

DOCUMENT RESUME

03620 - [A2633746]

[Request to Reconsider Decision Supporting Protest to Restrictive Specifications]. B-188277. September 16, 1977. 8 pp. + 4 enclosures (4 pp.).

Decision re: Raymond Corp.; Department of the Air Force; by Robert F. Keller, Acting Comptroller General.

Issue Area: Federal Procurement of Goods and Services:

Definition of Performance Requirements in Relation to Need of the Procuring Agency (1902).

Contact: Office of the General Counsel: Procurement Law I.

Budget Function: National Defense: Department of Defense - Procurement & Contracts (058).

Organization Concerned: Drexel Dynamics Corp.

Authority: E-187338 (1977). B-187639 (1977). 51 Comp. Gen. 247.

Reconsideration was requested of a decision supporting a protester's contention that specifications calling for side-to-side loaders were unduly restrictive. The fact that two offerors were able to meet specifications does not provide a reasonable basis for restriction. However, the decision was reversed because: where there are conflicting statements, the agency's data are adopted unless protester can prove they are incorrect; and the agency's mathematical model showed that side-to-side loaders would satisfy the Government's needs more efficiently. (HTW)

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DECISION

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

FILE: B-188277

DATE: September 16, 1977

MATTER OF: The Raymond Corporation; Air Force--requests for reconsideration

DIGEST:

1. Fact that two offerors were able to meet restrictive specification does not per se provide reasonable basis for restriction.
2. Where, as here, conflicting statements of protester and contracting agency--concerning average time required for protester's materials handling equipment to deposit and retrieve items relative to time of other offeror's equipment--constitute only available evidence, agency's data is adopted because protester has not met burden of affirmatively proving that its data is correct and agency's incorrect.
3. Since contracting agency has shown by mathematical model that fewer side-to-side loaders than front-to-side loaders will be required to satisfy the Government's needs for warehouse modernization program, greater degree of efficiency is not unreasonable minimum need of Government. Therefore, specification restricted to side-to-side loaders is not unreasonable and decision of June 2, 1977, is reversed.

The Raymond Corporation and the Air Force request reconsideration of our decision in the matter of Drexel Dynamics Corporation, B-188277, June 2, 1977, 77-1 CPD 385. In that decision, Drexel Dynamics Corporation (Drexel) contended that the Air Force had no reasonable basis to restrict specifications to side-to-side loaders (capable of loading or unloading from both sides) when a front-to-side (capable of loading or unloading from only the right side) Drexel model would meet the Air Force's performance requirements stated in sections 1.0, 2.0, 3.0 and 4.0 of request for proposals (RFP) No. F34650-77-00010. Drexel's contention was supported by (1) unrefuted data showing that, under normal operating conditions, front-to-side loaders are more productive

than side-to-side loaders, and (2) Army tests of both type loaders resulting in an Army determination that front-to-side loaders were more desirable. Since the Air Force failed to show that (1) the advantages of side-to-side loaders are greater than the advantages of front-to-side loaders, or (2) front-to-side loaders would not satisfy the Government's minimum needs, we concluded that the RFP's side-to-side loader requirement was unduly restrictive. Our decision did not address Drexel's contentions concerning the necessity for the RFP's wire guidance, automatic pallet positioning, and automatic height selector requirements.

The Air Force, in reports dated June 21, June 27, July 1 and August 2, 1977, essentially argues that: (1) the side-to-side loader is a mandatory, integral part of a Department of Defense (DOD) Warehouse Modernization Program to provide efficient use of personnel, equipment and space; (2) a mathematical model simulating expected operating conditions shows that side-to-side loaders are more efficient than front-to-side loaders in the particular circumstances of this procurement; and (3) the RFP's specifications were not unduly restrictive of competition because at least two offerors can satisfy the requirements.

As for the third argument, the fact that two offerors were able to meet the RFP's side-to-side loader requirement does not per se provide a reasonable basis for the restriction. See Keystone Diesel Engine Company, Inc., B-187338, February 23, 1977, 77-1 CPD 128 (restriction of 2-cycle engines was unreasonable because 4-cycle engines were not more quiet, less polluting or mechanically more reliable).

Raymond, in letters dated June 13 and July 18, 1977, concurs in the Air Force's position and additionally argues that: (1) the original Drexel unrefuted "normal operating condition" data was erroneous; (2) the Air Force has no need for the front-loading capability of the front-to-side loader; and (3) the Army's decision to use the front-to-side loader was based on operating conditions and needs completely different than the Air Force's. Because of our conclusion below, there is no need to consider these additional arguments.

