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REPORT TO **LAW BRANCH**
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THE CONGRESS OF THE UNITED STATES



REVIEW OF
COSTS OF BIDDING AND RELATED TECHNICAL EFFORTS
CHARGED TO GOVERNMENT CONTRACTS

DEPARTMENT OF DEFENSE
AND
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



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MARCH 1967

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WASHINGTON, D.C. 20548

B-133386

MAR 17 1967

To the President of the Senate and the
Speaker of the House of Representatives

The General Accounting Office has made a review of the costs of bidding and related technical efforts charged to Department of Defense and National Aeronautics and Space Administration contracts. The accompanying report presents our findings, conclusions, and recommendation,

The report is concerned with the need for improved control over the costs of contractors' bidding and other related technical efforts absorbed by the Government. It is based mainly on our findings at Lockheed Missiles & Space Company, Division of Lockheed Aircraft Corporation, Sunnyvale, California. However, auditors of the Departments of the Army and Air Force have noted similar problems during their audits of numerous other Government contractors. We have summarized their findings in this report.

In our opinion, the need for improved control results principally because the Armed Services Procurement Regulation, which provides the basis for limiting charges to contracts for contractors' bidding costs and other technical effort costs, is not sufficiently clear and is subject to varying interpretations. We, as well as agency auditors, have noted that, where the procurement regulations do not clearly define the types of costs allowable under Government contracts or do not clearly establish the extent of allowability, the interpretations made by contractors most often prevail.

This situation is best illustrated where contractors, such as Lockheed Missiles & Space Company, are engaged simultaneously in the preparation of bids and proposals and the conduct of independent research and development. These two activities involve similar technical efforts. For the larger contractors, including Lockheed Missiles & Space Company, agreements are negotiated in advance covering the

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extent of the contractors' independent research and development programs that will be absorbed by the Government but advance agreements generally are not made limiting the amount of bid and proposal expenses to be absorbed by Government contracts.

Thus, technical effort designated by the contractor as pertaining to its independent research and development program is subject to reduced reimbursement by the Government, whereas similar effort designated as bid and proposal expense may be accepted without limitation.

Our review indicated that at least half of the \$3.8 million of bidding and related costs claimed by Lockheed Missiles & Space Company for 1962 either were similar to independent research and development costs or were not, in our opinion, clearly necessary to support the contractor's bids and proposals. The items in question were costs incurred (1) after the Government indicated that it **was** not interested in a proposal, (2) before the time a request for proposal was received, (3) after a bid or proposal had been presented to the potential customer, and (4) to develop capability to respond to future anticipated requests for proposals.

The Lockheed Aircraft Corporation, in commenting on our draft report, disagreed with our position with respect to these items.

The Department of Defense and other Government agencies, including the National Aeronautics and Space Administration, have recognized the problem of determining allowability of bidding and related costs when such determination is based on a subjective review of the reasonableness of the contractor's classification of the technical effort for which he is claiming reimbursement. For the past several years, the Department of Defense had been in the process of amending the procurement regulations to deal with all types of contractors' independent technical effort as a package and to provide certain limitations on the charging of such costs to Government contracts.


The Department of Defense informed us, however, that the plan to combine the costs of independent research and development and bid **and** proposal technical effort had been recently discontinued and that a study would be made to develop an appropriate remedy for effective management of bid and proposal costs charged to Government contracts. Both the Department of Defense and the National Aeronautics and Space Administration stated that it would not be feasible at this time to issue interim guidance, as we had proposed, with respect to allowability of bid and proposal costs.

We recognize that the many facets of the bid and proposal problem deserve intensive consideration before revised procedures are established. However, we are concerned that, in the meantime, contracting and auditing officials will continue to be faced with the need to interpret the procurement regulations in the areas covered by this report. In our opinion, the planned study should be expedited.

We therefore are recommending that the Secretary of Defense give the proposed study of bidding and related costs a high priority and that he establish goals to ensure the earliest possible completion of required revisions to the procurement regulations.

We are reporting this matter to the Congress to advise it of a significant problem that is affecting several Government agencies and numerous contractors and of reported plans for its solution.

Copies of this report are being sent to the Director, Bureau of the Budget; the Secretary of Defense; the Secretaries of the Army, Navy, and Air Force; and the Administrator, National Aeronautics and Space Administration,

A handwritten signature in black ink, appearing to read "James B. Stewart". The signature is written in a cursive, slightly slanted style.

Comptroller General
of the United States

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REPORT ON REVIEW
OF
COSTS OF BIDDING AND RELATED TECHNICAL EFFORTS
CHARGED TO GOVERNMENT CONTRACTS
DEPARTMENT OF DEFENSE
AND
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

INTRODUCTION

The General Accounting Office has made a review of the costs of bidding and related technical efforts incurred by contractors and charged to contracts awarded by the Department of Defense (DOD) and the National Aeronautics and Space Administration (NASA). Our review was made pursuant to the Budget and Accounting Act, 1921 (31 U.S.C.53); the Accounting and Auditing Act of 1950 (31 U.S.C. 67); and the authority of the Comptroller General to examine contractors' records, as set forth in 10 U.S.C. 2313(b).

This report is concerned with the need for improved control over the costs of contractors' bidding and other technical efforts absorbed by the Government. The report is based mainly on our findings at Lockheed Missiles & Space Company (LMSC), Division of Lockheed Aircraft Corporation, Sunnyvale, California. However, auditors of the Departments of the Army and Air Force have noted similar problems during their audits of numerous other Government contractors. We have summarized their findings in this report.

Our review at LMSC was made to obtain detailed information concerning a long-standing problem area for which a solution had not been developed. The examination was directed primarily toward determining the types of technical efforts included in bid and proposal expense which was claimed in the overhead rate charged to

Government contracts. We reviewed LMSC's policies and procedures to account for and claim reimbursement of such expenses and the controls established and surveillance maintained by the Government. We reviewed pertinent Government regulations and directives and the decisions reached by Government negotiators as to the allowability of bidding and related costs.

We reviewed principally the bidding and related costs pertaining to selected projects included in LMSC's claim for reimbursement of overhead costs for its fiscal year ended December 30, 1962; however, we also reviewed some projects in overhead claims for prior and subsequent years to satisfy ourselves that the conditions in 1962 were not unique.

Our review for 1962 included 140 of the 390 work orders involving \$3,234,000 of the total cost of \$3,832,000 of bidding and related technical efforts incurred during that year. Bidding and related costs are included in LMSC's overhead (Contract and Administrative Expense) claim, which totaled \$30,331,000 for 1962. This claim still had not been fully settled by the Government as late as January 1967. Our review was limited to bidding and related costs and did not include a review of any other costs in LMSC's overhead claims.

BACKGROUND

Lockheed Missiles & Space Company is concerned principally with satellite and missile design and development under contracts with the Departments of the Air Force and Navy. A minor portion of **LMSC's** workload involves contracts with other Government agencies, including the National Aeronautics and Space Administration.

The Government and **LMSC** are concerned with various categories of technical engineering effort, the principal categories being technical effort in (1) performance of contract work, (2) independent research and development (IR&D), and (3) bids and proposals. The scope and cost of technical effort in the performance of a contract are controlled by the terms of the individual contract. IR&D efforts of **LMSC** are covered by an advance agreement limiting the Government's participation in the costs. The Government's participation in bidding costs is not controlled by Government regulation, except for the broad limitation in procurement regulations that such costs must be reasonable.

Paragraph 15-205.3 of the Armed Services Procurement Regulation (ASPR) defines bidding costs as follows:

"Bidding costs are the costs of preparing bids or proposals on potential Government and non-Government contracts or projects, including the development of engineering data and cost data necessary to support the contractor's bids or proposals. Bidding costs of the current accounting period of both successful and unsuccessful bids and proposals normally will be treated as allowable indirect costs, in which event no bidding costs of past accounting periods shall be allowable in the current period to the Government contract. However, if the contractor's established practice is to treat bidding costs by some other method, the results obtained may be accepted only if found to be reasonable and equitable."

LMSC's definition of bid and proposal expense is substantially the same as the ASPR definition of bidding costs, and such costs are included by LMSC in its overhead costs for the period in which they are incurred.

