Circuit Switches and then return residual spare parts to the government. Ms. Macchiarella stated, however, that the program was "not a steady thing where we can count on getting so many every month, and it's not necessarily the same NSN [National Stock Number] because sometimes those shelters [sic] may end up going back, but they may not have all the parts in them, so it's not anything you can rely on." The only factor the Army was aware of at the time it calculated the estimated quantities for the contracts at issue, according to Ms. Macchiarella, was the change in the treatment of spare parts returned from the field.

Prior to the trial, the Defense Contract Audit Agency (DCAA) audited both of Hi-Shear's claims for damages. The audit accepted \$42,499.00 of the claims and questioned \$321,149.00. The damages DCAA accepted included \$33,729.00 for unrecouped fixed overhead and a general and administrative amount of \$8,770.00. Although the audit accepted a portion of plaintiff's general and administrative costs, which were included in its request for profit, the audit stated that it rejected Hi-Shear's claim for lost profits in total because it determined that Hi-Shear would have been in a loss position for both contracts even if all contractor requirements had been ordered.

DISCUSSION

I. Liability

The instant case concerns two requirements contracts. Pursuant to the FAR, a requirements contract "provides for filling all actual purchase requirements of designated

Government activities for specific supplies or services during a specified contract period, with deliveries to be scheduled by placing orders with the contractor.” 48 C.F.R. § 16.503 (1993); see also Travel Centre v. Barram, 236 F.3d 1316, 1318-19 (Fed. Cir. 2001). The primary design of a requirements contract is to provide flexibility to the government when its needs are unpredictable and it wishes to maintain control over its level of consumption. Technical Assistance Int’l, Inc. v. United States, 150 F.3d 1369, 1371-72 (Fed. Cir. 1998). While, under a requirements contract, the contractor has the exclusive right to fill all of the government’s needs for a certain item, the government is allowed great freedom in determining its requirements “because it has specifically bargained for such flexibility, in exchange for which it has usually agreed to pay a premium price for the goods or services to be provided.” Technical Assistance Int’l, Inc. v. United States, 150 F.3d at 1372 (citing Shader Contractors, Inc. v. United States, 149 Ct. Cl. 535, 543, 276 F.2d 1, 7 (1960)).

Pursuant to the FAR, the government must provide an estimate of its contract requirements in the solicitation. According to FAR 16.503(a)(1):

For the information of offerors and contractors, the contracting officer shall state a realistic estimated total quantity in the solicitation and resulting contract. This estimate is not a representation to an offeror or contractor that the estimated quantity will be required or ordered, or that conditions affecting requirements will be stable or normal. The contracting officer may obtain the estimate from records of previous requirements and consumption, or by other means, and should base the estimate on the most current information available.

As stated in FAR 16.503(a)(1), estimated contract requirements do not represent a guarantee or warranty and, normally, significant variances between estimated requirements and actual orders will not result in liability on the part of the government in the absence of bad faith, negligence, or a showing of a grossly unreasonable estimate. Medart, Inc. v. Austin, 967 F.2d 579, 581 (Fed. Cir. 1992); Clearwater Forest Indus., Inc. v. United States, 227 Ct. Cl. 386, 396-97, 650 F.2d 233, 240 (1981); see also Womack v. United States, 182 Ct. Cl. 399, 412, 389 F.2d 793, 802 (1968). Thus, “the risks associated with variance between actual purchases and estimated quantities are allocated to the contractor.” Technical Assistance Int’l, Inc. v. United States, 150 F.3d at 1372 (quoting Medart, Inc. v. Austin, 967 F.2d at 581, and citing John C. Weistart, Requirements and Output Contracts: Quantity Variations Under the UCC, 1973 Duke L.J. 611, 619-20 (citing 3A Corbin Contracts § 569 (1960)) (1973)).

A bidder, however, is entitled to rely on the government’s estimates of its requirements as stated in the invitation for bids. Medart, Inc. v. Austin, 967 F.2d at 581. The government “is not free to carelessly guess at its needs. Where a contractor can show by preponderant evidence that estimates were ‘inadequately or negligently prepared, not in good faith, or grossly or unreasonably inadequate at the time the estimate was made[,]’ the government could be liable for appropriate damages resulting.” Medart, Inc. v. Austin, 967 F.2d at 581 (quoting Clearwater Forest Indus., Inc. v. United States, 227 Ct. Cl. at 395, 650 F.2d at 239).

The government is required to base its estimates on “all relevant information that is reasonably available to it.” Womack v. United States, 182 Ct. Cl. at 401, 389 F.2d at 801; accord Medart, Inc. v. Austin, 967 F.2d at 582. A contractor cannot succeed by arguing that a more reasonable approach to estimating requirements was available or that the government could have created or searched for more accurate data. Medart, Inc. v. Austin, 967 F.2d at 582; Crown Laundry and Dry Cleaners, Inc. v. United States, 29 Fed. Cl. 506, 520-521 (1993).

The plaintiff asserts that the government negligently estimated the contract requirements by failing to take into account unserviceable returns and spares on hand. The government argues that it was not negligent in the preparation of the estimated contract requirements, that other factors contributed to the variance between the estimates and actual orders and that Hi-Shear cannot recover because it did not rely on the estimates presented in the bid. Pursuant to the following discussion, the court finds that the government negligently failed to take into account unserviceable returns and spares on hand. Moreover, that other factors contributed to the variance between the estimated contract requirements and actual orders does not relieve the government from liability due to its negligence. Finally, Hi-Shear did rely on the estimates presented in the solicitation.

The parties have stipulated that in calculating “an estimate of annual purchase requirements based on information provided by the NSNMDRs, an estimator should use information in the NSNMDR for quantities on hand and for quantities expected to be provided by repairs of units returned from the field.” The parties also have stipulated that when Ms. Macchiarella and Ms. Gallagher calculated the estimated contract requirements used in the contracts at issue, they used the base average monthly demand, rather than the net average monthly demand. The net average monthly demand takes into account the number of anticipated requisition requests to be filled by repaired items; base average monthly demand does not. Thus, in calculating the estimated contract requirements that were used in the solicitations at issue, the government failed to take into account the number of requests that would be filled by repaired items, a calculation that it could have performed using readily available data from the NSNMDR.

The government’s error is compounded by the fact that it knew that the Army had recently implemented a policy which would result in an increase in the number of spare parts returned from the field for repair. Mr. Harrison testified that, “[w]e knew returns would increase” as a result of the Army’s decision to start charging field units for spares and issuing credit for unserviceable returns. According to Mr. Harrison, the government did account for the anticipated increase in returns when Mr. Zaccarine identified those items for multi-year contracts by using a default return rate of twenty-five percent for those items which had actual return rates lower than twenty-five percent. The government attempt, at this initial stage of its analysis in estimating its requirements, to account for the change in policy regarding unserviceable returns was a reasonable attempt to compensate for the expected increase in unserviceable returns the change in policy was expected to bring. Once the government selected the items for multi-year procurement, however, it did not account for the unserviceable return rate when it estimated its contract requirements. While the government could have duplicated its attempt to account for the increase in

unserviceable returns when it estimated the contract requirements by using the twenty-five percent default rate to determine net average monthly demand, because the government used base average monthly demand, it failed to account for any unserviceable returns when it calculated its estimated contract requirements for the contracts at issue. Consequently, it eliminated its ability to factor in the anticipated increase in unserviceable returns.

