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Ashen

Comptroller General
of the United States
Washington, D.C. 20548

Decision

Matter of: EER Systems Corporation

File: B-248904.3

Date: March 8, 1993

David R. Hazelton, Esq., Latham & Watkins, for the protester.
James S. Roberts, Jr., Esq., Sirote & Permutt, for Coleman Research Corporation, an interested party.
Bobby G. Henry, Jr., Esq., Department of the Army, for the agency.
David Ashen, Esq., and John M. Melody, Esq., Office of the General Counsel, GAO, participated in the preparation of the decision.

DIGEST

Protest that agency improperly failed to disclose vital information concerning condition of rocket motor selected by protester from list of available government furnished property is denied where protester was on actual or constructive notice of problems with condition and storage of motors, and downgrading of protester's proposal for selection of motor was based, not on factors related to the undisclosed information, but on factors known to the protester--i.e., its assumption of a 90 percent yield rate for motors that were 20 to 30 years old and had not flown for 7 years.

DECISION

EER Systems Corporation protests the award of a contract by the Strategic Defense Command (SDC), Department of the Army, to Coleman Research Corporation under request for proposals No. DASG60-92-R-0002, to provide targets and conduct target missions in support of theater missile defense flight test programs. EER contends that the agency improperly withheld vital information concerning the suitability of a solid fuel rocket motor that was listed in the solicitation as available government furnished property (GFP) and proposed by EER.

We deny the protest.

The solicitation contemplated award of a cost-plus-fixed-fee contract to design, develop, test and fabricate target systems, including both the reentry vehicle (target) and the launch system, and to conduct a total of 75 target missions

(launches)--a base requirement of 25 and 2 option requirements of 25 each--at 2 test ranges (1 long-range and 1 short-range) in the period between January 1994 and March 1997. The solicitation listed 11 different models of solid fuel rocket motors that were available as GFP should offerors choose to use them. The solicitation stated, however, that "[a]ll GFP will be provided 'as is,'" and noted that the statement of work (SOW) required the contractor "to verify the technical adequacy of any GFP to perform in the application for which it is to be used." In addition, amendment No. 0002 to the solicitation specifically cautioned that the list of GFP was "provided only to assist offerors" and that offerors should determine if the GFP "is appropriate and available for use."

The solicitation provided for proposals to be evaluated based on three factors: (1) a technical factor, including a criterion for system engineering and development, and another for launch services and flight test operation, both of equal weight; (2) a management factor--including a criterion for organizational structure, personnel and experience, and another for project management--described as less important than the technical factor; and (3) cost, described as less important than the technical and management factors. The solicitation provided for evaluation of the most probable cost to the government, including both the realistic cost of the offeror's proposal and such additional costs to the government as the cost of the GFP.

Five proposals were received from four offerors--Coleman, EER, Orbital Sciences Corporation (OSC), and Sparta, Inc.--by the closing time on April 28, 1992. Only Coleman's proposal and that of OSC for barge-launched targets were initially included in the competitive range. Following a protest to our Office by EER and Sparta against the exclusion of their proposals from the competitive range, the Army included their proposals as well. After conducting negotiations, the agency requested the submission of best and final offers (BAFO) by September 8.

Based upon its evaluation of BAFOs, the Army found Coleman's proposal to be the most advantageous to the government. Coleman's proposal received a "good" rating under each technical and management criterion, resulting in an overall "good" rating for the non-cost factors, and was evaluated as offering the most advantages and no significant disadvantages.

Specifically, the agency concluded that: (1) Coleman's proposal to initially use government-furnished Minuteman I second stage motors greatly reduced the risk of failures during the initial stages of the program and increased the