Various Government customer agencies solicit proposals from LMSC and other contractors for studies, design, and development of satellites, missiles, and their components. Formal solicitations are made in the form of a request for proposal (RFP)¹ issued by authorized contracting officers. LMSC not only replies to RFP's but also initiates unsolicited proposal efforts, some of which are submitted to customer agencies, and undertakes engineering studies--referred to as preproposal efforts--to develop its own capability to bid for new work. Preproposal efforts are defined by LMSC as:

"*** those efforts required to assure a competitive position in responding to an anticipated program or program area proposal request."

The costs of these efforts are charged to bid and proposal expense.

In addition, during 1962 LMSC established a new category of costs related to bid and proposal expense which it designated as "contract capability costs." These costs are defined as the costs of:

"*** that effort devoted to sustain continuity of the proposed program subsequent to submission of the proposal, but prior to and in anticipation of the contract award."

Preproposal and contract capability costs are not defined in the ASPR. LMSC accumulates its bid and proposal expense and contract

¹The term "request for proposal (RFP)" as used in this report is to be interpreted to include reference to "request for quotation."

capability costs in overhead work orders. These work orders are charged with direct labor and material, purchased services, computer use, and interdivision charges. Indirect labor, overtime premium, reproduction, travel, and other applicable overhead are not allocated to these work orders.

Total direct costs of bidding and related efforts claimed by LMSC in recent years are summarized as follows:

Direct Costs of
Bidding and Related Efforts

<u>Year</u>	<u>Bid and proposal</u>		<u>Contract capability</u>	<u>Total</u>
	<u>Preproposal</u>	<u>Bidding</u>		
1960	\$ 561,000	\$ 743,000	\$ -	\$1,334,000
1961	1,020,000	1,209,000	-	2,229,000
1962	1,063,000	2,404,000	360,000	3,832,000
1963	2,668,000	2,169,000	204,000	5,041,000
1964	3,686,000	1,844,000	69,000	5,599,000
1965	4,839,000	2,572,000	301,000	7,712,000

As stated on page 2, bidding and related costs are part of Contract and Administrative Expense which is included in LMSC's overhead claim for allocation to Government contracts. LMSC's claims for Contract and Administrative Expense were \$22,033,000 in 1961, \$30,331,000 in 1962, \$35,997,000 in 1963, \$35,001,000 in 1964, and \$35,806,000 in 1965.

The Government's financial interest in LMSC's bidding and related costs stems from the fact that LMSC's sales are almost exclusively to the Government, and these costs are allocated to the various contracts. For instance, during 1962, 99.99 percent of LMSC's sales were to the Government under negotiated contracts, 98.37 percent being under cost-reimbursement-type contracts and the remainder under other types of negotiated contracts. LMSC's sales for 1962 amounted to \$824 million.

Subsequent to 1962, an increasing proportion of LMSC's sales to the Government has been made under firm fixed-price and fixed-price incentive contracts. For example, in 1965 about 44 percent of LMSC's sales were made under fixed-price-type contracts. During that year total sales amounted to about \$601 million, of which 99.97 percent were to the Government.

The Air Force, Navy, and NASA contracts awarded to LMSC are administered by representatives of each agency, who are located at the contractor's plant. Audit responsibility is vested in a representative of the Defense Contract Audit Agency, formerly the representative of the Air Force Auditor General, also located at the contractor's plant. The overhead rates are negotiated by a joint-services negotiation team headed by a representative of the Air Force Systems Command, Andrews Air Force Base, Washington, D.C.

A listing of the principal officials of the Department of Defense and the National Aeronautics and Space Administration responsible for matters discussed in this report is included as appendix I.

FINDING AND RECOMMENDATION

NEED FOR IMPROVED CONTROL OVER COSTS OF BIDDING AND RELATED EFFORTS CHARGED TO GOVERNMENT CONTRACTS

There is a need for improved control on the part of the Department of Defense and the National Aeronautics and Space Administration over the costs of bidding and related technical efforts charged to Government contracts.

In our opinion, the need for improved control results principally because the Armed Services Procurement Regulation, which provides the basis for limiting charges to contracts for contractors' bidding costs and other technical effort costs, is not sufficiently clear and is subject to varying interpretations. We, as well as agency auditors, have noted that, where the ASPR does not clearly define the types of costs allowable under Government contracts or does not clearly establish the extent of allowability, the interpretations made by contractors most often prevail.

This situation is best illustrated where contractors, such as LMSC, are engaged simultaneously in the preparation of bids and proposals and the conduct of independent research and development. These two activities involve similar technical efforts. For the larger contractors, including LMSC, agreements are negotiated in advance covering the extent of the contractors' IR&D programs that will be absorbed by the Government but advance agreements generally are not made limiting the amount of bid and proposal expenses to be absorbed by Government contracts.

Thus, technical effort designated by the contractor as pertaining to its IR&D program is subject to reduced reimbursement by the Government, whereas similar effort designated as bid and proposal expense may be accepted without limitation.

The findings resulting from our review at LMSC and the findings of agency auditors concerning bid and proposal costs of several Government contractors, including LMSC, are included in the sections that follow.

Government administration of bidding and related costs

The allowability of a defense contractor's claim for bidding and related costs is governed by the Armed Services Procurement Regulation. The contractor's claim is reviewed by the cognizant Government auditor who issues an advisory report in which he questions such costs as do not appear to meet contractual or ASPR criteria. The Government negotiator reviews the auditor's advisory report and, on the basis of the questions raised in the report and explanations received from the contractor and the auditor, negotiates a settlement of the contractor's claim. Although the cognizant auditor has questioned a significant portion of the bidding and related costs claimed by LMSC in recent years, the Government negotiator has allowed virtually all such costs.

Paragraph 15-205.3 of the Armed Services Procurement Regulation, as *quoted* on page 3 of this report, defines bidding costs. The ASPR provides that bidding costs are allowable if they are reasonable. Reasonableness is defined in paragraph 15-201.3 in the ASPR as:

"A cost is reasonable if, in its nature or amount, it does not exceed that which would be incurred by an ordinarily prudent person in the conduct of competitive business. The question of the reasonableness of specific costs must be scrutinized with particular care in connection with firms or separate divisions thereof which may not be subject to effective competitive restraints. What is reasonable depends upon a variety of considerations and circumstances involving both the nature and amount of the

cost in question. In determining the reasonableness of a given cost, consideration shall be given to--

- (i) whether the cost is of a type generally recognized as ordinary and necessary for the conduct of the contractor's business or the performance of the contract;
- (ii) the restraints or requirements imposed by such factors as generally accepted sound business practices, arm's length bargaining, Federal and State laws and regulations, and contract terms and specifications;
- (iii) the action that a prudent business man would take in the circumstances, considering his responsibilities to the owners of the business, his employees, his customers, the Government and the public at large; and
- (iv) significant deviations from the established practices of the contractor which may unjustifiably increase the contract costs."

DOD has not provided auditing and contracting officials with specific guidelines for implementing the "bidding cost" provision, and these officials, as well as contractors, must interpret the "bidding cost" provision guided only by the general terms of the "reasonableness" provision.

Our review indicates that several contractors, including LMSC, have interpreted the phrase in the definition of bidding costs which reads "including the development of engineering data and cost data necessary to support the contractor's bids or proposals" to mean that preproposal and other technical efforts incurred in anticipation of the release of an RFP are allowable costs. These efforts are similar to independent research and development efforts, and, in our opinion, it is not clear whether they should be

considered as bidding, IR&D, or other technical efforts. Government negotiators, in the absence of implementing instructions, have been reluctant to disallow such costs from claims for bid and proposal expenses, even though auditors have often questioned the allowability of such costs.

The ASPR permits contractors to recover costs of independent research and development and bidding efforts as indirect charges to Government contracts. In recognition of the difficulty in some cases of determining the reasonableness and allocability of certain types of costs, DOD recommended in the ASPR (15-107) the negotiation of an agreement in advance of the incurring of such costs. The ASPR 15-107 provides that:

"*** the reasonableness and allocability of certain items of cost may be difficult to determine, particularly in connection with firms or separate divisions thereof which may not be subject to effective competitive restraints. In order to avoid possible subsequent disallowance or dispute based on unreasonableness or nonallocability, it is important that prospective contractors, particularly those whose work is predominantly or substantially with the Government, seek agreement with the Government in advance of the incurrence of special or unusual costs in categories where reasonableness or allocability are difficult to determine.

