

DOCUMENT RESUME

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[Justification for Sole-Source Awards to Spectral Dynamics].  
PSAD-78-84; B-160725. April 7, 1978. 5 pp. + 2 enclosures (6 pp.).

Report to Sen. William Proxmire; by Richard W. Guzman,  
Director, Procurement and Systems Acquisition Div.

Issue Area: Federal Procurement of Goods and Services:  
Reasonableness of Prices Under Negotiated Contracts and  
Subcontracts (1904).

Contact: Procurement and Systems Acquisition Div.

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

Organization Concerned: Department of Defense; Department of the  
Navy; Department of the Air Force; Department of the Navy:  
Naval Sea Systems Command; Spectral Dynamics Corp.

Congressional Relevance: House Committee on Armed Services. Sen.  
William Proxmire.

The Naval Sea Systems Command's procurement, on a sole-source basis, of a communication system from the Spectral Dynamics Corporation of San Diego, California, was questioned. The communication system has proven to be very reliable and useful and has exceeded its required mean-time between failures by 150%. The contractor met or exceeded delivery dates and has been cooperative in correcting any problems, generally without cost to the Government. The sole-source procurement was justified on the basis of public exigency because need arose for increasing fleet-readiness capability, and the contractor could deliver the system within 6 or 7 months at a reasonable price. Allegations were made that communications equipment failed because of prolonged storage in Guam by the Navy and that there were latent design defects in a rate-of-flow indicators. The communications equipment was stored for about 4 months in Guam, and analysis disclosed that the equipment failures may have been due to electrostatic conditions caused by a typhoon while the units were stored in a metal warehouse. There was no evidence to support the allegation that prolonged storage contributed to the equipment failure. With regard to the allegation that the contractor did not use parts meeting military specifications, the contractor used standard commercial parts not necessarily meeting military specifications. The Air Force advised that Spectral Dynamics indicators met all performance test standards and were the highest quality indicators procured. (RRS)



UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

PROCUREMENT AND SYSTEMS  
ACQUISITION DIVISION

B-160725

April 7, 1978

The Honorable William Proxmire  
United States Senate

Dear Senator Proxmire:

This report is in regard to your August 4, 1977, request, calling our attention to correspondence you received from Mr. D. M. Pierson of San Diego, California, questioning the Naval Sea Systems Command (NAVSEA) procurement, on a sole-source basis, of a communication system from the Spectral Dynamics Corporation, San Diego, California. Mr. Pierson also stated that the contractor had delivered defective rate-of-flow indicators to the Air Force.

We reviewed documentation and discussed the allegations with representatives of NAVSEA, Arlington, Virginia; the Naval Regional Procurement Office, Long Beach, California; and the Air Force San Antonio Air Logistics Center, San Antonio, Texas. We also visited the contractor's plant.

We believe that operational needs of the fleet for increasing its readiness capability and the existence of a proven source of quality products for filling that need quickly--at apparently reasonable prices--justified the several sole-source communications systems procurements. These procurements were also made to evaluate the items under operational conditions.

There were some quality problems with the rate-of-flow indicators, and the Air Force is currently looking into the possible causes. Details of our review follow.

SOLE-SOURCE PROCUREMENT OF  
COMMUNICATION SYSTEM ALLEGATION

Background

In 1970 the Navy decided that it needed an acoustical communication system for use by submarines to contact surface ships and aircraft. For test purposes the Navy purchased two off-the-shelf commercial communication systems in December 1970 from Sanders Associates, Inc. The tests of these first

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two systems led the Navy to obtain 14 communication systems referred to as WQT-2/WQR-2. Components of this system were commercial off-the-shelf items purchased in May 1972 from the following suppliers.

<u>Item</u>	<u>Supplier</u>	<u>Unit price</u>
Recorder	Alden Company	\$ 7,000
Receiver	Spectral Dynamics	23,000
Transmitter	Sanders	<u>43,000</u>
<b>Total</b>		<b><u>\$73,000</u></b>

The initial intention was to buy this version of the communication system on a one-time basis until another more sophisticated system could be developed. Even though the WQR-2 had certain limitations it demonstrated the feasibility of using the system for communications between submarines and surface ships and aircraft.