In this regard, the case is similar to Chemical Technology, Inc. v. United States, 227 Ct. Cl. 120, 645 F.2d 934 (1981). That case concerned a contract to provide mess attendant services at the Naval Construction Battalion Center in Port Hueneme, California. 227 Ct. Cl. at 122, 645 F.2d at 935. In the solicitation, the government estimated the number of meals per month. 227 Ct. Cl. at 124, 645 F.2d at 936. The government knew that Port Hueneme could be used for reservists engaging in their two weeks active duty for training. 227 Ct. Cl. at 128, 645 F.2d at 946. The government failed, however, to take that factor into account when estimating the number of meals per month, and did not notify the bidders of this possibility. 227 Ct. Cl. at 129, 645 F.2d at 946. During the contract period, four battalions of reservists used Port Hueneme to engage in their two weeks of active duty training. 227 Ct. Cl. 133, 645 F.2d at 942. Thus, the total amount of meals served exceeded the estimate in the contract by over twenty-five percent. 227 Ct. Cl. at 135, 645 F.2d at 943. The court found that the government's estimate was negligently prepared, which amounted to a constructive change to the contract. 227 Ct. Cl. at 145, 645 F.2d at 945. In both Chemical Technology, and in the instant case, the government knew of factors that could impact estimates described in a solicitation, yet failed to use that knowledge when creating the estimates, or apprise the bidders of that contingency.

The defendant argues that the court must take into account the "scope of the contract, and the [e]ffect the omitted information would have on the accuracy of the calculations" in determining whether the government was negligent. According to Mr. Zaccarine, the difference between using base average monthly demand and net average monthly demand to calculate the estimated contract requirements would have been "very, very small" Mr. Harrison also testified that he believed that the effect of the government's failure to factor unserviceable returns into its calculation of estimated contract requirements "would have been relatively minimal."

Even if the government's error had only a relatively small effect on the government's estimate, however, the government is not relieved from liability. In Womack v. United States, the court stated that "the Government is not required to be clairvoyant but it is obliged to base that estimate on all relevant information that is reasonably available to it." Womack v. United States, 182 Ct. Cl. at 401, 389 F.2d at 801. Therefore, pursuant to Womack and subsequent case law, the government's failure to consider readily available information can rise to the level of negligence when such information is relevant to the government's estimates regardless of the degree of impact of the information on the estimate. See Chem. Tech., Inc. v. United States, 227 Ct. Cl. at 138, 645 F.2d at 944; Myers Investigative and Sec. Servs., Inc. v. United States, 47 Fed. Cl. 605, 619 (2000), *aff'd*, 275 F.3d 1366 (Fed. Cir. 2002); D.F.K. Enterps., Inc. v. United States, 45 Fed. Cl. 280, 287 (1999).

The defendant, however, argues that the holding in Medart, Inc. v. Austin, which was decided after Womack v. United States, stands for the rule that “not all failures to include possible information constitute negligence, and not all omissions of information create liability. Factors such as the scope of the contract, and the affect [sic] the omitted information would have on the accuracy of the calculations must be taken into account.” The defendant, however, extends the holding in Medart too far by arguing that the government’s failure to consider information reasonably available to it is negligent only when that failure impacts the estimate in a manner disproportionate to the scope of the contract. Medart involved a requirements contract to supply metal cabinets to several hundred federal ordering agencies broken down into three delivery zones. Medart Inc. v. Austin, 967 F.2d at 580. GSA used the number of units ordered by zone during the previous fiscal year, the most current information available, for the estimated contract requirements. Id. For the four line items awarded to Medart, the actual requirements differed from the estimated requirements by anywhere from twenty-five to seventy percent. Id. Medart argued that using the previous year’s orders as the contract estimates was unreasonable because the government could have used other, more reliable means to derive the estimates. Id. at 581. The court denied Medart’s claim, stating:

For example, Medart suggests that GSA should have polled end-users about their projected needs and budgets. But the scope of this contract was extensive; it was used to supply cabinets to several hundred ordering agencies, including hundreds of military sites throughout the world. The board found that there was no central point to obtain accurate predictions of orders by ordering agencies. The government used information that was reasonably available; it need not search for or create additional information. See Womack, 389 F.2d at 801; accord Chemical Technology, Inc. v. United States, 645 F.2d 934, 946, 227 Ct. Cl. 120 (1981).

Id. at 582.

As defendant suggests, in Medart, the court did take into account the size and complexity of the contract to determine whether better and more specific information was readily available. Id. The Medart court’s conclusion, however, is not inconsistent with the Womack direction that if the information is relevant and readily available, it should be used. Id. Subsequently, judges of this court also have read Womack as instructing that the government must take into account information which is reasonably available to it. See, e.g., Educators Assocs., Inc. v. United States, 41 Fed. Cl. 811, 816 (1998) (“Courts grant relief when the government misled the contractor . . . or when the government deliberately ignores material information in calculating its estimate.”); Datalect Computer Servs., Ltd. v. United States, 40 Fed. Cl. 28, 37 (1997) (“By contrast, when information exists . . . Medart actually requires its evaluation or disclosure.”), aff’d in part, vacated in part, 215 F.3d 1344 (Fed. Cir. 1999) (table), cert. denied, 529 U.S. 1037 (2000); Crown Laundry and Dry Cleaners, Inc. v. United States, 29 Fed. Cl. at 521.

In Datalect Computer Servs., Ltd. v. United States, the operative conclusion was

well stated:

[D]efendant's reliance on Medart is misplaced because in Medart, there was no information available at the time the estimate was created that indicated that the government may have misstated its requirements. Medart, 967 F.2d at 581-82. By contrast, when information exists, such as in the present case, Medart actually requires its evaluation or disclosure.

Datalect Computer Servs., Ltd. v. United States, 40 Fed. Cl. at 37. Datalect involved a requirements contract for the maintenance and repair of government owned computer equipment operating in Europe. 40 Fed. Cl. at 30. The government based its estimates on historical workload information. Id. at 31. At the time it prepared the solicitation, the government was aware of, but failed to consider, several factors that would likely effect its actual requirements during the term of the contract, including a downsizing of the military, a move towards self-maintenance and an influx of new computers with extended warranties. Id. at 36. The government failed, however, to consider that information when formulating its estimates. Id. at 37. As a result, the court found that the government was negligent and the plaintiff was entitled to recover. Id.

In the instant case, the information for quantities expected to be provided by repairs of units returned from the field was contained in the NSNMDR database. Although the government knew that repairs from units returned from the field would lower the estimated requirements, by whatever amount, the government failed to include that information in the solicitation. Thus, the information was relevant and readily available and the government's failure to consider it was negligent.