The Government and LMSC have for several years negotiated advance agreements limiting the Government's participation in the cost of IR&D efforts pursued by the contractor. These advance agreements provide for cost sharing of IR&D expenses and place a maximum limit on the costs that the Government will absorb each year. The cost sharing between the Government and LMSC has been on a 75-25 percent basis, respectively, subject to a ceiling amount established for the Government's share. The following schedule shows *the* Government share ceiling, the total IR&D expenses

incurred, and the amounts allowed by the Government negotiator in overhead negotiations:

<u>Year</u>	<u>Government share ceiling</u>	<u>Total IR&D expense incurred</u>	<u>Allowed in overhead negotiations</u>
1960	\$3,422,000	\$ 4,390,000	\$3,208,000
1961	3,365,000	4,337,000	3,121,000
1962	5,175,000	6,793,000	5,076,000 ^a
1963	5,981,000	8,425,000	5,981,000 ^a
1964	7,471,000	10,823,000	7,471,000
1965	6,764,000	11,703,000	Not yet negotiated

^aAlthough overhead negotiations were not settled as of January 27, 1967, the parties had agreed to these amounts for IR&D.

The advance agreements for IR&D provide, in part, that:

"The above ceilings include only the independent research and development costs as defined in ASPR 15-205.35, including the applicable engineering and manufacturing overhead, but do not include the allocation of G&A nor costs of other research effort such as defined by ASPR 15-205.3, Bidding Cost, and 15.205.21, Manufacturing & Production Engineering Costs. ***"

Although some technical efforts--such as the development of engineering data for an unsolicited proposal or in anticipation of a request for proposal--are in our opinion very similar to IR&D, costs of these efforts have been charged by LMSC to bid and proposal expense and have not been covered by advance agreements.

The Air Force auditor has questioned the reasonableness of bidding and related costs claimed by LMSC for several years. For LMSC's 1960 claim, he questioned \$561,000 of preproposal costs and \$743,000 of bidding expenses. The Government negotiator was of the opinion that the preproposal costs were very similar to IR&D and

should be subject to a cost-sharing arrangement similar to the advance agreement negotiated for IR&D. His offer of a 75-25 percent sharing plan was accepted by LMSC and, as a result, \$140,000 of the contractor's claim for preproposal costs was disallowed.¹ The negotiator, however, allowed all of the bidding expense claimed, on the basis that the amount was reasonable and consistent with past experience and sales volume.

The auditor, for LMSC's 1961 claim, questioned \$925,000 of the bid and proposal expenses claimed by Lockheed on the basis that this amount represented a significant increase over comparable costs in 1960. The Government negotiator considered \$650,000 of the costs questioned by the auditor to be reasonable but disallowed \$275,000. While neither the auditor's records nor the Government negotiator's records identified the amount of preproposal effort included in the amounts questioned and disallowed, the Government negotiator advised our representative that it had been a significant factor in arriving at the amount disallowed.

The auditor, in his 1962 overhead review, questioned \$1,912,000 of the \$3,472,000 bid and proposal expense and all the \$360,000 contract capability costs claimed by LMSC. He questioned the \$1.9 million bid and proposal expense on the basis that it represented an extraordinary increase in such costs. The \$1.9 million consisted of about \$1 million in preproposal effort, \$111,000 on LMSC's study on a spacecraft bus, \$54,000 for a mock-up display not needed, excessive proposal activity for NASA in relation to volume

¹Lockheed Aircraft Corporation, in comments dated 9-26-66 (app. II), stated that disallowances were at times accepted as a compromise to conclude negotiations but not on the basis that the preproposal costs should have been treated as IR&D.

of business with NASA, and substantial dollar expenditures on several individual proposal projects,

The Government negotiator reinstated all of these questioned expenses, except the \$111,000 expended on the spacecraft bus for a lunar logistics system. The negotiator informed us that the \$111,000 expended on the spacecraft bus had been disallowed because LMSC had been notified of the award to another company and continued incurring costs on something that LMSC could not sell and from which the Government would have little benefit.

In connection with the \$1 million of preproposal efforts, the auditor pointed out that, because of their apparent research-oriented nature and nonapplicability to specific proposals, these efforts could be considered as IR&D. As such, the costs of the preproposal effort would be subject to regular overhead application and cost sharing under the negotiated IR&D advance agreement ceiling. The Government negotiator, however, claimed he had no guidelines to follow and had to apply the test of reasonableness. He recognized that the preproposal effort could be used to circumvent the limits contained in the advance IR&D agreement but maintained that it was a normal business expense and should be allowed. He claimed that he was aware of the nature of the costs and agreed that they were not strictly proposal costs.

The Government negotiator's explanation for reinstating the preproposal expenses was inconsistent with his prior years' determinations that certain of these same types of costs were not allowable under Government contracts.

The auditor, in reviewing LMSC's overhead claim for 1963, questioned over \$3 million of bid and proposal expenses and almost \$200,000 of contract capability costs of the over \$5 million bidding and related costs claimed. Although the negotiations had not

yet been completed at the time of our review, the Government negotiator informed us that, except for a disallowance of \$60,000 on the spacecraft bus to which LMSC had agreed, he had reinstated all the other bid and proposal expense and contract capability costs questioned by the auditor.

The problem of determining the allowability of bidding and related costs arises because ASPR defines several types of technical effort in such a way that a given technical effort may be costed in more than one category. This problem is compounded by the passage of time because of the loss of employees familiar with the work performed and the lack of sufficiently detailed supporting records. Although LMSC presents its overhead claim shortly after the close of its fiscal year, the audit, negotiation, and settlement of the claim are often delayed for several years. Thus, as of January 27, 1967, LMSC's overhead claims for 1962 and 1963 had not yet been completely settled.

DOD management officials, auditors, contracting officers, and negotiating officers have recognized the problem of determining the allowability of bidding and related costs when such determination is based on a subjective review of the reasonableness of the contractor's classification of the technical effort for which he is claiming reimbursement. For the past several years DOD and other Government agencies, including NASA, have been working on a revision of procurement regulations to provide a better means of controlling the costs charged to Government contracts for the technical efforts of contractors. Because various types of technical effort were difficult to clearly and conclusively identify, DOD was considering the desirability of amending the ASPR to place the costs of all such technical effort under a single category to be called contractor's independent technical effort (CITE).

We were informed in November 1966, however, that, although this approach had merit, it had been determined that on balance it was not an acceptable solution. Consequently, DOD is now planning further studies to aid in the development of new methods of dealing with bid and proposal costs.

Army and Air Force auditors have also reported on the inadequate control over the costs of various types of technical efforts charged to Government contracts. In a report, dated October 18, 1963, on the review of bidding costs incurred in 1961 and 1962 at 35 contractor locations, the Air Force Auditor General showed that (1) various bases were used by negotiating officials to determine allowability of bidding costs and (2) bidding costs were not allocated to contracts of agencies in proportion to bids and proposals made to the agencies so that an agency which generated a substantial amount of bidding costs absorbed only a small fraction of the bidding costs incurred.

On May 13, 1965, the Air Force Auditor General reported on a review of bidding and proposal costs incurred by bidders on 20 small (from \$11,000 to \$89,000) research and development procurements. The report showed that the total bidding costs of all bidders ranged from 7 to 178 percent of the amount of the basic procurement contract and that the average cost was 43 percent of each procurement.

In a report, dated April 16, 1965, on the review of IR&D and other related technical effort at 28 contractor locations, the Army Audit Agency reported (1) intermingling of IR&D with bidding and proposal and other technical effort costs, (2) inconsistent allocation of indirect costs to IR&D effort, and (3) inadequate implementation of existing procedures by procurement personnel when negotiating IR&D advance agreements.