Because the WQR-2 system was successful within its limitations, the Office of the Chief of Naval Operations decided that additional communication systems were needed. The Navy purchased 14 additional systems during fiscal year 1974 from Spectral Dynamics. Spectral assembled the unit--designated as WQC-5--using its own receiver and transmitter, and an Alden Company recorder, for a total price of \$52,280.

The WQC-5 was put together from off-the-shelf commercial components with minor Navy-requested modifications. Spectral delivered an acceptable system on time. The unit as a whole is not offered for commercial sale because the equipment is classified once it has been modified to meet Navy requirements.

#### Subsequent procurements of WQC-5 communications systems

The Office of the Chief of Naval Operations requested additional units for use by submarines and surface ships. Twenty-nine units were purchased from Spectral Dynamics at \$54,280 each in fiscal year 1976.

The Navy plans to buy another 20 units, with an option for 10 more, using fiscal year 1978 funds. We have been advised that the Navy plans no further sole-source procurements of the system.

Basis for sole-source procurement  
from Spectral Dynamics

The AN/WQC-3 has proven to be a very reliable and useful communication system. It has exceeded its required mean-time-between failure by 150 percent. The contractor has met or exceeded delivery dates and has been cooperative in correcting any problems, generally without cost to the Government. The Navy justified sole-source procurement of the system from Spectral Dynamics on the basis of public exigency because need arose for increasing fleet-readiness capability and the contractor could deliver the system within 6 or 7 months. The Navy advised us that a lead-time of 36 months would be required to purchase the system competitively. This time includes specifications preparation, bid solicitation, contract award, meeting first article test requirements, and delivery of an acceptable first production unit.

The Navy, however, has not yet decided whether to continue to buy the present system for fleet-wide use or to develop another.

OTHER ALLEGATIONS

Allegation that communication equipment  
failed because of prolonged storage  
in Guam by the Navy

Mr. Pierson alleged that the Navy stored AN/BQR-23 receiver sets on Guam for a considerable period before installation because the contractor made deliveries prior to the specified delivery date. Consequently, he stated, two of the AN/BQR-23 systems had to be repaired by Spectral at Government expense due to system failures, partially attributable to the prolonged storage.

We found that the contract authorized delivery on or before the specified delivery dates, and determined that two AN/BQR-23 receiving sets experienced failures after shipment to Guam for shipboard installation. The units were stored about 4 months. Analysis disclosed that the equipment failures may have been due to electrostatic conditions caused by a typhoon that hit Guam while the units were stored in a metal warehouse building. The Navy reimbursed the contractor about \$200 for system repairs. We found no evidence to support the allegation that prolonged storage contributed to the failures of the two systems.

Allegation of latent design defect  
in rate-of-flow indicators and  
use of nonmilitary specification parts

Mr. Pierson alleged that under Air Force contract (F41608-75-C-1991), Spectral Dynamics delivered rate-of-fuel-flow indicators, containing a latent design defect, necessitating return of all units to the factory for modification. The correspondent also alleged that the units contained parts that did not meet military specifications. Further, Mr. Pierson stated that the contractor attempted to suppress these facts.

We found that, of 32 units delivered under the Air Force contract, 12 had to be returned due to failures in the field. Initially, four units were returned to the contractor for repair. Two units had broken connectors, because excessive force was used when printed circuit boards were installed. One unit failed because a part caused an excessive flow of current to other components. The cause of the fourth unit's failure could not be ascertained. Of the remaining eight units, five were shipped to Spectral Dynamics. Three units were shipped to another contractor for repairs, but were lost in shipment. At our request, the Air Force is trying to determine why these eight units failed and will advise us of their findings.

In connection with the allegation that the contractor did not use parts meeting military specifications, we were advised that the contractor used standard commercial parts not necessarily meeting military specifications. Contractor officials stated that parts drawings did not indicate military specifications; however, preproduction system testing was in accordance with contract military standards. Air Force representatives disagreed, however, stating that the contract clearly called for approved parts. On the other hand, the Air Force advised us that the Spectral Dynamics indicators met all performance test standards and are the highest quality indicators procured thus far.

