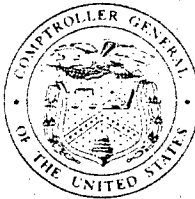


**DECISION**



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

*Proc I*

*10,507*

FILE: B-193261

DATE: June 19, 1979

MATTER OF: Baird Corporation

**DIGEST:**

*[Protest Alleging No Other Bidder Submitted Responsive Technical Proposal]*

1. Specification in step-one request for technical proposals (RFTP) of two-step procurement for computer-operated spectrometer requires auxiliary readout device to contain internal diagnostics for troubleshooting, test points and circuit breakers. Because low bidder's device does not contain these features, GAO concludes that Army's acceptance of low bidder's technical proposal represents basic change in agency's minimum needs. Such change should have been communicated to other offerors.
2. GAO concludes that protester's contention that low bidder's spectrometer fails to comply with RFTP requirement that it not be prototype is without merit since RFTP does not require that offeror have working model of an identical spectrometer, but rather working models in field of similar instrument.
3. Despite protester's detailed argument that second low bidder's proposal does not meet analytical requirements of RFTP for spectrometer, GAO believes protester has failed to prove its assertions in this regard. Protester's estimate that 45 phototubes are needed for basic analytical program is inconsistent with RFTP requirement for only 40 such phototubes.

Baird Corporation (Baird) protests the award of a contract under invitation for bids (IFB) No. DAAA22-78-B-0400 to any bidder other than itself. The IFB was the second step of a two-step formally advertised procurement issued by the Army for a direct reading vacuum spectrometer to be used to analyze various materials utilized in the fabrication, processing and production of weapons to determine certain elements present and their concentrations.

*005643*

Step one of this procurement was issued on October 11, 1977, requesting offerors to submit technical proposals not later than November 11, 1977. The several proposals were evaluated by the Army and clarifications were sought from some offerors in April 1978. Step-two bids were opened on August 14, 1978. The bids were as follows:

- DLG 01868  
CNG 00375  
DLG 01869  
DLG 01870
- |   |           |
|---|-----------|
| 1. Labtest Equipment Co.  | \$126,497 |
| 2. Jarrell-Ash Division of<br>Fisher Scientific Co. (Jarrell-Ash) | 145,999   |
| 3. Angstrom, Inc. (Angstrom)                                      | 148,872   |
| 4. Baird  | 157,640   |

The Army found the bid of Labtest Equipment Co. to be nonresponsive.

On August 15, 1978, Baird gave written notice of its protest to the Army. By letter dated August 28, 1978, Baird outlined in detail the basis of this protest. The Army furnished Baird with written notice of denial of the protest on October 20, 1978. On this date, Baird filed its protest with our Office. No award has been made to date.

*The protest is asserted*  
Baird contended that it was the only offeror which submitted a responsive technical proposal under step one. According to Baird the proposals of the other bidders failed to offer equipment which met the essential requirements of the solicitation. Consequently, Baird believes that the Army is either required to award a contract to it or enter into price negotiations with it to the exclusion of the other bidders pursuant to Defense Acquisition Regulations (DAR) § 2-503.1 (h) (1976 ed.).

Specifically, Baird contends that Jarrell-Ash's offer of a cathode ray tube (CRT) display as a backup input/output device to replace the spectrometer's printer if it fails is nonresponsive to paragraph 3.2.4.5 of the step-one request for technical proposals (RFTP). Baird also contends that Jarrell-Ash has failed to comply with paragraph 3.1.4 of the RFTP which requires that the offeror have working models in the field of the spectrometer it offers.

With respect to Angstrom's technical proposal, Baird contends that the spectrometer offered by Angstrom does not possess sufficient capacity to meet the analytical requirements of the RFTP. Baird claims that Angstrom's bid under step two was based upon supplying its standard V-70 model spectrometer which has a maximum capacity of only 50 phototubes and exit slits. According to Baird, 59 phototubes are needed in order to meet the current and future analytical requirements set out in the RFTP.

The technical requirements of paragraph 3.2.4.5 are:

"The system shall be equipped with an auxiliary readout for use independent of the printer. The auxiliary readout shall contain internal diagnostics for troubleshooting, test points for readily reading the various supply voltages required and separate circuit breakers for each of the voltage supplies to protect against overload. In addition, the auxiliary readout shall be capable of displaying the results of the analytical run on a scaler type readout of not less than four (4) digits. The element shall be identified as the appropriate scaler number is displayed. Provisions shall be made to manually sequence the display."