We reviewed bidding and related technical effort costs incurred by LMSC for the period 1961-63, with particular emphasis on 1962. In our opinion at least \$1,936,000 of the \$3,234,000 of costs we reviewed for 1962 either were similar to IR&D effort costs or were not clearly necessary to support the contractor's bids and proposals. These costs are summarized in the table below and are discussed in the sections of the report that follow.

<u>Type of cost</u>		<u>Amount</u>
Preproposal efforts		\$1,068,000
Studies pursued after notification that Government not interested:		
Spacecraft bus	\$111,000	
Titan III upper stage	38,800	
Synchronous Orbit Communi- cation System	<u>4,336</u>	154,136
Engineering studies before and after proposal period		354,336
Contract capability		<u>359,755</u>
		<u>\$1,936,227</u>

Cost of preproposal efforts charged
to Government contracts

For 1962, LMSC claimed as bid and proposal expenses direct costs of \$1,068,000 for studies to develop engineering capabilities. For 1963, **LMSC** claimed \$2.7 million for such studies. (See p, 5 .) These studies, generally referred to as preproposal efforts, were initiated to investigate and develop data on given projects or program areas.

As stated on pages 11 through 13, the Air Force auditor questioned substantial amounts of preproposal expense in LMSC's claims for 1960, 1961, 1962, and 1963. The negotiator disallowed \$140,000 of such costs for 1960 and about \$275,000 for 1961 but advised us that he had allowed all such costs included in **LMSC's** claims for 1962 and 1963.

Following are examples of preproposal efforts charged by LMSC as bid and proposal expense:

Advanced Agena vehicles

In 1962 and 1963 LMSC expended about \$353,000 on an 18-month preproposal study of advanced Agena vehicles. The study effort was to provide recommendations to LMSC management on courses of action for further development of an upper stage vehicle and to initiate further development of appropriate **LMSC** capabilities,

On January 8, 1962, LMSC issued a preproposal work order describing the effort, as follows:

"This study is intended to cover the investigation of Agena derivatives and alternatives. Consideration will be given to: increased diameter and length, other high energy fuel, and compatibility with both present and future large 1st stage boosters, including solids."

From time to time the work plan was revised, authorizing additional time and further defining the scope and objectives of the study. For example, the October 12, 1962, revision stated, in part:

"The study will investigate the missions and systems requirements, systems engineering, and developmental requirements of a Lockheed [LMSC] advanced post-Agena Upper Stage Vehicle, and will have as its objective a firm recommendation on Lockheed's [LMSC's] course of action with regards to developmental proposals to NASA and the USAF."

The June 25, 1963, revision of the work order described the preproposal effort, as follows:

"This revision is issued to cover the Second Quarter effort on the subject study. It will continue the investigation of mission and systems requirements, systems engineering and developmental requirements of a LMSC Advanced Post-Agena upper stage vehicle. The data compiled will **be** used on anticipated future proposals."

LMSC made a presentation of the major results of the effort to NASA in June 1963. Shortly after the presentation, the effort was discontinued. LMSC neither received a request for a proposal nor submitted a proposal to the Government.

Eurospace study

In 1962 and 1963 LMSC expended about \$23,000 on an analysis and commentary on a proposal prepared by Eurospace, a nonprofit, nonpolitical organization whose members are from European industry. The purpose of Eurospace is to promote space activities in Europe. LMSC, as a corresponding member, was invited by Eurospace to undertake a study. LMSC charged the costs of the study to bid and proposal expense and ultimately allocated these costs to Government contracts.

The October 12, 1962, LMSC work order described the study, as follows:

"Preliminary effort, which supported by the funds of this workplan, involves evaluation and comment on various proposals generated by Eurospace members."

In April 1963, after a 3-month suspension of work, the project was renewed under a new work order which described the effort, as follows:

"This work order is issued to cover the effort required on the subject study. It will involve critical review and analysis of the Eurospace proposals for a European nonmilitary space program and a determination of potential areas for major LMSC participation."

LMSC neither received a request for proposal nor submitted a proposal to a Government or commercial customer.

The LMSC preproposal work orders showed that the purpose of the studies was to establish capability for future participation in program areas and to prepare LMSC for future proposals in various fields. The preproposal efforts extended over many months. They were not specifically directed toward responding to requests for proposals or toward developing data for current unsolicited proposals.

Costs of studies pursued after notification that the Government was not interested in proposals

LMSC, in 1962 and 1963, claimed direct costs of about \$230,400 for reimbursement under Government contracts for studies pursued on three different projects after it had been notified that the Government was not interested in the proposals. These costs were part of the total bidding costs of \$2,404,000 and \$2,169,000 claimed by LMSC for 1962 and 1963, respectively. (See p. 5.)

As stated on pages 11 through 13, the Air Force auditor questioned, and the Government negotiator disallowed, the costs of the spacecraft bus project in LMSC's overhead claims for 1962 and 1963. However, the auditor did not question the fact that LMSC's overhead claims included costs incurred on the Titan III upper stage project and the synchronous orbit communication system project after LMSC had learned that the Government was not interested in LMSC's proposals on these two projects. The negotiator advised us that he had not disallowed costs incurred on the latter two projects which were included in LMSC's overhead claims for 1962 and 1963.

Following are the details on these three projects.

Spacecraft bus for lunar logistics system

On August 1, 1962, NASA issued a request for proposal for a study of a spacecraft bus for a lunar logistics system. LMSC submitted a proposal on August 17, 1962. The direct costs incurred for this proposal effort totaled about \$4,000. While waiting for NASA's evaluation of the proposal, LMSC undertook a review and extension of the work submitted in the proposal, including design configurations and concepts. The study costs during this waiting period totaled about \$2,000. On September 6, 1962, NASA notified LMSC that it was negotiating a contract for the study of the spacecraft bus with another company. The Government paid this successful bidder \$178,448, plus a fixed fee under this contract.

Eleven bidders responded to the request for proposal for a spacecraft bus. NASA considered several of the contractors in its final evaluation. Although LMSC was not one of those considered and was notified on September 6, 1962, that the contract was being awarded to another company, it continued with its study of the spacecraft bus. During September 1962, LMSC started the 3-month

study that it had outlined in its August 17 proposal. In December 1962 LMSC made a technical presentation of its findings to NASA. LMSC continued its studies on the spacecraft bus until the middle of May 1963. In the table below, the total costs LMSC incurred to perform the study are compared with the successful bidder's proposed contract costs.

	<u>LMSC cost</u>	<u>Successful bidder's proposed cost</u>
Direct Labor	\$131,092	\$ 64,754
Computer and other costs	<u>39,573</u>	<u>36,523</u>
Total direct charges	\$170,665	\$101,277
Overhead	<u>108,700^a</u>	<u>76,167</u>
Total cost	<u>\$279,365</u>	<u>\$177,444^b</u>

^aEstimated by GAO

^bTotal contract cost was \$178,448 exclusive of fee.

LMSC charged the direct costs of the proposal effort and the subsequent study effort to a single bid and proposal work order. No overhead was applied to the work order. The direct costs of the study in 1962 and 1963 were about \$111,003 and \$60,000, respectively.

Titan III upper stage

LMSC, in 1962, incurred direct costs of about \$38,800 on a proposal effort for the Titan III upper stage after it had been notified by the Government that the design and development of the vehicle had been assigned to another company. LMSC pursued the study for about 5 months and then terminated the effort without

submitting a proposal. LMSC claimed reimbursement of the cost of the study as bid and proposal expense.

On April 6, 1962, LMSC started a preliminary study of the Titan III upper stage. On April 12, LMSC's New Business Committee approved a proposal effort. LMSC's records show that, on that same day, the Air Force Chief of the Procurement Directorate for the Titan III told the LMSC representative that the Air Force had assigned design and development cognizance to another company and that LMSC would not have an opportunity to participate in this program because of the critical schedules and time limitations. Despite the knowledge that the Government was already working with another company, LMSC proceeded with its study. On May 10, 1962, LMSC made a presentation of the preliminary study to the cognizant Government Review Committee. In September 1962, after LMSC had charged \$42,998 to bid and proposal expense, the effort on the Titan III upper stage was abandoned without submitting a proposal. About \$38,800 of this amount was incurred after the Government had notified LMSC that another company had been selected.