We plan to recommend that the Air Force

- determine whether a downward price adjustment is required because of the contractor's use of parts not meeting military specifications;
- review the adequacy of its procurement and quality control procedures in preventing recurrence of similar

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situations, whereby one bidder could gain a competitive edge over other bidders that presumably based their prices on using approved parts in accordance with contract requirements; and

--amend military specifications to coincide with commercial specifications when commercial specifications are adequate.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "R. W. Gutmann". The signature is written in black ink and is positioned above the typed name and title.

R. W. Gutmann  
Director

Enclosures - 2

ENCLOSURE I

ENCLOSURE I

July 7, 1977

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The honorable William Proxmire  
United States Senate  
Washington, D.C. 20510

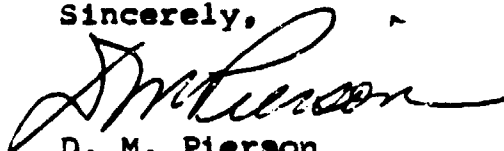
Dear Senator Proxmire:

Thank you for the prestige the simple act of forwarding your copy of my letter of May 6, 1977 to NAVSEA has afforded my cause of attempting to get the U.S. Navy to compete it's latest "emergency" substitute sonar procurement, the AN/WQC-5 IACS. I am quite sure that without your action my letter would have gone unanswered, and worse, unheeded. Please accept my heartfelt appreciation; it is truly gratifying for us to observe first-hand a public figure take an interest in such matters.

You will find enclosed a copy of another letter to NAVSEA. It is dated July 7, 1977 and was submitted in answer to Admiral Gerald J. Thompson's letter to me of June 17, 1977. Perhaps my response is brash at first glance, but I assure you the items set forth therein are true and provable and really should be known by the Navy before it makes another sole source procurement concerning the AN/WQC-5 program because, I believe, the risk to the government is steadily increasing very rapidly.

Thanks again.

Sincerely,



D. M. Pierson  
12450 Damasco Court  
San Diego, Ca. 92128

enl: a/s

July 7, 1977

Commander  
Naval Sea Systems Command  
Washington, D.C. 20362

Attn: Admiral Gerald J. Thompson  
Supply Corps, USN  
Deputy Commander for Contracts

Re: O26/PJTmsv Ser:48 17 Jun 1977

Dear Admiral Thompson:

Your letter of June 17 in response to my recommendation of May 6 that the U.S. Navy discontinue sole source procurements of AN/WQC-5 Integrated Acoustic Communication System (IACS) equipment and services, was received June 24. It is a very good letter and most sincerely appreciated. However, in view of your Command's apparent decision to effect additional AN/WQC-5 procurements without the benefit of multiple source solicitations, additional information must be brought to your attention. The purpose of this letter then, is to dissuade your Command from the continuing sole source procurement in-so-far as Spectral Dynamics Corporation of San Diego and the AN/WQC-5 program are concerned.

In my letter to Mr. Bauder, Financial Editor of The San Diego Union dated June 9, 1977 (copy enclosed), the point of the U.S. Navy's propensity for the continuing sole source procurement of commercial quality electronic sonar equipment and services over the last six years from Spectral Dynamics is set forth on page 5. Implicit in that practice is the fact that each of the specified U.S. Navy programs was brought about and justified for sole source procurement on rationale strikingly similar to that expressed in your recent correspondence; i.e. interim systems urgently needed by the Navy due to schedule slippage of the ultimate version, a commercial substitute almost instantly available in quantity from one Navy supplier, Quick Reaction and Rapid Development Capability procedures required, etc. In retrospect, one could research the contractual, the factual and the actual installation dates of the AN/BQR-20, -20A, -22, -22A and -23 programs to determine the true quality of the original justification. But the question, "was each program really that urgent?", need not be asked because all of that is water over the dam. Suffice it to say that none of the programs had time for development of "a performance specification suitable for competitive procurement purposes", or for actual competition of any sort. This then must cast some suspicion on the periods quoted in your