likelihood of meeting the delivery schedule, since the motor has a recent record of successful flights (having been successfully flown over 30 times in the past 10 years), is available in large numbers (more than 400) and has been maintained in excellent condition as part of the national nuclear deterrent force; (2) Coleman's proposal of a common delivery vehicle for both the long-range and short-range test ranges increased operational flexibility; (3) Coleman's proposal of identical, moveable launchers at both ranges increased launch flexibility, and thereby reduced cost and risk; (4) Coleman's proposal to use an existing launch control center eliminated the need to design and fabricate a new launch control system; (5) Coleman's approach to product assurance showed significant insight into maintaining reliability and maintainability through monitoring and the use of proven hardware; and (6) Coleman's proposed team had a proven record of experience which lowered the risk to the government. Coleman's cost proposal was evaluated as offering a most probable direct cost of $149,833,000, and an overall, total evaluated cost, including the cost of GFP, of $483,767,000. While Coleman's total evaluated cost was only the second lowest, the Army determined that the technical and management advantages offered by Coleman's proposal justified the somewhat higher cost of the proposal. Coleman's cost proposal was evaluated as offering a most probable direct cost of $149,833,000, and an overall, total evaluated cost, including the cost of GFP, of $483,767,000. While Coleman's total evaluated cost was only the second lowest, the Army determined that the technical and management advantages offered by Coleman's proposal justified the somewhat higher cost of the proposal.

Although the most probable direct cost of EER's proposal ($162,901,000) exceeded Coleman's ($149,833,000), EER's proposal offered the lowest total evaluated cost ($453,291,000), $30,476,000 less than Coleman's. The Army, however, assigned the proposal an overall technical/management rating of only acceptable, and ranked the proposal as third out of the four BAFOs received. Although the Army determined that EER's proposal demonstrated "significant insight" with respect to reliability and maintainability, the agency found that it offered a number of "significant disadvantages."

First, the Army questioned EER's selection of the BOMARC solid fuel rocket motor, 59 of which were available, from the list of available GFP included in the solicitation. EER proposed to refurbish and use the BOMARC as the first stage in the 49--base and option--launches specified in the solicitation for the short-range test range. In the event insufficient operational BOMARCs were available, EER proposed to use either the CASTOR I or the SR 19 solid fuel rocket motors. EER anticipated a yield rate for the BOMARCs

of 90 percent, allowing for the use of 2 BOMARCs for static test firings, 49 for target missions and 2 as spares. The Army calculated that at least 53 operating BOMARCs would be required, including 4 needed for static test firings to verify that the motors, which were 20 to 30 years old and were last fired in 1985, could still be reliably, successfully used. The agency questioned whether EER's assumed yield rate of 90 percent--i.e., that 53 of 59 BOMARCs would successfully fire--was realistic. According to the agency's evaluation, EER's approach:

> "introduces high technical risk in the use of BOMARC motors with unproven reliability due to age and the lack of maintenance documentation. A low yield of refurbishable motors will not meet the demand for [short-range] motors which will add schedule delays and additional costs."

In addition, the agency noted that while EER had initially proposed to have the BOMARC motors refurbished by the original equipment manufacturer (OEM) (Thiokol Corporation), EER proposed in its BAFO to have a firm other than the OEM refurbish the motors. According to the agency, refurbishment by a subcontractor other than the OEM, which would be unfamiliar with the BOMARC, introduced further "technical risk along with possible lower yields, schedule delays, and higher costs." Finally, the Army concluded that EER's proposal of a flight guidance computer (the Conestoga Guidance System) which was not flight proven--instead of the proven Minuteman guidance system chosen by the other offerors--introduced still further risk.

UNDISCLOSED INFORMATION

In its protest of the resulting award to Coleman, EER contends that the Army improperly failed to disclose vital, adverse information concerning the condition of the BOMARC rocket motors even though EER had specifically requested all available information concerning their condition. EER claims that, as a result, it proposed the BOMARC motors in the erroneous belief they were in good condition.

EER contacted various officials of the Department of the Air Force, which controlled the BOMARC motors, to inquire about the availability and status of the motors. In addition, by letter of February 17, 1992, more than 2 months prior to the solicitation closing date of April 28, EER requested the results of x-rays that the Army had taken of 10 of the BOMARC motors, "as well as confirmation of the number of the motors existing and their condition and

information on other items such as . . . igniters."[1] The Army contracting officials, however, did not respond to EER's request for additional information. Instead, the agency directed EER during negotiations to furnish information concerning the officials contacted and their responses, and reassured the firm that "we would consider that in our evaluation." EER's written response to the agency, dated June 25, described in detail EER's numerous efforts to obtain information concerning both "the availability and status" of the BOMARC motors. Further, it specifically stated that EER had been advised by Air Force officials that "they were considered to be in good condition" and had been x-rayed by the Army, and it had been advised by a property official at Fort Wingate, New Mexico, where they were located, that the BOMARCs were stored in "humidity-controlled igloos."