Synchronous orbit communication system

In July 1962, LMSC undertook a study in anticipation of a request for a proposal on the synchronous orbit communication system program. In December 1962, after incurring costs of \$114,500 on the company-initiated synchronous orbit proposal effort, LMSC made a presentation of its findings to the Air Force. It then found that no fiscal year 1963 or 1964 funds were available for the synchronous orbit system. The limited funds available for the communication satellite program had all been allocated by the Air Force to a medium altitude random orbit system. After it had been notified that funds were not available for that program, LMSC continued

its effort on the synchronous orbit proposal for several weeks and incurred additional direct costs of \$21,000. Of this amount, \$4,336 was charged to 1962 costs and the remainder to 1963. No proposal was submitted by LMSC.

Engineering studies before and after the proposal period charged as bidding costs

For 1961, 1962, and 1963, LMSC claimed about \$1,527,000 as bidding costs incurred on four projects we selected for review; about \$777,000 of these costs were incurred before receipt of requests for proposal (RFP) or after submission of the proposal.' These costs were part of the total bidding costs of \$1,209,000, \$2,404,000 and \$2,169,000 claimed by LMSC for 1961, 1962, and 1963, respectively. (See p. 5.)

As stated on pages 11 through 13, the Air Force auditor questioned substantial amounts of bidding costs included in LMSC's overhead claims for 1961 through 1963. However, the Government negotiator reinstated and allowed almost all such costs claimed for those years.

LMSC incurred the following costs on the four projects during 1961 through 1963:

Project	<u>Direct Bid and Proposal Expenses</u>				Costs outside proposal period
	<u>Before release of RFP</u>	<u>During proposal period</u>	<u>After submission of proposal</u>	<u>Total</u>	
RIFT (note a)	\$663,385	\$275,866	\$23,460	\$ 962,712	\$686,846
NOVA Vehicle System Study	32,401	236,960	15,056	284,417	47,457
Missile B	22,921	183,648	8,635	215,204	31,556
MMRBM (note b)	3,005	53,353	8,330	64,688	11,335
Total	\$721,713	\$749,827	\$55,481	\$1,527,021	\$777,194

^aReactor-in-flight-test

^bMobile medium range ballistic missile.

¹The term "after submission of proposal" as used in this report is to be interpreted to mean subsequent to any required postproposal presentation.

Of the total cost of \$777,194, shown in the table above as **incurred** outside proposal periods, \$354,336 was charged in 1962, consisting of \$279,266 for RIFT, \$45,457 for NOVA, \$18,278 for Missile B, and \$11,335 for MMRBM. LMSC also claimed contract capability costs of about \$360,000 in 1962 on these four projects. (See discussion of contract capability costs on pp. 25 to 29.)

Analysis of one of these projects, the RIFT proposal effort, shows that LMSC, in anticipation of the release of an RFP, started engineering studies on a proposal in July 1961. NASA issued the RFP on this program in two phases. The RFP for Phase I covered the management proposal and was released on December 7, 1961. The purpose of this RFP was to permit the Government to evaluate the capabilities of interested contractors and, accordingly, limit the list of potential contractors to those who possess demonstrable competence and capability to successfully perform the requirement under consideration. LMSC submitted the management proposal on January 2, 1962. We were informed that the cost of preparing the management proposal was nominal.

On February 26, 1962, after evaluating the management proposals, NASA released the RFP for Phase II to the three qualified contractors selected under the earlier phase. LMSC, as one of the selected contractors, submitted its cost and technical proposal for Phase II on March 26, 1962, and made a required oral presentation to NASA on April 11, 1962. LMSC continued the study effort with the last charge being recorded in February **1963**.

Contract capability costs
charged to Government contracts

In 1962, LMSC charged about \$360,000 to Government contracts for what it termed "contract capability costs." LMSC identified

these 1962 costs as those incurred in support of four major proposals after the proposals had been submitted. As stated on pages 11 through 13, the Air Force auditor questioned the contract capability costs included in LMSC's overhead claim for 1962 and also for 1963; however, the Government negotiator reinstated and allowed all such costs claimed for those years.

LMSC introduced contract capability costs as a new category of costs in April 1962. In November 1963, LMSC, at the request of the Air Force auditors, defined these costs, as follows:

"*** that effort devoted to sustain continuity of the proposed program subsequent to submission of the proposal, but prior to and in anticipation of the contract award. This activity includes:

- a. Consolidation and finalization of technical data and reports generated during the proposal effort.
- b. Retention of the basic team commitment made to the customer insofar as it is practical and feasible.
- c. Planning of complete staff and organizational requirements.
- d. Accumulation and presentation of additional information in support of the proposal or as requested by the customer.
- e. Preparation and submission of data, subsequent to contract award required by the customer for definitive contract finalization,"

Contract capability costs were an unusual type of cost neither defined by the ASPR nor previously categorized by LMSC. ASPR 15-107 recommends that, to avoid a possible dispute based on unreasonableness or unallocability, the contractor should seek agreement

with the Government in advance of incurring unusual costs in categories where reasonableness or allocability are difficult to determine.

LMSC did not seek or obtain Government approval in advance of incurring contract capability costs. For 1962, it claimed costs on the following four major projects.

<u>Project</u>	<u>Direct costs</u>
RIFT	\$ 69,145
NOVA Vehicle System Study	275,534
Missile B	13,754
Integrated Mission Control Center	<u>1,322</u>
	<u>\$359,755</u>

In 1963, LMSC claimed an additional \$5,000 as contract capability costs on these projects and \$199,000 on three other projects.

As discussed on page 24, LMSC incurred costs after it had submitted the proposals and made subsequent required presentations and charged these costs to bid and proposal expense. In addition, it incurred contract capability costs on the same projects after the proposals were submitted. For example, on the NOVA Vehicle System Study, LMSC submitted its proposal on April 26, 1962. After submission of its proposal, LMSC incurred direct costs of \$15,000 which it charged to bid and proposal expense and, in addition, incurred direct costs of about \$275,000 which it classified as contract capability costs.

Furthermore, LMSC incurred part of these costs after July 13, 1962, the date when LMSC was notified that the contract was being awarded to two other companies, and as late as August 10, 1962. Thus, LMSC incurred costs of about \$28,000 of the total cost of

\$275,000 for contract capability on the NOVA Vehicle System Study after it was notified that it was an unsuccessful bidder on that project.

On the NOVA Vehicle System Study, NASA invited proposals for a cost-sharing contract. NASA indicated that the Government would finance costs of approximately \$700,000. LMSC estimated that the NOVA Vehicle System Study would cost \$1,900,000 and proposed a cost-sharing contract whereby NASA would finance \$700,000, or 37 percent, while LMSC would absorb \$1,200,000, or 63 percent, of the total costs.

After submitting the proposal on the NOVA Vehicle System Study, LMSC, without approval from NASA, proceeded with development studies on vehicle design. The introduction to one of the reports stated:

"This fourth Progress Report concludes the company-funded design effort on the NOVA Vehicle Program as defined in the NASA RFQ." (Empahsis supplied.)

Although the report stated that the work was company funded, LMSC charged the cost of these studies to contract capability work orders and ultimately passed these costs to Government contracts.

LMSC charged Government contracts with the following costs in connection with the NOVA Vehicle System Study.

	<u>Direct costs</u>
Bid and proposal expense	\$284,000
Contract capability cost	<u>275,000</u>
	<u>\$559,000</u>

Thus, although LMSC was not awarded the contract, it charged Government contracts almost as much for its effort on the NOVA Vehicle System Study as the \$700,000 NASA indicated it would finance for such a study.

Contractor comments and our evaluation

Lockheed Aircraft Corporation (Lockheed) submitted comments on the findings and proposals for corrective action included in our preliminary draft report. The full text of its reply is included as appendix II.

Lockheed stated that its review did not sustain the conclusion in our draft report that the costs discussed in the report were not clearly necessary to support LMSC's bids or proposals and, therefore, were not clearly within a reasonable interpretation of the ASPR definition of bidding costs. Lockheed agreed that determinations as to reasonableness require a degree of subjective judgment but did not believe that this, by itself, indicates that additional guidance is required.