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letter of the 17th relative to prospective periods required to compete, analyze, award and acquire new AN/WQC-5 equipments and support services from any source other than Spectral Dynamics. There are no reasonably current data available to me to factually support the periods quoted by you for such competition. It is a fact that no other company has been formally requested to propose in competition with Spectral Dynamics concerning the AN/WQC-5, or any of the precedent Navy programs specified in my letters of May 6 or June 9, 1977. Accordingly, it appears that no other company has been given the same opportunity afforded Spectral; i.e. anticipation of Navy requirements by proceeding into development and even production of systems before receiving a written Request for Proposal, or contractual commitment of any kind from the Navy. You have correctly designated such anticipatory expenditures by Spectral as having been "privately financed", and having commercial sales application. However, it is also true that the corporation recovers its anticipatory investment in engineering design and development through allocation of such costs to its General and Administrative Expenses, then attaches a percentage of its product's manufacturing estimated costs to the selling price of that product. For example, assume the estimated cost-to-the-shelf (material, direct labor and overheads including indirect labor) of a certain Navy product is \$10,000.00; the most recent estimated Spectral G&A rate approximates eighty-five (85) per cent, is applied for an estimated Price-before-profit of \$18,500.00; a proposed profit factor of 14 1/2 percent is then applied to yield a proposed selling price of \$21,182.50, each. The absence or precision in the pricing formula and the unique G&A rate are but two of the comments which can be made relative to this practice. While identical proposed G&A rates are used in development of prices for technical data, spares, depot operation and in-plant training, a reduced rate of thirty-seven per cent (37%) is used as appropriate to field engineering and outside training services. The profit factor of fourteen and one half per cent (14 1/2%) is used in Navy proposals as a matter of firm company policy for all hardware and services. No proprietary unit of the AN/WQC-5 system has been sold, or offered for sale, to a non-military customer by Spectral Dynamics.

The price which the government ultimately pays for these "privately financed" commercial sonar systems is further increased by contractually authorizing Spectral to deliver the equipments "on or before" the specified delivery dates, thus allowing recovery of the price of the delivered goods at the earliest possible time. There have been instances where some of the systems and spare parts have been stored by the Navy for a considerable period awaiting installation in the next platform. In one instance the government reimbursed Spectral the contract price for a Field Engineer to visit Guam to repair and renovate two AN/BQR-23 systems due to systems failures at least partially attributed to having been caused by prolonged storage in that hostile Guamanian climate.

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Not all U.S. Navy programs falling within the production capabilities of Spectral have been awarded the firm. About three years ago NAVAIR possessed an urgent requirement for a commercial quality acoustic processor for the LAMPS program and competed the requirement on a formal, albeit negotiated, basis between Spectral Dynamics and Digital Retrieval Systems. The latter ultimately was awarded the contract - a strong indication that responsive competition for urgent Navy requirements does, in fact, exist. There have been informal proposals by Spectral to produce certain products then under contract by the Navy with competitors which were not successful as to Spectral and contract award. For example the U.S. Navy evaluated a Spectral proposal to replace a Tracker unit being developed by the Raytheon Company when it appeared the latter was experiencing technical and cost difficulties of a serious magnitude. The Navy determined to remain with its original contractor following its evaluation of the Spectral proposal, thus pointing at least to the fact that technical capabilities equal to those of Spectral Dynamics do in fact, exist in a number of other companies.

Noteworthy here is mention of Spectral's success in obtaining award of an Air Force contract (F41608-75-C-1991) through the Formal Advertisement procedures from Kelly AFB, Texas; Headquarters San Antonio Air Logistics Center. The award was of course based upon the fact that Spectral was the responsive bidder who submitted the lowest bid to qualify and produce 32 Rate of Fuel Flow Indicators (SDC P/N 13283). Subsequent to qualification efforts and delivery of the units a latent design defect has necessitated arrangements for all units to be returned to the factory for modification. In addition, a statement was filed by the undersigned with the Kelly AFB Inspector General setting forth information alleging the units are materially deficient of the Procurement Document (Specification), that such deficiencies were known, or should have been known, to certain corporate directors/officers before submission of the bid, during performance, and specifically upon examination of the initially returned units by the company's Quality Assurance Department; and such deficiencies existed irrespective of the design defects. That such directors intentionally attempted to suppress and "cover up" these facts, all to the detriment of the U.S. Government. Two points: In one of the very few truly competitive situations for a prime government contract in which Spectral participated during the past six years, its product was materially deficient as to specification requirements for "mil-spec" parts, and had a latent defect which prohibited proper operation of the unit. Secondly, in the event the statement of wrongdoing is investigated and found sound, ramifications therefrom could effect the company's ability to perform then-existing contract work, consequently perhaps, adversely affecting the proper performance of the now contemplated AN/WQC-5 efforts. Because of an unequalled resistance to disclose what action, if any, has been

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taken, or might be taken in the future, by the office of the Inspector General after some 90 days following receipt, the statement has been submitted through the U.S. Naval Investigative Service to the U.S. Air Force, hopefully for investigation and if warranted, criminal prosecution.