WAREHOUSE MODERNIZATION PROGRAM

The Air Force explains that the current loader requirement represents a single phase of a DOD Warehouse Modernization Program, which directed the military departments to bring their warehousing

systems up to the current state-of-the-art. The overall Air Force plan for Tinker Air Force Base, developed in six phases, is for high-density, multilevel storage with minimum aisle space. The first two phases, already completed, included construction of a \$6.3 million medium-bulk warehouse building and installation of high-density multilevel storage racks at a cost of \$480,000. The side-to-side loaders solicited in the instant RFP constitute phase 3. Phases 4 and 5 are for the purchase and installation of electronic carts to deliver palletized material between the medium-bulk warehouse and the central warehouse shipping and receiving areas. Phase 6 is a computer linkup with the Warehouse Information Control System currently in use for the small-item warehouse. This linkup will permit computer control of the medium-bulk warehouse production scheduling to allow the most effective use of personnel and machines in the pickup and deposit of materials. One of the goals of this production programming will be to ensure that for at least 85 percent of the issues, a loader will be able to deposit a pallet and then pick up another pallet in the same aisle. The Air Force states that this 85-percent minimum dual cycle goal represents a realistic estimate of operating conditions upon completion of the warehouse modernization program. (The Air Force has not stated for the record when phase 6 is programmed for the warehouse involved here but we have been informally advised that phase 6 is scheduled for calendar year 1979.)

Presently, material to be stored is received by commercial or military transportation, truck or aircraft; delivered to a central receiving building by truck; then in-checked, inspected and delivered to storage warehouses by tractor-drawn 25-foot trailers equipped with a roller-type, power-driven handling system. Storage warehouses have a mechanized roller-conveyorized shipping and receiving system that matches the mechanized trailer system. The material is moved automatically from the trailer into the warehouse utilizing the two systems. Plans provide for material to be automatically "repalletized" at this point for subsequent deposit in storage. The proposed side-to-side loaders would be used to deposit and retrieve the material; no additional automated lift equipment (i.e., front loaders) will be required.

WIRE GUIDANCE, AUTOMATIC PALLET POSITIONING, AUTOMATIC
HEIGHT SELECTION

Regarding Drexel's contentions that wire guidance, automatic pallet positioning, and automatic height selection are required only for the side-to-side loader, the following response was provided by the Air Force.

The required wire guidance system is considered by the Air Force as an absolute requirement for any narrow-aisle, high-density storage facility regardless of the type loader used, for personal safety and protection of both storage racks and stored materials. Wire guidance has no connection to stacking stability of the side-to-side vehicle, as alleged by the protester. Nor is it required because the mast assembly blocks the operator's view. Although wire guidance definitely assists the operator of any loader while traveling forward, it is not the mast structure, but the load itself, which restricts the operator's view. Finally, the protester's contention that wire guidance is necessary only for the side-to-side loader--because it cannot deposit or retrieve a load unless precisely centered--is incorrect because any loader must be centered in front of the location in order to pick or deposit a pallet. The vehicle must also remain in the center of the aisle for safety reasons. Additionally, the pick or deposit time would be increased if the operator had to jockey closer to the racks to pick or deposit a pallet, as with the Drexel model.

Automatic height selection and automatic pallet positioning features are definite requirements regardless of the type loader procured. By insuring proper vertical and horizontal alignment of the loader automatically, the possibility of personal injury, or damage to stored items or storage racks is minimized.

We note that although Raymond and the Air Force devoted considerable time and effort justifying the RFP's wire guidance, automatic height selection and automatic pallet positioning requirements, Drexel questions only the need for these features and has never refused to furnish these features. The only RFP requirement which would restrict Drexel from competition and the sole focus of our June 2 decision is the side-to-side loader requirement. Since we agree that the wire guidance, automatic height selection and automatic pallet positioning requirements have a reasonable basis, the determinative issue is whether the side-to-side loader requirement is unduly restrictive. The Air Force excluded front-to-side loaders because in its view side-to-side loaders are more efficient in the planned materials handling system as demonstrated by mathematical model--first made a part of the record after our June 2 decision was rendered.

THE MATHEMATICAL MODEL

The Air Force explains that, as in all models, the outcome can be greatly affected by basic assumptions. The Air Force's assumptions are based on actual intended operation, existing safety limitations, and past experience. It is also assumed that the Drexel loader can be equipped

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with wire guidance and the automatic pallet positioning and height selection features. All operating assumptions are summarized below:

Assume that: (1) vehicle movement within bin aisles will be 1.5 miles per hour; (2) average time to deposit or retrieve at a storage rack is 16 seconds; (3) average time to discharge or load at the staging area is 17 seconds; (4) vehicles operate 7.5 hours per day; and (5) system will process 1,580 transactions per day, including 700 issues from storage, 595 partial pallets returned to stock after partial picking (85 percent of 700 issues), and 285 new receipts from storage.

