

**DECISION**

**THE COMPTROLLER GENERAL  
OF THE UNITED STATES**  
WASHINGTON, D.C. 20548

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**FILE:** B-216509**DATE:** November 8, 1984**MATTER OF:** Olympia USA, Inc.**DIGEST:**

1. GAO finds no merit in protest that the General Services Administration's (GSA) method for evaluating life cycle costs (LCC), in conjunction with bids to supply typewriters, is unfair and unreasonable. The protester fails to show, as it alleges, that 1) the LCC tests, conducted prior to the procurement, were unreliable, 2) that GSA's method of determining ribbon replacement costs prejudiced the protester, or 3) that GSA's method for determining typewriters' residual values, as an element of LCC, was unreasonable.
2. Bid that fails to provide model number of offered item, as required, nevertheless is responsive where it otherwise is clear from the bid precisely what the bidder is offering and what the firm legally will be obligated to furnish if the bid is accepted.
3. Fact that protester might have submitted a nonresponsive bid would not, by itself, defeat the protester's interest in its pre-bid opening protest that the specifications were defective.

This decision responds to a request by the United States Claims Court that our Office render an advisory opinion on Olympia USA, Inc.'s protest under General Services Administration's (GSA) solicitation No. FGE-D3-75283-A. The protest pertains to the portion of the solicitation seeking bids, under formally advertised procedures, to meet federal agencies' normal requirements

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for single-element electric or electronic typewriters,<sup>1/</sup> and to the stated methodology for determining the low bidder based on the projected life cycle costs (LCC) of offered models. After filing the protest with our Office, Olympia filed a complaint with the court seeking declaratory and injunctive relief based on essentially the same grounds as Olympia had raised in its protest. Olympia USA, Inc. v. United States, Cl. Ct. No. 503-84C.

We find no legal basis to question GSA's LCC analysis.

### I. Background

The solicitation provides that the low bidder will be determined basically by the application of an LCC formula adjusting the offered purchase price to reflect certain costs, including: the costs of productivity downtime arising from typewriter failures; the costs of repair parts and services; the costs of replacing ribbons, correction tapes and print wheels (hereafter "ribbon replacement"); and a measure of the machines trade-in value after 10 years (the machine's "residual value"). The formula adds projected costs of downtime, repair parts and services, and ribbon replacement to the offered purchase price, while subtracting the residual value, in order to arrive at a total realistic cost to the government for each offered machine.

The projected costs of downtime, repair parts and services, and ribbon replacement have been predetermined through testing GSA previously conducted on a sample group of four machines of each model. The testing subjected each typewriter to 3,000,000 keystrokes (the estimated number of operations in the expected 10-year useful life

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<sup>1/</sup>The resulting contract will be listed in the Federal Supply Schedule (FSS) 74, part 1, section B, that GSA distributes to federal agencies. Federal agencies may place orders against FSS contracts directly with the contractor.

of the machines), using Graphic Products Corporation's commercially-available Automatic Electric Typewriter Tester TT-200, with certain modifications. GSA pre-determined the residual value of each model by surveying dealers of used typewriters for the present value of the machine assuming it was 1 year old, and discounting the average of the responses to reflect the value after 10 years.

The basic LCC methodology is set forth in an attachment to the solicitation. Since the procedure for evaluating bids requires information determined in advance of the procurement, the solicitation also limits models that may be offered to those models that have already undergone LCC testing and evaluation.

Prior to this procurement, Olympia had submitted its "Olympia Standard" model to LCC testing and evaluation, the results of which form the basis of the protest. Those results were that Olympia's model incurred projected costs of \$892.36 for the costs of downtime, repair parts and services, and ribbon replacement over a 10-year period. For evaluation purposes, that was adjusted to reflect the current value of expenditures to be made in the future, resulting in the addition of \$547.91 to Olympia's bid price. Of that amount, \$54.81 will be offset by the residual value assigned to Olympia's machine.