Hi-Shear also has claimed that the government failed to take into account spares on hand when calculating the estimated contract requirements for the solicitations at issue. In a response to plaintiff's request for admissions, entered into evidence during the trial, the government admitted that Ms. Macchiarella and Ms. Gallagher failed to take assets on hand into account when they made their estimates. The request for admission stated: "[A]lthough the National Stock Number Master Data Record for each item contain information concerning quantities on hand and quantities returned and repaired, Ms. Gallagher and Ms. Macchiarella did not use that information in calculating the estimated contract requirements." Nonetheless, the government argues that spares on hand were taken into account when Mr. Zaccarine determined which spares were suitable for multi-year contracts. The government's argument is not convincing. Mr. Zaccarine considered assets on hand to determine for which items the government had sufficient quantities, so that multi-year contracts would be inappropriate. Mr. Zaccarine's conclusion that the spares at issue did not have sufficient items on hand so that it was appropriate to procure those items through multi-year contracts does not mean that for those spares selected the Army did not have any spares on hand. The defendant has not cited to, nor has the court found, any part of the record that indicates that there were no spares on hand for the items selected for multi-year contracts. Consequently, Mr. Zaccarine's consideration of spares on hand when determining which items were appropriate for multi-year procurement does not obviate the government's need also to consider spares on hand when calculating the

estimated contract requirements for the contracts awarded to the plaintiff. That information was readily available in the NSNMDR database. Therefore, the government's failure to consider spares on hand when estimating contract failures also was negligent.

Finally, the government argues that Hi-Shear cannot recover for government negligence because it did not rely on those estimates to calculate its bids. The government makes two points in this regard. First, the government argues that because the contract was a requirements contract, pursuant to FAR 16.503(a)(1), the estimates contained in the solicitation were "not a representation to an offeror or contractor that the estimated quantity [would] be required or ordered, or that conditions affecting requirements [would] be stable or normal." Consequently, according to the government, Hi-Shear was not entitled to rely on the estimates. In addition, the government argues that Hi-Shear did not rely on the estimates in the solicitation because it did not provide different prices for each of the different quantity ranges included in the solicitation.

The court finds the government's arguments unpersuasive. First, the court rejects the government's argument that a contractor cannot rely on the estimates in a solicitation for a requirements contract because those estimates are not guarantees. In Medart, Inc. v. Austin, the contract at issue was a requirements contract and included a statement that the estimates therein were not guaranteed quantities. 967 F.2d at 580. Although the court noted that a variance between actual purchases and government estimates will not give rise to liability, the court also indicated that "presumably contractors rely on the proffered estimates in formulating their bids, so the government must act in good faith and use reasonable care in computing its estimated needs." Id. at 581. The Medart court found that "where a contractor can show by preponderant evidence that estimates were 'inadequately or negligently prepared, not in good faith, or grossly or unreasonably inadequate at the time the estimate was made[.]' the government could be liable for appropriate damages resulting." Id. (quoting Clearwater Forest Indus., Inc. v. United States, 227 Ct. Cl. at 395, 650 F.2d at 239). Courts also have reiterated the presumption that contractors rely on government estimates in other cases involving requirements contracts. See Educators Assocs., Inc. v. United States, 41 Fed. Cl. at 816; Datalect Computer Servs., Ltd. v. United States, 40 Fed. Cl. at 35; Crown Laundry and Dry Cleaners, Inc. v. United States, 29 Fed. Cl. at 519. Consequently, the fact that a government's estimates in a requirements contract are not guaranteed does not mean that a contractor should not be able to rely on the estimates prepared by the government to prepare its bids.

In re J.A. Jones Management Services, Inc., A.S.B.C.A. No. 46,793, 99-1 B.C.A. (CCH) ¶ 30,303 (1999) is an isolated case in which the Board denied a contractor's claim that the government's estimates were negligent because the contractor failed to rely on the estimates provided. In J.A. Jones, the Board found that:

Apart from some unsworn, self-serving statements in its cost proposal and claim submissions concerning its use of Government workload estimates (findings 16, 23, 24), the only direct evidence appellant offered to show that it actually relied on the TE-2c workload estimates for non-powered support

equipment appears in a response by a vice president to a leading question on direct examination (finding 14).

A.S.B.C.A. No. 46,793, 99-1 B.C.A. (CCH) ¶¶ 30,303, at 149,833. The Board found that the vice president's statements were unpersuasive and disregarded them. *Id.* The only other witness for the contractor with first hand knowledge about the subject of the contract had not been shown the estimates. *Id.* Thus, the Board found that the contractor could not recover.

In contrast, the testimony at trial demonstrated that Hi-Shear did rely on the contract estimates provided by the government. At the trial, Hi-Shear's CEO, Mr. Mooney, testified that Hi-Shear bid the same price for all of the ranges because it believed that the estimated contract requirements were accurate. According to Mr. Mooney, given the time available to prepare a bid, Hi-Shear was not able to create separate prices for the different ranges. Mr. Mooney stated: "So we rely on the government to say this is what we are going to buy. So we make our bids up based upon what the government says they are going to buy, the estimated contract requirements." On cross examination, Mr. Mooney explained Hi-Shear's strategy further:

And in the final analysis to make one bid or make one best judgment of what to bid, you believe that the low end in the upper range will offset one another because all of the government's ECRs [Estimated Contract Requirements] are based on their statistical probabilities, which gives you a bell-shaped curve. Some will be below; correspondingly, some will be higher.

Mr. Mooney's testimony is uncontroverted. He testified that Hi-Shear took a risk when it submitted a single price for the different price ranges and assumed that, in the final analysis, the government would order quantities at or near the quantity estimated. In other words, Hi-Shear relied on the estimated contract requirements when preparing its bid.

Although not addressed in subsequent post-trial briefing, plaintiff's counsel also alleged during closing argument at trial that the government had acted in bad faith. According to plaintiff's counsel, Mr. Zaccarine attempted to "sabotage" Mr. Harrison's decision to use a twenty-five percent default unserviceable return rate when selecting the items to be solicited through multi-year procurements by deliberately instructing Ms. Macchiarella and Ms. Gallagher to use base average monthly demand rather than net base average monthly demand. The court proceeds from a "strong presumption that government officials . . . carry out their duties lawfully and in good faith." Am-Pro Protective Agency, Inc. v. United States, 281 F.3d 1234, 1238 (Fed. Cir. 2002); accord T & M Distributions, Inc. v. United States, 185 F.3d 1279, 1285 (Fed. Cir. 1999); Morganti Nat'l, Inc. v. United States, 49 Fed. Cl. 110, 143 (2001), aff'd, 36 Fed. Appx. 452 (Fed. Cir. 2002). Proving a government official has violated the duty of good faith requires a "high burden of proof," recently defined by the United States Court of Appeals for the Federal Circuit as "clear and convincing" evidence to overcome the presumption in the government's favor. See Am-Pro Protective Agency, Inc. v. United States, 281 F.3d at 1238-39 ("[W]e believe that clear and convincing most appropriately describes the burden of proof applicable to

the presumption of the governments [sic] good faith.”). This burden of proof, formerly described by the Federal Circuit as well-nigh irrefragable proof, is firmly established in our jurisprudence. Am-Pro Protective Agency, Inc. v. United States, 281 F.3d at 1239 (citing T & M Distribs., Inc. v. United States, 185 F.3d at 1285; Torncello v. United States, 231 Ct. Cl. 20, 44-45, 681 F.2d 756, 770 (1982); Schaefer v. United States, 224 Ct. Cl. 541, 548, 633 F.2d 945, 948-49 (1980); Kalvar Corp., Inc. v. United States, 211 Ct. Cl. 192, 198-99, 543 F.2d 1298, 1302 (1976), cert. denied, 434 U.S. 830 (1977); Grover v. United States, 200 Ct. Cl. 337, 344 (1973)).

