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DECISION

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

DLG02575

FILE: B-193694 **DATE:** August 10, 1979

MATTER OF: Ailtech, Inc.

[Protest of Navy's Minimum Needs Requirement]

DIGEST:

1. Navy's post-protest statement of minimum requirements found in product subject of sole-source contract may overstate requirements in several features. Nevertheless, GAO cannot question Navy's need that comparable product should weigh 50 lbs. or less to meet lightweight need or judgment that only contract product meets lightweight need while achieving certain performance needs.

2. In view of apparently overstated Navy requirements for several features of analyzers, GAO recommends that actual needs for option requirement of analyzers be re-examined. In event re-examination of needs for option requirement suggests that competitive procurement would be in order, option in sole-source contract should not be exercised. In any event, re-examination of needs should be made before future procurements are initiated.

3. Based on facts of record, GAO concludes protester was given some advance indication that protested sole-source procurement would be initiated unless industry sources offered products essentially comparable to sole-source product. In any event, GAO is unaware of any regulation that requires pre-solicitation notice of sole-source procurement intent.

4. Since, as practical matter, validity of award cannot be questioned, protester was not prejudiced by award prior to resolution of protest. In any event, stated urgency of many applications of required items cannot be challenged.

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DLG 01283

Ailtech, Inc. (Ailtech), has protested the issuance of request for proposals (RFP) NOO104-79-R-YW12/VW4, by the Navy Ships Parts Control Center, Mechanicsburg, Pennsylvania. The RFP was issued for 126 "spectrum analyzers" under the following item numbers of the RFP:

Item No.	Supplies	Quantity
0001	National Stock Number (NSN)-2802 *(Model 492-01-02-03)	7
0002	NSN - 2801 *(Model 492-01-02)	48
0003	NSN - 2803 *(Model 492-02)	71

(*The "Model 492" designation refers to a spectrum analyzer product made by Tektronix Inc; the "01," "02," "03," designations refer to Tektronix's optional features providing "automatic preselection," "digital storage," and "phaselock stabilization," respectively.) The RFP also provided for an optional purchase of up to 100 percent of the total base quantity of spectrum analyzers.

DLG 02441

Ailtech's initial protest stated that the RFP described the product of one manufacturer only: Tektronix, Inc. Ailtech insisted that the restriction to Tektronix was improper in view of "counterparts in the commercial product of several other companies," including the Ailtech product line, which "are presently available."

Based on our analysis, as set forth below, we cannot dispute the Navy's position that the Tektronix unit is the only existing commercial unit meeting a critical lightweight requirement while also achieving certain performance requirements.

Background

The Navy reports that the procurement in question resulted from a series of studies beginning earlier in this decade to study, among other things, why greater use was not made of existing analyzers.

For example, a 1972 Navy "standardization" study concluded that the "most frequent comment" from users of existing spectrum analyzers as to why greater use of the devices was not made was that the "Navy analyzers are too heavy and too large." Further, the then-existing analyzers were considered "rather old [and] difficult to calibrate"; moreover, erroneous readings resulted from use of the analyzers because of frequency instability and low sensitivity.

In order to overcome the problems associated with the lack of use of the analyzers, the requirements of an "ideal" analyzer were developed to be used as a standard of comparison to evaluate existing analyzers. The study concluded that even though most "ideal" features were "clearly beyond the capabilities" of existing equipment the majority of ideal requirements could be satisfied. Among these ideal features were lightweight configuration (to insure portability), 40 GHz maximum frequency range, 100 dB dynamic range (although the report noted that 80 dB would satisfy 83 percent of user requirements), and a phaselock oscillator.

The Navy's contracting officer for this RFP says that "[f]ollowing the 1972 study, the Navy spent considerable time, effort, and resources in an attempt to aid interested parties in the commercial world in developing a type of spectrum analyzer which would meet the Navy's needs, as well as have application to the commercial market." The contracting officer further reports that "only one firm, Tektronix, Inc., took a direct interest in developing a product [Model 492] which would be responsive to the [Navy's needs]."

From October 1976 to October 1977 the Navy made a second standardization study to determine current Navy analyzer requirements and to evaluate samples of the latest commercial analyzers.

This second study noted that "Navy technicians actually use the analyzers as little as possible" because of, among other things, the "complexity of the instruments" and the "size and weight of the analyzers." Moreover, the report noted that the majority of users

were satisfied with the available spectrum analyzers since the "demand for more sophisticated instruments, in terms of parameter capability, [was] minimal."