During negotiations, the Army questioned EER concerning its selection of the BOMARC:

> "Only 59 BOMARC Motors are available. This program will require 49. Have yield rates of motors been taken into account? What is your proposed back-up should the yield rate be less than the 49 you require? Discuss cost impacts, schedule delays, redesigns, etc. if 49 motors are not useable."

EER responded that it had chosen the BOMARC precisely "because of its anticipated high yield rate (90% or greater)." According to EER, solid fuel rocket motors have a higher usage yield rate than liquid fuel rocket motors and the propellant has an extremely long shelf life if maintained in a dry condition. In this regard, EER noted that the project engineer for the BOMARC at the OEM (Thiokol)--then its intended refurbishment subcontractor--and representatives of EER, including its director of engineering, had inspected the stored BOMARC motors at Fort Wingate in March 1992, at which time both the propellant and the hardware appeared to be in good condition, with no evidence of environmental damage to the propellant and with only "very minor rusting," not affecting structural integrity, present on the hardware. EER added, however,

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[1]According to the Army, although 10 of the BOMARC motors were x-rayed in 1991 to assess the feasibility of obtaining targets on an interim basis, pending award of this contract, for another requirement, this approach was abandoned when the agency determined not to pursue that requirement. As a result, no analysis of the x-rays was undertaken, and they were not considered in the evaluation of proposals under this procurement.

that "in the event that the yield rate is less than 49 BOMARC motors," EER would select either the CASTOR I or the SR-19 solid fuel rocket motors "to replace BOMARC assets."

According to EER, its favorable conclusions concerning the suitability of the BOMARC rocket motors did not take into account the contents of three adverse government reports on their condition, of which EER was unaware and which were either in the Army's possession or otherwise available to it.

First, the Army had in its possession a report, dated June 18, 1991, issued by Teledyne Brown Engineering to SDC, documenting an inspection by Teledyne and SDC personnel in May 1991 of the BOMARC motors in their storage bunkers at Fort Wingate. According to the report, although the motors contained bags of desiccant, used to extract moisture, the desiccant had not been changed since 1987, and the desiccant was improperly placed directly on the propellant, which could cause surface cracks. The Teledyne report, however, stated that the "visual inspection of the propellant grain in several motors that were opened, revealed that the propellant appeared to be in good condition. . . ." The report recommended that the BOMARC motors be x-rayed, that a boroscope examination--a visual examination using fiber optics--be conducted to inspect the propellant grain "for cracks at the aft end where the desiccant was in contact with the propellant," and that "replacement of initiation [ignition] system (as needed)" be done.

In addition, the Air Force possessed two reports on the condition of the BOMARC rocket motors, the existence of which the Army claims it was unaware of until after EER's protest was filed. A report dated July 9, 1990, entitled "BOMARC Motor Inspection, Inventory and Testing," documented an inspection in June 1990 of the BOMARC motors at Fort Wingate. According to the 1990 report, the BOMARC motors being stored at Fort Wingate for Hill Air Force Base (AFB) "appear to be in 'good' condition"; the "propellant in both the motor and pyrogen appear to be in 'very good' condition (i.e. no slumping, cracking or chemical breakdown)." However, the report noted that personnel at Hill AFB had found "case bond separation at the most FWD [forward] and AFT ends when they inspected them during 1985," and added that the motors had not been inspected or had the desiccant changed since 1985.[2]

[2]Case bond separation consists of internal cracks in the propellant which, as discussed below, can cause a rocket to deviate from its prescribed course.

The Air Force also possessed a report issued by TRW Corporation, Space and Technology Group, dated June 22, 1988. The TRW report noted that Thiokol's manager of field support activities on the BOMARC program had reported that: "the surveillance program on BOMARC was discontinued approximately 10 to 12 years ago. As of that time, the general condition of the motors was good and the motors were performing within requirements." According to the report, however, Hill AFB had reported possible case bond separation at the forward end of the motors. The TRW report stated that: "[i]t is suspected that the separation may be produced by a severe jolt the stage receives during the last phase of launcher erection. Additionally under high 'g' loads, case bond separation is most likely to occur. . . ."