The burden to overcome the presumption that a government official acted properly and in good faith is substantial; a bad faith claim cannot be substantiated without meeting a “high evidentiary burden of proof.” Am-Pro Protective Agency, Inc. v. United States, 281 F.3d at 1236. The Federal Circuit in Am-Pro Protective Agency, Inc. v. United States elaborated: “Specifically, we have described clear and convincing burden as such . . . ‘evidence which produces in the mind of the trier of fact an abiding conviction that the truth of a factual contention is “highly probable.”’” Id. at 1240 (quoting Price v. Symsek, 988 F.2d 1187, 1191 (Fed. Cir. 1993) (citations omitted)). The court in Am-Pro Protective Agency, Inc. v. United States described the type of proof necessary to establish what was previously denominated as “well-nigh irrefragable proof” as follows:

In the cases where the court has considered allegations of bad faith, the necessary “irrefragable proof” has been equated with evidence of some specific intent to injure the plaintiff. Thus, in Gadsden v. United States, the court compared bad faith to actions which are “motivated alone by malice.” In Knotts, the court found bad faith in a civilian pay suit only in view of a proven “conspiracy . . . to get rid of plaintiff.” Similarly, the court in Struck Constr. Co. v. United States, found bad faith when confronted by a course of Governmental conduct which was “designedly oppressive.” But in Librach, the court found no bad faith because the officials involved were not “actuated by animus toward the plaintiff.”

Id. (quoting Kalvar Corp. v. United States, 211 Ct. Cl. at 192, 543 F.2d at 1302 (citations omitted)). In addition, the Federal Circuit has stated: “[S]ubterfuges and evasions violate the obligation of good faith,’ as does lack of diligence and interference with or failure to cooperate in the other party’s performance.” Malone v. United States, 849 F.2d 1441, 1445 (Fed. Cir.) (quoting Restatement (Second) of Contracts § 205 comment d (1981)), modified, 857 F.2d 787 (Fed. Cir. 1988).

To attempt to substantiate its claim of bad faith during the trial, plaintiff produced two copies of the notes Ms. Macchiarella took when she received the formula for calculating estimated contract requirements from Mr. Zaccarine. Although Ms. Macchiarella clearly remembered writing down $BAMD \times PCF \times REOCY = ECR$, one of the copies included a mark next to base average monthly demand. During a deposition, Mr. Zaccarine identified the mark as an N in an attempt to show that he had told Ms. Macchiarella to use the formula $NBAMD \times PCF \times REOCY = ECR$. At the trial, however, Mr. Zaccarine explained

that he had since seen the original of Ms. Macchiarella's notes and confirmed that there was no N before BAMD. Plaintiff argues that Mr. Zaccarine subsequently attempted to cover up his actions by altering a copy of Ms. Macchiarella's notes to make it look like he had instructed her to use net base average monthly demand. The record, however, is insufficient to support plaintiff's argument, either that Mr. Zaccarine intended to mislead Ms. Macchiarella and Ms. Gallagher when he told them the formula to use for estimating contract requirements, or that Mr. Zaccarine was the person who added the mark next to BAMD in Plaintiff's Exhibit 106, or even that the mark next to BAMD on plaintiff's exhibit 106 is an N. Plaintiff argues that because Mr. Zaccarine was the only person at the trial who readily identified the mark as an N and signified that the formula used was actually net base average demand, he was the one to alter the document. The evidence presented to the court, however, is not the type of "irrefragable" evidence necessary to prove bad faith on the part of the government.

Moreover, the court's determination that the government was negligent in preparing the estimated contract requirements does not, necessarily, lead to a conclusion that the government acted in bad faith. In discussing the standard by which the government must calculate estimated contract requirements, the court in Medart Inc. v. Austin stated:

[T]he government must act in good faith and use reasonable care in computing its estimated needs; it is not free to carelessly guess at its needs. Where a contractor can show by preponderant evidence that estimates were "inadequately or negligently prepared, not in good faith, or grossly or unreasonably inadequate at the time the estimate was made[.]" the government could be liable for appropriate damages resulting. Clearwater Forest, 650 F.2d at 239.

967 F.2d at 581 (emphasis added). In the first sentence of the quote, the Medart court places two obligations on the government: (1) it must act in good faith; and (2) it must not act negligently. Similarly, the quotation in Medart from the Clearwater case indicates that a contractor may succeed by proving either bad faith or negligence. In Womack v. United States, the United States Court of Claims distinguished bad faith from negligence in the context of inadequate estimates. 389 F.2d at 800. The Womack court equated a challenge to the government's estimates with misrepresentation and stated :

Considering all of the circumstances, it constituted such a misrepresentation and not the less so because it was attributable to defendant's negligence rather than to any conscious attempt to deceive the plaintiffs. Whatever the case in tort or other areas, intent to mislead is not an essential element of actionable misrepresentation in the breach of contract context. Morrison-Knudsen Co. v. United States, 345 F.2d 535, 539, 170 Ct. Cl. 712, 719 (1965). An inadvertent misrepresentation stemming from negligence is fully as damaging as a deliberate one to the party who relies on it to his detriment.

Id. Thus, in Womack, the court recognized that a finding of negligence was independent of a finding of an intent to deceive, a traditional hallmark of bad faith. Plaintiff has not

demonstrated bad faith on the part of government representatives in the two contracts at issue. However, the negligent estimates discussed above support defendant's liability.

II. Damages

The plaintiff requests damages spread over the initial base year and the four option years of each contract, regardless of the fact that the government only exercised the option to extend each contract twice. Both contracts contained an option clause stating: "THE CONTRACTING OFFICER MAY EXTEND THE ONE YEAR BASE PERIOD FOR ISSUING DELIVERY ORDERS UNDER THE CONTRACT, BY ONE YEAR, UP TO FOUR TIMES" An option contract generally binds the option giver, not the option holder. As noted in Dynamics Corp. of America v. United States, 182 Ct. Cl. 62, 74, 389 F.2d 424, 431 (1968), Professor Corbin described an option contract as follows:

The primary element that differentiates it from all other contracts, is that the option Holder has the legal power to consummate a second contract for the contemplated exchange of equivalents and at the same time the legal privilege of not exercising it. The option giver, on the other hand, has the correlative liability to become bound to execute that exchange, and at the same time a disability to avoid it.

1A Corbin, Contracts § 259 at 464 (1963 ed.).

The United States Claims Court, the predecessor court to the United States Court of Federal Claims, likewise stated:

The government's failure to exercise an option in a contract does not ordinarily give rise to a breach of contract action. A standard option provision in a government contract obliges the contractor to perform the additional contract work if the government chooses to exercise the option, but it does not create a legal obligation on the part of the government to exercise the option and require the work. See Dynamics Corp. of Am. v. United States, 182 Ct. Cl. 62, 74, 389 F.2d 424, 431 (1968); Government Systems Advisors, Inc. v. United States, 847 F.2d 811, 813 (Fed. Cir. 1988).

Optimal Data Corp. v. United States, 17 Cl. Ct. 723, 731 (1989), aff'd, 904 F.2d 45 (Fed. Cir. 1990) (table); accord Johnny F. Smith Truck & Dragline Serv., Inc. v. United States, 49 Fed. Cl. 443, 455 (2001); LaSalle Partners v. United States, 48 Fed. Cl. 797, 806 (2001).

