



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

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## Decision

**Matter of:** Soltec Corporation; Astro-Med, Inc.

**File:** B-234597; B-234597.2

**Date:** June 16, 1989

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### DIGEST

Protest alleging that salient characteristic specification requiring sprocket drive mechanism for flight test recorders to be contracted for on brand name or equal basis, was unduly restrictive of competition and could be obtained from only one source is denied where the contracting agency has offered a reasonable explanation for the specification in issue and the protesters have not shown that the contracting agency's need for this mechanism is clearly unreasonable.

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### DECISION

Soltec Corporation and Astro-Med, Inc., have protested the specifications used by the Naval Weapons Center to purchase 110 "Thermal Writing Strip-Chart Recorders," Western Graphtec model No. WR350Z-8 "or equal" under request for proposals (RFP) No. N60530-89-R-0147. The recorders are to be used at the aircraft and missile test range facility at China Lake, California, in order to record flight test data generated, insofar as missile flights are concerned, by tests lasting only between two and 20 seconds. Thirteen salient characteristics of the brand name model were set forth in the RFP, which also informed prospective "equal offerors" that "equal" products were to fully meet these characteristics.

Both protesters contend that the salient characteristic describing the sprocket drive<sup>1/</sup> operation of the brand name model improperly restricts competition for the requirement

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<sup>1/</sup> Sprocket (or gear) drive essentially guarantees, in the Navy's view, the consistent, uniform flow of the recorder paper, regardless of environmental conditions, because the recorder's sprocket gears penetrate pre-cut holes in the recorder paper and thereby assure that the paper stays in place as it flows through the recorder.

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only to those models manufactured by Western Graphtec and that the protesters' recorders, which are based on friction drive,<sup>2/</sup> should otherwise be considered to be acceptable. This is the sole specification requirement to which Soltec objects and the principal requirement which Astro-Med protests. For the reasons stated below, we deny the protests.

Where a protester challenges a particular salient characteristic as unduly restrictive of competition, it is incumbent upon the contracting agency to establish prima facie support for its position that the restrictions it imposes are reasonably related to its minimum needs. Gel Systems, Inc., B-234283, May 8, 1989, 89-1 CPD ¶ \_\_\_\_\_. The burden then shifts to the protester to show that the requirements complained of are clearly unreasonable. See Julie Research Laboratories, Inc., B-218598, Aug. 20, 1985, 85-2 CPD ¶ 194.

The Navy reports that it specified recorders using sprocket drive because of the desert environment in which the recorders are required to operate. Specifically, the test ranges are located in the northwest corner of the Mojave Desert where extreme temperature variations, even on a daily basis, are found along with dust and grit constantly present in the desert air. Some of the recorders are to be located in a permanent, climate-controlled building, but others will be out on the test range in a trailer which is air-conditioned only when occupied. Further, the Navy states that it requires the flexibility to move the recorders from the climate-controlled building to "other stressful environments" (for example, the other trailer which is not permanently air-conditioned) so that all of the recorders must withstand the severe environmental stresses of the Mojave Desert.

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<sup>2/</sup> Friction drive means that movement of the paper is controlled by being squeezed between two rollers. In the Navy's view, this design is "inherently weaker" than sprocket drive as "grit and dust, regardless of the materials used [for the rollers], can and does cause the rollers to squeeze the [data display] paper less tightly and the aging of the rollers can cause them to become slippery." In the event the paper is squeezed less tightly or the rollers become slippery, the recording of data becomes less accurate, namely: movement of the data display paper causes what should have been depicted as a straight line to instead be depicted as a curved line.

It was the judgment of the Navy that friction drive recorders would not be acceptable since the Navy had previously used friction drive machines and experienced "terrible problems" with them. Specifically, the Navy reports that for many years it used friction drive recorders at the test range and that these recorders demonstrated the "tendencies of [friction drive] recorders using pre-printed chart paper to wander and skew." Several years ago, however (and through normal competition, the Navy states), the Navy purchased recorders using sprocket drive and the "problems<sup>3/</sup> that were being experienced virtually ceased."

The Navy states that it has been consistently monitoring the market for these recorders and while there has no doubt been changes and improvements in the materials used for the rollers, the Navy doubts that any change in friction drive roller materials can remedy the slippage problem thought to be inherent in this mechanism. Using softer materials will increase the dust and grit problem and using harder materials will increase the slipperiness problem, in the Navy's view.