In its reply, Lockheed presented justification for having included as bidding and related costs the various types of expenses discussed in this report. Engineering and other costs incurred prior to receiving a request for a proposal were justified on the basis that without such effort a firm has a minimal chance of successfully competing for Government contracts; that the Government directly benefits from this preliminary work in the enhanced quality of the proposals it receives; and that the Government through emphasis on increased competition, more realistic pricing, more completely defined requirements, and a higher level of sophistication in systems management has made preproposal work necessary on the more complex programs.

Costs incurred after proposals had been submitted and contracts had been awarded to other companies, or after LMSC had been notified that Government funds were not available for contract coverage, were justified on the basis that there was a potential for later contracts for the same or similar items.

Contract capability costs incurred between the time that proposals were submitted and contracts were awarded were justified as being necessary to retain personnel to provide timely and effective performance if LMSC received the contracts,

Lockheed's comments, of course, were based upon its own interpretation of what was allowable under ASPR. As stated in this report, however, we believe that the ASPR is not sufficiently clear and is subject to varying interpretations. We pointed out how Government auditors and contract negotiators disagreed on what was allowable under ASPR. Because ASPR requires a considerable amount of subjective judgment on the part of the contractor, both the auditor and the negotiator must evaluate the propriety of this judgment. Evaluation of the judgment of others is difficult at best, but the degree of difficulty increases as time passes after the judgment has been made. Since the Government's audits and negotiations of contractors' overhead claims, including bidding and related costs, are normally made at long intervals after incurrence of the costs involved, the auditors and negotiators are not in a favorable position to question the contractors' judgments,

The purpose of the proposals in our preliminary draft report was, therefore, to reduce the extent of subjective judgment required by establishing a more precise set of rules for determining the allowability of bidding and related costs. Although we are showing several examples in this report of costs which in our judgment were not clearly necessary to support LMSC's bids or proposals, we recognize that other persons may not concur in our judgment.

Similarly, the line of distinction between bidding and proposal costs and IR&D costs may be **very** fine and the intent of the

contractor may be an important factor in deciding the proper classification. This is particularly true when the interval of time between the beginning of an engineering effort and the date the contractor receives a request for a proposal is lengthy, or when an engineering effort does not result in the submission of a bid or proposal.

Although there will probably always be disputes between contractors and the Government as to the proper application of ASPR provisions, we believe that this problem would be reduced in the bid and proposal area by the establishment by the Government of more specific guidance as to allowability.

Agency comments

The Department of Defense and the National Aeronautics and Space Administration also submitted comments on the findings and proposals for corrective action included in our preliminary draft report. Neither DOD nor NASA took issue with the facts and conclusions in the draft report. Both agencies directed their comments strictly to our proposals to correct the conditions we had described. Their replies are included as appendixes III and IV.

In making our proposals we recognized that DOD and NASA had been working on a revision of procurement regulations to provide a better means of controlling the costs charged to Government contracts for technical efforts of contractors. (See p. 14.) Consequently, we proposed in our preliminary draft report that DOD and NASA consider the matters discussed in our report in their proposed amendment of procurement regulations so as to control and limit charges to Government contracts for all types of contractors' independent technical efforts. We proposed also that, pending satisfactory amendment of procurement regulations, DOD and NASA provide

auditing and contracting officials with interim guidance for ensuring protection of the Government's interests in considering the allowability of costs of the types discussed in this report.

In its reply, DOD indicated that the proposed revision of procurement regulations had been determined to not be an acceptable solution and that it had been discontinued. DOD conceded that there had been some difficulties in interpreting ASPR but that it was not clear that these difficulties had had any widespread effect on cost allowance. DOD pointed out that there had been major changes in the past 5 years in its methods of initiating major programs which undoubtedly contributed to the increase in both IR&D and bid and proposal costs but that at this time the cause and effect relationships are not clear.

Recognizing the need for effective management in this area, DOD advised that it was planning to study the nature of bid and proposal costs more thoroughly. Methods for dealing with this cost would then be adopted, which should provide the necessary visibility and discipline without lessening the contractors' ability to respond to requests placed upon them by DOD.

DOD also stated that--in view of the lack of clarity in the bid and proposal area, and in view of other unanswered questions, such as the impact of Defense-sponsored procedures on cost incurrence--it was not prepared to issue interim guidance at this time.

NASA also advised that it did not believe that issuance of interim guidelines would be feasible at this time. In support of this statement, NASA said that it did not yet know the extent to which tighter control of bid and proposal expense is in the interest of the Government, or the technique of control which would be appropriate to implement such further limitation as might be decided upon,

Conclusions and recommendation

In our opinion, the costs discussed in this report are similar to IR&D effort costs or are not clearly necessary to support LMSC's bids or proposals. Consequently, there is doubt as to whether such costs are clearly within a reasonable interpretation of the ASPR definition of bidding costs. We recognize, however, that, because the ASPR definition is in general terms, it is subject to various interpretations and that, in the absence of definitive guidelines, contracting and auditing officials can only be guided by the general ASPR provision that costs, to be allowable, must be reasonable. What is reasonable, however, requires a subjective determination, and what is reasonable to one person may not be reasonable to another.

Consequently, we believe that, in order to provide improved control over bidding and related costs charged to Government contracts, the ASPR should be amended to as clearly as possible define the types of costs that are allowable and establish guidelines for determining the extent of allowability. Although DOD and other Government agencies had recognized the need for revision and for several years had been studying the problem with the objective of developing a means to better control not only bidding and related costs but all types of contractors' independent technical effort, both DOD and NASA informed us that additional information was required to enable them to develop revised methods of control. Consequently, DOD plans to make a study to obtain the necessary information.

We recognize that the many facets of the bid and proposal problem deserve intensive consideration before revised procedures are established. However, we are concerned that, in the meantime,

contracting and auditing officials will continue to be faced with the need to interpret ASPR in the areas covered by this report. In our opinion, the planned study should be expedited.

Recommendation

We therefore recommend that the Secretary of Defense give the proposed study of bidding and related costs a high priority and that he establish goals to ensure the earliest possible completion of required revisions to the procurement regulations.

APPENDIXES

PRINCIPAL OFFICIALS
OF
THE DEPARTMENT OF DEFENSE AND
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
RESPONSIBLE FOR MATTERS
DISCUSSED IN THIS REPORT

	Tenure of office	
	From	To
<u>DEPARTMENT OF DEFENSE</u>		
SECRETARY OF DEFENSE: Robert S. McNamara	Jan. 1961	Present
ASSISTANT SECRETARY OF DEFENSE (Installations and Logistics): Paul R. Ignatius Thomas D. Morris	Dec. 1964 Jan. 1961	Present Dec. 1964
<u>NATIONAL AERONAUTICS AND SPACE ADMINISTRATION</u>		
ADMINISTRATOR: James E. Webb	Feb. 1961	Present

LOCKHEED AIRCRAFT CORPORATION

BURBANK, CALIFORNIA

September 26, 1966

Mr. Harold Rubin
Associate Director
U. S. General Accounting Office
Defense Accounting and Auditing Division
Washington, D. C. 20548

Dear Mr. Rubin:

In your letter of August 29, 1966, you requested comments on an enclosed draft of a report to the Congress on a review of bidding and related costs charged to Government contracts at Lockheed Missiles & Space Company. We appreciate the opportunity to offer comments and have carefully reviewed the matters discussed in the report.

The report and the accompanying letter to the Secretary of Defense conclude that procurement regulations should be amended to more clearly define and limit the types of bidding and related costs which will be considered allowable under Government contracts and that pending such amendment interim guidance should be furnished to Government audit and contract personnel. The factual material included in the report regarding particular proposal efforts and expenditures at LMSC does not support this conclusion in our opinion. Having in mind the internal controls over bid and proposal and related costs at LMSC, the manner in which those costs have been incurred, and the nature of our overhead negotiations with Government representatives, we cannot agree with the statements in the report that the determinations supporting allowability of most of these costs resulted from a lack of guidelines in the Armed Services Procurement Regulation (ASPR).