A contractor can recover for the government's failure to exercise an option if the government's failure was in bad faith. See Dangfeng Shen Ho v. United States, 49 Fed. Cl. 96, 107 (2001), aff'd, 30 Fed. Appx. 964 (Fed. Cir. 2002); Appeal of Dachdeckermeister Udo Dämgen GMBH, A.S.B.C.A. No. 53,076, 01-2 B.C.A. (CCH) ¶ 31,467, 155,378 (2001); Aspen Helicopters, Inc. v. Dep't of Commerce, G.S.B.C.A. No. 13,258, 99-2 B.C.A. (CCH) ¶ 30,581, 151,024 (1999). As discussed above, however, the court has not found bad faith on the part of the government officials in this contract. See Dangfeng Shen Ho v. United

States, 49 Fed. Cl. at 107 (refusing to find the government acted in bad faith in failing to renew plaintiff's option). Therefore, this plaintiff may not recover for any items which might have been ordered during the fourth and fifth option years even if the government incorrectly estimated its contract requirements.

Plaintiff is entitled to damages, if proven, for the government's breach of contract. In Hughes Communications Galaxy, Inc. v. United States, 271 F.3d 1060 (Fed. Cir. 2001), reh'g and reh'g en banc denied (2002), the United States Court of Appeals for the Federal Circuit reiterated the core rules concerning damages for common law breach of contract:

"The general rule in common law breach of contract cases is to award damages sufficient to place the injured party in as good a position as he or she would have been had the breaching party fully performed." San Carlos Irrigation & Drainage Dist. v. United States, 111 F.3d 1557, 1562-63 (Fed. Cir. 1997). Thus, "[a] plaintiff must show that but for the breach, the damages alleged would not have been suffered." Id. Moreover, the damages must have been foreseeable at the time the parties entered the contract, which requires that they "be the natural and proximate result of the breach." Locke v. United States, 151 Ct. Cl. 262, 283 F.2d 521, 526 (Ct. Cl.1960).

271 F.3d at 1066. These basic rules are limited, however, "by the proposition that contract law precludes recovery for speculative damages." San Carlos Irr. and Drainage Dist. v. United States, 111 F.3d 1557, 1563 (citing Roseburg Lumber Co. v. Madigan, 978 F.2d 660, 667 (Fed. Cir.1992) (citing Story Parchment Co. v. Paterson Parchment Paper Co., 282 U.S. 555, 562-63 (1931))), corrected on reh'g (1997). "[R]emote and consequential damages are not recoverable in a common-law suit for breach of contract . . . especially . . . in suits against the United States for the recovery of common law damages, such as the instant case." Id. (quoting Wells Fargo Bank, N.A. v. United States, 88 F.3d 1012, 1020 (Fed. Cir. 1996) (citing Northern Helex Co. v. United States, 207 Ct. Cl. 862, 878-79, 886, 524 F.2d 707, 713, 720 (1975)), cert. denied, 520 U.S. 1116 (1997)).

Lost profits is often one of the elements of damages awarded to the non-breaching party to give it the benefits it would have received had the contract not been breached. Cal. Fed. Bank, FSB v. United States, 245 F.3d 1342, 1349 (Fed. Cir. 2001) (citing Glendale Fed. Bank, FSB v. United States, 239 F.3d 1374, 1380 (Fed. Cir. 2001) (citing Restatement (Second) of Contracts § 347 (1981))), cert. denied, 122 S. Ct. 920 (2002). "Lost profits are 'a recognized measure of damages where their loss is the proximate result of the breach and the fact that there would have been a profit is definitely established, and there is some basis on which a reasonable estimated of the amount of the profit can be made.'" Id. (quoting Neely v. United States, 152 Ct. Cl. 137, 146, 285 F.2d 438, 443 (1961)).

In a number of complex contract cases, however, exact computation of damages may prove to be extremely difficult. Therefore, courts have held that, "[t]he ascertainment of damages, or of an equitable adjustment, is not an exact science, and where

responsibility for damage is clear, it is not essential that the amount thereof be ascertainable with absolute exactness or mathematical precision.” Elec. & Missile Facilities, Inc. v. United States, 189 Ct. Cl. 237, 257, 416 F.2d 1345, 1358 (1969) (citations omitted, emphasis in original). The plaintiff can meet its burden of proving damages if it “furnishes the court with a reasonable basis for computation, even though the result is only approximate.” Wunderlich Contracting Co. v. United States, 173 Ct. Cl. 180, 199, 351 F.2d 956, 968 (1965); see also Capital Elec. Co. v. United States, 729 F.2d 743, 746 (Fed. Cir. 1984); Addison Miller, Inc. v. United States, 108 Ct. Cl. 513, 557, 70 F. Supp. 893, 900, cert. denied, 332 U.S. 836 (1947); Datalect Computer Servs. v. United States, 41 Fed. Cl. 720, 722 (1998), aff’d, 215 F.3d 1344 (Fed. Cir. 1999) (table), cert. denied, 529 U.S. 1037 (2000); Jackson v. United States, 12 Cl. Ct. 363, 366-67 (1987).

However, “leniency as to the actual mechanics of computation does not relieve a contractor of its basic and essential burden of establishing the fundamental facts of liability, causation, and resultant injury.” Miller Elevator Co., Inc. v. United States, 30 Fed. Cl. at 702 (quoting G.M. Shupe, Inc. v. United States, 5 Cl. Ct. 662, 737 (1984)). For example, in a case in which there was no comparative data, no standards and no corroboration, “the mere expression of an estimate as to the amount of productivity loss by an expert witness with nothing to support it will not establish the fundamental fact of resultant injury nor provide a sufficient basis for making a reasonably correct approximation of damages.” Luria Bros. & Co., Inc. v. United States, 177 Ct. Cl. 676, 696, 369 F.2d 701, 713 (1966) (citing Wunderlich Contracting Co. v. United States, 173 Ct. Cl. 180, 199, 351 F.2d 956, 968 (1965)).

One method of approximation is the “jury verdict,” which is “most often employed when damages cannot be ascertained by any reasonable computation from actual figures,” but it “is not favored and may be used only when other, more exact, methods cannot be applied.” Dawco Constr., Inc. v. United States, 930 F.2d 872, 880 (Fed. Cir. 1991). In the underlying United States Claims Court decision in Dawco Construction, Inc. v. United States, 18 Cl. Ct. 682 (1989), the trial judge discussed the conditions under which the jury verdict might be useful, as follows: “Notwithstanding that a judge of this court is the sole trier of fact, the court has held that a jury verdict approach to the computation of damages is proper when it is not possible for the plaintiff to prove actual damages, but sufficient information exists to enable the court to arrive at a fair approximation of the damages.” Id. at 698 (citations omitted). In S.W. Electronics & Manufacturing Corp. v. United States, 228 Ct. Cl. 333, 655 F.2d 1078 (1981), the Court of Claims applied the jury verdict method because “[w]hen confronted with the clear liability of defendant and the plaintiff’s efforts to present all available evidence on damages, the [court] was under a heavy obligation to provide compensation. While there was ‘uncertainty as to the extent of the damage, * * * there was none as to the fact of damage.’ (Emphasis in original).” 228 Ct. Cl. at 351, 655 F.2d at 1088 (quoting Joseph Pickard’s Sons Co. v. United States, 209 Ct. Cl. 643, 650, 532 F.2d 739, 743 (1976)). However, as noted by the Court of Appeals for the Federal Circuit in Dawco, the jury verdict method’s “primary peril, as evidenced in this case, is the risk that unrealistic assumptions will be adopted and extrapolated, greatly multiplying an award beyond reason, and rewarding preparers of imprecise claims based on

undocumented costs with unjustified windfalls.” Dawco Constr., Inc. v. United States, 930 F.2d at 882. Thus, the jury verdict method is resorted to only when the plaintiff has shown: “(1) that clear proof of injury exists; (2) that there is no more reliable method for computing damages; and (3) that the evidence is sufficient for a court to make a fair and reasonable approximation of the damages.” Id. at 880 (citing WRB Corp. v. United States, 183 Ct. Cl. 409, 425 (1968)).