Several commercial analyzers--including the Ailtech 727 and Tektronix 492--were evaluated in the second study by comparing these analyzers with two existing, in-use analyzers--the HP-141T and the Tektronix 491. A comparison between the Tektronix and AIL models showed the following:

Characteristic	Tektronix	Ailtech
weight & volume	40 lbs, 1.12 cubic feet	89 lbs., 2.42 cubic feet
frequency range (maximum)	63 GHz	40 GHz
	(The Tektronix model also extended to a lower frequency coverage of any other model --kHZ--and was "usable" to 10 kHZ.)	
dynamic range	80 dB	100 dB

Based on this analysis, the second study recommended that the existing "preferred * * * analyzers be replaced by the Tektronix 492 options 1, 2, and 3 for new procurements."

The contracting officer reports the events subsequent to the second report, as follows:

> "The results of the testing and evaluation conducted by NESEA were subsequently directly communicated by the Naval Electronic Systems Command (NAVELEX) to Mr. Jeffrey Gruber, Government Relations Manager at AILTECH, Inc., via Creative Marketing Associates, McLean, VA, AILTECH's Government representative. AILTECH, Inc. made no objections to

> the Navy's determination, and subsequently advised NAVELEX, through its Government representative, Creative Marketing Associates, that it intended to eventually offer the Navy a product comparable to the Tektronix Model 492 Spectrum Analyzer. To date, AILTECH, Inc. has not yet developed such a product, yet it was fully aware that NESEA was ready, willing and able to test and evaluate any proposed product, or to answer any questions relative thereto. NAVELEX advised the Contracting Officer that it had been informed by Creative Marketing Associates that the Government representative had provided both verbal and written information to AILTECH, Inc. on a continuing basis over the past several years which was relevant to the Navy's needs for spectrum analyzers. The agency further advised that it had conducted subsequent meetings with both AILTECH's technical personnel and the firm's Government representative regarding the Navy's technical requirements for spectrum analyzers. Also, the Contracting Officer was informed that the only comments received from other suppliers relative to the completed study was that it was accomplished fairly, objectively, and comprehensively. NAVELEX also indicated that the AILTECH, Inc. product in question, Model 727, as currently configured, was determined to be unacceptable in that it failed to satisfy the Navy's essential requirements for technical performance, broad frequency coverage, ease of operation, portability, and ruggedness. With these technical requirements in mind, NAVELEX executed a Justification for Non-Competitive Negotiation following an updated evaluation of the then available types of spectrum analyzers."

The "Justification for Non-Competition" under the subject RFP reads, as follows:

"The Navy has a need for a quantity [of] 168 high performance, broad range spectrum analyzers of the type 80009-492 (with options). This equipment is an all solid-state, advanced spectrum analyzer offering the latest innovations in instrumentation technology and includes the following technical characteristics:

Frequency Range: 50 KHz to 63 GHz
Resolution Bandwidth: 100 Hz
Sensitivity: -105 dBm to -80 dBm
Dynamic Range: 100 dB
Automatic Preselection: (option 01)
Digital Storage: (option 02)
Phaselock Stabilization: (option 03)
Environmental: Per Mil-T-28800, Type III, Class 3, Style C
Operation: 3 knob control in a lightweight, portable configuration

"The 80009-492 was designed in direct consideration of Navy's needs as described in NESEA studies 72-24 and 77-10-26. These needs dictate that a spectrum analyzer procured for Navy use must provide broad frequency coverage to 40 GHz, advanced technical characteristics, ease of operation, portability, and an environmentally rugged configuration.

"The Navy has standardized on the 28480-3580A (or equal) for the World Wide Tech Control program. This unit adequately covers requirements for spectrum analysis up to 50 KHz. The 80009-492 supplements the capabilities of 28480-3580A and provides frequency coverage from 50 KHz to 40 GHz with performance characteristics suitable for the vast majority of required spectrum analysis measurements. It is unique in that it is the only available instrument which satisfies the Navy's essential requirements for technical performance, broad frequency coverage, ease of operation, portability, and ruggedness.

> Any alternative consideration would necessitate the procurement of several separate units and plug-ins, attendant with the problems of cumbersomeness of use and transport, spare parts support, training, stowage and documentation.
>
> "It is in the best interests of the Navy to fulfill its requirements by procuring the Tektronix Model 492 Spectrum Analyzer on a sole-source basis."