It clearly appears to me that your Command or perhaps one of its software contractors such as Hydrotronics, or the successor-in-interest to Hydrospace-Challenger could rapidly develop a performance specification for the AN/WQC-5 equipment in view of the fact that such equipment and related technical data covering its operation and maintenance, presently exist within the government's inventory. Moreover, the Navy has every right available under the rights in Data clause of applicable contracts to so employ the technical data. Once a performance specification and delivery schedules are developed, acquisition of better competitive information appears pretty easy to me. I am convinced that the very least of benefits which might be realized by the Navy through a competition, would be a lower price than through the presently planned sole-source procurement. Secondly, a multiple source solicitation would obviously better satisfy rules and regulations, but it might also result in selection of a source other than Spectral Dynamics, and thus perhaps providing more reliable, trouble-free performance in the future.

Spectral Dynamics is not a large company-it employs about 525 persons and recorded a record 20 million dollar gross sales for its fiscal year which ended last March 30. Numerous rumors concerning its merger, acquisition etc. by or with another corporation are fairly prevalent at this time. While it is impossible to know the nature of any new management or specifically what attitude a prospective management might have towards government contracts at Spectral, it is a point your Command must closely consider, particularly the ramifications to Navy programs (past, present and future) which might occur if such a merger, sale etc. should result in a dissolution of the corporation, or it's prime government contracts department. As you know Spectral Dynamics is in sole possession of a multitude of technical information concerning certain design aspects of all the Navy systems enumerated above, and it operates an exclusive repair depot for those same systems and their spare parts.

There are other risks which appear important for the Navy to consider in the AN/WQC-5 program. For example, in its latest Annual Report Spectral Dynamics has made the following statement:

"From time to time the company has had charges filed against it by regulatory agencies, employees and former employees alleging various violations of laws or regulations. With respect to currently pending matters, man-

1. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS, page 8, note 3, entitled, "Commitments and contingencies".

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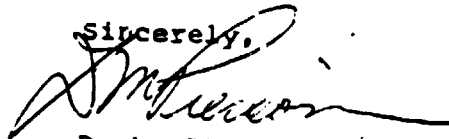
agement believes the same to be without merit and that such matters will be disposed of favorably or without material adverse effect upon the company."

Not everyone agrees with these sweeping and nonchalant "management beliefs". I, as one of its former employees, am presently pursuing the administrative remedies course(s) concerning allegations of unlawful employment practices by the President of Spectral, its agents or employees, its Board of Directors and certain other Officers, relative to racial discrimination, retaliation and other matters. These charges are currently pending with the California Fair Employment Practices Commission, the Equal Employment Opportunity Commission and the Department of Labor. In view of the statement quoted above it appears an administrative solution to these problems is not probable. Accordingly, my plan is to proceed under Title VII of the Civil Rights Act of 1964, as amended, to the Federal Court to obtain proper relief. Such relief shall include civil and criminal sanctions in-so-far as petition is concerned, as provided by the Act. Moreover, I fully intend to seek default termination of each and every federal prime and subcontract then held by the corporation, or its successor, under Title VII and certain Executive Orders and to have the corporation placed on the debarred and ineligible (for further government contracts award) list, if at all possible.

There is at least one other similar complaint against Spectral Dynamics pending at this time. As to the "charges filed.... by regulatory agencies, employees and (other) former employees", I can only say that in my case certain additional matters are presently under study for possible filing with the Internal Revenue Service and the Securities and Exchange Commission, and here again my intention is to extract the full measure of law against the corporation if at all possible.

In conclusion please accept my sincere appreciation for your letter of the 17th and this opportunity to submit these matters for your consideration.

Sincerely,



D. M. Pierson  
12450 Damasco Court  
San Diego, Ca. 92128

cc: The Honorable William Proxmire  
Mr. Paul Snitzer, Esq. General Accounting Office  
Secretary of Defense, Office of Procurement Policy  
Secretary of the Navy