Plaintiff alleges that it is entitled to “the profit and burden that it anticipated in its bid and would have earned if the Government’s representations of its requirements had been true.” A plaintiff that has proven that the government was negligent in estimating contract requirements, however, still bears the risk of variances in the government’s requirements due to factors other than the government’s negligence and, thus, must base its damages on what the government would have estimated its contract requirements to be if it had not been negligent. See Datalect Computer Servs., Ltd. v. United States, 41 Fed. Cl. at 722, 728 (noting that a plaintiff that had proven negligent estimates must prove “causal connection to the alleged events on which the claims is based” and denying plaintiff’s claim for failure to present the court “with sufficient evidence to make a reasonable approximation of the damages incurred.”); In re Fairfax Opportunities Unltd., Inc., A.G.B.C.A. No. 96-178-1, 98-1 B.C.A. (CCH) ¶¶ 29,556, 146,526 (1998) (refusing to award damages based on difference of estimate and actual orders and relying on what the government would have estimated as the “most fair and accurate measure of recovery”). Therefore, the plaintiff before this court is only due a percentage of the portion of the difference between the actual orders and the estimated contract requirements attributable to the government’s failure to consider net base average monthly demand and assets on hand. To identify plaintiff’s entitlement, the court must first determine at what level the government would have estimated its contract requirements had it correctly used net base average monthly demand.

The plaintiff argues that realistic estimates would have approximated the actual requirements. In support, plaintiff notes that, “[t]he fact that the Government purchased very few goods for three full years and still ended up with significant inventories of all goods shows that returns and repairs provided adequate streams of repaired spares. Defendant argues that the effect of the government’s failure to account for repaired items and spares on hand was minimal and that other factors accounted for the variance between the estimated contract requirements and the actual quantities ordered. Consequently, the defendant believes that the actual estimates would have been substantially similar to the estimates provided in the solicitation, if the government had used net base average monthly demand in its estimate calculations.

Although much of the historical data used by the government has been lost pursuant to a command directive issued by the Army directing CECOM to retain documents used in preparing contract requirements for only two years, the court believes it is possible to reconstruct a reasonable model of what the government’s actual estimates would have been using the available record. Although it is not exact, the court believes that it is reasonably sufficient to serve to calculate damages. Mr. Harrison testified that the formula the government should have used in calculating its estimated contract requirements is net

base average monthly demand times the program change factor times the reorder cycle. The record reflects in several places that the program change factor used by the government was one and one-half² and that the reorder cycle was twelve. Therefore, the only undefined variable necessary to calculate what the government would have estimated as its contract requirements is the net base average demand for each item, for each of the three contract years at issue, for each contract.

Mr. Harrison testified that net base average monthly demand is a function of the base average monthly demand, the unserviceable return rate and the repair rate. Derived from the example Mr. Harrison gave at the trial, it is expressed as a formula, as follows: $NBAMD = BAMD - (BAMD \times \text{Unserviceable Return Rate} \times \text{Repair Rate})$. Therefore, to determine the net base average monthly demand for each item, one would need the base average monthly demand, the unserviceable return rate and the repair rate for each item, in each contract and for each of the three contract years remaining in the case.

The base average monthly demand may be determined from evidence available in the record. The government used the formula $BAMD \times PCF \times REOCY = ECR$ for determining its estimated contract requirements. Thus, to solve for base average monthly demand, the following formula may be used: $BAMD = ECR \div (PCF \times REOCY)$. Accepting the program change factor and the reorder cycle as constants which were testified to during the trial, and that the government's estimated contract requirements are present in the solicitations and have been stipulated to by the parties, by entering the program change factor constant, the reorder cycle factor and the estimated contract requirement stated in the solicitations for each item, one may solve for the base average monthly demand for each item, for each contract year at issue:

² As noted above, the program change factor was derived from the number of end items in use in the field. The end items for all of the spare parts at issue in both contracts was the T-39 circuit switch. Therefore, the program change factor for each spare part is the same.

Base Average Monthly Demand Per Contract Year for Contract F301						
Contract Line Item Number (CLIN)	ECR Per Contract Year			BAMD Per Contract Year ³		
	1	2	3	1	2	3
0001	6	6	6	0.3333	0.3333	0.3333
0003	60	15	15	3.3333	0.8333	0.8333
0005	6	6	11	0.3333	0.3333	0.6111
0007	6	15	15	0.3333	0.8333	0.8333
0011	25	15	15	1.3889	0.8333	0.8333
0015	6	6	6	0.3333	0.3333	0.3333
0017	29	11	11	1.6111	0.6111	0.6111
0019	31	11	11	1.7222	0.6111	0.6111
0022	10	11	11	0.5556	0.6111	0.6111

Base Average Monthly Demand Per Contract Year for Contract F305						
Contract Line Item Number (CLIN)	ECR Per Contract Year			BAMD Per Contract Year		
	1	2	3	1	2	3
0001	16	16	16	0.8889	0.8889	0.8889
0002	35	35	35	1.9444	1.9444	1.9444
0003	16	16	16	0.8889	0.8889	0.8889
0004	35	35	35	1.9444	1.9444	1.9444
0005	16	16	16	0.8889	0.8889	0.8889
0006	40	40	40	2.2222	2.2222	2.2222
0007	12	16	16	0.6667	0.8889	0.8889

With regard to the unserviceable return rate, the court believes that it would have been reasonable for the government to use the same default unserviceable return rate of twenty-five percent that Mr. Zaccarine used when determining which items were suitable

³ BAMD=ECR÷(PCF x REOCY).

for multi-year contracts, even though Mr. Zaccarine testified that he continuously checked the unserviceable return rates to determine whether those numbers were changing and that up until October of 1993, when he stopped monitoring the T-39 switch, the unserviceable return rates for the items in question remained low. The Army could not use actual, past unserviceable return rates because of the change in policy for which it needed to account. Mr. Harrison also decided to use a twenty-five percent default unserviceable return rate for any item in which the actual return rate was under twenty-five percent in selecting the items for multi-year procurements. Mr. Zaccarine testified that none of the items he tested for multi-year procurement, and, thus, none of the items at issue in this case, had unserviceable return rates of higher than twenty-five percent. Ms. Macchiarella testified that when she and Ms. Gallagher estimated the contract requirements, the Army had still not seen an increase in unserviceable returns due to the change in policy granting credit for unserviceable returns and charging units for spare parts, although the Army still believed that the rate would increase in the near future. Because the only rate used by the government was twenty-five percent, and combined with the fact that, although under a regular document destruction policy, the Army destroyed the records making establishment of the actual rate impossible, it is reasonable to rely on the twenty-five percent unserviceable return rate to establish plaintiff's damages.