The technical characteristics listed in the determination were also substantially set forth in a December 20, 1978, Navy letter to counsel for Ailtech. This letter stated that the Navy's "minimum requirements" for "high performance, broad range, spectral analyzers" were as follows:

> "Instrument should be solid state
> Frequency Range 50 KHz to 63 GHz
> Resolution Bandwidth 100 Hz
> Sensitivity -105 dBm to -80 dBm
> Dynamic Range 100 dB
> Must have automatic preselection
> Must have phaselock stabilization
> Must have lightweight, portable configuration (less than 50 lbs.)"

The letter further said that the Navy would consider any Ailtech manufactured "instrument meeting the Government's requirements."

It is our understanding that Ailtech did not furnish an offer under the RFP in response to this letter. Since Tektronix submitted the only offer under the RFP, award was made to Tektronix after the Navy informed us that further delay in award under the RFP would "interfere with overall GPETE Program goal of intending to ensure the availability of minimum quantities of selected items for Fleet support purposes." Specifically, we understand, the Navy supported the need to make an immediate award based on the need for many analyzers in "such highly urgent programs as AN/SLQ-32, SEA NYMPH, and PHALANX."

Ailtech Protest

Ailtech's grounds of protest are summarized under the following paragraphs.

(1) Ailtech's analyzer model 727 has been used successfully in the Navy's "PHALANX" program. Ailtech's models, along with the models of other manufacturers, are nearly identical to the Tektronix product in size and appearance; moreover, the models meet the performance capabilities of the Tektronix product. Thus the sole-source restriction is improper.

(2) The Navy's reports do not justify the stated minimum requirements. The Navy admits as much by stating to GAO that "minimum salient characteristics" will be developed for the future. Further, the Tektronix product does not achieve the 100 dB requirement.

(3) Ailtech was never notified that the testing of its model 727 would result in a restrictive procurement.

(4) The determination to award before resolution of the protest on the grounds of urgency is erroneous in view of the length of time consumed by the Navy studies which began more than 7 years ago.

Navy Reply

(keyed to the above-numbered paragraphs)

(1) Neither the Ailtech product offered for testing in the second standardization study nor the Ailtech product involved in the Navy's "PHALANX" program currently meets the Navy's minimum needs for a "single, lightweight unit of broad frequency coverage, offering ease of operation and rugged construction." Specifically, the Navy's PHALANX program evaluators rated the alternative AIL product "last * * * due to its large size and weight, lack of digital storage, and problems with frequency drift."

(2) The Navy's minimum requirements for the analyzers as stated in paragraph (1), above, are evident in the present record which justifies those requirements.

As to Ailtech's suggestion that the Tektronix model does not meet the 100 dB requirement, the Tektronix's model with option 01 attains an harmonic measurement dynamic range of 100 dB. The Navy's noncompetitive determination addresses the dynamic range as 100 dB in order to describe the capabilities of the instrument being procured, the Tektronix 492. It is not anticipated that the Navy would specify a dynamic range beyond 80 dB unless greater levels were common in the industry.

(3) Ailtech improperly assumed that the testing of its product during the period of the second standardization study could not lead to a sole-source procurement. Sole-source procurement was not a pre-conceived objective, but was decided on after thorough evaluation.

(4) The Navy insists that the Tektronix models will be used for such highly urgent programs as PHALANX. Thus the decision to award on the basis of urgency is justified.

Analysis

(Keyed to the above numbered paragraphs)

(1) & (2) The "non-competitive" determination set forth technical characteristics of the Tektronics 492. The December 20 letter to counsel for Ailtech repeated those characteristics and also stated that they constituted the Navy's "minimum requirements." Some of the December 20 "minimum requirements" merely describe the Tektronix model and may overstate reasonable Navy needs as revealed in the standardization reports and in the RFP description of required items.

For example, automatic preselection, phaselock loop stabilization, and digital storage are stated to be minimum requirements. While any one Tektronix 492 could be provided with all of these features, according to the RFP, of the 126 analyzers to be procured initially

only 55 are required to have an automatic preselector, and only seven are required to have phaselock stabilization. Thus, to the extent the Navy implies that all three features are actually required in each analyzer, it is an overstatement.

Similarly, the 100 dB dynamic range requirement is an overstatement. Only 55 of the 126 analyzers are required to have this feature (under option 01), so that representing the dynamic range as necessarily 100 dB overstates the Navy's actual minimum needs especially considering that 80 dB satisfies most users' needs.