Given that: (1) each aisle is 180 feet in length; (2) each aisle is 66 inches in width; and (3) 50 percent of issues will be on same side of the aisle as the receipt and 50 percent will be on the opposite side.

Define: (1) "dual cycle" as one where vehicle enters an aisle carrying a pallet to be placed in stock and then retrieves another pallet for issuing from that same aisle; and (2) "single cycle" as one where the vehicle performs only one operation while within the aisle.

The results show the number of front-to-side loaders and side-to-side loaders required to perform the anticipated work as a function of the percent of dual cycle issues.

<u>DUAL CYCLE AS</u> <u>PERCENT OF ISSUES</u>	<u>NUMBER OF VEHICLES REQUIRED</u>	
	<u>FRONT-TO-SIDE</u>	<u>SIDE-TO-SIDE</u>
50	6.5	6.2
55	6.5	6.1
60	6.5	6.1
65	6.5	6.0
70	6.5	6.0
75	6.4	5.9
80	6.4	5.9
85	6.4	5.8

The Air Force states that the inescapable logic here is that, given the same lifting capacities and operating speeds (maximums established by safety organizations) and required automatic controls, a loader which can

deposit a pallet on one side of the aisle without ever leaving the aisle must be more efficient than a loader which must go to the end of the aisle, turn around, and return to a pickup point on the opposite side of the same aisle. The Air Force notes that the exact comparative degree of efficiency estimated by any model can, of course, be altered by the operating assumptions; however, the basic relationship of one method's greater efficiency over the other is unvarying. The Air Force states that under the total plan for modernization of its warehousing operations, including scheduling of pickups and deposits by computer to insure maximum dual cycles, the advantages of side-to-side loaders are greater than those of front-to-side loaders. The Air Force concludes that for the implementation of the DOD Warehouse Modernization Program, the requirement for side-to-side loaders is not only logical but a mandatory integral part of the entire program to provide efficient use of warehouse personnel, equipment and space.

We note that Drexel and the Air Force are basically in agreement with the data used in the model except for the amount of time required for a deposit or load action at a cart or bin. The Air Force contends that Drexel's stated times of 10 and 12 seconds, respectively, are understated.

"* * * Since the Drexel vehicle must leave the guided path to deposit or retrieve a pallet, it is our opinion that the alleged time is not long enough to perform the operation. In the warehouse plan, a battery operated cart will be staged at the end of each bin aisle. When the vehicle completes an issue transaction, the pallet would be deposited on one of the carts for removal to the shipping area. When processing receipts, the vehicle will pick up a pallet from one of the carts, enter the aisle, and make the receipt transaction. Both vehicles will operate in the same manner; therefore, the same time would be required. Therefore, based upon this rationale, our estimated times were used for both vehicles, not those proposed by Drexel for their vehicles."

Drexel vigorously argues that its deposit and retrieval times are factual, not deceptive, and are based on actual operating times required to perform these functions. Drexel contends that if the Air Force used the actual storage and retrieval times for the Drexel model in the

mathematical model, the results would show that fewer front-to-side loaders than side-to-side loaders would be required.

We note that, for purposes of the Air Force model, the absolute time required for the Drexel equipment or a side-to-side loader to perform the functions involved is unknown and not as important as the Air Force estimates of the relative time of the Drexel equipment to the time that the side-to-side loader would require. The record indicates that no actual on-site test data compiled by using the competing loaders with the materials handling equipment to be furnished by the Air Force was developed. Absent what would have been the best evidence, in the circumstances, the mathematical model appears to be a satisfactory relative measure of efficiency and productivity of the competing loaders.

With regard to Drexel's disagreement with the Air Force's deposit and retrieval times, we are inclined to adopt the Air Force's estimates of the times involved since when conflicting statements of the protester and the contracting agency constitute the only available evidence, we do not believe that the protester has met the burden of affirmatively proving its case. See, e.g., The Public Research Institute of the Center for Naval Analysis of the University of Rochester, B-187639, August 15, 1977, and decisions cited therein. Nevertheless, we have followed Drexel's suggestion and performed the computations substituting Drexel's times for the Air Force's, with the result that Drexel is generally correct except at the level of 85-percent (the planned operational level) dual cycle issues where we calculate that seven front-to-side loaders would be required to perform the same amount of work that six side-to-side loaders could perform.