Individual final recovery rates, extracted from the NSNMDR database on March 29, 1999 are available for every item at issue. Although the final recovery rates were extracted slightly more than five years after the government calculated the estimated contract requirements at issue, the court finds that it is reasonable to use the rates from 1999. Neither party submitted any evidence at the trial showing that the final recovery rates changed in the years proceeding the government's estimation. In addition, final recovery rates are a function of the Army's ability to repair an item, and the cost analysis of doing the repair. It seems improbable that these factors would change over time, and there is no evidence in the record to suggest such a change. The following charts indicate the final recovery rates in 1999 for each contract line item:

Final Recovery Rates for CLINs in Contract F301 - March 29, 1999	
CLIN	Final Recovery Rate
0001	.75
0003	.75
0005	1
0007	.75
0011	.75
0015	.75
0017	.85
0019	1
0022	1

Final Recovery Rates for CLINs in Contract F305 - March 29, 1999	
CLIN	Final Recovery Rate
0001	.75
0002	1
0003	.75
0004	.75
0005	.85
0006	1
0007	.75

Notably, the final recovery rates from March of 1999 range from seventy-five to one hundred percent, consistent with Mr. Zaccarine's testimony at the trial that at the time he selected items for multi-year procurement, the NSNMDR database reflected that final recovery rates for those items ranged from seventy-five to one hundred percent.

The final factor, according to the parties' joint stipulation, for determining net base average monthly demand, is assets on hand. There is no evidence in the record as to the number of the items at issue that the Army had on hand at the time it calculated the estimates. This appears to be because the NSNMDR database is constantly changing and the Army directive indicates that such information used for soliciting contracts shall only be

retained for two years. Either way, plaintiff has failed to provide a useable number for assets on hand. Consequently, plaintiff cannot establish what the government would have estimated as the contract requirements if it had accounted for assets on hand. As a result, plaintiff may not recover for the government's failure to take assets on hand into account.

Using the default unserviceable return rate of twenty-five percent, the final recovery rates and the base average monthly demand, as described above, it is possible to calculate the net base average monthly demand for each contract item and each contract year:

Net Base Average Demand Per Contract Year for Items in Contract F301								
CLIN	Final Recovery Rate	Unserviceable Return Rate	BAMD Per Contract Year			NBAMD Per Contract ⁴ Year		
			1	2	3	1	2	3
0001	.75	.25	.3333	.3333	.3333	0.2708	0.2708	0.2708
0003	.75	.25	3.3333	.8333	.8333	2.7083	0.6771	0.6771
0005	1	.25	.3333	.3333	.6111	0.2500	0.2500	0.4583
0007	.75	.25	.3333	.8333	.8333	0.2708	0.6771	0.6771
0011	.75	.25	1.3889	.8333	.8333	1.1285	0.6771	0.6771
0015	.75	.25	.3333	.3333	.3333	0.2708	0.2708	0.2708
0017	.85	.25	1.6111	.6111	.6111	1.2687	0.4812	0.4812
0019	1	.25	1.7222	.6111	.6111	1.2917	0.4583	0.4583
0022	1	.25	.5556	.6111	.6111	0.4167	0.4583	0.4583

Net Base Average Demand Per Contract Year for Items in Contract F305								
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⁴ NBAMD=BAMD - (BAMD x Unserviceable Return Rate x Final Recovery Rate).

CLIN	Final Recovery Rate	Unserviceable Return Rate	BAMD Per Contract Year			NBAMD Per Contract Year		
			1	2	3	1	2	3
0001	.75	.25	.8889	.8889	.8889	0.7222	0.7222	0.7222
0002	1	.25	1.9444	1.9444	1.9444	1.4583	1.4583	1.4583
0003	.75	.25	.8889	.8889	.8889	0.7222	0.7222	0.7222
0004	.75	.25	1.9444	1.9444	1.9444	1.5798	1.5798	1.5798
0005	.85	.25	.8889	.8889	.8889	0.7000	0.7000	0.7000
0006	1	.25	2.2222	2.2222	2.2222	1.6667	1.6667	1.6667
0007	.75	.25	.6667	.8889	.8889	0.5417	0.7222	0.7222

Using the formulas and numbers described above, the following charts describe the calculation of the government estimates as to its contract requirements and using Hi-Shear’s pricing for the initial contact, what the total price of each contract would have been based on net average monthly demand.

Contract F301

CLIN	NBAMD Per Contract Year			ECR Per Year ⁵		
	1	2	3	1	2	3
0001	0.2708	0.2708	0.2708	4.8744	4.8744	4.8744
0003	2.7083	0.6771	0.6771	48.7494	12.1878	12.1878
0005	0.2500	0.2500	0.4583	4.5000	4.5000	8.2494
0007	0.2708	0.6771	0.6771	4.8744	12.1878	12.1878
0011	1.1285	0.6771	0.6771	20.3130	12.1878	12.1878
0015	0.2708	0.2708	0.2708	4.8744	4.8744	4.8744
0017	1.2687	0.4812	0.4812	22.8366	8.6616	8.6616
0019	1.2917	0.4583	0.4583	23.2506	8.2494	8.2494
0022	0.4167	0.4583	0.4583	7.5006	8.2494	8.2494

Contract F305						
CLIN	NBAMD Per Contract Year			ECR Per Year		
	1	2	3	1	2	3
0001	0.7222	0.7222	0.7222	12.9996	12.9996	12.9996
0002	1.4583	1.4583	1.4583	26.2494	26.2494	26.2494
0003	0.7222	0.7222	0.7222	12.9996	12.9996	12.9996
0004	1.5798	1.5798	1.5798	28.4364	28.4364	28.4364
0005	0.7000	0.7000	0.7000	12.6000	12.6000	12.6000
0006	1.6667	1.6667	1.6667	30.0006	30.0006	30.0006
0007	0.5417	0.7222	0.7222	9.7506	12.9996	12.9996

Hi-Shear's claims to the contracting officer included: (1) fixed overhead relating to the unordered quantities and (2) gross profit related to the unordered quantities, including general and administrative (G & A) costs. The DCAA audit of Hi-Shear's claims accepted the unrecouped fixed overhead costs claimed by the plaintiff. The audit found that "[i]n our

⁵ As previously noted: ECR = NBAMD x PCF x REOCY. In the above calculations, PCF is a constant of 12 and REOCY is a constant of 1.5.

opinion, the contractor's other in-house contracts should not absorb the fixed overhead cost related to these two contracts." In addition, the defendant has not raised any arguments contesting the plaintiff's claim for fixed overhead costs in the event that the court ruled that the government had improperly estimated its requirements and that the plaintiff was entitled to recovery. Hi-Shear's certified claim, and the DCAA audit, however, base the amount of fixed overhead recoverable by the plaintiff on the assumption that the plaintiff was entitled to all of the estimated contract requirements for the base year and all four option years. The court has found that Hi-Shear is only entitled to a computation based on the quantities the government would have ordered had it accounted for unserviceable returns and only during the base year and the two executed option years. Therefore, the plaintiff is entitled only to the fixed overhead related to the quantities the government would have ordered and only for the base year and the two executed option years. The following chart indicates the total overhead, per contract line item, for contract F-301 and the amount of that overhead that was fixed, calculated by taking seventeen percent of the total overhead, as suggested by Hi-Shear in its certified claims and accepted by the DCAA audit:

Fixed Overhead Per CLIN - Contract F301			
CLIN	Total Overhead Per Item	Fixed Overhead Percentage	Fixed Overhead ⁶ Per Item
0001	\$258.97	.17	\$44.02
0003	\$334.93	.17	\$56.94
0005	\$139.99	.17	\$23.80
0007	\$105.87	.17	\$18.00
0011	\$284.90	.17	\$48.43
0015	\$57.05	.17	\$9.70
0017	\$363.47	.17	\$61.79
0019	\$429.95	.17	\$73.09
0022	\$528.00	.17	\$89.76

The total amount of fixed overhead due to the plaintiff for contract F301 is calculated by multiplying the fixed overhead per item by the number of items the government should have ordered in the base year and the two executed option years and subtracting from that amount the fixed overhead covered by the government's actual orders:

⁶ Fixed overhead per item equals seventeen percent of the item's total overhead.