In reviewing these costs, particularly those which have been questioned by the Government auditors, the Government negotiator has required the LMSC representatives to substantiate the reasonableness of these costs in relation to LMSC's bid and proposal activity. In some instances he did not fully agree with our conclusions and disallowed portions of the costs, as noted in the report. While generally the LMSC negotiators did not agree with his position, in a few cases disallowances were accepted as a compromise in order to conclude this portion of the negotiation. There was no instance, however, in which LMSC accepted the disallowances on the basis that the costs should have been treated as independent research and development expense and, in our view, there is no support for the underlying assumption in the draft report that certain of the costs which have been charged to bid and proposal should more properly have been charged to IR&D.

Mr. Rubin

September 26, 1966

The report emphasizes the "similarity" in technical effort involved in bid and proposal preparation, and that related to performance of IR&D. However, the intent and nature of the two types of effort differ. Under bid and proposal effort only that is accomplished which is necessary to tell the potential customer what will be done and how it will be accomplished. Independent development, on the other hand, generally is directed toward design and development of a specific product; under independent research there is a broad objective to increase knowledge in science.

In short, we feel that the bid and proposal expenses and related costs were determined to be allowable, not because of a lack of guidelines, but because they were, in fact, reasonable and allocable as provided in ASPR. The negotiation results would not have been changed even though more detailed guidelines had been included in ASPR unless such guidelines were in the form of an arbitrary limitation on the allowability of such costs. A limitation in the form of a negotiated ceiling on allowable bid and proposal costs would be inappropriate because these expenses are incurred in response to the Government's requirements. In the highly competitive environment which now exists in the aerospace industry, contractors must respond vigorously and effectively to the Government's anticipated requirements. Even without a dollar ceiling there are built-in limitations which force contractors to equate the effort and expense involved in preparing a proposal with their chances of winning a contract. First, there are limits to the number of qualified technical people who can devote their time to the preparation of proposals and can be assigned to any resulting contracts. Second, and more severe, is the over-all necessity for rigid cost control which is made mandatory by the extensive use of incentive and fixed-price contracts. Regardless of whether particular costs are allowable, these contracts by providing contractors with greater returns for reducing costs of performance and penalties if costs are increased have strongly reinforced the cost disciplines imposed by Company management.

Although it is not explicit in its recommendations on the subject, the draft report by implication suggests that cost limitations should include a provision that bid and proposal costs will be allowable only to the extent that such costs are incurred after the receipt of a Request for Proposal (RFP) and before the submission of a proposal. While the report states that the primary concern is with "types of effort included in bid and proposal expense", the substance of the report indicates that the basic objection is not with the type of effort involved but the period in which the effort was expended in relation to the issuance of an RFP or the submission of a proposal. From a review of the various cost figures shown in the report it appears that the \$1,936,000. of 1962 costs referred to as "not clearly within a reasonable interpretation of the ASPR definition of bidding costs, or not clearly necessary to support the contractor's bids and proposals" is comprised of \$1,422,000. in costs incurred prior to the release of an RFP and \$514,000. of costs incurred after submission of proposals. We can only conclude that it is primarily the period in which the costs were incurred, rather than the nature of the costs, which has caused your staff to question them.

Mr. Rubin

September 26, 1966

If our inference is correct, namely, that the report is intended to support a limitation on allowability of costs to those costs incurred after receipt of an RFP and prior to submission of a proposal, we most strongly disagree with this conclusion. It has become almost a truism that a firm has a minimal chance of successfully competing for a Government contract unless it has directed significant preliminary efforts toward responding to an anticipated Government requirement before the RFP has been received. The Government directly benefits from this preliminary work in the enhanced quality of the proposals it receives. In fact, the emphasis by the Government on increased competition, more realistic pricing, more completely defined requirements, and a higher level of sophistication in systems management, has made preproposal preparation a virtual necessity on the more complex programs. This would also militate against the submission of unsolicited proposals, which are a vital factor in channeling the innovative capabilities of industry toward meeting the Government's needs.

The validity of proposal expense as an allowable cost is not lessened in those situations where no proposal is actually submitted to the Government because anticipated Government requirements do not materialize, or the Company's competitive position is determined to be poor. At LMSC the decisions not to submit proposals, even after substantial preliminary effort has been expended, reflect the fact that proposal effort is closely monitored by management. If either changing requirements or changed appraisal of the Company's ability to compete effectively for a program indicates that the proposal probably will be unsuccessful, work on the proposal is discontinued. The draft report seem to suggest that bidding costs should not be allowed unless a proposal is actually submitted. From the Government's standpoint, this would be unwise since it would penalize a contractor by disallowing costs already incurred when, in the exercise of reasonable judgment, the contractor had determined that it would be uneconomic and not in the Government's interests to continue its proposal effort on a particular program.

Even when a particular proposal effort is concluded without submission of a proposal, the data developed may prove useful subsequently on other proposals. The advanced Agena proposal study resulted in data which was used in a number of proposals and resulted in contract awards or contract modifications. At the present time the Air Force is considering a significant program based on an LMSC proposal which incorporated a substantial amount of data developed during the Agena study referred to in the report. The insight developed in the Eurospace study, referred to on pages 17 and 18, was useful in developing proposals on the German National Scientific Satellite Program (625A-1 program) and Highly Elliptical Orbiting Satellite Program (HEOS). As a result of the latter proposal, LMSC received a subcontract under the prime contract issued by the European Space Research Organization (ESRO), which has a cooperative agreement with the U.S. Government for launching of the satellite. The costs of the Eurospace study clearly were allowable as a reasonable expense necessary to LMSC's business efforts. In no way could these costs be classified as IR&D.

Mr. Rubin

September 26, 1966

The report also questions the allowability of costs incurred after certain proposals have been submitted which LMSC in recent years has designated "contract capability costs". As your staff was advised at LMSC, these costs are incurred on a selective basis with high level management approval for the purpose of maintaining intact the key capabilities represented by the team which prepared the proposal and sustaining a degree of continuity of effort during the period in which the Government is evaluating the proposal. This is necessary in order to insure that we can give timely and effective performance if a contract is awarded by having immediately available the high level of technical and managerial teamwork which is required.

The report refers to several situations in which LMSC incurred costs after it had been notified that the contract had been awarded to another company. Work on the proposals was continued in these cases because it was determined by LMSC management that, despite the award of the initial contract to another company, there were substantial possibilities that LMSC might, through continuation of its efforts, secure contracts to be awarded in the next phase of the procurement. On major programs the value of the follow-on procurement is generally vastly greater than the value of the contract awarded as a result of the initial competition. This may well make it highly worthwhile to a contractor to continue work on a proposal looking toward the follow-on contracts even after the award of the initial contract has been made to another firm. This allows the Government the opportunity to take advantage of alternate approaches which may result from the continued proposal activity.

LMSC's intent to compete for substantial follow-on hardware contracts was the reason for continuing proposal effort after notice of award to other firms on both the Titan II Upper Stage discussed on page 21 of the report, and the Nova Vehicle System Study referred to on pages 26 and 27. In both cases the proposal efforts were discontinued when it was determined that the prospect of securing such contracts was not favorable.

Similarly, the down-stream potential was the factor which persuaded LMSC management to complete the proposal for the Synchronous Orbit Military Communications System after LMSC had been advised that funds were not then available for contract coverage. It is worth noting that the data developed in 1962 for this proposal was used extensively in preparation of the proposal for the Advanced Defense Satellite Communication Program in 1965.

The proposal on the spacecraft bus for a lunar logistics system illustrates how meaningless it is to compare proposal costs with the value of the initial contract, as is done on page 20 of the report. There, LMSC's direct proposal costs of about \$171,000. (plus a GAO-estimated overhead factor of \$108,700.) are compared with the successful bidder's proposed contract costs of about \$177,000. LMSC's proposal costs are placed in more meaningful perspective by comparing them to the total anticipated cost of \$500 million for the development effort to be covered by subsequent contracts.