In contrast, the IBM "Selectric III BO1," offered by IBM in the current procurement (under which bids were opened after the filing of Olympia's protest), incurs projected LCC costs of \$263.98, adjusted to add \$162.09 to IBM's bid price, while the machine's assigned residual value is \$123.52.<sup>2/</sup> Application of these LCC values to

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<sup>2/</sup>The LCC amounts used in this decision are those provided in Exhibits O-1 and O-3 of GSA's October 12 report on the protest.

the bid prices--\$320 by Olympia and \$575 by IBM--results in Olympia's evaluated price, \$813.10, exceeding IBM's, \$613.57, by \$199.53. In fact, IBM is in line for the award.<sup>3/</sup>

## II. Issues

Olympia disputes the validity of the LCC testing and evaluation, and protests their use to determine the low bidder in this procurement. Specifically, Olympia raises the following grounds of protest:

A) Regarding the LCC testing, the protester contends that the downtime costs and the costs of repair parts and services imputed to its bid price are not attributable to defects in Olympia model, but to the alleged failure of GSA to calibrate its automatic testing system properly or to control the testing procedures.

B) The protester argues that GSA inflated the costs of ribbon replacement on Olympia's model by refusing to permit Olympia to offer prices for supplies to be used with the typewriters being acquired under this procurement, and instead using commercial price lists to determine the supplies' costs. Olympia further argues that, at the same time, GSA understated IBM's ribbon replacement costs by using the lowest listed

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<sup>3/</sup>The solicitation provides that a 90 percent confidence interval will be computed, and that if any bidder's LCC fall within the low bidder's 90 percent confidence interval, then other procedures will be used to determine the low bidder. Since IBM's 90 percent confidence interval is \$575.83 to \$651.30, the provisions for those procedures, including providing for award based on the lowest offered price without reference to LCC, do not apply to this procurement.

price for a compatible ribbon listed in an FSS contract, despite the fact that IBM's model was not tested using such a ribbon and several using agencies do not order such ribbons for their IBM machines.

C) The protester complains that GSA's method for determining residual value, based on a survey of the current values of machines after 1 year's use, is arbitrary and bears no reasonable relationship to the trade-in value that GSA reasonably can anticipate obtaining in 10 years.

D) The protester maintains that GSA's testing methodology varied from that listed in the specification regarding the number of keystrokes during testing.

These grounds are discussed separately below. In addition, we address, and reject, an argument raised by GSA that Olympia's bid under the subject solicitation was nonresponsive, and that therefore the protest is basically academic or moot.

### III. Discussion

#### A. Downtime Costs and Costs of Repair Parts and Services

One of Olympia's contentions is that the TT-200, the machine used to test the typewriters, abused Olympia's model in a manner unrelated to normal use, resulting in damages to the keys and the imputation of downtime and repair costs to Olympia's model that are not typical of normal use. The TT-200 consists of a control unit connected by a cable to the typewriter operating module, and which utilizes solenoid plungers to depress the keys of the typewriter being tested. The machine is equipped with an impact control which can vary the force with which the plungers descend. The protester admits that the TT-200 is an "accepted machine for testing typewriters and for determining the life of ribbons."<sup>4</sup> The protester contends, however, that if the machine is not carefully

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<sup>4</sup>/Protester's October 26 submission to this Office, at page 4.

installed to obtain the proper angle of impact, the impact control properly calibrated, and the testing carefully monitored for necessary readjustments to the machine and the impact control, then the test results are totally unreliable. The protester further contends that GSA's failure to observe these standards caused Olympia's model to suffer unusual problems.

We do not believe that the protester, who bears the burden of submitting sufficient evidence to establish its position, see Alchemy, Inc., B-207954, Jan. 10, 1983, 83-1 CPD ¶ 18, has met its burden with respect to its allegations that GSA failed to observe necessary testing standards, and that such failure caused Olympia's model to suffer atypical problems.

The protester's deposition of GSA's supervisor of the testing, who the protester admits is a "skilled and capable engineer,"<sup>5/</sup> states that the supervisor initially installed the testing machines or did most of the work. According to the deposition, this entailed setting the TT-200 operating module in a frame, and adjusting the frame so that the module was aligned with the keys in a manner that allowed the solenoids to activate typewriter functions. The impact control apparently was also adjusted to the point where impact created a clear image. Thereafter, the testing was continually monitored by part-time employees, mostly consisting of students, to observe deficiencies or failures and to check to see if the cause originated in the testing equipment or with the typewriter. If the cause originated in the testing equipment, the monitor was to adjust the equipment, whereas if the cause was in the typewriter, the monitor was to note the deficiency, and correct it or call a serviceman as needed. For this purpose, the monitor could consult the manufacturer's instruction manual. If the monitor had any doubts, he was to discontinue testing and have the supervisor or an engineer examine the situation. The supervisor, when not observing the testing, checked the record of noted deficiencies.<sup>6/</sup>

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<sup>5/</sup>Id.