Plaintiff's Entitlement to Fixed Overhead for Contract F301						
CLIN	Entitled Quantities Per Contract Year			Fixed Overhead Per Item	Fixed Overhead Covered by Actual Orders	Total Entitlement to Fixed Overhead
	1	2	3			
0001	4.8744	4.8744	4.8744	\$44.02	\$0.00	\$643.78
0003	48.7494	12.1878	12.1878	\$56.94	\$3,416.33	\$747.27
0005	4.5000	4.5000	8.2494	\$23.80	\$0.00	\$410.51
0007	4.8744	12.1878	12.1878	\$18.00	\$0.00	\$526.44
0011	20.3130	12.1878	12.1878	\$48.43	\$0.00	\$2,164.40
0015	4.8744	4.8744	4.8744	\$9.70	\$0.00	\$141.82
0017	22.8366	8.6616	8.6616	\$61.79	\$0.00	\$2,481.47
0019	23.2506	8.2494	8.2494	\$73.09	\$0.00	\$2,905.34
0022	7.5006	8.2494	8.2494	\$89.76	\$0.00	\$2,154.19
Total						\$12,175.23

The process is repeated for Contract F305:

Fixed Overhead Per CLIN - Contract F305			
CLIN	Total Overhead Per Item	Fixed Overhead Percentage	Fixed Overhead Per Item
0001	\$36.90	.17	\$6.27
0002	\$50.85	.17	\$8.64
0003	\$33.91	.17	\$5.76
0004	\$39.57	.17	\$6.73
0005	\$39.93	.17	\$6.79
0006	\$42.65	.17	\$7.25
0007	\$73.87	.17	\$12.56

Plaintiff's Entitlement to Fixed Overhead for Contract F305						
CLIN	Entitled Quantities Per Contract Year			Fixed Overhead Per Item	Fixed Overhead Covered by Actual Orders	Total Entitlement to Fixed Overhead
	1	2	3			
0001	12.9996	12.9996	12.9996	\$6.27	\$0.00	\$244.52
0002	26.2494	26.2494	26.2494	\$8.64	\$276.64	\$403.74
0003	12.9996	12.9996	12.9996	\$5.76	\$74.95	\$149.68
0004	28.4364	28.4364	28.4364	\$6.73	\$0.00	\$574.13
0005	12.6000	12.6000	12.6000	\$6.79	\$203.63	\$53.03
0006	30.0006	30.0006	30.0006	\$7.25	\$580.00	\$72.51
0007	9.7506	12.9996	12.9996	\$12.56	\$0.00	\$449.02
Total						\$1,946.64

Thus, the court finds that the plaintiff is entitled to \$14,121.87 (\$12,175.23 and \$1,946.64) for fixed overhead costs related to unordered quantities for the base year and two option years.

The plaintiff also has requested gross profit for the unordered quantities. The defendant has argued that plaintiff is not entitled to lost profits because Hi-Shear would have been in a loss position following the completion of the contract. Similarly, the DCAA

audit questioned plaintiff's claim for lost profits because "based on our analyses, the contractor would have experienced a loss on both of these contracts even if all contract requirements had been ordered." In order to recover lost profits, a contractor must establish that it would have earned profit on the contract but for the government's breach. See Cal. Fed. Bank v. United States, 245 F.3d at 1349; Neely v. United States, 152 Ct. Cl. at 137, 285 F.2d at 443. Consequently, Hi-Shear must prove that, but for the government's failure to account for net base average demand over the three years at issue, it would have made a profit. According to the audit, the cost to Hi-Shear to produce the units ordered was \$536,725.00 and the bid price was \$237,938.00, resulting in a loss of \$298,787.00. Mr. Mooney, plaintiff's CEO, admitted that Hi-Shear's costs in producing the units ordered were approximately \$536,725.00. Mr. Mooney stated, however, that the reason the cost of producing the items was above the bid price was because Hi-Shear had to perform engineering on the contract that would have been capitalized and amortized over the rest of the orders. Mr. Mooney assumes, however, that Hi-Shear was entitled to all of the estimated contract requirements for the base year and the four option years. Plaintiff has presented no evidence that, if capitalized and amortized, the engineering costs would have been sufficiently covered by the orders the court has found it entitled to, namely, the orders the government would have estimated had it accounted for unserviceable returns over the base year and the two executed contract years. Thus, the court finds that plaintiff has failed to prove that it is entitled to lost profits.

Finally, the court addresses plaintiff's claims for G & A costs. The DCAA audit agreed with Hi-Shear's estimate of its G & A rate as twenty-six percent. The DCAA audit only accepted, however, the G & A expenses related to Hi-Shear's unrecouped fixed overhead and rejected the G & A expenses related to the cost of work not performed. The DCAA's approach appears reasonable, and there is no evidence in the record to refute the DCAA conclusion. Hi-Shear based its G & A costs on the labor, materials and total overhead related to the production for each contract line item. Hi-Shear did not incur, however, any labor or material costs on the contracts for items that were not ordered. Nor has it claimed non-fixed overhead costs. A defense contractor may not recover G & A expenses related to unallowed costs. See Rice v. Martin Marietta Corp., 13 F.3d 1563, 1571 (Fed. Cir. 1993). Therefore, Hi-Shear may only recover G & A costs related to fixed overhead. The G & A costs related to fixed overhead is equal to twenty-six percent of the fixed overhead to which Hi-Shear is entitled: \$3,671.69.

CONCLUSION

Pursuant to the above discussion, the court finds that the government was negligent in failing to account for net base average monthly demand when it calculated the estimated contract requirements for Contracts F301 and F305. Plaintiff's recovery, however, is limited to the damages occasioned by the government's negligence. Hi-Shear is only entitled to the additional quantities the government would have estimated had it correctly accounted for net base average monthly demand. The plaintiff continued to bear the risk of variances not caused by the government's negligence. Moreover, plaintiff only may recover for the base year of the contract plus the two additional option years executed by the government. The defendant was not obligated to extend the contract further.

As a result of the defendant's negligence, the plaintiff is entitled to the fixed overhead related to the additional quantities the government would have estimated over the base year and the two option years, less the fixed overhead recovered by actual orders: \$14,121.87. In addition, the plaintiff is entitled to G & A costs related to that fixed overhead: \$3,671.69. The plaintiff is not entitled to profit, because it has not proven that it would have earned a profit on the contract had the government properly estimated its requirements and only executed the first two option years. Therefore, the Clerk's Office shall enter **JUDGMENT** for the plaintiff in the amount of \$17,793.56, plus interest pursuant to 41 U.S.C. § 611 (2000) from May 12, 1997 until payment is made.

IT IS SO ORDERED.

MARIAN BLANK HORN
Judge