



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

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E-179871

November 23, 1973

Optical Radiation Corporation
632 N. Irwindale Avenue
Azusa, California 91702

Attention: Mr. R. I. Ur
Vice President

Gentlemen:

We refer to your telefax message dated June 13, 1973, and your letter of June 20, 1973, protesting the award of a contract to any bidder other than Optical Radiation Corporation (ORC), under invitation for bids (IFB) No. CG-33-72-A, issued by the Commandant, United States Coast Guard Headquarters, Washington, D.C.

The subject IFB requested bids on a "Brand Name or Equal" basis for 48 High Intensity Xenon Arc Lamp Searchlights. The purchase description set forth the salient characteristics of the brand name product, Spectrolab Nightsun Model SX-16. In this connection, the IFB included the "Brand Name or Equal" clause prescribed by Federal Procurement Regulations (FPR) 1-1.307-6, which provides in pertinent part:

"(c)(1) If the bidder proposes to furnish an 'equal' product, the brand name, if any, of the product to be furnished shall be inserted in the space provided in the Invitation for Bids, or such product shall be otherwise clearly identified in the bid. The evaluation of bids and the determination as to equality of the product offered shall be the responsibility of the Government and will be based on information furnished by the bidder or identified in his bid as well as other information reasonably available to the purchasing activity. CAUTION TO BIDDERS. The purchasing activity is not responsible for locating or securing any information which

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is not identified in the bid and reasonably available to the purchasing activity. Accordingly, to insure that sufficient information is available, the bidder must furnish as a part of his bid all descriptive material (such as cuts, illustrations, drawings, or other information) necessary for the purchasing activity to (i) determine whether the product offered meets the requirements of the Invitation for Bids and (ii) establish exactly what the bidder proposes to furnish and what the Government would be binding itself to purchase by making an award. The information furnished may include specific references to information previously furnished or to information otherwise available to the purchasing activity.

(2) If the bidder proposes to modify a product so as to make it conform to the requirements of the Invitation for Bids, he shall (i) include in his bid a clear description of such proposed modifications and (ii) clearly mark any descriptive material to show the proposed modifications.

(3) Modifications proposed after bid opening to make a product conform to a brand name product referenced in the Invitation for Bids will not be considered."

Two bids were received in response to the IFB by the bid opening date of April 24, 1973: Spectrolab Division of Textron, bidding on its Model SX-16 at a unit price of \$3,075, and ORC, bidding as an "equal" product a modified version of its AN/AVQ-17 Searchlight at a unit price of \$2,477. ORC submitted technical data with its bid.

Following evaluation of the information concerning the modified ORC AN/AVQ-17, the contracting officer notified your firm, by letter dated June 1, 1973, that your product deviated from the specifications in one respect and that it could not be determined whether your product possessed certain salient characteristics set forth in the IFB. Therefore, your bid was rejected as nonresponsive. The contract was awarded to Spectrolab, and this protest followed.

It is your contention that the information submitted with your bid established the equality of your product and that the rejection of your bid was erroneous.

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In his letter of June 1, 1973, the contracting officer stated:

"A. General Specification 'a' in the IFP requires that the searchlight be designed for installation and use on helicopters for search and rescue operations. Helicopter SAR operations involve flying at altitudes from sea level to approximately 12,000 feet. The AN/AVQ-17 2KW searchlight which ORC proposes to modify to meet the requirements is capable of operating at such altitudes (see T.O. FCIC-7-3-2 Table 1-1); however, the modified light offered to the Coast Guard will only be capable of operating between sea level and 3,000 feet. This altitude restriction is unacceptable."

You argue that nowhere in your bid was it stated that the aircraft operating level of the AN/AVQ-17 Searchlight, as modified, would be reduced to altitudes from sea level to 3,000 feet, and that this finding was based upon a misinterpretation of the information submitted by you.

Section 1.7 of ORC's descriptive material provided:

"1.7 ENVIRONMENTAL
The searchlight and mount will be designed to meet the following requirements of MIL-STD-810B:

"1.7.1 Altitude. The system will be designed to comply with the requirements of Method 500, Procedure 1, except that the altitude in Step 3 will be reduced to 3,000 feet."

Method 500, "Altitude", of MIL-STD-810B provides in pertinent part:

"1. Purpose. The altitude test is conducted to determine the effects of reduced pressure on equipment. Damaging effects of low pressure include leakage of gases or fluids from gasket-sealed enclosures and rupture of

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pressurized containers. Under low pressure conditions, low density materials change their physical and chemical properties. Damage due to low pressure may be augmented or accelerated by the contraction, embrittlement, and fluid congealing induced by low temperature. Erratic operation or malfunction of equipment may result from arcing or corona. Greatly decreased efficiency of convection and conduction as heat transfer mechanisms under low pressure conditions is encountered. This test method is composed of two procedures:

"1.1 Procedure X is applicable to equipment of group I in section 4, table I, for the purpose of determining the ability of such equipment to withstand the reduced pressure encountered during shipment by air and for satisfactory operation under those pressure conditions found at high ground elevations.

* * * * *

"3. Procedures.

"3.1 Procedure I.

"Step 1 - Place the test item in the test chamber in accordance with section 3, paragraph 3.2.2, and maintain standard ambient temperature during the entire test.

"Step 2 - Reduce the chamber internal pressure to 87.5 mm of Hg (3.44 in. of Hg or 50,000 ft. above sea level). The rate of pressure change may be the maximum attainable by the chamber. Maintain the chamber pressure for a period of not less than one hour.

"Step 3 - Increase the chamber pressure to 523 mm of Hg (20.6 in. of Hg or 10,000 ft. above sea level) and then operate the test item and compare the results

with the data obtained in accordance with section 3, paragraph 3.2.1.