EER argues that as a result of the Army's failure to furnish these reports, it was misled to its detriment into concluding that the BOMARC rocket motors, listed by the solicitation as available GFP, were in fact suitable for use in conducting the required target missions in support of theater missile defense flight test programs.[1] Specifically, EER claims that it was unaware of five actual or potential problems with the BOMARC motors discussed in or apparent from the reports: (1) that the igniters on all motors would have to be replaced; (2) that the motors had been stored in a non-climate-controlled bunker; (3) that the motors had not been inspected or had the desiccant changed since 1987; (4) that the desiccant had been improperly placed directly on the propellant, thereby increasing the likelihood of surface cracks in the propellant; and (5) that case bond separation had been found when the motors were inspected in 1985. In particular, EER asserts that had it known of the presence of case bond separation, it would not

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[1]EER also protests the failure of the Army to make available the x-rays that had been taken of 10 of the BOMARC rocket motors. According to the protester, the agency's failure in this regard deprived it of valuable information for the preparation of its proposal, since x-rays can detect case bond separation within solid rocket fuel propellant. As evidenced by its letter of February 17, 1992 to the agency, however, EER was aware of the existence of the x-rays prior to the closing date for receipt of proposals. Its argument --that the agency failed to furnish information necessary for the preparation of its proposal--constitutes a protest of an alleged solicitation impropriety. American Int'l Global, B-247896, July 2, 1992, 92-2 CPD ¶ 3. Such protests are untimely where not filed prior to the closing time for receipt of proposals. 4 C.F.R. § 21.2(a)(1) (1993). Since EER's protest was not filed until after award, this argument concerning the x-rays is untimely.

have proposed the BOMARC motors. EER states, and the agency does not dispute, that:

> "Case bond separation can result in a burn through [in the motor casing] during flight that could cause the rocket to go off course. Due to the resulting danger to life and property, it would be necessary to destroy the rocket in flight (and thus completely frustrate the mission). Moreover, a serious problem such as case bond separation would be a strong indicator that the BOMARC motors suffer from other unknown but potentially serious problems."

The Army argues that it had no obligation to furnish any information concerning the condition of the BOMARC rocket motors. The agency bases its position on the fact that the rocket motors were offered on an "as is" basis and the solicitation specifically directed offerors to determine if the motors were "appropriate and available for use." The Army also claims that it was not under any obligation to furnish information on case bond separation here since, while it was aware of the potential for case bond separation to develop in any solid fuel rocket as it ages, it was unaware of the Air Force reports that case bond separation had, in fact, been previously observed in the BOMARC motors. The Army maintains that knowledge of the case bond separation problem in the BOMARC notes should not be imputed to it.

Although there is no requirement that a solicitation be structured so as to eliminate all performance risks, a contracting agency must give offerors sufficient information to enable them to compete intelligently and on a relatively equal basis. See Seair Transport Servs., Inc., B-249555, Dec. 4, 1992, 92-2 CPD ¶ 390. This requirement may not be satisfied where a procuring agency possesses information showing that GFP it makes available contains significant defects which render the GFP unsuitable for the purpose for which it is made available, and which by their nature cannot reasonably be discovered by offerors.[4] Irrespective of the

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[4]While a contracting agency is not required to warrant the condition of property furnished under a contract, and may instead furnish the property on an "as is" basis or otherwise disclaim any warranty concerning the suitability of the property, see Service Eng'g Co., ASBCA No. 40,272, 92-3 BCA ¶ 25,106, an "as is" type of disclaimer in a government contract will not be enforced where there is undisclosed, vital knowledge on the part of the government, which an offeror could not reasonably be expected to

(continued...)

nature and extent of any such obligation, as discussed below, in this case the protester was not prejudiced by the Army's failure to provide available information about the BOMARC motors to EER.