The Navy acknowledges that Astro-Med's design remedies, in part, the problems associated with friction drive by "printing the data graphs used to calibrate the data at the same time [the recorder] records the data." This approach appears to guarantee, in the Navy's view, that the "data is accurate with respect to the grid or printed graphs." Nevertheless, the Navy observes that Astro-Med's "grids or printed graphs will not be consistent from machine to machine." In other words, with the Astro-Med recorder, if the data display paper slips, "what should have been a straight line would also be curved but the underlying printed graph would likewise curve" so that the printed graphs from several recorders, which are used to monitor a flight test, cannot be held side-by-side after the test is completed and interpreted. The inability to have side-by-side reading of printed graphs from several recorders thereby prevents the full use and interpretation of the Navy's test data. Specifically, the Navy states that the proper "alignment of chart recordings and data is essential to the successful analysis of weapons system data."

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3/ Astro-Med suggests that even the chart paper of a sprocket drive machine can be adversely affected by temperature and humidity fluctuations. However, the Navy states it has never had this problem with sprocket drive recorders at China Lake.

In reply to the Navy's position, both companies argue that their friction drive recorders have been satisfactorily used and approved by other users. For example, after the record in this case had closed, Soltec furnished us with a copy of a recent Air Force test report which shows, Soltec claims, that its recorder satisfactorily withstood extremes in temperature in connection with bid sample testing to the extent that the Air Force has put the recorder on an approved source list. Both companies also list several allegedly satisfied users of their equipment.

We think the protesters have fallen short of establishing that the Navy's position is unreasonable. It is clear that the agency's needs reflect the environment in which the recorders will be used. While the protesters assert that their recorders can be used and refer to other users of their equipment, they have not shown that the Navy's concerns about friction drive recorders in the desert environment are misplaced. For example, notwithstanding the data from the Air Force concerning satisfactory temperature range performance on the Soltec model, there is no indication that the Soltec recorder was tested in a "dust and grit," desert-like atmosphere of the type existing at China Lake or that the rollers were subjected to conditions similar to those previously giving rise to harmful aging in the rollers in friction drive recorders installed in the past at China Lake. Further, although Soltec and Astro-Med have listed other alleged satisfied users of their recorders, no specific data have been furnished to our Office which would demonstrate that the usage and operating environments of the other installations are identical to those existing at China Lake.

Accordingly, we conclude that the Navy has established prima facie support for its position that its minimum need at China Lake is for sprocket drive in all its recorders, especially since all the recorders must be able to function under severe environmental stresses incident to being transferred to various locations at China Lake. We further conclude that the protesters have not shown this Navy position to be unreasonable.

As to the argument that sprocket drive is available from only one source, the Navy notes that "Soltec makes a number of sprocket drive recorders, but they do not make one in the size specified in this RFP." Astro-Med insists, however, that only Western Graphtec makes "high speed sprocket drive machines." Nevertheless, since we have concluded that the Navy has established its need for sprocket drive, it is not objectionable that the specified mechanism is allegedly

available from only one source. See Mid-Atlantic Service & Supply Corp., B-218416, July 25, 1985, 85-2 CPD ¶ 86.

Although all of Soltec's discussion and most of Astro-Med's discussion centered on the sprocket drive requirement, the latter also objected to two other specification requirements, neither of which, we note, it addressed in its final comments upon a supplemental technical report submitted by the Navy.

First, Astro-Med objected to a requirement that time and event markers be recorded at margin locations different from those which Astro-Med customarily provides. The Navy states this requirement is needed to standardize data for use by engineers typically assigned to the weapons system being tested and not to China Lake. The Navy argues that standardization of data will thereby reduce the chance of confusion and errors by engineers not in everyday contact with the recorders. In addition, the Navy contends that it would not be difficult and that it would require "relatively small effort" for Astro-Med to comply with the requirement--an assertion Astro-Med has not contested.

Second, Astro-Med objected to the requirement that the device which prints the data on to heat-sensitive paper have a manual heat control in addition to an automatic heat control for controlling the intensity or contrast of the data printed. The Navy argues that if the initial heat setting is too low or too high it will result, respectively, in no data being recorded or a smear. Therefore, it wishes to be able to check and quickly adjust the heat setting before the weapon test is run and the data recorded. In response to the Navy report, Astro-Med asserts that there are manually adjustable heat controls "within [its] machine," but as a design decision it "did not elect to give the user easy access to the manually adjustable heat control" out of concern that increasing the heat in the printhead could adversely affect the life of the writing device.

After considering the parties' arguments, we cannot conclude that it was arbitrary or unreasonable for the Navy to require features which facilitate the adequate recording and accurate interpretation of the data collected.

Finally, Soltec alleges that an employee of the requisitioning activity stated that he "would not accept the Soltec product because [he] did not want to have to become familiar with the different locations of the buttons and switches on the Soltec recorder." In reply, the employee insists that he did not state this but that he insisted to Soltec that

Soltec's model would be acceptable "except for the requirement for sprocket drive." We conclude that the employee's version is more consistent with the detailed position of the Navy as revealed at length in the present record.

We deny the protest.

*Ronald Berger*

*for*

James F. Hinchman  
General Counsel