Jarrell-Ash offered three approaches for meeting the requirements of paragraph 3.2.4.5, but the Army found that only Jarrell-Ash's first and third approach were acceptable. In its first approach, Jarrell-Ash offered a CRT display device and a second spectrochemical controller so that, if the first controller failed, the spectrometer could still be operated. In its third approach, Jarrell-Ash offered only a CRT display device as a substitute for the printer. As indicated the Army found Jarrell-Ash's second approach to be nonresponsive. Jarrell-Ash bid its third approach under step two.

Baird argues that the obvious intent of paragraph 3.2.4.5 is to enable the spectrometer's operator to read the results of an analytical run directly from

the spectrometer in the event of a malfunction somewhere in the system, particularly in the computer, and to troubleshoot the system to identify this malfunction so that it can be immediately corrected. However, according to Baird, the CRT offered by Jarrell-Ash is merely a spare input/output device to replace the printer if it fails and, therefore, it does not comply with paragraph 3.2.4.5. Further, since Jarrell-Ash's spectrometer is computer controlled, Baird alleges that a malfunction in the computer would completely disable its system, and the operator would have no alternate means of reading the results from the spectrometer or troubleshooting the system absent a complete replacement of the computer. In Baird's opinion, the CRT is of use only when the printer itself malfunctions.

Angstrom agrees with Baird's contentions that Jarrell-Ash's CRT does not comply with all the requirements of paragraph 3.2.4.5. Angstrom argues that if, during step one, Jarrell-Ash was able to convince the Army that a spare input/output terminal was all that was required by the RFTP, this was without question one of the main reasons Jarrell-Ash was the second low bidder under step two. Angstrom believes that if a spare terminal was all that was needed in order to meet the requirements of paragraph 3.2.4.5, the specification should have been changed by the Army to reflect this fact. Angstrom urges that, at the very least, there should have been a technical conference at the step-one level in view of the "fairly obvious" interpretation made by Jarrell-Ash as compared to the interpretations of Baird and Angstrom.

Jarrell-Ash asserts that the RFTP does not call for an auxiliary electronics presentation system. Jarrell-Ash states that the CRT which it offered was an auxiliary readout device for use independent of the printer. Jarrell-Ash argues that Baird is erroneously interpreting paragraph 3.2.4.5 to require an auxiliary readout device for use "independent of the computer." Furthermore, Jarrell-Ash alleges that the CRT which it offered does allow diagnostic routines to be run with the computer to determine where a malfunction might be within the system. According to Jarrell-Ash, the spectrometer operator would still use the same diagnostic routines and operating procedures with the CRT as he would with the printer terminal.

Finally, the Army recognizes that paragraph 3.2.4.5 specifies that the auxiliary readout shall contain internal diagnostics for troubleshooting the system, test points for readily reading the various supply voltages required and separate circuit breakers for each of the voltage supplies to protect against overload. Nevertheless, the Army asserts that the specification does not require that the above-described diagnostics "relate to the system as a whole." The Army takes the position that the only logical purpose of these diagnostics is, in the event of a system failure, to determine whether the source of the failure is in the auxiliary readout device or elsewhere in the system. Since the auxiliary readout proposed by Jarrell-Ash operates "independently" and since the system can be operated without this unit, the Army concludes that there was no need for Jarrell-Ash's auxiliary readout to have this diagnostic function. In this regard, the Army claims that the only diagnostic necessary to determine the location of the malfunction is a procedure to ascertain whether the system operates properly without the auxiliary readout device.

We have recognized that the two-step formal advertising procedure combines the benefits of competitive advertising with the flexibility of negotiation. See 50 Comp. Gen. 346 (1970). The first-step procedure is similar to a negotiated procurement in that technical proposals are evaluated, discussions may be held, and revised proposals may be submitted. See ACCESS Corporation, B-189661, February 3, 1978, 78-1 CPD 100. These step-one negotiation procedures require that technical proposals comply with the basic or essential requirements of the specifications but do not require compliance with all details of the specifications. See 53 Comp. Gen. 47 (1973), and the cases cited therein. However, if a technical proposal represents a basic change to the specification requirements, then before it can be accepted, the contracting agency must inform the other offerors of the change and provide them with an opportunity to submit a proposal in accordance with the revised requirements. 53 Comp. Gen. 47, 49, supra.

We believe that the plain language of paragraph 3.2.4.5 of the RFTP sets forth three basic requirements for the auxiliary readout device: (1) it must be for use independent of the printer; (2) it must contain

internal diagnostics for troubleshooting in the event of a system malfunction; and (3) it must contain test points and circuit breakers for reading the supply voltages and protecting against circuit overload. The record shows that Jarrell-Ash's CRT terminal is capable of recording data independent of the printer. However, it is also clear from the record that Jarrell-Ash's CRT terminal lacks the required diagnostic features, the test points and separate circuit breakers specified in paragraph 3.2.4.5. Also, we note that Angstrom offered an auxiliary readout device that had diagnostic features built into the device itself.