- "Step 4 - With the test item not operating, return the chamber to standard ambient conditions.
- "Step 5 - Operate the test item and compare the data obtained with the data obtained in accordance with section 3, paragraph 3.2.1.
- "Step 6 - Inspect the test item as specified in section 3, paragraph 3.2.4."

Step 3 of Procedure 1, therefore, normally requires a test of the operation of an item at an altitude of 10,000 feet above sea level after an hour's exposure to an altitude of 50,000 feet above sea level. Under the exception contained in Section 4.7.2 of your descriptive material, however, the test is conducted at 3,000 feet rather than 10,000 feet.

You further maintain that it could have been determined from a very simple engineering analysis of the data you submitted that the proposed searchlight would operate at the required altitudes. You state:

"Since altitude limitations are primarily a function of the heat generated, which is a function of input voltage, it is a valid assumption that if the wattage is reduced the heat will be similarly reduced and thus the operational altitude limits increased. The unmodified AN/AVQ-17 Searchlight is designed to operate at 2800 watts and the proposed Const Guard modified AN/AVQ-17 Searchlight will be designed to operate at 1600 watts. Consequently, there is a power reduction of 1200 watts or 42%. A similar reduction in the generation of heat will obviously result allowing the proposed modified AN/AVQ-17 Searchlight to operate at altitudes above that of the unmodified searchlight."

The Coast Guard observes that even if the above analysis is accepted, the searchlight you proposed to furnish would be equipped with a cooling blower substantially smaller than that installed on the unmodified AN/AVQ-17. It appears from page 3-11 of your descriptive material that you contemplated using a one-pound blower, whereas the AN/AVQ-17 blower weighs 2.7 pounds. Our examination of your bid supports the Coast Guard's statement that the bid did not discuss the relative capacities of the two blowers nor did it describe in any detail the blower proposed for use with the modified light.

In view of the above, we are unable to conclude that the procuring activity erroneously regarded your proposal as lacking assurance that the searchlight would be capable of operating satisfactorily at the required altitudes.

In his letter of June 1, 1973, the contracting officer also advised your firm that the information submitted with your bid was insufficient to establish that your product would meet the solicitation requirements with respect to remote control of beam focusing, output of the proposed light source, cold weather starting, and cooling at high temperatures.

One of the salient characteristics of the brand name item set forth in the IFR was the focusing of the searchlight by remote control. The unmodified AN/AVQ-17 does not possess this feature, as you acknowledged on page 1-2 of your descriptive material. Page 2-2 of your material contains statements that you would comply with the specification requirements, and on page 3-17 you proposed furnishing a remote control unit which included a "Beam Focusing Control". Paragraph 4.1 of your material set forth the beam intensity performance to be obtained through remotely focusing the lamp.

Although there were these indications within your bid that you intended to provide a remote beam focusing control, we must agree with the procuring agency that you did not provide "a clear description of how the AN/AVQ-17 searchlight will be modified to provide the required remote focusing capability".

Another required characteristic was that the light source be a "Single xenon short arc lamp between 1,500 and 2,000 watts. Average beam power shall be between 20,000 and 25,000 lumens." Page 2-2 of your descriptive material contained the statement:

"When operated at 2,200 watts, the AN/AVQ-17 Searchlight produced 40,000 lumens in the beam

and calculations show that operation at 1,500 watts will produce approximately 25,000 lumens. This has been confirmed by actual measurements. See Section ."

The Coast Guard considered this information to be insufficient in that the measurements referred to were omitted. Although you later advised that the intended references was to paragraphs 3.2.1. and 3.2.2. of your descriptive material, the Coast Guard observes that neither of those paragraphs contain measurements or calculations substantiating the lamp's output power.

The invitation for bids further specified:

"Searchlight shall have the capacity to operate in an outside temperature range between -40 degrees F and 125 degrees F for long periods of time. An internal cooling system shall be incorporated due to hover capabilities of helicopters.

Paragraph 3.2.3. of your descriptive material stated that cold starting of the xenon lamp would be accomplished through the modification of a high energy boost circuit developed for the Army Night Vision Laboratory for use with a 1,000 - watt searchlight. However, you did not describe those modifications and the Coast Guard reports that it was unable to obtain a description of them through discussions with the Army Night Vision Laboratory.

Additionally, your descriptive material did not explain how the AN/AVQ-17 searchlight, which is capable of operating at temperatures up to 120 degrees F, would be modified to permit operation at 125 degrees F. After bid opening, you advised the contracting officer that "the AN/AVQ-17 was successfully qualification tested in accordance with the requirements of U.S. Air Force Technical Exhibit ASKQS-70-6 under a combined environment of 12,000 feet altitude and an ambient temperature of 129 degrees F." However, this information was properly not considered in view of its submission after bid opening.

Our Office has held that, in response to a solicitation containing a brand name or equal clause substantially similar to the clause used in the instant IFB, it is incumbent upon each bidder offering other than the referenced item to provide with

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its bid sufficient descriptive data to enable the contracting agency to determine that the item offered will meet the needs of the Government as specified. Blanket statements offering to meet all specification requirements do not substitute or compensate for inadequate descriptive data or overcome variances in bid data so as to render the bid responsive. See 45 Comp. Gen. 312 (1965).

As a result of our review of the record, we believe that with respect to remote control of beam focusing, output of the proposed light source, cold weather starting, and cooling, your bid failed to satisfy the requirements of paragraphs (c)(1) and (2) of the "Brand Name or Equal" clause, quoted above, concerning the submission of descriptive material. Accordingly, your bid was properly rejected, and your protest must be denied.

The copy of your technical proposal is returned.

Sincerely yours,

Paul G. Dembling

For the Comptroller General
of the United States

Enclosure

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