Our review of the record indicates that EER was on constructive notice that the BOMARC motors were held in storage space lacking climate-control equipment. While EER may, as reported by it during negotiations, have been advised that the storage igloos at Fort Wingate were climate-controlled, the Army reports that, in fact, the BOMARC igloos, which were located in an area without electric power, were not climate-controlled. In our view, EER has not adequately explained, nor is it otherwise apparent given the absence of electric service at the igloos, why it was reasonable to continue to believe after the inspection that the igloos were climate-controlled. In any case, there is no reason to believe that knowledge of the absence of climate control equipment would have affected EER's choice of rocket motor. According to EER's director of engineering: "Fort Wingate is located in a 'high desert' region that naturally has a fairly constant temperature and humidity levels. . . . the location and construction of these storage facilities were clearly designed to provide a climate controlled environment ideally suited for the storage of motors."

As for the need to replace the igniters, EER itself proposed during negotiations to replace the igniters in 36 of the 59 motors. Since EER already was aware of potential problems with that component, the failure to furnish the Teledyne report, recommending "replacement of initiation system (as needed)," did not in this respect prejudice EER.

It is not apparent, however, how EER could have known from its inspection at Fort Wingate, or otherwise, of the failure to maintain a regular program of surveillance and inspection

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[4](...continued)
ascertain. C.M. Moore Div., K.S.H., Inc., PSBCA No. 1131, 85-2 BCA ¶ 18,110; G.W. Galloway, Co., ASBCA Nos. 16,656 and 16,975, 73-2 BCA ¶ 10,270; see generally Service Eng'g Co., supra; Power City Elec., Inc., IBCA No. 950-1-72, 74-1 BCA ¶ 10,376 at fn. 19. Likewise, under the well-established doctrine of superior knowledge, where the government possesses special knowledge, not shared by the contractor, which is vital to the performance of the contract, the government has an affirmative duty to disclose such knowledge. Hardeman-Monier-Hutcherson, a joint venture v. The United States, 458 F.2d 1364 (Ct. Cl. 1972); Helene Curtis Indus., Inc. v. United States, 312 F.2d 774 (Ct. Cl. 1963).

of the BOMARC motors, either at Fort Wingate or previously. Likewise, EER's inspection of the motors at Fort Wingate could not have furnished notice of the case bond separation problem. Both EER and the agency agree that a visual surface inspection would not detect the case bond separation within the propellant. As for the placement of the desiccant, the agency cannot affirmatively state that the desiccant was improperly placed directly on the propellant at the time of EER's inspection, as it had been previously according to the Teledyne report. In contrast, EER's director of engineering specifically recalls that the desiccant was properly placed, i.e., was not in direct contact with the propellant. Furthermore, it is not evident why the inspection should have placed EER on notice concerning the failure to change the desiccant regularly. Indeed, EER's director of engineering states that logs posted near the BOMARCs indicated that the desiccant was being changed on a regular basis. In those circumstances, we cannot conclude that EER was on notice, actual or constructive, of the concerns expressed in the reports concerning the lack of inspection, case bond separation or the placement and change of the desiccant. We find, however, that the failure to disclose these concerns does not warrant sustaining EER's protest.

While the Army was aware of the potential for case bond separation to develop in any solid fuel rocket as it ages, the Army maintains, and EER does not dispute, that the agency was unaware of the Air Force reports that case bond separation had, in fact, been previously observed in the BOMARC motor. The fact that case bond separation had previously been observed did not affect in any way the evaluation of EER's proposal. On the other hand, concerns as to the lack of a regular inspection program and the failure to properly change the desiccant apparently were considered in the Army's evaluation of EER's proposal. The Army's evaluation report noted the agency's concern with "the lack of maintenance documentation," while the contracting officer's initial report in response to the protest states that it was determined that use of the BOMARCs "would be higher risk based on reasons other than the motors' age," including the fact that the "BOMARC motors have not been maintained properly (eg., desiccant changed) and the surveillance program. . .was discontinued 10 to 12 years ago."