The Army argues that it is not our practice to question an agency's determination of the technical acceptability of proposals in the absence of any showing of unreasonableness, an arbitrary abuse of discretion, or a violation of the procurement statutes and regulations. See Marine Electrical Railway Products Co., Inc., B-189929, March 9, 1978, 78-1 CPD 187, and the cases cited therein. Nevertheless, it is clearly within the competence of our Office to consider what meanings reasonably may be attributed to solicitation provisions. Standard Conveyor Company, 56 Comp. Gen. 454 (1977), 77-1 CPD 220. Further, we have recognized that there is a limit to the extent to which a competition may be permitted to deviate from the stated specifications. Standard Conveyor Company, supra.

The Army interprets paragraph 3.2.4.5 to mean that the diagnostics need not relate to the system as a whole. However, we note that paragraph 3.2.4.5 specifically provides that the auxiliary readout device contain within it diagnostics for troubleshooting. Moreover, the Army's interpretation ignores the requirements in paragraph 3.2.4.5 for circuit breakers in the auxiliary readout device in order to protect against overload. Consequently, it is our opinion that the Army's interpretation of this paragraph is not reasonable.

A technical proposal need not comply with all the details of the specifications. 51 Comp. Gen. 85 (1971); 50 Comp. Gen. 337 (1970); and 46 Comp. Gen. 34 (1966). Nevertheless, the flexibility of two-step advertising does not obviate the necessity for adherence to stated evaluation criteria and basic specification requirements. 53 Comp. Gen. 47, 51, supra. In determining the permitted deviation from stated solicitation requirements, we have

looked to the mandatory character of the language involved, its specificity, and the general thrust of the provision from which there has been deviation.  
B-178192, October 29, 1973. *were examined*

Paragraph 1 of the RFTP states that the spectrometer shall be complete with all required components and accessories in order to rapidly and accurately accomplish the specified analytical program. Section 3.2, of which paragraph 3.2.4.5 is a part, covers the "detailed requirements" for the spectrometer. In view of the foregoing and the clear language of paragraph 3.2.4.5 itself, we believe that the internal diagnostics, test points, and circuit breakers for the auxiliary readout device were mandatory requirements of the RFTP. We also believe that the Army's apparent decision, in accepting Jarrell-Ash's third technical proposal, to relax these requirements should have been communicated to the other offerors.

With regard to the alleged failure of Jarrell-Ash to comply with paragraph 3.1.4 of the RFTP, we find this contention to be without merit. Paragraph 3.1.4 provides that an offeror's spectrometer not be a prototype and that the offeror have working models of a "similar" system in the field. It is our opinion that paragraph 3.1.4 was not intended to restrict competition to offers of spectrometers exactly the same as those previously manufactured by the offerors. See ACCESS Corporation, supra. While Baird agrees that this paragraph does not require working models of an "identical" spectrometer, it nevertheless argues that offerors must have more than one working model in the field having all of the performance characteristics specified in detail in the RFTP specifications. However, we fail to see how Baird is arguing anything other than that the working models in the field must be exactly the same as the spectrometer called for in the RFTP. Moreover, some of the things that Baird specifies as performance characteristics, such as auxiliary readout and dual permanently mounted petrey stands, are actually accessories to or components of the spectrometer. In any event, we note that paragraph 3.1.4 deals with the design of the spectrometer not its performance characteristics. Consequently, we think that the requirement for working models in the field of a similar system means a similarly designed system.

In its technical proposal, Jarrell-Ash stated that it complied with paragraph 3.1.4. Further, Jarrell-Ash enclosed literature with its proposal describing the items it was offering and lists of purchasers of its vacuum spectrometers. Jarrell-Ash did note that because of the special nature of the RFTP requirements for a dual atmosphere petrey stand arrangement and a higher capacity pumping system, the spectrometer offered would be a modified version of its standard spectrometer. Nevertheless, Jarrell-Ash stated that it had provided a similarly modified spectrometer to a customer in Japan. In view of the foregoing, we find no basis for Baird's contention that Jarrell-Ash failed to comply with paragraph 3.1.4 of the RFTP.