The 63 GHz maximum frequency is apparently also an overstatement. The non-competitive determination specifically stated, in the context of an otherwise general description of required analyzer characteristics, that the analyzer must have frequency coverage to 40 GHz. Similarly, the first Navy standardization report lists 40 GHz as an "ideal" feature.

With respect to minimum frequency, we recognize that the non-competitive determination states that the analyzer should have a lower frequency limit of 50 KHz, to supplement the 28480-3580A (or equal) analyzer, which covers up to that frequency. We note also that the second Navy report indicates that the Tektronix 492 is specified to operate down to 100 kHz, but is "usable" to 10 kHz. This report does not discuss the quality of the Tektronix 492's performance below 100 kHz. Since the Navy is apparently willing to accept an analyzer which will perform within specifications only to 100 kHz, the 50 kHz minimum frequency requirement may be an overstatement.

Further, the required sensitivity range of -80 to -105 dBm is only satisfied by the Tektronix 492 when it is operated with an external mixer, according to the second Navy report. If the Navy is willing to accept that qualification on operation, it should have so stated in its requirements. Failure to state the qualification is an overstatement of the requirement.

Thus the Navy's December 20 statement of minimum needs may actually overstate those needs in several features. Nevertheless, we are not able to question the Navy's minimum need that the analyzer weigh 50 lbs or less to insure portability. Although there is no specific rationale in the record for this particular weight limit, we believe the limit reasonably expresses the Navy's justified need for a "lightweight, portable" unit.

There is no indication in the record that Ailtech has a manufactured unit which conforms to the "lightweight" requirement of 50 lbs and achieves at least a maximum frequency range of 40 GHz and a dynamic range of 80 dB--two performance features which we believe the record reasonably shows to be actual Navy needs.

The only specific example cited by Ailtech as a unit meeting the Navy's requirements was its model 727 which was used in the "PHALANX" program. Since the Ailtech unit in the "PHALANX" program was rated "last due to large size and weight," we assume the unit was the same one tested during the second standardization study. The Ailtech unit tested during the study clearly does not conform to at least one of the Navy's essential requirements--lightweight--and therefore was properly not for consideration.

Finally, we note that no other manufacturer--even those who submitted a unit for Navy testing during the second study--has protested the lightweight requirement or has insisted that it manufactures a lightweight unit with minimum 40 GHz, 80 dB performance characteristics.

On this record, we cannot dispute the position that Tektronix's model 492 is the only commercially available unit currently meeting basic Navy needs. Thus, we cannot question the validity of the award to Tektronix.

Nevertheless, in view of the apparently overstated Navy requirements for several features we are recommending by letter of today to the Secretary of the Navy that the Navy's actual needs for the option requirement in Tektronix's contract and for future

requirements be re-examined. In the event the re-examination of needs for the option requirement suggests that a competitive procurement (perhaps under a "brand name or equal" approach) for the option would be in order, the present option in Teltronix's contract should not be exercised. In any event, we recommend that a detailed re-examination of actual needs be made before any future procurements are made.

(3) Ailtech was aware that the results of the testing of its product and of other products in the industry might ultimately be used in one or more procurements. In our view Ailtech acted unreasonably in assuming that only a competitive procurement would necessarily result from this testing since "noncompetitive" procurements are not uncommon and are authorized, with restrictions, in procurement law and regulation.

It is also our view that Ailtech learned during the course of the 1976-1977 second standardization study that the Navy considered the Tektronix 492 to "most closely" satisfy its needs. Further, of record is an unrebutted statement of the contracting officer that, in response to this preference, Ailtech stated it intended to offer a comparable model. With these facts in mind, we believe Ailtech was given some advance indication that a noncompetitive award to Tektronix could take place in view of test results unless industry sources offered models essentially "comparable" to the Tektronix 492.

As noted above, we find nothing in the present record to indicate that this essential comparability existed at the time of the release of the RFP or at the time of the award to Tektronix. Indeed, we have no independent knowledge that essential comparability has yet been achieved in a manufactured product.

In any event, we are unaware of any procurement regulation which requires an agency to indicate--prior to the issuance of a solicitation--that a future procurement will be restricted to one concern.

(4) Since, as a practical matter, we cannot question the validity of the Tektronix contract, the protester was not prejudiced by the the award prior to our resolution of the protest. In any event, we cannot question the stated urgency of many applications of the analyzer in specific Navy programs, noted above, notwithstanding the lengthy test periods preceding the procurement.

To the extent the protest seeks a decision that the Tektronix award must be terminated, the protest is denied.

R. F. Keller

Acting Comptroller General
of the United States