Mr. Rubin

September 26, 1966

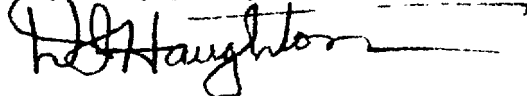
With this potential in mind LMSC continued its study even after award to another company and subsequently made a technical presentation to NASA, but then discontinued its efforts when it was determined that the prospect of securing contracts was not good. In my opinion the Government's as well as contractors' interests would be poorly served if the proposals prepared by potential contractors did not reflect an appreciation of the magnitude and complexity of the particular over-all program planned by the Government.

For the reasons mentioned, our review does not sustain the conclusion that the costs discussed in the report, were not necessary to support LMSC's bids and proposals and were therefore not reasonable. It is true, as observed in the report, that determinations as to reasonableness require a degree of subjective judgment but this, by itself, does not indicate that additional guidance is required. In fact, considering the DOD study directed toward comprehensive ASPR treatment of costs of contractor's independent technical effort, the development of interim guidance would be abortive and unnecessary. If, despite this, interim instructions are to be issued, I would strongly urge that they be in the form of a fully coordinated amendment to the ASPR rather than being issued as internal instructions. To the extent that additional guidelines would be directed toward limiting allowability of costs which would otherwise have been allowable under ASPR they would adversely affect substantive rights of contractors under their contracts. This, on the face of it, would represent interference with the integrity of contracts and might well be of doubtful legality.

Our corporate staff and LMSC management will be available for further discussions if you feel that this would be helpful.

Copies of this letter are being forwarded to the Office of the Assistant Secretary of Defense (I&L), and to the National Aeronautics and Space Administration.

Very truly yours,



D. J. Haughton
President



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D. C. 20301

INSTALLATIONS AND LOGISTICS

CA

NOV 14 1966

Mr. Harold H. Rubin
Associate Director of
Research and Development
General Accounting Office
Washington, D. C. 20548

Dear Mr. Rubin:

This is in response to your letter of August 29, 1966 to the Secretary of Defense requesting comments on your draft report on Review of Bidding and Related Costs Charged to Government Contracts, Department of Defense and National Aeronautics and Space Administration (NASA), (OSD Case #2517).

Your report is concerned with the need for improving control over the amount of contractors* bidding and other technical effort costs absorbed by the government. The report is predicated principally on a review of bidding and related effort costs incurred at Lockheed Missiles and Space Company. Your review disclosed bidding expenditures which you believe are not clearly reasonable under ASPR or are not necessary to support contractors² proposal effort. A major part of the reviewed and questioned costs represented technical effort which you believe were more properly charged to independent research and development (IR&D) expense.

You conclude that ASPR does not provide sufficient guidance, at the present time, and, as a consequence, the allowance of bid and proposal (B&P) costs may be subject to different interpretations by contracting and auditing officials,

Your report recommends, pending satisfactory amendment **of** procurement regulations, that the Secretary of Defense and the Administrator of NASA: (1) provide auditing and contracting officials with interim guidance for ensuring protection of the government's interest in considering **the** allowability of costs of the types discussed in the report, and (2) consider the matters discussed in the report in the proposed ASPR amendment so as to control and limit charges **to** government contracts **for** all types of contractors* independent technical efforts .

The Department of Defense has been considering an arrangement whereby (IR&D) and (B&P) technical effort would be combined. Though this approach has merit, it has been determined that on balance it is not an acceptable solution. Therefore, the Department of Defense proposes to continue the current practice of maintaining separate cost principles for (IR&D) and (B&P) costs. Although there have been some difficulties in actual interpretation, it is not clear that these have had any widespread effect on cost allowance. There have been major changes in the past five years in our methods of initiating major programs which have undoubtedly contributed to the increase in both IR&D and B&P costs, At this time the cause and effect relationships are not clear.

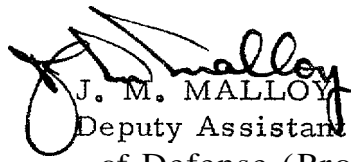
Although selective controls have been used by means of advance agreements for IR&D costs, it is not clear that the same type of control or any "control", as such, will be appropriate for B&P. There is a need, of course, for effective management of this area, Before an appropriate remedy can be developed, a better understanding of the nature of B&P expense is considered necessary.

Therefore, it is planned to study the nature of B&P more thoroughly after which time methods for dealing with this cost will be adopted which will provide the necessary visibility and discipline ~~without~~ lessening the contractors* ability to respond to requests placed upon them by the Department. Pending completion of this effort, it is planned to continue the present procedure of managing the IR&D effort through selective use of advance agreements.

In view of the lack of clarity in the B&P area, and in view of other unanswered questions, such as the impact of Defense sponsored procedures on cost incurrence, we are not prepared to issue interim guidance at this time.

We appreciate the opportunity of commenting on your report.

Sincerely yours,


J. M. MALLOY
Deputy Assistant Secretary
of Defense (Procurement)



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WASHINGTON, D.C. 20546

IN REPLY REFER TO: K

NOV 23 1966

Mr. Morton E. Henig
Supervisory Accountant
General Accounting Office
NASA Assignment, CAAD
Washington, D.C. 20548

Dear Mr. Henig:

In Mr. Parker's letter of August 29, 1966, to Mr. Webb, comments were requested on the GAC preliminary draft of a report to the **Congress** entitled "Review of Bidding and Related Costs Charged to Government Contracts."

The report concludes that there is a need to improve controls over the amount of contractor's bidding and other technical effort: costs absorbed by the Government, and makes two recommendations: **that** the matters discussed in the report **be** considered in **amending** the procurement regulations and that, pending such amendments, NASA and the DOD provide interim guidance to auditing and contracting officials to ensure protection of the Government's **interest**: in considering the allowability of costs of the types discussed in **the** report,

In recent years, the volume of contracting for research and development has increased. **This** has resulted, of **courte**, in greater contractor expenditures **for** bid and proposal preparation, independent research and development, and other nonsponsored technical effort in the **seeking** of new Government research and development business. Research and development expense at or prior to the bid and proposal stage has become **a** contractor expense necessary to maintenance of a contractor's competitive position as well **as** to maintenance of an industry capability **or** resource vital to the Government,

While individual advance understandings regarding contractor independent technical effort **have** met **with** difficulties and, **admittedly**, **are not a** final **answer to the general** problem, **they are vehicles** which **will** generate **a** feedback of information helpful to our continuing studies. Specifically, they should provide data upon which we **can** rely in **deciding** what **kinds** of controls prove **most** workable in meeting **our objectives**.

To develop a larger experience base, we plan to discuss with the DOD the matter of making somewhat greater use of advance understandings than we have in the past. In order to avoid discrimination between contractors, it may be that we will identify an industry grouping and attempt to negotiate understandings on a comparable basis with the larger contractors within that grouping.

Advance agreements concerning the totality of a contractor's independent technical effort do not appear to be a solution to the overall problem because of the administrative burden they present and because of the difficulty in attaining comparable results with all contractors in a competitive area. In addition, they have met with objection from contractors because they force them to predict the volume and character of future Government requests for proposals. The contention is made that the prediction must be made without adequate information being furnished contractors. Government people also point out that any arbitrary restriction on contractor nonsponsored technical effort limits the capability of industry to respond competitively to a Government requirement.

Existing cost principles provide for a distinction between bid and proposal expense (including the development of engineering data and cost data necessary to support bids or proposals) and independent research and development expense. We are aware that this distinction has become blurred and have been studying the problem. A possible answer is the combining of bid and proposal and independent research and development expenses (together with all other nonsponsored contractor technical effort) into one account with a single control established over it. Although this approach has the virtue of simplicity and solves the definitional problem, it requires that a single control which is equitable to industry in general and to a particular contractor and in the interest of the Government be identified. A practical control of this nature has not as yet been devised.

It would be fair to state at this point that we do not feel we yet know the extent to which tighter control of bid and proposal expense is in the interests of the Government or the technique of control which would be appropriate to implement such further limitation as might be decided upon. It is for this reason that we feel that the issuance of interim guidance at this particular time would not be feasible.

We would be pleased to consider any suggestions you may offer to assist in resolution of this problem,

Sincerely yours,


Bernard Moritz
Deputy Assistant Administrator
for Industry Affairs