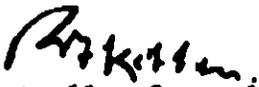
ANALYSIS

The Air Force data shows that (1) front-to-side loaders are about as efficient as side-to-side loaders below the level of 75-percent dual cycle issues, and (2) the 75-percent level and above cannot reasonably be obtained on a consistent basis without computer assistance planned for phase 6 of the overall modernization plan. We believe that the Air Force has presented adequate evidence that after phase 6 fewer side-to-side loaders than front-to-side loaders would be required to meet the Government's reasonably foreseeable minimum needs. The fact that one loader may be more efficient than another is a reasonable basis to exclude the less efficient one from

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competition, because the greater degree of efficiency is not an unreasonable minimum need of the Government. See 51 Comp. Gen. 247 (1971).

Accordingly, our June 2 decision is reversed and Draxel's protest is denied. By letters of today the appropriate congressional committees will be informed that this decision eliminates the Air Force's obligations under the Legislative Reorganization Act of 1970, 31 U.S.C. §§ 1171-76 (1970), referred to in our June 2 decision.


Acting Comptroller General
of the United States



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20549

W. L. C.
P. I.

B-188277

September 16, 1977

The Honorable Abraham A. Ribicoff
Chairman, Committee on Governmental Affairs
United States Senate

Dear Mr. Chairman:

Enclosed is a copy of our decision of today concerning requests by the Air Force and The Raymond Corporation that we reconsider our decision in the matter of Drexel Dynamics Corporation, B-188277, June 2, 1977, 77-1 CPL 385. The June 2 decision concluded that, based on the then current record, the Air Force had no reasonable basis to restrict the specification in request for proposals No. F34650-77-00010 to side-to-side loaders because unrefuted data showed that front-to-side loaders would also meet the Government's minimum needs.

After careful consideration of new information provided by the Air Force--showing by mathematical model that in the overall warehouse modernization program, including computer-assisted, materials-handling, fewer side-to-side loaders than front-to-side loaders would be required to perform anticipated work--we now conclude that the greater degree of efficiency is not an unreasonable minimum need of the Government.

Accordingly, our June 2 decision is reversed, the protest is denied, and the Air Force's obligations under section 236 of the Legislative Reorganization Act of 1970, 31 U.S.C. § 1176 (1970), are eliminated.

Sincerely yours,

R. H. K. S.
Acting Comptroller General
of the United States

Enclosure



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

*9/11 L. Taylor
P. I*

B-188277

September 16, 1977

The Honorable Jack Brooks
Chairman, Committee on Government Operations
House of Representatives

Dear Mr. Chairman:

Enclosed is a copy of our decision of today concerning requests by the Air Force and The Raymond Corporation that we reconsider our decision in the matter of Drexel Dynamics Corporation, B-188277, June 2, 1977, 77-1 CPD 385. The June 2 decision concluded that, based on the then current record, the Air Force had no reasonable basis to restrict the specification in request for proposals No. F34650-77-00010 to side-to-side loaders because unrefuted data showed that front-to-side loaders would also meet the Government's minimum needs.

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Sincerely yours,

Acting

R. K. 1/1/77
Comptroller General
of the United States

Enclosure



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

*Do. Wright
11/2*

B-188277

September 16, 1977

The Honorable John L. McClellan
Chairman, Committee on Appropriations
United States Senate

Dear Mr. Chairman:

Enclosed is a copy of our decision of today concerning requests by the Air Force and The Raymond Corporation that we reconsider our decision in the matter of Drexel Dynamics Corporation, B-188277, June 2, 1977, 77-1 CPD 385. The June 2 decision concluded that, based on the then current record, the Air Force had no reasonable basis to restrict the specification in request for proposals No. F34650-77-G0010 to side-to-side loaders because unrefuted data showed that front-to-side loaders would also meet the Government's minimum needs.

After careful consideration of new information provided by the Air Force--showing by mathematical model that in the overall warehouse modernization program, including computer-assisted, materials-handling, fewer side-to-side loaders than front-to-side loaders would be required to perform anticipated work--we now conclude that the greater degree of efficiency is not an unreasonable minimum need of the Government.

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Sincerely yours,

Prokman
Acting Comptroller General
of the United States

Enclosure



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

*M. Boyle
9/16/77*

B-188277

September 16, 1977

The Honorable George H. Mahon
Chairman, Committee on Appropriations
House of Representatives

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Accordingly, our June 2 decision is reversed, the protest is denied, and the Air Force's obligations under section 236 of the Legislative Reorganization Act of 1970, 31 U.S.C. § 1176 (1970), are eliminated.

Sincerely yours,

Acting

R. K. 11/2
Comptroller General
of the United States

Enclosure