



Comptroller General
of the United States

Washington, D.C. 20548

150169
Glass

5251510

Decision

Matter of: Racal Recorders, Inc.

File: B-253717

Date: October 18, 1993

Bryan E. Hopkins for the protester.
Walker L. Evey, National Aeronautics and Space Administration, for the agency.
Linda C. Glass, Esq., and Michael R. Golden, Esq., Office of the General Counsel, GAO, participated in the preparation of the decision.

DIGEST

Protest that specifications in amended invitation for bids for 14-channel instrumentation tape recorder are unduly restrictive is denied where record shows that requirements reflect agency's minimum needs and protester merely argues without support that the requirements are not the best method for satisfying the agency's needs.

DECISION

Racal Recorders, Inc. protests the specifications in invitation for bids (IFB) No. 3-535779, issued by the National Aeronautics and Space Administration (NASA), Lewis Research Center (LeRC), for one 14-channel instrumentation tape recorder. Racal contends that the requirement that the tape recorder have a frequency counter and a digital voltmeter (DVM) is unduly restrictive and exceeds the agency's minimum needs.

We deny the protest.

BACKGROUND

The IFB was issued on May 10, 1993, for 1 tape recorder capable of bi-directional recording and reproducing 14 data channels with an evaluated option for two additional units. Section C of the solicitation provided several mandatory specifications that an offered item was required to meet including maximum dimension requirements. With respect to the front panel of the tape recorder, the solicitation

provided that, as a minimum, the following displays shall be on the front panel of the recorder:

- "4. A Frequency Counter
- "5. A DVM or analog voltmeter with RMS and DC displays"

On June 9, Racal filed this protest with our Office objecting to the requirement that a frequency counter and a DVM be on the front panel of the tape recorder. In response to the protest, on July 2, LeRC issued amendment No. 0003 which permitted bidders to supply the frequency counter and DVM as peripherals to the recorder instead of incorporated into the tape recorder's front panel. The amendment specifically provided the following:

"a frequency counter and a DVM (or analog voltmeter) with RMS (root-mean-squared) and DC (direct current) displays shall also be included. The frequency counter and DVM shall either be incorporated into the tape recorder's front panel, or be external to the tape recorder. If the frequency counter and DVM are external to the recorder, then:

- "1. The frequency counter and DVM shall be rack-mountable in a standard 19 inch EIA rack.
- "2. The tape recorder shall be supplied with all necessary cabling and switches to allow a record or reproduce signal from any channel to be input to the frequency counter or DVM.
- "3. The tape recorder shall be supplied with an indication of the channel number of the displayed signal, and whether the displayed signal is a record or reproduce signal. This indication shall be visible from the front of the recorder."

The solicitation also established minimum and maximum accuracy and resolution levels for the DVM and analog meter measuring DC and RMS values.

By letter dated July 9, Racal contends that notwithstanding amendment No. 0003 its position is that a frequency counter or DVM is not needed.

In preparing a solicitation for supplies or services, a contracting agency must specify its needs and solicit offers in a manner designed to achieve full and open competition. 10 U.S.C. § 2305(a)(1)(A)(i) (1988), and include restrictive

provisions or conditions only to the extent necessary to satisfy the agency's needs. 10 U.S.C. § 2305(a)(1)(A)(i) (1988). Where a protester alleges that a requirement is unduly restrictive, we review the record to determine whether the requirement has been justified as necessary to satisfy the agency's minimum needs. Admiral Towing and Barge Co., B-245600; B-245602, Jan. 16, 1992, 92-1 CPD ¶ 83. Here, based on the record, we conclude that the solicitation's specifications are reasonably related to the agency's minimum needs.

FREQUENCY COUNTER

Racal states that in its opinion, a frequency counter is solely designed for calibration purposes and the necessity for a frequency counter is not needed for Racal's recorder which provides for automatic calibration. Racal maintains that a frequency counter internal to a recorder as set forth in the original specifications is not accurate enough for any other purpose beyond calibration and that the auto calibration and verification function provided by Racal are nothing more than aids to assist the operator and are not provided to be used as analytical tools. In this regard, Racal completely ignores the amended solicitation which allows for an internal or external frequency counter.

According to NASA, a frequency counter is used for identifying the frequency in oscillations per second of the electrical signal being recorded. NASA states that it requires this device to display the frequency of the electrical signals from the recorder in order to ensure the accuracy of the data being measured. NASA also states that its operators have other uses for the frequency counter beyond calibration. For example, a tape recorder is used to record various electrical signals pertaining to rotating machinery and the frequency of one of the signals being recorded varies with the speed of the rotating machinery. NASA states that an accurate display of the rotating speed can be obtained by examining the frequency of the signal. The frequency counter on the tape recorder can be used to display the frequency of the signal, and thus the rotating speed of the machinery can be displayed and checked.

While the protester maintains that its tape recorder is calibrated automatically and therefore a frequency counter is unnecessary, the protester still recognizes that, as NASA has stated, there are other uses for the frequency counter besides calibration. The protester basically asserts that the accuracy of the frequency counter is insufficient for any of these other functions. However, the agency explains

that the frequency counter is sufficiently accurate for the operator to check the frequency of the input signals to the recorder and for other purposes. The protester has not shown that the frequency counter does not satisfy the minimum level of accuracy required by the agency for the measurement of the signals.

DVM

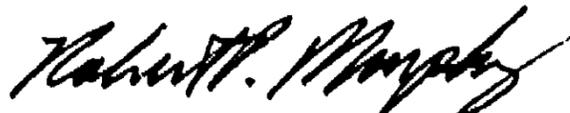
Racal argues that its recorder has a bar graph located on its visual data unit which is the functional equivalent to a DVM. Racal maintains that its bar graph provides a numeric indicator which is not subject to interpretation and allows the user to view other aspects of the signal such as harmonic distortion.

NASA states that the DVM is required to measure the RMS value and DC level of the input or output signals. The RMS level of a signal is the measure of the varying portion of the signal. The DC level of a signal is fixed, or unchanging. NASA states that the operator checks the RMS level of signals during operation in order to determine the magnitude of change of the input or output signals. The operator also checks the DC level of signals during operation in order to verify the fixed level. According to NASA, a certain minimum level of accuracy and resolution for RMS and DC readings are necessary. These levels are specified in the solicitation. NASA reports that a bar graph is not an acceptable substitute for a DVM because the bar graph readings are subject to an unacceptable degree of interpretation. NASA also maintains that a bar graph would require at least 50 points on its scale to meet the accuracy and resolution requirements of the solicitation and that a bar graph of this size would exceed the dimensional requirements set forth in the solicitation.

We do not find NASA's requirement for a DVM to be unreasonable. As stated above, NASA reports that it needs a DVM to check the RMS and DC level of an input signal and that Racal's bar graph simply does not provide the accuracy and resolution necessary to meet the agency's needs. While Racal argues that its bar graph provides a numeric indicator of the RMS and DC level of signals, Racal is silent as to whether or not its bar graph is equivalent to the DVM with regard to the agency's stated accuracy and resolution requirements. Specifically, Racal does not rebut NASA's position that a bar graph does not provide as accurate a reading as a DVM with a precise digital readout.

On this record, we have no basis to object to the inclusion of the frequency counter and DVM requirements in the solicitation.

The protest is denied.


for James F. Hinchman
General Counsel