<sup>6/</sup>Deposition, at pages 63-74.

The record does not indicate any problem with the initial installation of the TT-200, a task performed or overseen by the supervisor whom the protester concedes is qualified. Concerning the conduct of the tests, the record contains no evidence, aside from the protester's self-serving statements, that GSA's procedures are not sufficient. Since the TT-200 is acknowledged as an acceptable machine for typewriter testing, we would think that if there existed generally accepted procedures for such testing more stringent than those observed by GSA, the protester could present evidence of those procedures. In the absence of such evidence, the circumstances themselves do not suggest to us that, after initial installation, monitoring the testing generally required any special expertise. Rather, it seems to have basically required observing the operation for obvious failures to initiate a typewriter function, making judgments about the basic origin of any failures where the origin was discoverable, and writing notations in the record. In addition, the monitors could make simple necessary adjustments to the equipment to correct the failures, while serious problems were left for the supervisor or an engineer.

Specifically regarding the damaging of keys, the protester complains that GSA's failure to calibrate the force of the impact and to adjust the individual solenoid's angle of addressing the keys accounted for the damage. Nothing in the record, however, establishes that the TT-200 is even capable of exerting more damaging force than can be expected during normal use. The mere fact that GSA utilizes an electrically powered machine to conduct the testing does not indicate to us a likelihood of unusually destructive force being exerted. Olympia has presented the results of tests that it allegedly conducted itself on a similar model (its offered model being only 3 years old), and that purport to show no key damages. Aside from the fact that Olympia's own results are subject to obvious credibility attacks, however, the testing procedures and results are not explained in sufficient detail to call into serious question the results of GSA's testing. Moreover, GSA's report points out, and the protester does not deny, that Olympia's testing results report other failures not experienced during GSA's testing that support the net results of GSA's LCC tests.

With respect to the angle of the solenoids, we note that GSA's testing supervisor stated in his deposition

that the operating module was aligned with the angle of the keyboard and that the angle was adjusted during testing. The supervisor indicated that any further adjustment of the individual solenoids would not significantly change the vector force applied to the keys.<sup>7/</sup>

The protester also complains that the test results were unreliable because monitors had unbridled discretion to determine whether failures were attributable to the typewriters, and whether typewriter failures were of one of three types, with different impacts on the costs imputed to the typewriter. As explained in the solicitation, the first type of failure, "catastrophic" failure, included failures which rendered the machine unusable for normal typing and required a service call; the broken keys were of this type. The second type, "degradation" failure, degraded operation sufficiently to require a service call but did not preclude normal use of the machine; uneven character impressions, and loss of use of a seldomly used feature, are examples of such failures. The third type of failure, "nuisance" failure, is one that interrupts operations but does not require a service call. (The solicitation and the LCC procedures list other examples of the different types of failures.)

The protester does not allege that broken keys should not have been classified as catastrophic failures, but seems to question problems reported with ribbons not functioning properly. We note that the monitors had the benefit of some instruction and the manufacturer's instruction manual. To the extent that they were called on to exercise their discretion, there is no basis to suspect that the monitors' judgments would result in a more severe assessment of the type of failure than a typist would make in a normal working environment. The point of the LCC testing, after all, was to reflect the costs of the machines under normal use, and not under the use of technicians.

We therefore do not believe that the protester has shown that GSA's method for testing downtime and repair costs was unreasonable, unfair or invalid.

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<sup>7/</sup>Id., at 59.