Nevertheless, the Army maintains, and the record corroborates, that the agency's primary, overriding concern with EER's proposal of the BOMARC motors did not focus on any specific, identified defect in the handling or condition of the BOMARCs. In this regard, the Teledyne report, which was in the agency's possession, stated that the "propellant appeared to be in good condition"; it recommended the use of

the BOMARC motor. The subsequent boroscopic examination of the motors performed by personnel from the White Sands Missile Range, which had been recommended in the Teledyne report, likewise confirmed that "the condition of these motors is very good." Rather, the primary basis for the Army's downgrading of EER's proposal in this regard was EER's assumption of what the agency perceived to be an unreasonably high yield rate. It was the Army's position that assuming a yield rate of 90 percent for any solid fuel rocket motor which was 20 to 30 years old and had no recent, proven history of current reliability, necessarily increased performance and schedule risk. The Army's concern with EER's proposal of the BOMARC rocket motor was increased when EER, in its BAFO, replaced the OEM as its refurbishment subcontractor with a firm not familiar with the BOMARC. (In contrast, although OSC also proposed the BOMARC motor, which was viewed by the agency as a disadvantage, its technical proposal nevertheless received an overall "good" rating because, in part, OSC proposed to use Thiokol, the BOMARC OEM, as its refurbishment subcontractor.)

We think the nature of the Army's essential concern with EER's proposal of the BOMARC rocket motor was or should have been apparent to EER. EER knew or should have known that the BOMARC motors were 20 to 30 years old and had not been flight tested since 1985. Further, EER was placed on actual notice of the agency's concern with the yield rate when the Army specifically questioned the firm during negotiations about its assumed yield rate and any plans for a back-up motor should the actual yield rate be less. As for its replacement of the OEM with a subcontractor unfamiliar with the BOMARC, EER clearly should have known that this would increase the agency's stated concern with its proposal of the BOMARC.

We conclude that there is no basis for finding that EER was prejudiced by the Army's nondisclosure of information, since that information was not related to the principal reasons for the downgrading of EER's proposal.

EVALUATION

EER questions the evaluation of its proposal on the basis that the agency failed to adequately take into account the fact that it could have substituted the CASTOR I rocket motor for the BOMARC with only a minimal increase in its evaluated cost and with a significant improvement in technical capability. EER calculates that, at most, substitution of CASTOR Is for all of the required BOMARCs would have increased the total evaluated cost of its proposal by only approximately $5,000,000, leaving it still approximately $25,000,000, or 5.3 percent, lower than the evaluated cost of Coleman's. Furthermore, EER states that

the CASTOR I is a new, flight-proven rocket motor still in production, which has superior performance capabilities relative to the BOMARC and, unlike the BOMARC, would require no refurbishment.

EER's position, however, fails to address the Army's central concern in this regard. While it may have been able to propose a rocket motor superior to the BOMARC at only a somewhat higher evaluated cost, EER in fact proposed primarily to rely upon the BOMARC to launch target missions from the short-range test range. It proposed to substitute CASTOR I (or the SR 19) motors only if, during contract performance, insufficient BOMARCs proved to be available. The Army was concerned that substituting the CASTOR I for the BOMARC rocket motor during the course of performance would require redesign of the interfaces between rocket stages and the reentry vehicle, redesign of the ground support equipment to accommodate the new dimensions of the booster configuration, new guidance software, a new safety analysis and simulation, new safety devices, and a new flight termination system with new qualifying tests for the destruct system. According to the agency, a substitution of motors during the course of performance therefore could result in a delay of as much as 3 to 6 months. In addition, as noted above, the agency was also concerned that EER had proposed a flight guidance computer which was not flight proven. In contrast, Coleman proposed a rocket motor with a recent record of successful flights and which was available in large numbers, a proven flight guidance computer, and other equipment that increased operational flexibility or reduced performance and schedule risk.

Furthermore, according to the Army, the theater missile defense flight test program has an extremely tight flight launch schedule; the development of the initial target is required under the solicitation to be completed within 14 months, and the overall theater missile defense program which the test program supports has been assigned a high priority requiring deployment of an initial missile defense system required by 1996. Given the vital, urgent nature of the program, the agency determined that the lesser schedule and performance risk offered by Coleman's proposal, relative to EER's proposal, outweighed its somewhat higher evaluated cost. We find no basis to question this conclusion.

The protest is denied.

Robert M. Murphy

for James F. Hinchman
General Counsel