We recognize that during the course of this protest it developed that Jarrell-Ash had been incorrect about the identity of the customer in Japan to whom a similarly modified spectrometer had been provided. Instead of being provided to the Onahama Refinery in Japan, this spectrometer had been provided to Mitsubishi. In any event, Jarrell-Ash informs this Office that the spectrometer was a vacuum spectrometer with two sample stands. While Baird argues that, as required by the RFTP, this particular instrument still did not have two permanently mounted argon flushed petrey stands capable of analysis over a spectral range of 1750-4300A, we do not think that it was so dissimilar to the spectrometer Jarrell-Ash offered under the RFTP as to make that spectrometer a prototype.

As to Angstrom's technical proposal, Baird alleges that 11 of the chemical elements in the RFTP will require two spectral lines so that 45 phototubes are needed for all the elements and alloys in the RFTP's basic analytical program. Since the RFTP also requires the equipment to be capable of 25-percent expansion in the number of elements to be detected and measured and a 50-percent expansion in alloy or matrix system capacity, Baird asserts that a minimum of seven phototubes must be added to meet the element expansion requirement as well as seven more to meet the alloy or matrix expansion requirement. Using these estimates, Baird contends that the 50 phototube spectrometer that Angstrom offered will be inadequate to meet current and future analytical needs.



Angstrom avers that Baird has left much unsaid technically in making its assumptions about the complexities of adding elements and alloys to the basic analytical requirements of the RFTP. Angstrom argues that it is unclear as to what the Army will be requiring in the future. As a consequence, Angstrom contends that the only requirement imposed by the RFTP provision for expansion is that space be available on the offeror's spectrometer to add, rearrange or otherwise modify the basic analytical program to include elements beyond those already specified. In short, Angstrom believes that all any firm can offer in this regard is "additional holes in a tube plate."

Overall, Angstrom challenges Baird's technical presentation to us. Angstrom asserts that in a multiple matrix program it may be necessary to utilize more than one spectral line for each element. However, such decisions, according to Angstrom, cannot be made without full knowledge of the required analytical program and extensive experience in optical emission spectrochemical methods of analysis. Also, Angstrom states that the alloy matrix can consist of spectral lines already in the basic element program. In Angstrom's opinion, there is, in the spectral lines required to facilitate analysis of the elements specified in the RFTP, unlimited potential for adding alloys without making any change in the spectrometer itself. Thus, Angstrom contends that its technical proposal is responsive to the known requirements of the RFTP.

We believe that Baird has failed to prove its assertions. Paragraph 3.2.2 of the RFTP requires an offeror's spectrometer to have a minimum capacity of 40-photomultiplier tubes and exit slits. Obviously, this reflects the Army's technical judgment as to the minimum number of photomultiplier tubes needed to detect and measure the elements and alloys listed in the RFTP's basic analytical program. Since Angstrom's standard spectrometer has 50 phototubes, we fail to see how Angstrom's technical proposal is nonresponsive to the requirements for the basic analytical program.

With regard to the RFTP expansion requirement, we point out that Baird's "estimate" of 45 phototubes needed for the basic program is inconsistent with the Army's minimum phototube requirement of 40. Consequently,

we believe that Baird's conclusion that 59 phototubes are required to meet both current and future analytical requirements is unwarranted. Moreover, it is our opinion that Baird's allegation that many elements in both the basic and any expanded program will automatically require two spectral lines for proper analysis has not been adequately established. Here, we agree with Angstrom that whether there will be a need for more than one spectral line for many elements will depend on the requirements of the particular analytical program that has to be run.

Since we find that Angstrom's proposal does meet the analytical requirements of the RFTP, no award may be made to Baird. However, we do not believe that an award may properly be made to Angstrom either. In view of our conclusion that the Army intended to satisfy the Government's minimum needs by waiving certain requirements in the RFTP for the auxiliary readout device, the appropriate remedy is to reopen negotiations under step one. Consequently, we recommend that the step-two IFB be canceled and the step-one phase of the procurement be reopened based on the Government's current requirements for a direct reading vacuum spectrometer.

Finally, we note that Baird asserts that the RFTP requirement for the expansion of the basic analytical program is ambiguous because the Army did not specify the elements or alloys that would be added in the future. According to Baird, the Army has injected a "significant degree of uncertainty" into this procurement. On the other hand, the Army argues that this particular issue has been untimely raised by Baird. We do not think that it is necessary for us to determine timeliness since we are recommending that the step one phase of this procurement be reopened. Any uncertainties regarding the expansion necessary to meet the Army's future analytical needs should be resolved by the Army and Baird during the reopened step-one negotiations. *✓ and they wrote*

*R. F. K. 11/14*  
Deputy Comptroller General  
of the United States