## B. Ribbon Replacement Costs

The solicitation explains that the prices for ribbons, correction tapes, and print wheels are to be determined by reference to FSS contracts, if those items are available from those sources; otherwise, the manufacturer's list price shall control. Except for ribbons (for which GSA reports it will adjust Olympia's LCC price slightly to reflect a price available under an FSS contract), supplies for Olympia's typewriters are not available from FSS contractors, and GSA therefore used the lowest manufacturer's list price for supplies compatible with Olympia's model. Olympia complains that this methodology is unreasonable for several reasons, first of which is that it precludes Olympia from offering competitive prices for its supplies.

To the extent that Olympia desires to offer ribbon prices, we point out that GSA is contractually obligated to its FSS contractors to have ribbons purchased from those sources if the available ribbons will meet the using agencies' needs. In any event, the protester has not shown that the methodology prejudiced Olympia in this procurement. In fact, GSA reports that it recalculated Olympia's LCC using prices Olympia stated it would have offered for supplies (including even lower prices than the FSS-listed price for ribbons), but the calculation did not affect the results of the evaluation.<sup>8/</sup>

The protester also complains that GSA unfairly and improperly utilized the lowest priced ribbon listed on an FSS contract (\$.62) to calculate IBM's ribbon replacement costs. The protester contends that that price is unreasonable since GSA had not tested IBM's machine with the lowest-priced ribbon, and many federal agencies do not order the lowest priced ribbon for use with IBM's model. Olympia contends that a fair ribbon price would be about \$2.50 per ribbon. While the protester argues that use of this figure would increase IBM's LCC by \$247 (it is

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<sup>8/</sup>GSA's October 12 report on the protest, Exhibit Q-2.

unclear how that figure is reached), our calculation, based on IBM's model needing an average of 13.4 ribbons per year, is that a price of \$2.50 per ribbon would increase IBM's LCC by approximately \$12,<sup>9</sup>/ thus indicating that Olympia was not prejudiced by the evaluation of ribbons.

We do agree with the protester that it does not make much sense to test typewriters with different ribbons than those for which prices will be evaluated for use with the machines. In this respect, GSA tested models using the ribbons supplied by the manufacturer. Nothing in the record, however, shows that IBM benefited from those procedures or, if IBM did, that Olympia did not equally benefit.

### C. Residual Value

The protester complains that the solicitation provisions and the LCC methodology for competing and evaluating residual value after an assumed useful life of 10 years are unreasonable. As previously stated, the provisions basically credit an offeror with the market value of its models after 1 year's use ascertained through a survey of companies that sell large numbers of used typewriters, and then discount that amount to reflect a compounded yearly 10-percent reduction in value over a 10-year period. The discount factor was taken from Office of Management and Budget (OMB) Circular No. A-94, March 27, 1982, which provides for the application of a compounded yearly 10-percent factor to reflect the current value of a benefit anticipated over time.

Olympia argues that an estimate of a machine's residual value after 10 years that is based on current market values is unreasonable and cannot bear any reasonable relationship to the machine's actual value in

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<sup>9</sup>/The difference between \$2.40 and \$.62 (\$1.88) multiplied by 13.4, and then discounted.

10 years. Olympia contends that this is especially so regarding IBM's model since that model is an electrically powered mechanical typewriter, which according to Olympia will have practically no value in 10 years because of the availability of more sophisticated electronic machines with such features as automatic correcting memory.

We previously have rejected an objection to a similar methodology, based principally on industry publications, that GSA had employed for evaluating typewriters' residual values. See Remington Rand Corporation, et al., B-204085, et al., May 3, 1982, 82-1 CPD ¶ 408 at pages 12-13. We held that residual value comprises a cost element that logically cannot be ignored despite the observed difficulty in determining the precise residual value of each model, and we found that GSA had a reasonable, objective approach to the task. Recognizing that any approach is somewhat speculative, we believe that GSA's method of attempting to ascertain the current market of a 1-year old machine objectively, and the discounting it by 10-percent yearly to obtain a residual value after depreciation, is reasonable and fair.

While we understand that one could argue that for evaluation purposes the resultant residual value should be further discounted in accordance with OMB Circular No. A-94 to reflect the current value of the future trade-in (the downtime repairs and ribbon-replacement costs are discounted to reflect current value), we note that the OMB Circular does not expressly require GSA to apply the discount in evaluating the low bidder under a procurement for tangible personal property. Furthermore, we have calculated the effect of further discounting residual values, and find that it would not alter the outcome of the current procurement, even using the "competitive" prices Olympia contends it would have offered for its supplies. Therefore, even if GSA's failure to discount the residual value to reflect the current value of the anticipated trade-in should be deemed a deficiency, the deficiency would not prejudice Olympia or pose an obstacle to a valid award under the current solicitation.

Concerning Olympia's argument that IBM's typewriter will be rendered obsolete by the advent of electronic typewriters, we are swayed by GSA's response that the same

argument could have been made about mechanical typewriter being replaced by electric typewriters; yet the government purchased more than 7,500 of those machines last year. Moreover, the IBM model has been available for more than 10 years, during which time electronic models have already become available. Nevertheless, the IBM model has retained a relatively high trade-in and resale value.<sup>10/</sup>

#### D. Number of Keystrokes

The protester complains that the solicitation's explanation of the LCC methodology states that the machines will undergo  $3 \times 10^5$  keystrokes whereas in fact the LCC testing submitted typewriters to  $3 \times 10^6$ , or 3,000,000, keystrokes. The record, however, indicates that the solicitation contained a typographical error, since the letters GSA sent to potential offerors prior to the solicitation, for the purpose of explaining the LCC methodology and inviting firms to submit typewriters for testing, identified the number of keystrokes as  $3 \times 10^6$ , and the testing was conducted in that manner. Nothing in the record indicates that any bidder was misled by the error. In fact, Olympia did not object to the error until it commented on GSA's report, thus indicating that Olympia was not previously aware of it or affected by it. We therefore do not believe this protest ground forms any obstacle to a valid award under the solicitation.

#### E. Nonresponsiveness of Olympia's Bid

GSA has determined that Olympia's bid under the subject solicitation was nonresponsive because it failed to designate the model of the typewriter for which it was offering a bid, as required by the "ELIGIBLE PRODUCTS" clause on page 19 of the solicitation. We disagree with GSA's determination.

The "ELIGIBLE PRODUCTS" clause listed the 14 products that qualified for award of a contract in the procurement; these 14 were the only typewriters that had undergone LCC

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<sup>10/</sup>GSA's October 12 report on the protest at page 7.

testing. The only Olympia machine tested, and thus listed, was the Olympia Standard. On page 19-A, a bidder--who did not have to be the manufacturer of any listed eligible typewriter--was to insert the manufacturer's name and the product's designation, or model number. Bidders were warned that an offer that did not identify the eligible product would be rejected as non-responsive.

To be responsive, a bid as submitted must represent an unequivocal offer to perform the exact thing required by the solicitation such that acceptance of the bid will bind the contractor to perform in accordance with the solicitation's material terms and conditions. See Federal Acquisition Regulation (FAR), § 14.301, 48 Fed. Reg. 42,102, 42,177 (1983) (to be codified at 48 C.F.R. § 14.301); Jarrett S. Blankenship Co., B-213294, et al., Apr. 2, 1984, 84-1 CPD ¶ 370.

We think Olympia's bid was responsive. The record shows that in the bid Olympia identified itself as the manufacturer, and the fact is that Olympia manufacturers only one model that had been subjected to LCC testing. We think it unreasonable in such circumstances to believe that Olympia was offering anything other than its own tested typewriter. See 45 Comp. Gen. 397 (1966). We therefore believe that the identification of the item offered--the eligible Olympia Standard--indeed was clear, so that acceptance of the bid would bind Olympia to supply that item. The bid thus was responsive.

Further, we do not believe, as GSA argues, that if the bid was nonresponsive Olympia would lose the right to pursue its objections, lodged before bid opening, that the solicitation's LCC methodology is defective, except to the extent that Olympia contends it should receive an award under the current solicitation. The reason is that should Olympia prevail in its obligation to the LCC methodology, testing and evaluation, the remedy would be cancellation of the current solicitation and resolicitation under an

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appropriately revised LCC methodology, or by other means. See Swintec Corporation, et al., B-212395.2, et al., Apr. 24, 1984, 84-1 CPD ¶ 466. The nonresponsiveness of Olympia's bid under the allegedly defective specifications would not affect its right to submit an offer under the revised ones.

The protest is denied.

*for* 

Comptroller General  
of the United States